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The "Indices" (Index of words, subjects and authors) concluding this work, will be published, shortly as a separate volume.

#### A

## COMPARATIVE GRAMMAR

OF THE

INDO-GERMANIC LANGUAGES.

Da muss sich manches Rätsel lösen Doch manches Rätsel knüpft sich auch.

Goethe, Faust.

# COMPARATIVE GRAMMAR

OF THE

## INDO-GERMANIC LANGUAGES.

#### A CONCISE EXPOSITION

#### OF THE HISTORY

OF SANSKRIT, OLD IRANIAN (AVESTIC AND OLD PERSIAN), OLD ARMENIAN, GREEK, LATIN. UMBRO-SAMNITIC, OLD IRISH, GOTHIC, OLD HIGH GERMAN, LITHUANIAN AND OLD CHURCH SLAVONIC

BY

### KARL BRUGMANN.

PROFESSOR OF COMPARATIVE PHILOLOGY IN THE UNIVERSITY OF LEIPZIG.

#### VOLUME IV.

#### MORPHOLOGY, PART III:

VERES: FORMATION OF THE STEM, AND INFLEXION OR CONJUGATION.

#### TRANSLATED FROM THE GERMAN

ВY

#### R. SEYMOUR CONWAY, M. A. AND

BATE FELLOW OF GONVILLE AND CAIUS COLLEGE, CAMBRIDGE, AUTHOR OF 'VERNER'S 4AW IN ITALY', PROFESSOR OF LATIN IN THE UNIVERSITY COLLEGE, CARDIFF.

#### W. H. D. ROUSE, M. A.

SOME TIME FELLOW OF CHRIST'S COLLEGE, CAMBRIDGE, ASSISTANT MASTER AT CHEL-TENHAM COLLEGE.

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# JOHN PEILE,

DOCTOR OF LETTERS, MASTER OF CHRIST'S COLLEGE, THE FOUNDER OF THE STUDY OF COMPARATIVE PHILOLOGY IN CAMBRIDGE

THIS TRANSLATION IS DEDICATED

IN TOKEN OF THEIR GRATITUDE AND AFFECTION

ВY

HIS OLD PUPILS.

## AUTHOR'S PREFACE.

When in 1889 I brought out the part of my work containing the account of Noun Morphology, I had in my mind, and partly on paper, a simpler plan for the remainder of the work than that which the reader has before him. I meant it to include the presentation of the forms of declension and conjugation, and little more. In view of the confusion and uncertainty that reigned in this department, where many questions of origin and history seemed utterly unsettled, I then thought it best to restrict the work to these limits; and I only hoped that perhaps after the lapse of years, if a second edition should be called for, the further developement of a science which had already made such rapid progress would have put me in a position to give a practical and useful history of Noun and Verb Inflexion. But in the course of my work I was gradually converted from this pessimism; the difficulties no longer seemed insurmountable; and I at length decided to attempt a more complete account, not merely exhibiting the results of the different developements, but even now as far as possible tracing their course. Thus the work grew; and thus it comes about that the size of the latter part is so greatly out of proportion to that of the former.

In giving up my first plan, I was influenced not a little by my belief, that from a comprehensive work such as this, a work in which it is sought to present the facts and problems of language in connected form, more might reasonably be expected than what I had at first proposed. A student might fairly ask that the many questions which await an answer should not be simply avoided, but that some honest attempt should be made to advance a step towards their answering. It must surely be useful that he should not only read that which can be called certain, not only be taught well establisht facts, but that he should at the same time find the various problems and puzzles, with which the study of Indo-Germanic inflexion abounds, at least briefly mentioned and conveniently arranged. So will the scholar guard best against the mistake which not the best scholar is wholly free from, the danger that in trying to bring order and light into his palace of knowledge, he may leave some dark riddle unattempted, and only move it from one corner to another. If amidst these shifting theories I have often taken a decided stand, and declared myself for one or other of them, adding therewithal other and many new views and explanations, I am yet far from believing that I have placed beyond all doubt the view which I have preferred. In these matters to indicate a path for future research or simply to establish a prima facie case is far harder than most people think; and many a theory which seemed to be fixt on the firmest foundation and to offer no point to attack, has been broken down in the end. I can only hope that the mistakes which these volumes must inevitably contain, may help to supply the means for their own correction.

A few of my readers perhaps may wonder why certain new and some very recent theories upon Ablaut, proethnic Accent, formation of Roots and Suffixes, and other such matters, have in these last volumes been either altogether disregarded or only just glanced at. A good deal of the most recent work I would indeed have included in this last volume

but that it had to be finisht in 1891.1) In other cases I saw before me hypotheses, which attractive as they are, and fruitful as they may prove to be, at the time of their publication were too slightly worked out by their authors, and had been too little tested to allow of my making them the basis of my own account. In this volume I have practically not touched the newest theories of Ablaut; I confess that I approach the glib and symmetrical systems of Ablaut Series (cp. Bartholomae in Bezzenberger's Beiträge, xvII 105) with very little confidence, and I must refer to what is said on this matter in Vol. I § 309. Even a question of Verb Morphology so important as the form of proethnic Roots (whether they were monosyllabic or not) I have left on one side; I believe neither the one thing nor the other, but only that in the present state of our knowledge we can know nothing about it. If in spite of this I have used hyphens freely, I would remind the reader that the hyphen means a real point of composition in such words as Διόσ-κουροι, τοῦ-το, ἀνα-βάλλω, ἔ-φερον, but in  $\ddot{\alpha}\gamma$ -o- $\mu\epsilon\nu$  or  $\phi\epsilon\varphi$ -o- $\mu\epsilon\nu$  it only shows the etymological and morphological likeness of certain elements. And though I now as ever call -o- in ἄγ-ο-μεν a suffix, I do not thereby commit myself to the statement that such elements were originally independent words. See I § 14 pp. 16 ff., II § 8 pp. 18 ff.

Whether in all these things I have been so happy as to hit the golden mean, scholars must decide. Bearing in mind

<sup>1)</sup> Since then I have had to do without any systematic examination and use of the new works which keep streaming in, or my book would never have come to an end. Only now and then have even the more important works been used, such as those of Bartholomae, Bechtel, Buck, Johansson, G. Meyer, Per Persson, von Planta, W. Schulze, Streitberg, and others; Streitberg's work Zur Germanischen Spraohgeschichte first reached me (in proof sheets) after my book was in print as far as the Additions and Corrections; in these I was able to make reference to it. However, I was glad to observe that I am in agreement with many others in matters not a few.

the paramount object of this work, I would rather be blamed for giving too little space to the newest speculations than give any reason for the reproach that I have allowed them too much.

A word is necessary as to the principle on which the labours of my fellow-workers have been cited or not cited in the text. Complaints have not been wanting that in giving various theories and views I have not always given the name of him who first suggested them, or mentioned others who before me had thought of much the same thing. My principle has been as a rule not to mention the originator of each view, or all those who ante me mea scripsere, except in such cases as Verner's Law, which I mention under his name. My book does not in the least aspire to be a compendious history of the new school of philology, or to display the part each of us has taken in the gathering of the spoil. Where reference is made in the text to the works of other scholars, this is done for practical ends and no other.

In these last two volumes I have had from Thurneysen the same generous and ready help as before in all that refers to Keltic. Here, as before, the reference to his advice in a few special paragraphs does not in any degree express my obligation to his aid. If the treatment of Irish questions (for I have rarely touched on the British dialects) is at all on a level with recent research, and sometimes even carried beyond it, this is due to Thurneysen. But I must again beg that he be not held responsible for any errors I may have made in using his communications, or for anything but the paragraphs in which his own words are given. I have also to thank Hübschmann for a number of communications on Armenian.

In the text a number of corrections (mostly in unimportant details) have been silently made, which I have received from

reviews and from private letters of fellow-scholars, 1) among whom I would specially name Messrs. Conway, Holthausen, Leskien, Leumann, Osthoff, and Rouse. More detailed additions which should bring the first parts of the work up to date, I am obliged to forego, since thanks to the rapid progress of our science, whole paragraphs and pages would have to be remodelled. Naturally enough I am now in a position to improve upon many of the views I formerly exprest, particularly in the Phonology (Vol. I) publisht six years ago. Some of these I have expressly corrected, some tacitly. The reader should therefore consult in each case the explanation which I have given latest.

Leipzig, July 2. 1892.

### K. BRUGMANN.

<sup>1)</sup> Lith. galù ('I can') and the like forms are not misprints or oversights; see I § 26 p. 29. To avoid misunderstanding, I again call attention to the fact that while for (Ger. aus) denotes a regular phonetic connexion, instead of (Ger. für), denotes analogical substitution. Thus "piloūμεν for pileoμεν", but "Att. δαίμοσι instead of pr. Gr. \*δαιμα-σι".

### TRANSLATOR'S PREFACE.

The list of Additions and Corrections given in the concluding part of the German edition have been here put in their proper place in the text. Some few alterations have also been made, with Prof. Brugmann's sanction, by way of making clear what from its terseness might have been misunderstood. A list of misprints is given, but I fear there must be others; I hope that these will be forgiven, in view of the exceeding difficulty of correcting proof with so many different diacritic marks.

It may be well to point out that the word "Reduplicator" has been used as equivalent to Reduplicating Syllable or Syllable of Reduplication; and that "Phrase" has been extended to apply to a short complete sentence which fuses into a single word, as  $fer\bar{e}$ -bam,  $d\bar{a}t\acute{a}smi$  (see page 444).

In this volume as before I have to thank Mr. Conway for valuable help.

The Indices are nearly ready, and it is hoped they may be publisht along with this volume, or at least with small delay thereafter.

CHELTENHAM, July 17. 1894.

W. H. D. ROUSE.

## CONTENTS OF VOLUME IV.

	Page.
REFACE	$\mathbf{v}\mathbf{I}\mathbf{I}$
RANSLATOR'S PREFACE	XII
ORRIGENDA	XIX
ERBS: Formation of the Stem, and Inflexion or Conjugation.	
General Remarks (§§ 460-463)	1
Reduplicated Verb-Forms (§§ 464-476)	10
The Augment (§§ 477-483)	24
The Tense Stem.	
General Remarks (§§ 484-489)	33
The Present Stem (Imperfect Present and Aorist Present).	
Introductory Remarks (§§ 490-491)	48
(A) Classes I-VIII: Simple Root, or Root with -o-, for the	
Present Stem; sometimes Reduplicated	51
Class I (Skr. ds-ti): Simple Root used for the Present	
Stem. Idg. (§§ 493-497). Aryan (§§ 498-500). Ar-	
menian (§ 501). Greek (§§ 502-504). Italic (§ 505).	
Keltic (§ 506). Germanic (§§ 507-509). Balto-Sla-	
vonic (§§ 510-512)	51
Class II (Skr. bhár-a-ti sphur-á-ti): Root + Thematic	
Vowel forming the Present Stem. General Remarks	
(§ 513). Class II A: the Root Syllable accented and	
in the Strong Grade (§§ 514-522). Class II B: the	
Accent falls upon the Thematic Vowel, and the Root	
is Weak (§§ 523—535)	78
Class III (Skr. bi-bhé-ti): Reduplication ending in -i or	
-ü + simple Root forming the Present Stem (§§ 536	
-546)	97
Class IV (Sks. a-jn-jan-at Gr. γι-γν-ε-ται): Reduplication	
ending in $-\tilde{i}$ or $\tilde{u}$ + Root + Thematic Vowel, forming	
the Present Stem. Preliminary (§ 547). Class IV A:	
Strong Root Syllable (§ 548). Class IV B: Weak Root	
Syllable (§§ 549-554)	105

	Class V (Skr. $d\hat{a}$ - $dh\bar{a}$ - $ti$ ): Reduplication ending in -e (- $\bar{e}$ )	
	+ Simple Root forming the Present Stem (§§ 555-560)	108
	Class VI (Skr. sá-šc-α-ti): Reduplication in -e (-ē) + Root	
	+ Thematic Vowel forming the Present Stem (§§ 561	
		110
	-566)	110
	Class VII (Skr. cár-kar-ti): Complete Reduplication +	
	Root forming the Present Stem (§§ 567-569)	112
	Class VIII (Skr. dar-dir-a-t): Complete Reduplication +	
	Root + Thematic Vowel forming the Present Stem	
	(§§ 570-571)	113
(B)	Class IX (Skr. vám-i-ti bráv-ī-ti): Root + -9- or Root	
(D)		
	+ -\bar{\bar{\alpha}}, with or without Reduplication, forming the	
	Present Stem (§§ 572-577)	114
(C)	Classes X and XI: Root + -ā-, -ē- or -ō- forming the	
	Present Stem.	
	General Remarks (§ 578)	118
	Class X (Skr. $dr-\bar{a}-ti$ ): Unreduplicated Root $+-\bar{a}-$ , $-\bar{e}-$	
	or $-\bar{o}$ forming the Present Stem. Root $+$ $-\bar{a}$ - (§§ 579	
	-586). Root $+$ - $\bar{e}$ - $-\bar{o}$ - (§§ 587—593)	101
	—500). Noot + -e0- (88 501—595)	121
	Class XI (Skr. $ji-g\bar{a}-ti$ ): Reduplicated Root $+$ $-\bar{a}$ -, $-\bar{e}$ -	
	or -ō- forming the Present Stem. Reduplicator in -i-	
	(§ 594). Complete Reduplication (§ 595)	134
(D)	Classes XII to XVIII: Nasal Present Stems.	
·-/	General Remarks (§ 596)	136
	Class XII (Skr. mṛ-nā-ti): Root + -nān- forming	100
	the Present Stem (§§ 597-606)	444
		141
	Class XIII (Skr. mr-nd-ti): Root + -no- forming the	
	Present Stem (§§ 607-615)	148
	Class XIV (Skr. iš-aṇa-t): Root + -nnoenoono-	
	forming the Present Stem (§§ 616-624)	154
	Class XV (Skr. yunák-ti): Root + Nasal Infix forming	
	the Present Stem (§§ 625-626)	162
	Class XVI (Skr. yunj-a-ti): Root + Nasal Infix + The-	
	matic Vowel forming the Present Stem (§§ 627-637)	163
	Class XVII (Skr. r-no-ti): Rootneunu- forming	100
	the Present Stem (§§ 638-647)	150
	Closs VVIII (A root level way a '4' Close VVIII (A root level way a '4' Close void a '4')	176
	Class XVIII (Avest. kere-nav-a-iti Skr. r-nv-á-ti): Root +	
	-new-o- or -nw-o- forming the Present Stem (§ 648).	
	Class XVIII A: suffix -neu-o- (§ 649). Class XVIII B:	
	suffix -nu-o- (§§ 650-654)	184
(E)	Classes XIX-XXI: Present Stems with -8	
	General Remarks (655)	189
	Class XIX (Skr. dvé-š-ti): Root + -s-, -es- or -ss-	100
	forming the Present Stem (§ 656)	100
	Class XX (Skr. tq-sa-ti tr-ása-ti): Root + -so- or -eso-	190
	forming the Present Class (82 are car)	
	forming the Present Stem (§§ 657-665)	191

Class XXI (Skr. $ti$ - $st\bar{t}r$ - $sa$ - $t\bar{e}$ ): Root + -soeso-, with	
Reduplication ending in i (or ii), forming the Present	
Stem (§§ 666-668)	198
(F) Classes XXII and XXIII: Present Stems with -sko	
General Remarks (§ 669)	200
Class XXII (Skr. gá-cha-ti Avest. iš-asa-iti): Root +	200
-skoesko- forming the Present Stem (§§ 670-677)	000
	202
Class XXIII (Gr. δι-δά(x)-σxω): Reduplicated Root +	010
-sko- forming the Present Stem (§ 678)	210
(G) Class XXIV (Skr. cé-ta-ti): Root + -to- (-t-) forming	
the Present Stem (§§ 679-687)	211
(H) Class XXV (Skr. yō-dha-ti kūr-da-ti): Root + -dhodo-	
forming the Present Stem (§§ 688-701)	218
(J) Classes XXVI to XXXI: Present Stems with -io	
	228
General Remarks (§§ 702-704)	440
	000
	233
Class XXVII (Skr. dē-diš-yd-tē): Reduplicated Root +	050
-ioiio- forming the Present Stem (§§ 728-733)	259
Class XXVIII (Skr. $tr-\bar{a}-y\acute{a}-t\bar{e}$ ): Root $+-\bar{a}-$ , $-\bar{e} -\bar{o} +$	004
-io- forming the Present Stems (§§ (734-741)	261
Class XXIX (Skr. iš-an-yá-ti): Nasal Stems + -io- for-	205
ming the Present Stem (§§ 742—745)	265
Class XXX (Skr. tq-s-yá-tē): Root + s-suffix + -io	
(A) Forms with Present Meaning (§ 746). (B) With	
Future Meaning, Stems in -sio- and -asio- (-esio-),	
Aryan futures with -sia- and -išia-, Greek futures with	
-σο-, -εοαοοουο-, -σεο-, Lithuanian futures with	
-sia- (§§ 747-761)	268
Appendix to Classes XXVII—XXX: Extension of Stems	
in -sko-, -to-, and -dhodo- by the Suffix -io- (§§ 762	
-765)	279
Class XXXI (Skr. dēva-yā-ti): Later Group of Denomina-	
tives with Present Suffix -io General Remarks (§ 766).	
Pr. Idg. (§§ 767-773). Aryan (§ 774). Armenian	
Pr. Idg. (§§ 767-773). Aryan (§ 774). Armenian (7742). Greek (§ 775-776). Italic (§§ 777-778).	
Keltic (§§ 779-780). Germanic (§ 781). Balto-Sla-	
vonic (§§ 782-787)	281
(K) Class XXXII (Skr. vēd-áya-ti): Root + -éjo- forming the	
Present Stem.	
General Remarks (§§ 788-793)	318
Proethnic Indo-Germanic (§ 794)	326
Aryan (§§ 795—799)	330
Armenian (§ 800)	335
Armenian (§ 800)	335
Italic (§ 802)	338
,	

Keltic (§ 803)	339
Germanic (§§ 804-806)	339
Balto-Slavonic (§§ 807-809)	343
The s-Aorists.	
General Remarks (§ 810)	346
(A) Stems in -s- and -so	
I. Unthematic s-stems (§§ 811-832)	348
II. Thematic s-stems (§ 833)	369
(B) Stems in -es-, -os-, and -is	
General Remarks (§ 834)	371
I. es-stems (Gr. ησεα, Lat. agerem) (§§ 835-838)	372
II. əs-stems (Skr. ástarišam) (§§ 839—840)	375
III. īs-stems (Lat. vīdistis, Skr. ágrahīšam) (§ 841)	378
(C) Stems with -s-s- (§ 842)	380
The Perfect.	
General Remarks (§§ 843-845)	381
Proethnic Indo-Germanic (§§ 846-848)	387
Aryan (§§ 849-854)	395
Armenian (§ 855)	404
Greek (§§ 856-866)	404
Italic (§§ 867-875)	414
Keltic (§§ 876—881)	424
Germanic (§§ 882-893)	429
Balto-Slavonic (§ 894)	442
Periphrastic Formations (§§ 895 - 903)	444
Unexplained Formations.	
Preliminary (§ 904)	452
Aryan 3rd sing. aor. pass. in $-i$ (§ 905)	452
Armenian aor. yereçi and the like (§ 905a)	453
Irish 'Secondary Present' (§ 906)	453
Germanic Weak Preterite (§ 907)	453
Lithuanian Imperfect in -davau (§ 908)	455
The Mood Stem.	
Injunctive (§ 909)	456
Conjunctive.	
General Remarks (§ 910)	459
I. Conjunctive where the Indicative Stem ends in a Con-	
sonant or has a thematic Vowel.	
(A) The Indic. Stem ends in a Consonant (§§ 911-917)	461
(B) The Indic. Stem has a Thematic Vowel (§§ 918	
— <b>9</b> 29)	465
II. Conjunctive where the Indicative Stem ends in a Long	
Vowel.	
(A) The Indic. Stem end in $-\bar{a}$ -, $-\bar{e}$ - $-\bar{o}$ - without	
Gradation (§ 930)	475
(B) The Indic. Stem has a Long Final Vowel, with	
Gradation (§§ 931-937)	47R

Optative.	
General Remarks (§ 938)	479
I. Optative with -½ēī- (§§ 939 -949)	480
II. Optative with -og- (§§ 950—955)	493
Imperative.	100
General Remarks (§ 956)	496
I. The Proethnic Imperative.	
(A) Bare Tense Stem as $2^{rd}$ Sing. act. (§ $957 - 958$ ).	497
(B) $2^{\text{nd}}$ Person Singular in $-dhi$ (§§ $959-962$ )	502
(C) The Forms in $-t\bar{o}d$ (§§ 963–967)	505
II. Some Imperative Forms peculiar to certain languages.	
Aryan (§ 968)	510
Greek (§ 969)	511
Germanic (§ 970)	511
Signs of the Persons and of Middle and Passive Voice.	
General Remarks (§§ 971-975)	512
Active Endings.	
1st Person Singular (§§ 976-983)	517
2 <sup>nd</sup> Person Singular (§§ 984-991)	523
3rd Person Singular (§§ 992-999)	528
1st Person Plural (§§ 1000—1008)	534
2nd Person Plural (§§ 1009-1016)	<b>540</b>
3rd Person Plural (§§ 1017—1026)	543
1st Person Dual (§§ 1027-1030)	554
2 <sup>nd</sup> Person Dual (§§ 1031 - 1036)	556
3rd Person Dual (§§ 1037 - 1040)	557
Middle Endings.	
1st Person Singular (§§ 1041-1046)	558
2 <sup>nd</sup> Person Singular (§§ 1047—1053)	560
3rd Person Singular (§§ 1054-1059)	563
1st Person Plural (§§ 1060—1062)	566
2rd Person Plural (§§ 1063-1065)	567
3nd Person Plural (§§ 1066-1071)	568
The Dual (§§ 1072-1075)	571
Aryan, Italic, and Keltic endings with R (§§ 1076-1083)	572
Periphrastic Middle (Reflexive) (§§ 1084 - 1086)	579
Tables of the Verb Finite	582
The Verb Infinite (Verbal Nouns).	
Preliminary (§ 1087)	594
Verbal substantives (§§ 1088-1098)	597
Verbal Adjectives (§§ 1099-1106)	608



### CORRECTIONS AND ADDITIONS.

VOLUME I.

```
page 530 line 20 read in cases where the.
                      " an acute.
                 ^{24}
VOLUME II.
    page X line 1 read masculine.
          XI , 3 infra read And instead of But.
          23 read Classes instead of Classe.
                9 infra read Lett. instead of Lat.
          95
                    " ποδ-ην-εκ-ής instead of ποδ-εν-εκ-ής.
          98
              " 18
                           " by dissimilation.
          99
                 8
             " 14 supra " yugám instead of jugám.
         111
            , 4 infra place a full stop after 'one-eyed'.
              " 16 read ('free') instead of ('fre)'e.
              " 18
                     " priya-tvá-m instead of -tvā-m.
                     " O.Icel.
                 7
                                            " O.C.Sl.
         119
                                            " pavriya.
                 5
                     , paoriya
         133
         164 infra read saya-mna- instead of saya-mna.
                    " má-s.
         166
        168 line 11 read -ē instead of nē.
                  2 η δδυρ-μό-ς instead of δδύρ-μό-ς.
        173
         175 lines 7, 12, 28, 33
                  7, 23
                               read O.Sax. instead of A.S.
         189 line 2 inf.
         209
                 4
         179
                 1 read of instead of o-.
                        ya-tará- instead of ya-taraf.
                2
                                         " wather.
                       weather
        188
                3
                                         " O.Sax.
                    " A.S.
        208
                                        " itl shoud.
                    " it should
        210 inf.
                   " § 62
                                        " § 61.
        213 line 6
                                    "
                    " mṛ-tá-m
                                        " mṛ-tó-m.
              ,, 16
        221
                    " prīvā-tu-s amā-tu-s instead of prīvā-tu-sa mā-tu-s.
              , 22
        231
                     , dele stop after civitatem.
            " 16
              , 5 inf. put a stop after 221.
         240 , 2 read -τητος instead of τητος.
```

```
page 249 line 14 inf. read θαυμα instead of θαυμα.
                  5 read classification.
         253
                 9
                                            " These.
         268
                              There
                 2 inf.
                                               267.
         272
                              257
         277
                                            " whould.
                              would
         290
                              18-01-5
                                            " iδ-ρι-ς.
         291
                  8 insert stop after above.
         292
              " 11 inf. read neck instead of neek.
                             dati instead of doti.
         296
                  3
                 10
                             siú-ti
                                    " "šiú-ti.
         347
              , 17 inf.,
                                          ", -\epsilon i\nu and -\eta \nu instead of \eta \nu.
                             -\varepsilon \iota \nu
                                    12
                19 read ἀρηγ-ών instead of άρηγ-ών.
         349
         428
                 3 infra read statements.
                            " line.
         434
                  2
VOLUME III.
    page VII line 8 inf. read be instead of by.
     "57 "3 read of sound " " sound of.
VOLUME IV.
    page 7 line 9 inf. prefix § 463.
         10 prefix § 464.
         17, § 472 Remark, add: Further, it is assumed by Johansson
                   (Bezz. Beitr. XIII 125) that ai in Gothic perfects like
                   rai-r\bar{o}\bar{p} sai-s\bar{o} is a long (open) \bar{e}. But the change
                   which he assumes seems to me insufficiently supported.
         28 line 13 infra, add: The ēs of the comedians is perhaps better
                   read ess, corresponding with the forms terr and ferr
                   (page 501 footnote 1).
         78
                  5
                          , nv9-o- instead of nv9-o-.
                    22
         81
                16
                          " measuredst instead of measurest.
                  3 read -bō.
                  2 , didst accuse instead of pullest.
         95
                  2 inf. read say
                                  **
                                          " I say.
         96
                  2 " " blęt-e-tŭ, omitting *.
                  8 "
                          " Skr. da-thá instead of O.H.G.
         98
        106 footnote 1 inf. read αἰδέομαι , , αἴδέμαι.
        162 line 12
                    " , vol. I p. 410 footnote.
                             " I § 404.2 p. 299.
        198, title to Class XXI, read -eso- instead of -eso-.
        235 line 3 inf. in the text, read bin ,
     " 398 " 7 read no-nav-ī-ti instead of -tiv.
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### MORPHOLOGY OF VERBS.

# FORMATION OF THE STEM, AND INFLEXION OR CONJUGATION.1)

§ 460. Two kinds of words go to make up a verbal system. On the one hand there are the forms of the Indicative, Conjunctive, Injunctive, Optative (or Precative), and Imperative; those, that is, which belong to what is called the

<sup>1)</sup> General Works on the Verb in Indo-Germanic. Bopp, Vergl. Gram., 113 §§ 426 ff. pp. 255 ff., 111 §§ 672 ff. pp. 1 ff. Schleicher, Compendium pp. 644 ff. Fr. Müller, Grundr. der Sprachw., III pp. 580 ff. Bopp, Über das Conjugationssystem der Sanskritssprache in Vergleichung mit jenem der griech., lat., pers. und german. Sprachen, 1816. W. Wackernagel, Über Conjugation und Wortbildung durch Ablaut im Deutsch., Griech. und Lat., Seebode und Jahn's Jahrbb., Supplementband I (1831) pp. 17 ff. F. Graefe, Das Sanskrit-Verbum im Vergleich mit dem griech. und lat., aus dem Gesichtspunkte der class. Philologie, St. Petersburg, 1836. A. Kuhn, De conjugatione in - u linguae Sanscritae ratione habita, Berlin 1837. C. W. Bock, Analysis verbi oder Nachweis der Entstehung der Formen des Zeitwortes namentlich im Griech., Sanskr., Lat. und Türk., Berlin 1845. M. Rapp, Der Verbal-Organismus der indisch-europäischen Sprachen, 3 vols., 1859 (I. Das ind., das pers., und das slaw. Verbum; II. Das griech. und das roman. Verbum; III. Das goth., das skand., und das sächs. Ver-Fr. Müller, Der Verbalausdruck im årisch-semitischen Sprachkreise, Vienna 1858. Stenzler, Über die verschiedenen Conjugationen etc. (see footnote to page 52, vol. III). Schleicher, Die Unterscheidung von Nomen und Verbum in der lautlichen Form, 1865. Ascoli, Studj āriosemitici, Articolo secondo, letto alla Classa di lettere, etc. [del R. Instituto Lombardo], Milan 1865; treats of the Idg. verb as affecting the question how the Idg. languages are related to the Semitic. Merguet, Welche Beweiskraft hat das Verbum possum für die Entstehung der Verbalendungen aus Hilfsverben, Gumbinnen 1869. Idem, Die Ableitung der Brugmann, Elements. IV.

Finite Verb. The other class consists of verbal nouns; the forms of the Infinitive (including the Supine), Gerund, and Participle (including the Gerundive). The last class is called the Verb Infinite.

Verbalendungen aus Hilfsverben, Berlin 1871. Idem, Die Hilfsverba als Flexionsendungen, Fleckeisens Jahrbb. 1874 pp. 145 ff. Idem, Bemerkungen zur lat. Formenbildung, Kuhn's Zeitschr. xxII 141 ff. Die Ableitung der Verbalendungen aus Hilfsverben, ibid. xx 321 ff. Leo Meyer, Über Vocalsteigerung, insbes. in der Verbalflexion, ibid. Westphal, Das indogerm. Verbum nebst einer Übersicht der einz. idg. Sprachen und ihrer Lautverhältnisse, 1873. A. Kerber, Gedanken uber die Entwickelung der Conjugation; Erstes Heft: Einleitung, Präsens, Rathenow 1873. Grotemeyer, Üb. die Verwandtschaft der idg. und semit. Sprachen, part 3: Das Verbum, Kempen 1876 (compare part. 4, ibid. 1877). W. Scherer, Zur Gesch. der deutschen Sprache<sup>2</sup> The Author, Das verbale Suffix  $\bar{a}$  im Idg., die griech. Passivaoriste und die sogen. äolische Flexion der verba contracta, Morphol. J. Schrammen, Über die Bedeutung der Formen des Unters. I 1 ff. Verbum, Heiligenstadt 1884. Moulton, Notes in Verbal Morphology, Amer. Journ. Phil. x 280 ff. H. D. Müller, Zur Entwickelungsgeschichte des idg. Verbalbaues, 1890.

Arvan. Bartholomae, Zur [ar.] Verbalflexion, Ar. Forsch. II 61 ff. Idem, Zur [ar.] Verballehre, in Beiträge zur Flexionslehre der idg. Sprachen', 1888, pp. 1 ff (= Kuhn's Zeitschr. xxiv 271 ff.). ney, Sanskrit Gramm. pp. 200 ff. Idem, The System of the Sanskrit Verbs, Proceedings of the Americ. Philol. Assoc., 1876, pp. 6 ff. Sanskrit Roots and Verb-forms (Supplement to Skr. Gr.) 1885. Delbrück, Das altind. Verbum aus den Hymnen des Rigveda seinem Baue nach dargestellt, 1874. J. Avery, Contributions to the History of Verb-Inflection in Sanskrit, Journ. Amer. Orient. Soc., x 217 ff. Neisser, Zur ved. Verballehre, Bezzenberger's Beitr. vII 211 ff. Bartholomae, Handb. der altiran. Dialekte pp. 113 ff. Idem, Das altiran. Verbum in Formenlehre und Syntax dargestellt, 1878. Spiegel, Gramm. der altbaktr. Sprache pp. 205 ff. Idem, Die altpers. Keilinschr.<sup>2</sup> pp. 184 ff. Der Organismus des neupers. Verbums, Kuhn-Schleicher's Beitr. II 464 ff. H. A. Barb, Der Organismus des pers. Verbums, Vienna 1860. Müller, Die Conjugation des neupers. Verbums, sprachvergleichend dargestellt, Vienna 1864. Idem, Die Conjugation des avghanischen Verbums, sprachvergleichend dargestellt, Vienna 1867. Idem, Die Grundzüge der Konjugation des ossetischen Verbums, Vienna 1864. Salemann, Versuch über die Conjugation im Ossetischen, Kuhn-Schleichers Beitr. VIII 48 ff.

Armenian. Fr. Müller, Beiträge zur Conjugation des armen. Verbums, Vienna 1863 (see the same scholar's Armeniaca II, Vienna 1870, pp. 1 ff.).

§ 461. The forms of the Finite Verb grew out of the connexion of subject and predicate. In the parent language, phrases made up of a word denoting some condition or action and a personal pronoun, used as a sentence in which the latter was subject and the former predicate, coalesced, and became a

Greek und Latin. V. Henry, Précis de grammaire comparée du grec et du latin<sup>2</sup>, pp. 264 ff. King and Cookson, The Principles of Sound and Inflection as illustrated in the Greek and Latin Languages, pp. 373 ff. G. Curtius, Die Bildung der Tempora und Modi im Griech. und Lat., sprachvergleichend dargestellt, 1846. Landvoigt, Die Formen des griech. und lat. Verbums untereinander verglichen, Merseburg 1847. Birkenstamm, Über die lat. Conjugation in Vergleichung mit der griech., Rinteln 1869. Fröhde, Zur griech. und lat. Conjugation, Bezzenberger's Beitr. ix 107 ff.

Greek. Kühner, Ausführl. Gramm. der griech. Spr., 12 pp. 490 ff. G. Meyer, Greek Gramm. 2 pp. 402 ff. The Author, Greek. Gramm. (I. Müller's Handb. der klass. Altertumswiss., π2) pp. 144 ff. Pezzi, La lingua greca antica pp. 216 ff. Monro, A Grammar of the Homeric Dialect pp. 1 ff. Lobeck, Rhematicon, sive verborum Graecorum et nominum verbalium teohnologia, 1846. Curtius, Das Verbum der griech. Sprache, seinem Baue nach dargestellt, 12 1877, 112 1880. Ahrens, Über die Conjugation auf  $\mu$  im Homerischen Dialekte, Nordhausen 1838. L. Junius, On the Evolution of the Greek Verb from Primary Elements, London 1843. A. Haacke, Die Flexion des griech. Verbums in der att. und gemeinen Prosa, Nordhausen 1850. In ama, Osservazioni sulla teoria della conjugazione greca, Rivista di filol. I 149 ff. Fick, Zum Aorist- und Perfectablaut im Griech., Bezzenberger's Beiträge IV 167 ff. Bloom field, The 'Ablaut' of Greek Roots which show variation between e and o, Amer. J. Wackernagel, Der griech. Verbalacent, Journ. Phil. 1 281 ff. Kuhn's Zeitschr. xxIII 457 ff. Vogrinz, Beiträge zur Formenlehre des griech. Verbums, 1886. Von der Pfordten, Zur Geschichte der griech. Denominativa, 1886. Johansson, De derivatis verbis contractis linguae Graecae, Upsala, 1886. Lautensach, Verbalflexion der att. Inschriften, Gotha 1887. G. Mekler, Beiträge zur Bildung des griech. Verbums (1. Verba contracta mit langem Themenvokal, 2. die Flexion des activen Plusquamperfects), Dorpat 1887. G. Traut, Lexicon über die Formen der griech. Verba, 1867. Veitch, Greek Verbs Irregular and Defective, their forms, meaning, and quantity, embracing all the tenses used by the Greek writers, with references to the passages in which they are found, A. A. Σακελλάριος <sup>3</sup>Ανώμαλα καὶ ἐλλιπῆ ξήματα new ed., Oxford 1887. πεζων συγγραφέων και ποιητων της Έλληνικης γλώσσης, 5th ed., Athens 1877. C. Thiemann, Homerisches Verballexicon, 1879. Frohwein, Verbum Homericum, die homer. Verbalformen zusammengestellt, 1881. Γ. Ζηκίδης Δεξικόν απάντων των ξημάτων της Αττικής διαλέτου, μεριέχον καὶ τύπους έξ

single word; this is the origin of all the finite verb-forms. The pronouns which specified the persons of whom the predication was made (it is these which we call the personal endings of the verb) always come second in these combinations; as in

Latin. Kühner, Ausführl. Gramm. der lat. Sprache I pp. 428 ff. Stolz, Lat. Gramm. (I. Müller's Handb. der klass. Altertumswiss., 12) pp. 356 ff. Neue, Formenlehre der lat. Spr., II 2 529 ff. Merguet, Die Entwickelung der lat. Formenbildung pp. 167 ff. K. L. Struve, Über die lat. Declination und Conjugation, 1823. K. Hagena, Über die Einheit der lat. Conjug. Oldenburg 1833. Heffter, Über den Ursprung von Bildungen von Verben und der Conjugationsformen in der lat. Sprache, Seebode und Jahn's Jahrbb., IV. Supplementb. (1836), pp. 114 ff. Fuchs, Über die sogen. unregelmässigen Zeitwörter in den roman. Sprachen, 1840. Seemann, De conjugationibus Latinis, Culm 1846. A. Tobler, Darstellung der lat. Conjugation und ihrer romanischen Gestaltung, Zürich 1857. Westphal, Die Verbalflexion der lat. Spr., 1872. L. C. M. Aubert, Den latinske Verbalflexion, Christiania 1875. W. Eisenlohr, Das lat. Verbum, Heidelberg 1880. Stolz, Zur lat. Verbal-Flexion; 1, 1882. A. Probst, Beiträge zur lat. Gramm., I. Zur Lehre vom Verbum, 1883. M. Engelhardt, Die lat. Conjugation, nach den Ergebnissen der Sprachvergleichung dargestellt, 1887. - G. Koffmanne, Lexicon lateinischer Wortformen, 1874. Georges, Lexikon der lat. Wortformen, 1889 (in progress).

Keltic. Zeuss-Ebel, Gramm. Celt. pp. 410 ff. Windisch, Die ir. Auslautsgesetze, Paul-Braune's Beitr. IV pp. 204 ff. Lottner, Die altir. Verbalclassen, Kuhn-Schleicher's Beitr. II 322 ff. Stokes, Bemerkungen über das altir. Verbum, ibid. III 47 ff., VI 459 ff., VII 1 ff. Idem, The Old-Irish Verb Substantive, Kuhn's Zeitschr. XXVIII 55 ff. Ebel, Celtische Studien: Aus der Konjugation, Kuhn-Schleicher's Beitr. III 257 ff., Das Verbum, ibid. v 1 ff. Zimmer, Keltische Studien, Kuhn's Zeitschr. xxvIII 313 ff. (Das sog. t-Futurum); 328 ff. (Das sog. b-Präteritum); 335 ff. (Das sogen, u-Imperf.); 342 ff. (Deponentiale Conjunctivformen auf -ra); 348 ff. (3. sing. prät. pass. auf -as); 352 ff. (3. plur. praet. pass. auf -ait); 363 ff. (3. sing. praet. auf -ta, -tha); xxx 112 ff. (Die Schicksale des idg. s-Aorists im Ir. und die Entstehung des kelt. s-Präteritums); 198 ff. (Das sogen. t-Präteritum der kelt. Sprachen). Loth, Essai sur le verbe néoceltique en irlandais ancien et dans les dialectes modernes, son oaractère, ses transformations, Paris 1882. Ebel, De verbi Britannici futuro et coniunctivo, Schneidemühl 1866. Stokes, Die mittelbretonischen unregelmässigen Verba, Kuhn-Schleicher's Beitr. v 306 ff. Loth, L'optatif, les temps secondaires dans les dialectes britanniques, Mém. de la soc. de lingu.

<sup>&#</sup>x27;Αττικών ἐπιγραφών κτλ., Athen 1888. A. Hogue, The Irregular Verbs of Attic Prose, their forms, prominent meanings, and important compounds, Boston 1869.

\* $e\underline{i}$ -mi (= Skr.  $\acute{e}$ -mi Gr.  $\epsilon \acute{l}$ - $\mu \iota$ ), which consists of  $\sqrt{e}\underline{i}$ - 'go' and -mi, a pronoun connected with Skr.  $m\bar{a}$  Gr.  $\mu \grave{e}$  'me' (it will appear by and by that the -i of -mi originally was no part of

Grimm, Deutsche Gramm. I2 (1870) pp. 754 ff. Germanic. Kluge, Noreen, Behaghel, J. te Winkel, Siebs, Paul's Grundr. 1 369 ff., 509 ff., 592 ff., 663 ff., 749 ff. Braune, Got. Gramm.3 pp. 66 ff. Idem, Althound. Gramm. pp. 209 ff. Ch. S. Th. Berndt, Die doppelform. Zeitwörter d. deutsch. Sprache mit Zuziehung der verwandten Sprachen, Aix and Leipzig 1837. H. Schweizer, Die zwei Hauptklassen der unregelmässigen Verba im Deutschen, Höfer's Zeitschr. für die Wissensch. der Spr. III 74 ff. Ch. W. M. Grein, Ablaut, Reduplication und secundäre Wurzeln der starken Verba im Deutschen, 1862. Braune, Üb. den grammatischen Wechsel in der deutsch. Verbalflexion, Paul-Braune's Beitr. 1513 ff. Kluge, Beiträge zur Geschichte der germ. Conjugation (Quellen und Forschungen XXXII), 1879. Grein, Das got. Verbum in sprachvergleichender Hinsicht, 1872. C. H. F. Walter, Die starke Conjugation im Tatian, 1868. J. Kelle, Otfrid's Verbalflexion ausführlich erläutert, Zeitschr. f. deutsch. Altert. XII 1 ff. Idem, Verbum und Nomen in Notker's Boethius, Sitzungsber. der Wiener Ak., CIX (1885) pp. 229 ff. Idem, Verbum und Nomen in Notker's Aristoteles, Zeitschr. für deutsche Phil., xvIII 342 ff. Idem, Verbum und Nomen in Notker's Capella, Zeitschr. für deutsch. Altert. xxx 295 ff. C. Günther, Die Verba im Altostfries., 1880.

Balto-Slavonic. A. Ludwig, Der Infinitiv im Veda, mit einer Systematik des lit. und slav. Verbs, 1871. Schleicher, Lit. Gramm. pp. 221 ff. Kurschat, Gramm. der littau. Spr. pp. 270 ff. Bezzenberger, Beiträge zur Gesch. der lit. Spr. pp. 192 ff. Miklosich, Vergl. Gramm. der slav. Spr. III<sup>2</sup> 62 ff. Leskien, Handbuch der altbulg. Spr. 2 pp. 99 ff. Miklosich, Lehre von der Conjugation im Altsloven., Denkschriften der Wiener Akad., I (1850) pp. 167 ff. P. Pfuhl, De verborum Slavicorum natura et potestate, Dresd. 1857. Miklosich, Beiträge zur altsloven. Gramm. (part. praet. act. I; part. praes. act. auf g statt auf y; Aorist; die Personalsuffixe des Dualis; Imperativ), Vienna 1875. Leskien, Die Präsensbildungen des Slav. und ihr Verhältniss zum Infinitivstamm, Archiv für slav. Philol. V 497 ff. O. Wiedemann, Beiträge zur altbulg. Conjugation, St. Petersburg 1886. A. Kalina, Przyczynek do historyi konjugacyi słowiańskiej, Warsaw 1889.

Works dealing specially with the formation of Tense or Mood, or of Persons, and so forth, will be cited below in their proper place.

v 133 ff. Ernault, Études bretonnes, vI: La conjugaison personelle et le verbe 'avoir', Rev. Celt. IX 245 ff.; vII: Sur l'analogie dans la conjugaison, *ibid.* XI 94 ff. Nettlau, Observations on the Welsh Verbs, Y Cymmrodor IX pp. 56 ff. Rhys, Notes etc., Revue Celt. vI 14 ff.

the first personal pronoun). Personal endings make the chief difference between Verbs and Nouns or Pronouns.

But it would be a mistake to explain all the Indo-Germanic personal endings which we find actually used as being without exception personal pronouns. Once the Verb was created by aid of real personal pronouns, forms of different origin might be associated with it, and used as though they had a personal pronoun tacked on to the end. In this way, to take an example, the Latin participial form legi-minī = Gr.  $\lambda \epsilon \gamma \acute{o}$ - $\mu \epsilon \nu \alpha \iota$  was associated with the indicative legor etc. (see II § 71 p. 165); and the Romans felt no difference between -minī and -mur or -ntur. Again, many different languages employ infinitive forms, which are cases of nomina actionis, as imperatives used of a particular person. In the same way it is probable that some of the personal endings which have come down from the parent language were not really personal pronouns to begin with.

Another point is to be noticed. There are some forms without any personal ending at all which have been used like genuine verbal forms from the parent language onwards. The  $2^{\rm nd}$  sing, imperative pr. Idg. \*bhere (= Skr. bhára Gr.  $\varphi \ell \varrho \varepsilon$  etc.) is simply the present stem. It must be a survival from the time when tense-stems could be used as independent words. Undoubtedly \*bhere had at first a wider use, which narrowed by degrees to the use which it must have had ever since the end of the proethnic period. In the end, the form was quite clearly marked off from all others of its verbal system by the absence of any inflexion, in the same way as the voc. inne or the nom.  $\chi \omega \varrho \bar{\alpha}$  were distinguished from all other of their associated cases (see III § 186 pp. 62, 63).

Remark. Although personal endings were a sine qua non for the use of a verb form as an ordinary sentence (except \*bhere and a few others like it), or as a copula in a sentence, still a sentence could exist without them. At all periods, the Indo-Germanic languages have nsed sentences that had no finite verb at all. See Paul, Principien<sup>2</sup> pp. 99 ff.

§ 462. The Verb Infinite consisted of noun forms, chiefly nomina agentis or actionis. The difference between these and nouns in the ordinary sense is that these share in certain verbal peculiarities; they have tense, they distinguish between momentary, continuous, or inceptive actions, they have voice, and can govern nouns. The participles were already a large and ramifying group in the parent language; and time has brought about no important change in them. But most of the forms classed as infinitives have arisen since the proethnic period came to an end.

The distinction between the finite verb and the verb infinite is not always kept; for, as we saw in § 461, forms of the latter kind sometimes came to be used in the same way as forms with genuine personal endings. Nor is a line always drawn between the verb infinite and nouns; this we saw in vol. II § 144 pp. 456 f., and § 156 pp. 470 f.

The forms of the Verb Infinite have been discussed under the head of Stem-Formation and Inflexion, so far at least as concerns their formative and inflexional suffixes. We have now to examine the points which mark them as members of a verbal system, connecting, for example,  $\lambda \epsilon i \pi \omega \nu$  with  $\delta \epsilon i \pi \omega$ ,  $\lambda \epsilon i \psi \omega \nu$  with  $\delta \epsilon i \pi \omega$ , with  $\delta \epsilon i \pi \omega$ , and  $\delta \epsilon i \psi \omega$  with  $\delta \epsilon i \psi \omega$ . But for convenience sake verbal nouns will be only cited now and then while we deal with the various groups of the verb infinite, and the whole of them will be afterwards collected and examined in detail.

Verbal Compounds, such as would be formed by joining a real verb-stem to a form of the finite verb, and would answer to O.Pers.  $hama-pit\bar{a}=Gr.$   $\delta\mu\sigma-n\acute{a}\tau\omega\rho$  among noun compounds, never existed as a distinct category, either in the later stages of the parent language, or since. The only exceptions are reduplicated verb forms such as Skr.  $d\acute{a}r$ -darti 'he bursts, breaks to pieces', so far as these can rightly be called compounds (§ 464). We must however not forget that the reduplication of uninflected "roots" was certainly older, on

the whole, than the fusion of roots with personal pronouns into verbal forms.

Whether the tense sign -s- in Gr.  $\delta \varepsilon / \nu - \sigma \omega$   $\varepsilon - \delta \varepsilon / \nu - \sigma \alpha$  etc. was the verb subst. es-; whether -dh- in Skr.  $s \dot{a} - dhati$  Gr.  $\varepsilon \sigma \partial \omega$  ( $\sqrt{ed}$ -)  $\varepsilon - \sigma \chi \varepsilon - \partial \sigma v$  O.C.Sl. i - da etc. is the verb  $dh \bar{e} - {}^{\prime} \iota \iota \partial \dot{e} \nu \alpha \dot{\iota}$ ; and whether these originally acted as auxiliaries, are questions which must be left alone. Even if this be the truth about them, they must have sunk to the level of inflexions long before the end of the proethnic period, and they could no longer be the type for compounds consisting of verb + verb.

Nor do we find in the periods for which there is direct evidence either noun stems compounded with genuine verb forms, or genuine verbal stems compounded with nouns. We cannot class under the second head words like Gr. ἀρχέ-κακος (from ἄρχω), ἐπιχαιρέ-κακος (from επιχαίρω), Στησ-αγόρης (from ε-στησα), H.G. wetz-stein 'whetstone' melk-fass 'milkpail' (from wetze, melke). These are due merely to a perversion or interpretative corruption, and the imitation of older compounds which had a noun stem for the first member. They are not real compounds of a verbal stem with a noun. See II § 30 pp. 51 ff., § 41 pp. 74 f., § 47 p. 86.1)

Forms of the finite verb are clearly seen in composition only in the following classes of words; and here too one of the two parts has usually sunk to a kind of suffix or prefix.

1. A Verb form is compounded with Adverbial words; as Gr.  $\check{a}\pi$ - $\epsilon\iota\mu\iota$  Lat. ab-eo, Lat. ne-scio, pr. Idg.  $*\acute{e}$ - $d\imath\acute{k}om$  = Gr.  $\check{\epsilon}$ - $\delta\varrho\alpha\varkappa o\nu$  (I regard the augment as a temporal particle); Pruss.  $quoit\bar{\imath}$ -lai 'he may wish, he might wish', pr. Idg.  $*bh\acute{e}ret$ -u Skr.  $bh\acute{a}rat$ -u, — and also -i in  $*bh\acute{e}ret$ -i (beside  $*bh\acute{e}ret$   $*bh\acute{e}res$ ) was probably a demonstrative particle.

<sup>1)</sup> There is a new essay by W. Christ, Abhängigkeitskomposita des Griechischen, Berichte der k. bayer. Akad., 1890 pp. 187 ff. I cannot agree with the theory for which Christ takes up the cudgels again (pp. 184 ff.), that  $^3A_{\gamma\acute{e}}$ - $\lambda a_{\alpha c}$  arose from the imperative phrase  $\mathring{a}_{\gamma e}$   $\lambda a\acute{o}_{\gamma}$ , and that  $\mathring{a}_{\varrho\chi e}$ - $\Im \epsilon \omega \varrho_{\sigma}$  came from  $\mathring{a}_{\varrho\chi e}$ - $\Im \epsilon \omega \varrho_{\sigma}$  by phonetic change of  $\epsilon$  to  $\iota$ .

2. A Verb form is compounded with a Case, being itself the final member of the compound. The case, at the time of combination, was either a living case, or some kind of infinitive. Examples: Skr. dātāsmi (periphrastic future) for dātā asmi 'dator sum', Lat. possum for potis sum, vēnun-do vēnum-do pessun-do, Lat. ārē-bam āre-facio O.C.Sl. nesē-achu (III § 275 p. 177), Fr. aimerai (O.Fr. amerai) for amāre habeo, Lith. opt. 1st pl. sùktum-bime, etc.

The line between these two classes is not absolutely fixed, as we see from such words as Skr. astam-éti 'goes down' (of the sun), which has for its first part ásta-m 'to one's house, home'.

Remark. There is no class of Verbal Compounds answering to Class I of Noun Compounds  $(\delta\mu_0-\pi\acute{a}\tau\omega\varrho)$ , which might have been a model for later formations. It seems therefore best not to give a special chapter to Verb Compounds, as was done to Nouns, but to describe the various kinds in the place they most naturally come, along with the Tenses, the Personal Endings, or as it may be.

One point, however, should be touched on here. It is a matter of wider interest, and well illustrates an important principle of word-formation. When a sentence becomes a single word, it may be treated like a simple word, and it may be inflected or otherwise modified just as the simple word can. Lith. du-k 'give' ei-k 'go' (both imperative), consisting of the 2<sup>nd</sup> sing. \* $d\hat{u}$  (cp. Lat. ce-do) and \*ei + the particle -k, are the foundation for a 2nd pl. dikite, eikite etc.; and again eiksz come here', which itself is eī-k + szè 'here', produced elksz-te. Pruss. quoitī-lai 'he might wish' (lai = O.C.Sl. li 'vel, aut') suggested the 2nd sing. quoitīlai-si and 2nd pl. quoitilai-ti. Slav. daj-mi and Mod. Gr. Sos-uov 'give me' produced the 2nd pl. daj-mi-te and do's-uov-re. Of the same kind were Gr. 3rd pl.  $\alpha\gamma\acute{e}\tau\omega$ - $\nu$   $\alpha\gamma\acute{e}\tau\omega$ - $\sigma\alpha\nu$  (2nd sing.  $\hat{\epsilon}\lambda\Im{e}\tau\widetilde{\omega}$ - $\varepsilon$  Hesych). Lat. 2nd pl. agito-te, since Idg. \*age-tod was a compound of the imperative \*age with the adv. (abl.) \*tod 'thence, then'. Also, according to Osthoff and Bugge, Gr. δεδώκαμεν δεδώκατε; they explain δέδωκε as \* $\delta$ εδω = Skr.  $dad\bar{a}(u)$  + the particle \* = Lat. ce in cedo. Analogous forms of nouns or pronouns are: Gr. οὖτο-ς αύτη acc. τοῦτο-ν Boeot. οὖτο-ν etc., formed from the nom.  $*_{o\tilde{\nu}-\tau o}$   $*_{\alpha\tilde{\nu}-\tau o}$ , whose second part was a particle (cf. O.C.Sl.  $k\tilde{\nu}-to$  'who'), see II § 4 p. 9, III § 415 p. 337; Mid. Ir. instr. pl. donafī-b built up on O.Ir. donaib-(h)ī, see footnote on page 357; O.H.G. gen. deses dat. desemo following de-se 'this' with the particle se, see III § 414 pp. 335 f.; Skr. dat. asmá-bhyam Lesb. nom. ἄμμε-ς following acc. \*ns-me (Lesb. ἄμμε) with the particle sme, see § 436 pp. 367 f., § 443 p. 379; Pol. gen. sing. sztukamięsy following nom. sztukamięsa 'a piece of meat', where mięsa is the gen. of mieso.

### REDUPLICATED VERB-FORMS.

Reduplication, the repetition of a word or other element of speech with the same grammatical force, to express that an action or state is repeated, or to intensify it, is certainly older than the modes of forming cases or parts of the finite verb which we actually see in use. It had at first no special connexion with either verbs or nouns, but was used with both; verb types such as Skr. dár-dar-ti 'it bursts, breaks up' da-dhṛṣ-imá 'we have ventured' ci-kit-é 'he knows', and noun types like Skr. dar-dar-a-s 'broken' da-dhṛṣ-á-s 'venturesome, bold' ci-kit 'knowing' may have been formed quite independently of each other. Compare II § 6 pp. 12 ff., § 51 ff. pp. 94 ff. 1)

Root reduplication in verbs came to be very important, and this very early in the history of the parent language, because it was turned to account in the formation of tenses.

<sup>1)</sup> Works on Reduplication in general have been cited in the footnote to vol. II page 12. On Verbal Reduplication see the following. A. Williams, On Verb-Reduplication as a Means of Expressing Completed Action, Transactions of the Amer. Phil. Assoc., 1875 pp. 54 ff. Pauli, Das praeteritum reduplicatum der idg. Sprachen und der deutsche Ablaut, Kuhn's Zeitschr. XII 50 ff. Osthoff, Zur Geschichte des Perfects, pp. 264 ff. and passim. - Ernault, Du parfait en grec et en latin, pp. 1 ff. - Ebel, Reduplicierte Aoriste im Griech., Kuhn's Zeitschr. 11 46 ff. - Von der Pfordten, Zur Gesch. des griech. Perf., pp. 42 ff. - Deecke, De reduplicato linguae Latinae praeterito, Lips. 1869. -Stokes, Reduplication im altir. Verbum, Kuhn-Schleicher's Beitr. II 396 ff. Windisch, Das reduplicierte Perfectum im Ir., Kuhn's Zeitschr. XXIII 201 ff. — A. Moller, Die reduplicierenden Verba im Deutschen als abgeleitete Verba, eine etymologische Untersuchung, Potsdam 1866. Scherer, Die reduplicierten Praeterita, Zeitschr. f. österr. Gymn. xxiv 295 ff., and Zeitschr. f. deutsch. Altert. xix 154 ff., 390 ff. Die reduplicierten Präterita, Paul-Braune's Beitr. 1 504 ff. Pokorny, Über die redupl. Praet. der germ. Sprachen und ihre Umwandlung in ablautende, Landskron 1874. Holthausen, Die reduplioierenden Verba im Germ., Kuhn's Zeitschr. xxvII 618 ff. Hoffory, Die reduplicierten Praeterita im Altnord., ibid. 593 ff. - See also the works cited under the head of Tense-stems.

It was used to distinguish various kinds of action, and also the time at which the action took place. For these purposes Reduplication was very widely used, not only in the parent language but in most of its offshoots far on into the historical period. The wide use of verbal reduplication gave great impulse to similar reduplication in nouns. Noun-reduplication was at first a principle not very active or far-reaching; but thus reinforced it lasted much longer than it would have done, and in later times, under the influence of reduplicated forms in the verb infinite, reduplicated noun-forms appeared again where the proethnic reduplicated type had lost all its reproductive power. Examples are Gr. κεκράγ-μό-ς (Eur.) κέκράγ-μα (Aristoph.) 'cry, outcry', κεκράκ-τη-ς 'one who cries aloud' (Aristoph.) beside  $\varkappa \varepsilon - \varkappa \varrho \bar{\alpha} \gamma - \omega' \varsigma \quad \varkappa \varepsilon' - \varkappa \varrho \bar{\alpha} \gamma - \alpha , \quad \pi \varepsilon \pi o i \vartheta - \eta \sigma i - \varsigma$  'trust' (Josephus, Philo) beside πε-ποιθ-ως πέ-ποιθ-α, Mod.H.G. zitterig 'tremulous' beside zittere 'I tremble' = pr. Germ. \*ti-trō-mi.

- § 465. The following Idg. types may be distinguished, according to the form of the reduplication:
- I. Root-syllable and reduplication-syllable show the same vowel, or two ablaut-grades of the same vowel.
- $\alpha$ . The Root begins and end in a consonant, and the syllable of reduplication, or Reduplicator, ends in a consonant which is taken from the final of the Root (we count as consonants the second part of the diphthongs  $\alpha_i$   $\alpha_i$  and so forth). Of this there are three varieties; the first being a fairly exact reduplication, the second replacing a liquid by a nasal in the reduplicator, and the third inserting  $\bar{\imath}$ .
- 1. Aryan. Sanskrit bad-badhé  $3^{rd}$  sing. of  $b\bar{a}dh$ -'press'.  $d\acute{a}r$ -dar- $\S{i}$   $2^{nd}$  sing. of dar- ( $\sqrt{der}$ -) 'split, break', tar- $t\bar{u}r$ -ya- $nt\bar{e}$   $3^{rd}$  pl. of tar- ( $\sqrt{ter}$ -) 'pass over',  $v\acute{a}r$ -vrt-ati  $3^{rd}$  pl. of vart- ( $\sqrt{uert}$ -) 'vertere', mar-mrj- $y\acute{a}$ - $t\bar{e}$   $3^{rd}$  sing. of mar-( $\sqrt{ghen}$ -) 'strike, kill', nam- $nam\bar{i}$ -ti  $3^{rd}$  sing. of nam- ( $\sqrt{nem}$ -) 'bend',  $d\acute{a}n$ - $da\acute{s}$ -dan-s partic. of  $da\acute{s}$  ( $\sqrt{da^x}n\^{k}$ -) 'bite', jan-jabh- $y\acute{a}$ - $t\bar{e}$   $3^{rd}$  sing. of jambh- ( $\sqrt{gembh}$ -) 'snap'.  $v\bar{e}$ - $v\bar{e}$ -ti  $3^{rd}$  sing. of  $v\bar{i}$  'appetere',  $v\bar{e}$ - $v\bar{i}$ -ya- $t\bar{e}$   $3^{rd}$  sing. of  $v\bar{i}$  'flutter',  $n\bar{e}$ -nik- $t\bar{e}$   $3^{rd}$

sing. of nij-  $(\sqrt{neig})$  'wash'.  $n\bar{o}$ -nu-mas 1st pl. of nu- 'cry out',  $c\bar{o}$ - $\S k\bar{u}$ - $y\acute{a}$ - $t\bar{e}$  3rd sing. of sku- 'cover',  $\mathring{s}\bar{o}$ - $\mathring{s}uc$ - $\bar{d}na$ -s partic. of  $\mathring{s}uc$ - 'light, brighten', a- $n\bar{o}$ -nud-ya-nta 3rd pl. of nud- 'push'. A vestic  $car^e$ - $ker^e$ - $mah\bar{\iota}$  1st pl. of kar- 'think of' (Skr. imper. ca-kr-dhi). dae- $d\bar{o}i\check{s}$ -t 3rd sing. of dis-  $(\sqrt{deik}$ -) 'show' (Skr. 3rd sing.  $d\acute{e}$ - $di\check{s}$ - $t\bar{e}$ ). zao-zao- $m\bar{\iota}$  1st sing. of zu- 'call' (Skr.  $j\acute{o}$ - $hav\bar{\iota}$ -mi).

Greek  $\pi o \varrho - \varphi \acute{v} \varrho - \omega$  'I move restlessly' for \*- $\varphi v \varrho - \iota \omega$ : cp. Skr.  $j \acute{a}r - b h u r \bar{\iota} - t i$  'moves convulsively, throbs, palpitates'.  $\mu o \varrho - \iota u \acute{v} \varrho \omega$  'I roar, murmur' for \*- $\mu v \varrho - \iota \omega$ : cp. Lat.  $m u r m u r \bar{d} r e$ , O.H.G.  $m u r m u r \bar{o} n$  (§ 595).  $\gamma a \varrho - \gamma a i \varrho - \omega$  'I swarm' for \*- $\gamma a \varrho - \iota \omega$  ( $\gamma \acute{a} \varrho \gamma a \varrho a$  neut. pl. 'swarm').  $\gamma a \gamma - \gamma a i \nu \epsilon u \cdot \tau$  oderial  $\gamma \acute{e} \iota \omega$  (Schmidt conjectures  $\gamma a \gamma \gamma a \nu \epsilon \upsilon \iota \iota \nu$ ): cp. O.C.Sl.  $g a - g n a j a \iota$  'I murmur, growl' (adj.  $g a g n i \nu \check{u}$ ).  $\pi a \mu - \varphi a i \nu \omega$  'I shine clearly' for \*- $\varphi a \nu - \iota \omega$ , Epic partic.  $\pi a \mu \varphi a \nu \acute{o} \omega \nu$ ; the root was  $b h \bar{a} -$ , and the nasal of the verb was therefore a present-suffix, see §§ 601, 611.  $\ddot{\alpha} \tau \tau \omega$  Hom.  $\dot{\alpha} \iota \sigma \omega \omega$  'rush, run at something i. e. \* $f a \iota - f \iota \varkappa - \iota \omega$  (I § 96 p. 90, § 131 pp. 119 f.) may be connected with Skr.  $v \bar{e} - \nu i j - \nu \acute{a} - \iota \bar{e}$  ( $\nu i j - \omega \iota \omega$ ) by assuming an Idg.  $\mu a^{\varkappa} i g - \mu a^{\varkappa} i g - \omega \iota \omega$ . (cp. I § 469. 7 p. 346).

Remark. The origin of  $\alpha \iota$  and  $o \iota$  is obscure in the reduplicating syllable of the following words:  $\mu \alpha \iota - \mu \alpha' \omega$ ,  $\pi \alpha \iota - \rho \alpha' \sigma \sigma \omega$ ,  $\pi \alpha \iota - \pi \alpha' \lambda \lambda \omega$ ,  $\partial \alpha \iota - \partial v' \sigma \sigma \varepsilon \sigma \partial \alpha \iota$  (Élasof  $\partial \alpha \iota'$  Hesych.),  $\pi o \iota - \rho v' \sigma \sigma \omega$ ,  $\pi o \iota - \pi \nu v' \omega$  and others. The *i*-diphthong recals a reduplicative *i* in Skr.  $b h \dot{\alpha} r i - b h r - a t i$  and in Skr.  $b \dot{i} - b h a r - t i$  Gr.  $\gamma \iota - \gamma \nu \sigma - \mu \alpha \iota$ . See § 473 Rem. p. 17.

Latin. mur-murāre (murmur): cp. Gr. μορμέρω Ο.Η.G· murmurōn. tin-tinnāre tin-tināre, tin-tinnīre beside tinnīre.

Keltic. Mid. Ir. der-drethar 'there is a sound, or a cry', s-pret. derdrestar, cp. II § 52 pp. 94, 95.

Germanic. O.H.G. mur-murōm mur-mulōm 'I murmur' (Mid.H.G. murmer murmel 'murmur, growl'): cp. Gr. μορμύρω Lat. murmurāre. O.H.G. rērēm 'I bleat, bellow, roar', pr. Germ. 1st sing. \*rai-rēiō, cp. Litt. rēju 'I bellow'. This verb changed its inflexion on the analogy of verbs like pr. Germ. \*pulē-iō (Goth. pula O.H.G. dolēm), see §§ 592, 708, 739; hence A.S. rārian, with the same change to the 2nd weak conjugation as is seen in dolian and some others.

Slavonic. O.C.Sl. glagolją 'I speak' for \*gol-golją (glagolŭ 'word'); mrŭmŭrją 'I gnaw, nibble'; gągnają 'I murmur, growl', cp. above, Gr. γαγγαίνειν.

§ 466. 2. The reduplicating syllable has a Nasal instead of a Liquid; see I § 282 p. 226. Skr. can- $c\bar{u}ryat\bar{e}$  'moves quickly or repeatedly'. Gr.  $\gamma o\gamma - \gamma \dot{\nu} \lambda \lambda \omega$  'I round'  $(\gamma \dot{\sigma} \gamma \gamma \nu \lambda o - \varsigma$  'round'),  $\tau o\nu - 9o\rho t \zeta \omega$  'I murmur'. Lat. gin- $gr\bar{v}re$ .

This nasal reduplication passed on from roots ending in a nasal (see § 465) or a liquid to a few others: as Skr.  $ja\hat{n}jap-y\acute{a}t\bar{e}$  from jap- 'whisper, say half-aloud',  $dandah\bar{t}ti$   $dandahyat\bar{e}$  from dah- 'burn' (which seemed natural in Skr. after such a form as  $dan-da\acute{s}-$  from  $\sqrt{de\hat{n}\hat{k}}-$  'bite'), Gr.  $\gamma o\gamma -\gamma \acute{v}\zeta \omega$  'I growl'.

§ 467. 3. In Sanskrit, i or  $\bar{\imath}$  is often inserted between the reduplicating syllable and the root; the Vedic language has  $\bar{\imath}$  before single consonants, i before more than one (compare Wackernagel, Das Dehnungsgesetz, p. 18). E. g. bhári-bhr-ati  $3^{\rm rd}$  pl. of bhar- 'carry',  $v\acute{a}r\bar{\imath}$ -vrj-at- partic. of varj-'turn, twist',  $gh\acute{a}ni$ -ghn-at- partic. of han- 'strike, kill',  $gan\bar{\imath}$ -gan-ti  $3^{\rm rd}$  sing.  $g\acute{a}ni$ -gn-at- partic. of gam- 'go', kani-krad- $y\acute{a}$ - $m\bar{a}na$ - partic. of krand- 'bellow',  $n\acute{a}v\bar{\imath}$ - $n\bar{o}$ -t  $3^{\rm rd}$  sing. of nu-'cry out'.

Where  $-\bar{\imath}$ - comes after the root syllable,  $-\bar{\imath}$ - is never found after the syllable of reduplication; thus we have only  $n\bar{o}$ - $nav\bar{\imath}$ - and  $nav\bar{\imath}$ - $n\bar{o}$ -.

Forms with an aspirate at the beginning of the reduplicator, such as bhári-bhr-ati gháni-ghn-at-, are the older and are phonetically correct; but those like dávi-dhv-at- and pánī-phan-at- have been altered, the former from \*dhávi-dhv-at-following dō-dhavī-ti (cp. I § 480 pp. 354 f.), the latter from \*phánī-phan-at- following pam-phan-at- (cp. I § 475 p. 350). Thus at a later stage we find barī-bhar-ti instead of bhárī-bhar-ti too.

How to regard this  $\bar{i}$  is not quite clear. Thus much, however, seems to me certain, that it is the same as an  $\bar{i}$ ,

also of varying quantity, which characterises Class III of our reduplicated forms; and I shall give in the Remark to § 473 a conjecture as to its origin.

§ 468. 4. Gr.  $\dot{\epsilon}\gamma\rho\dot{\eta}-\gamma\rho\rho\alpha$  'I am awake' has the suffix  $-\bar{\epsilon}$ -in the reduplicating syllable after the root (§§ 587 ff.), cp.  $\dot{\epsilon}\gamma\rho\dot{\eta}-\sigma\sigma\omega$  'I am awake', beside  $\ddot{\epsilon}\gamma\rho-\epsilon-\tau o$  'awoke',  $\dot{\epsilon}\gamma\epsilon\dot{\epsilon}\rho\omega$  'I arouse' for  $*\dot{\epsilon}\gamma\epsilon\rho-\iota\omega$ . Perhaps the same  $-\bar{\epsilon}$ - is contained in Skr.  $car\bar{a}$ -cará-s 'going far away',  $ghan\bar{a}$ - $ghan\acute{a}$ -s 'killing easily' and similar words (cp.  $sar\bar{\imath}$ - $srp\acute{a}$ -s 'creeping, crawling' and the like).

§ 469. b. The Root begins and ends in a consonant, and contains an i- or u-diphthong. This diphthong is represented in the reduplicator by i and u sonant, sometimes  $\bar{i}$  and  $\bar{u}$ , not followed by any consonant. Skr. bi-bhē-mi 'I fear' 3rd dual bi-bhi-tas partic. bi-bhy-at conj. 3rd sing. bī-bhay-a-t, O.H.G. bi-bē-m 'I shake'. Skr. dī-dhy-ē 'I behold', Avest, dī-đaeiti 'beholds'. Skr. pret. a-ci-kšip-a-t from kšip- 'throw',  $a-r\bar{\imath}-ri$ š-a-t from riš- 'be hurt'. Skr. desid. ti-tik-ša-tē from tij- 'be sharp'. Gr. πι-πί-σκω 'I give to drink': cp. Skr. 2nd pl. pi-py-a-ta 2nd sing. pī-pi-hí (pī- 'make overflow, give plenty to drink'). δίζομαι 'I seek, strive' (orig. 'gaze at something') for \*δι-δι-ο-μαι (on δίζημαι see § 594): cp. Skr.  $2^{nd}$  sing. di- $d\bar{\imath}$ -hi  $3^{rd}$  pl.  $d\bar{\imath}$ -dy-ati,  $d\bar{\imath}$ - 'shine, be bright' (ácha dī- 'direct one's mind to'). Goth. rei-rái-þ 'shakes, trembles': cp. Skr. lē-lāya-ti 'moves, trembles' with reduplication of the type of a (1) above (§ 465); the inflexion reira reirais etc. is explained by the analogy of verbs like paha 'taceo', see §§ 592, 708, 739. Skr. ju-hó-ti 'offers', pret. a-cu-krudh-a-t from krudh- 'grow angry',  $a\text{-}d\bar{u}\text{-}du\S\text{-}a\text{-}t$  from duš- 'grow bad, perish', desid. bu-bhut-sa-ti from budh- 'wake, learn'..

Remark 1. Despite such forms as Skr.  $\dot{s}i-\dot{s}u-\dot{s}$  a-pi-plav-a-m Gr.  $\tau\iota-\tau\dot{v}oxo\mu\alpha\iota$   $\pi\iota-\varphi\alpha\dot{v}ox\omega$  (cp. II § 52 Rem. p. 97), I yet believe that where the i-roots had originally i in the reduplication, u-roots had u. The palatal consonant in the reduplicator of verbs whose root initial is a velar consonant does not prove that  $ju-h\acute{o}-ti$  is instead of  $*ji-h\acute{o}-ti$ , a-cu-krudh-a-t instead of \*a-ci-krudh-a-t, or bu-bhut-sa-ti instead of \*bi-bhut-sa-ti (cp. bi-bhar-ti  $a-pi-spi\dot{s}-a-t$  etc., § 473); for ku- may have become cu- on the analogy (say) of a-ci-krad-a-t, and of perfect forms such a  $cu-kr\ddot{o}dha$  cu-krudhur where cu- is instead of \*ca-= Idg. \*qe- (cp. Rem. 2).

Remark 2. i or u in the reduplicator of perfects like the following is not original: Skr. ri-reca cu- $kr\bar{o}dha$  i- $y\bar{a}ja$  u-veca Lat. sci- $cid\bar{\iota}$  tu- $tud\bar{\iota}$ , O.Ir. ro chuala for \*cu-clova, see § 851, 868, 878.

- § 470. c. The Root begins in a sonant and ends in a consonant, and so also the Reduplicator.
- 1. Roots ending in a single consonant. Skr.  $\acute{a}l$ -ar-ti moves',  $\vec{a}m$ -an-a-t 'he was hurt'. Armen. ar-ar-i 'I made' (pres. ar-ne-m), beside Gr.  $\mathring{a}\varrho$ - $\alpha\varrho$ - $\iota$ ( $\iota$ ) in to',  $\mathring{\eta}\varrho$ - $\alpha\varrho$ - $\iota$ ( $\iota$ )  $\varrho$ - $\iota$ ( $\iota$ ) perf.  $\mathring{\alpha}\varrho$ - $\mathring{\alpha}\varrho$ - $\iota$ ( $\iota$ ). Gr.  $\mathring{\eta}\gamma$ - $\alpha\gamma$ - $\iota$ ( $\iota$ ) from  $\mathring{\alpha}\gamma\omega$  'I lead',  $\mathring{\omega}\varrho$ - $\varrho$ - $\varrho$ - $\iota$ ( $\iota$ )  $\mathring{\varrho}$ - $\varrho$ - $\varrho$ - $\iota$ ( $\iota$ ) from  $\mathring{\varrho}\varrho$ - $\varrho$ - $\varrho$ - $\iota$ ( $\iota$ ) have arisen, I move',  $\mathring{\varrho}\pi$ - $\omega\pi$ - $\iota$ (I have seen, see'.
- 2. Where roots end in two consonants, only the first appears in the reduplicator (cp. Skr. vár-vart-ti from vuert-etc., § 465). Gr. ἄλ-αλκ-ε 'he warded off'. Skr. perf. ān-áśa (pres. aś-nō-ti 'attains' for \*n̄k-) O.Ir. perf. t-ānac 'I came' (-c-for -nc-) Gr. aor. ἐν-εγκ-εῖν 'to bring' (cp. Skr. ānāśa Gr. κατ-ήνοκα § 846), Skr. perf. ān-ánja (anj- 'anoint'). On the analogy of these perfects arose in Sanskrit ān-arca (arc- 'shine, praise'), see § 851.
- § 471. II. The reduplicating syllable ends in e or  $\bar{e}$ , no matter to what vowel grade the root belongs. This was the kind of reduplication used for the Perfect and for certain classes of the Present and Aorist, both in the parent language and later. I have by no means convinced myself that  $\tilde{e}$  belonged originally only to forms with  $\tilde{e}$  in the root syllable, and that it was the echo of the root; nor that its use with other roots is due to analogy. See § 473, Remark.

First, forms with e short in the reduplication.

Perfect. Skr. ba-bhūva Gr.  $\pi \varepsilon$ -φύασι,  $\sqrt{bhey}$ - 'become, be'. Skr. ta-sthimá Gr.  $\varepsilon$ -σταμεν Lat. ste-timus,  $\sqrt{sta}$  'stand'. Gr.  $\pi \varepsilon$ -παγα  $\pi \varepsilon$ -πηγα Lat. pe-pigī Goth. fai-fāh,  $\sqrt{pak}$ - pāg-'make fast'. Gr.  $\gamma \varepsilon$ -γενμαι O.Ir. do-roigu for \*-rό-gegu (§ 878),  $\sqrt{gey}$ s- 'taste, try, enjoy'. Gr.  $\lambda \varepsilon$ -λοιπα,  $\sqrt{leiq}$ - 'leave'. O.Lat. pe-pugī. By late re-formation, as has been pointed out (§ 469, Rem. 2), we get Skr. ri-réca cu-krōdha i-yāja u-vāca Lat. sci-cidī pu-pugī tu-tudī, O.Ir. ro chuala.

Pr. Ar. \*sa-zd- (= Avest. hazd-) became Skr.  $s\bar{e}d$ -, e. g. 1st pl. sēdimá (I § 591 p. 447), and pr. Ar. \*ja-jt- became Skr. yēt-, as mid. yēt-ē (Avest. 1st pl. act. yaep-ma). ē, which here and in similar examples is regular, spread by analogy, and thus we get pētimá instead of pa-pt-imá (the older form, used along with the later),  $\sqrt{pat}$ -'fly, fall', and  $n\bar{e}\dot{s}im\dot{a}$ , from  $\sqrt{na\dot{s}}$ -'be destroyed'. Then again  $\tilde{e}$  in Irish arose by compensatory lengthening, as perf. ro  $g\bar{e}nar$  'natus sum' for \*ge-gn- ( $\sqrt{\hat{g}en}$ -), see I § 523 p. 380, § 620 p. 467. Lat. sēdimus might be derived from \*se-zdimus (I § 594 p. 450), and lēgimus vēnimus be explained on the same principle as Skr. pētimá. Germ. forms like Goth. sētum (sat 'I sat') mētum (mat 'I measured') qēmum (qam 'I came'), and of Lith. forms like part. sěd-ēs (sědu 'I sit') běg-ēs (bégu 'I run') kél-ēs (kelù i. e. \*kel--iù 'I lift') věm-ēs (vemiù 'I break wind'), there is none which can be due to compensatory lengthening in these several languages. We must therefore assume that here the unreduplicated root with Idg. ē, the 3rd strong grade of the e-series, acted as the weak stem for the perfect. This form of the root is quite clearly the perfect stem in Skr. sāh-vás- beside pres. sāh-a-ti = Idg. \*sēĝh-e-ti, and in O.Ir. ro mīdar 'iudicavi' beside Gr.  $\mu\eta'\delta$ - $\epsilon$ - $\tau\alpha\iota$ , and others. See § 480 Rem., and § 494.  $m\bar{e}t$ in Goth. mētum must therefore be identified with O.Ir. mīd-Gr.  $\mu\eta\delta$ -. Weak reduplicated stems often became hard to pronounce; and hence they were often exchanged for this kind of unreduplicated form in the Germanic and Baltic branches, and perhaps in Latin too. See further in §§ 848 and 893.

The discovery of these doublet stems in the Idg. perfect, se-zd- and  $s\bar{e}d$ -, makes it anything but certain that  $*\bar{e}d$ - was a contraction of reduplicated \*e-ed- in Skr.  $\bar{a}dima$  Lat.  $\bar{e}dimus$  Goth.  $-\bar{e}tum$ . Lith.  $\bar{e}d\bar{e}s$  O.C.Sl.  $jad\bar{u}$  (from  $\sqrt{ed}$ - 'eat').  $*\bar{e}d$ -may have been a stem like  $*s\bar{e}d$ -; and this to me seems more likely to be true. See § 848. 3.

Present and Aorist. Skr.  $3^{rd}$  pl.  $sa-\dot{s}c-ati$   $3^{rd}$  sing.  $s\acute{a}-\dot{s}c-a-ti$  Gr.  $\acute{\epsilon}-\sigma n-o i \tau o$ ,  $\sqrt{seq}$ - 'sequi'. Gr.  $\acute{\epsilon}i\pi-\alpha$  (Gort.  $\pi \varrho o$ -

-Fειπάτω) stem Idg. \*ue-uq-, Skr. ά-vōc-a-t Gr. ε-ειπ-ο-v stem Idg. \*ue-uq-o-,  $\sqrt{u}$ eq- speak' (cp. §§ 557, 561).

§ 472.  $\bar{e}$  is less frequent than e in the reduplicator. Many perfects in the Vedas have  $\bar{a} = \mathrm{Idg.} \ \bar{e}$ , as  $d\bar{a}$ - $dh\bar{a}ra$  (dhar- 'hold'),  $m\bar{a}$ -mgjur (marj- 'wipe'),  $v\bar{a}$ - $va\dot{s}ur$  ( $va\dot{s}$ - 'desire'); an example of this kind in Avestic is Gāthic 3<sup>rd</sup> sing.  $v\bar{a}$ - $ver^ez\bar{o}i$  ( $var^ez$ - 'work').

The same  $\bar{a}$  is found in Intensives through all periods of Sanskrit; e. g.  $d\bar{a}$ -dhar-ti beside dar-dhar-ti,  $b\bar{a}$ -badh- $\bar{e}$  beside bad-badh- $\dot{e}$  ( $b\bar{a}dh$ - 'press, oppress'),  $p\bar{a}$ -pac-ya- $t\bar{e}$  (pac- 'cook'). A similar agreement between the reduplicators of the perfect and the present intensive is seen in perf.  $d\bar{\imath}$ -dhay-a and pres. intens.  $d\bar{\imath}$ - $dh\bar{e}$ -ti, from  $dh\bar{\imath}$ - 'think'. It is obvious that the closely allied in meaning of the completed perfect (or present perfect) and the intensive had some part in the spread of reduplicating  $\bar{a}$  in the Vedic perfect.

Analogous Greek forms are the perfect  $i\gamma\eta'-\gamma\epsilon\varrho-\mu\alpha\iota$  from  $\sqrt{ger}$ - 'awake', which agrees with Skr.  $j\bar{a}-g\bar{a}r-a$   $j\bar{a}-g\bar{r}-v\acute{a}s$ -(present  $j\bar{a}-gar-ti$   $j\bar{a}-gg-h\acute{i}$ ), and the Homeric present  $\delta\eta-\delta\dot{\epsilon}\chi$ -- $\alpha\tau\alpha\iota$  'they welcome' (§ 560).

Remark. Some have wished to see this redupl.  $\bar{e}$  in other Greek perfects. But the view is unsafe. See the Author, Gr. Gr. § 131 p. 164. Nothing much is proved by Cret.  $\mathring{a}\pi_{-}\mathring{\eta}\sigma\tau\epsilon\lambda\kappa\epsilon$  (Cauer, Del. 2 no. 132. 5) and  $\mathring{\eta}_{-}\gamma\varrho\alpha\tau\tau\alpha\iota$   $\mathring{\eta}_{-}\gamma\varrho\alpha\mu\mu\epsilon\nu\rho\varsigma$  (J. Baunack, Berl. Phil. Wochenschr., 1887, col. 60; Th. Baunack, Philologus XLIX 594), since it is very doubtful whether they come from  $*\sigma\eta_{-}\sigma\tau\epsilon\lambda_{-}$  and  $*\gamma\eta_{-}\gamma\varrho\alpha\varphi_{-}$  (cp. § 476, Rem. 2).

§ 473. III. The Reduplicator ends in i or  $\bar{\imath}$ , the Root having a different vocalism. This is the prevailing mode, and has been since proethnic times, with certain classes of aorist and present stems. I am very far from satisfied with the view that this  $\bar{\imath}$  originally was used only with roots containing i (as Skr. bi- $bh\bar{e}$ -ii, type I b. § 469), which it merely echoed, and that it only spread to other roots by analogy.

Remark. The  $\tilde{\imath}$  of Skr. ά-j $\tilde{\imath}$ -jana-t bi-bhar-ti Gr. γι-γνο-μαι, as has been said in § 467 pp. 13 f., I would identify with  $\tilde{\imath}$  in the Skr. intensives bhár $\tilde{\imath}$ -bhar-ti bhári-bhr-ati etc. These and the like reduplicative syllables may once have had a real independence, and  $-\tilde{\imath}$  - $\tilde{\imath}$  may have been some inflexion, perhaps a case ending. These were doubtless Brugmann, Elements. IV.

sentences of the same kind as Lith. dektè dēga 'it burns up clear' (§ 260. p. 161), Umbr. subocau suboco 'invoco invocatione, I appeal appealingly'; for similar phrases from other languages, see Pott, Doppelung, 151 ff.

If this is correct, the  $\tilde{i}$  of  $*\hat{g}\tilde{i}$ - $\hat{g}en$ - and similar forms originally came from roots ending in a vowel, such as  $d\bar{i}-d\bar{o}-(\delta i\delta \omega \mu i)$ ,  $dh\bar{i}-dh\bar{e} (\tau' \vartheta \eta \mu \iota)$ . When the cohesion between the parts had become so firm that the ž-case was regarded as being simply a "reduplication", - this idea was greatly encouraged by the use of real reduplications of the type of I b, as \*bhī-bhai- \*bhī-bhī- — two results might follow: (1) forms like \*ĝi-ĝen- \*bhi-bher- came into existence, and (2) with roots beginning in a sonant a simple  $\tilde{i}$  was used for reduplicating, e. g.  $*\tilde{i} + oq$ - becoming \*iq- (Skr. ik- Gr.  $i\pi$ -) even in the parent speech, and such forms as Skríy-arti Gr. λ-αύω (see p. 19). Further, (3) in Sanskrit, or perhaps earlier still, the use of (say) tari- and tar- as variant reduplicators (tari-tr-at- and tar-tarī-ti tár-tur-āṇa-s) led to the making of marī-mrj-(instead of \*marjī-mrj-) beside mar-mrj-, and the like. Does at in Gr.  $\mu\alpha\iota - \mu\alpha'\omega$   $\pi\alpha\iota - \phi\alpha'\sigma\sigma\omega$   $\pi\alpha\iota - \pi\alpha'\lambda\lambda\omega$  etc. represent another case ending, and are the words formed on the same principle as we are supposing these with -i to be? If so, o in the or of ποι-πνύω ποι-φύσσω must be ascribed to the influence of  $\pi \sigma \varrho - \varphi \tilde{\nu} \varrho \omega$   $\mu \sigma \varrho - \mu \tilde{\nu} \varrho \omega$   $\gamma \sigma \gamma - \gamma \psi \lambda \lambda \omega$  etc.; for  $\pi \alpha \iota - \varphi \alpha \sigma \sigma \omega$ :  $\gamma \alpha \varrho - \varphi \omega \sigma \omega$  $\gamma \alpha \ell \varrho \omega = \pi o \iota - \varphi \dot{\nu} \sigma \sigma \omega : \mu o \varrho - \mu \dot{\nu} \varrho \omega.^{1}$ 

If this be really the origin of redupl.  $\tilde{i}$ , the question arises whether e and  $\bar{e}$  in words like Gr.  $\pi e - \varphi \psi \bar{a} \pi$  and  $i \gamma \dot{\gamma} - \gamma e \varrho \mu a \iota$  Skr.  $j \bar{a} - g \dot{a} r a$  (type II, see §§ 471—2) may not be the case-ending of a root noun. As before, we should have to start from roots ending in a vowel, from groups such as  $d \tilde{e} + d \bar{o} - (Gr. \delta \epsilon - \delta \omega \pi a Skr. da - d \bar{a} \dot{u})$ .

Skr. ti- $\dot{s}th$ -a-ti Gr.  $\ddot{i}$ - $\sigma\tau\eta$ - $\mu\iota$  Lat. si- $st\bar{o}$  O.Ir. do-airissid (I  $\S$  109 e p. 103,  $\S$  516 p. 377) O.H.G se- $st\bar{o}m$  (pr. Germ. \*si- $st\bar{o}$ -mi, I  $\S$  35 p. 35),  $\checkmark$   $st\bar{a}$ - 'stand'. Skr. bi-bhar-ti Gr.  $\dot{\epsilon}\sigma$ -ni $\varphi$ 0 $\dot{\alpha}\nu\alpha\iota$  ( $\S\S$  539, 542),  $\checkmark$ 0bher- 'ferre'. Skr.  $j\dot{\tau}$ -jan-a-t  $\dot{\alpha}$ - $j\bar{\tau}$ -jan-a-t Gr.  $\gamma i$ - $\gamma \nu$ -0- $\mu\alpha\iota$  Lat. gi-gn- $\bar{o}$  O.Ir. gi-gnid,  $\checkmark$ 0gen-'beget'. In Sanskrit thematic aorists the quantity fluctuated; i before more than one consonant, and before a single consonant when a long syllable followed;  $\bar{\iota}$  before a single consonant followed by a short syllable (cp. Wackernagel, Dehnungsg. p. 18); e. g.  $\dot{\alpha}$ -pi- $spr\dot{s}$ -a-t ( $spar\dot{s}$ - 'touch') and  $\dot{\alpha}$ -di- $d\bar{\iota}k\dot{s}$ -a-t ( $d\bar{\iota}k\dot{s}$ - 'be consecrated'), but  $\dot{\alpha}$ - $j\bar{\iota}$ -jan-a-t. Greek has  $\bar{\iota}$  only in  $\pi\dot{t}$ - $\pi\tau$ - $\omega$  'I fall' (cp. Skr.  $\dot{\alpha}$ - $p\bar{\iota}$ -pat-a-t); but here  $\bar{\iota}$  may have been borrowed from  $\dot{\phi}\dot{t}$ - $\pi\tau\omega$ , which was connected

<sup>1)</sup> Another explanation of this  $\tilde{\imath}$  is given by Per Persson, Stud. zur Lehre von der Wurzelerweiterung, p. 216 footnote 1. Per Persson's is really not very different from mine.

with it in meaning; if so, it is no example of the principle we are discussing.

Presents with -s- (§§ 666 ff.). Skr. ji- $j\bar{n}\bar{a}$ -sa- $t\bar{e}$  from  $j\bar{n}\bar{a}$ -'learn, know', di- $d\bar{a}$ -sa-ti di-tsa-ti from  $d\bar{a}$ - 'give',  $m\bar{\imath}$ - $m\bar{a}$ -sa- $t\bar{e}$  from man- 'think'. O.Ir. no-gigius 'I will pray' for \*- $gigets\bar{o}$ , beside no guidiu 'I pray'.

Presents with -sk- (§ 678). Gr. δι-δάσκω 'I teach' (perf. δε-δίδαχα), Lat.  $disc\bar{o}$  for \*di-tc- $sc\bar{o}$  (perf. di- $dic\bar{o}$ ).

The i-vowel alone is used for the reduplication with roots beginning in a sonant. Skr. *ipsati* (cp. apsanta § 659) beside ap-nō-ti 'acquires', irtsati beside rdh-nō-ti 'thrives' fut. ardhiṣyatē; with īkṣatē 'sees' (cp. O.Pers. patiy-axšaiy § 559) is connected Gr.  $\bar{i}\pi$ - in Hom.  $\partial \pi$ - $\bar{i}\pi$ - $\varepsilon v'\omega$  'I ogle'  $(\pi \alpha \rho \vartheta \varepsilon v - o\pi i \pi \eta g)$ , 1) which is an analogical re-formate like  $\ddot{o}\pi - \omega \pi \alpha$  instead of  $*\ddot{\omega}\pi \alpha$ , 'set in motion', Avest. 3rd sing. conj. uz-yarāp i. e. -iyar-āp; Skr. iy-ē-ti beside é-ti 'goes', the only evidence for which is its  $2^{\text{nd}}$  sing. pret.  $\overline{aiy}$ - $\overline{e}$ - $\overline{s}$  (R.V., v. 2. 8), Avest.  $3^{\text{rd}}$  pl. conj. yeyan = Ar. \*iy-ay-ān (Bartholomae, Ar. Forsch. II 71 f.); Gr. λ-ανω 'I spend the night', λάσκειν άγειν (Hesych.) for \*λ-αγ + σκω; O.Ir. i-orr fut. of orgin 'I destroy, kill' (beside O.H.G. arg 'that which is bad'). The former group, with the reduplication vowel and root vowel contracted together, was certainly proethnic: \*\bar{\tau}p\tau and \*\bar{\tau}q\tau for \*\bar{\tau}-\tau p\tau \*\bar{\tau}-\tau p\tau, or something of the kind. But it is possible that Skr. iy-arti and others of that type are a re-formation of later date, like Goth. perf. aí-áuk from áuka 'I increase', -aí-áik from -áika (af-áika 'I deny, refuse').

On the difference between Gr.  $\tau i$ - $\vartheta \eta \mu u$ , with orig. i in the reduplicator, and Skr.  $d\acute{a}$ -dhati Lith.  $2^{\rm nd}$  pl.  $d\grave{e}$ -ste with orig. e, see § 538.

It has been pointed out (§ 469 Rem. 1, p. 14) that i is found in the reduplicator even where the root contains u-vocalism. But, as I said in that place, I regard Skr.

<sup>1)</sup> I cannot agree with Kretschmer in deriving  $\delta\pi\bar{\imath}\pi$ - from \*oqi-oq-(Kuhn's Zeitschr., XXXI 385).

ju-ho-ti, a-cu-krudh-a-t, bu-bhut-sa-ti and similar forms as being genuine proethnic types, and not as having changed i to u.

§ 474. IV. A fourth type, of unknown origin, is represented by a considerable number of forms in Sanskrit, and by two in Greek. (Cp. Bezzenberger, Bezz. Beitr. III 310).

Skr. desid. aśiśiṣa-ti from aś- 'eat', the grammarians also cite aniniṣa-ti from an- 'breathe', arjihiṣa-ti for \*arjhijhiṣa-ti (I p. 480 p. 354) from arh- 'deserve, be worth' and others; aor. arpipa-t (unaugmented) beside arpáyati 'sets in motion, shakes' (§ 797), in grammars also ānina-t, ārjiha-t, āubjija-t (ubj- 'keep down, squeeze together') and others.

Gr. ἐρὖκακο-ν from ἐρὖκω 'I hold back' and ἢνίπαπο-ν from ἐνίπτω 'I address'; beside ἐνέν $\bar{\imath}$ πο-ν, type I c (§ 470).

§ 475. A few remarks are now needed on the way in which Consonant Initials are treated in Reduplication.

1. There was originally no difference between the beginning of root and reduplicator, when the root began with one consonant, as  $d\bar{o}$ - 'give' Skr.  $d\acute{a}$ - $d\bar{a}ti$ , Gr.  $\delta\acute{\iota}$ - $\delta\omega\mu$ , Lat. de--dit Osc. de-ded, O.C.Sl. 3rd pl. da-detŭ. But a great many differences were brought about by phonetic change. For instance, in Greek and Sanskrit the initial of the Reduplicator was affected by the principle of dissimilation of aspirates which held in those languages, e. g. Sanskrit dádhāti for \*dha-dhāti, babhūva for \*bha-bhūva (I § 480 p. 354),1) Gr. τίθημι for \*9ι-θημι, πεφύασι for \*φε-φυαντι (I § 496 pp. 364 f.). We were introduced in vol. I p. 483 footnote 1 to a dissimilation peculiar to Irish, -roinasc for \*-ro-nenasc, -roichan for \*-ro--cechan; compare § 878, below. The Root-initial is changed e. g. in pr. Idg. \*si-zd-\bar{o} ( $\sqrt{\text{sed}}$ - 'sit') = Gr. % $\omega$  (I § 590 p. 447, § 593 p. 449). It often happened, however, that a difference brought about by phonetic change was obliterated afterwards; as in Ved. perf. mid. si-sic- $\bar{e}$  instead of si- $\bar{s}ic$ - $\bar{e}$ 

<sup>1)</sup> The perfect ja- $bh\ddot{a}ra$  is a mixture of ba- $bh\ddot{a}ra$  and ja- $h\ddot{a}ra$ . See von Bradke, Zeitschr. D. Morg. Ges. XL 665 f.

from sic- 'pour', 1) Gr. Gort.  $\Im i$ -9 $\varepsilon \Im \Im \alpha \iota$  instead of \* $\tau l$ -9 $\varepsilon \Im \Im \alpha \iota$  Att.  $\tau i$ -9 $\varepsilon \Im \Im \alpha \iota$  (I § 496 p. 365, the Author, Gr. Gr. 2 pp. 73 f.), Ion. perf.  $\Im i$ - $\Im i$ -per instead of \* $\Im i$ - $\Im i$ - $\Im i$ -per 'go' (I § 428 b, p. 316), Umbr. ře-ře 'dedit' instead of \*te-ře cp. teřust dirsust 'dederit' (I § 369 Rem. 3 p. 281).

Remark. We may not assume that in Idg. \*pi-b-e-ti (Skr. pibati Lat. bibit O.Ir. ibid) b is simply for p by dissimilation. It is quite possible that b came from the imperative \*pi-b-dhi (for \*pi-p-dhi), cp. § 539.

476. 2. Where a root begins in more than one consonant, only the first of them is reduplicated. This rule held in the proethnic language and holds in its branches too. Examples:

Skr. śu-śráva Gr. κέ-κλντε O.Ir. ro chuala for \*cu-clova from  $\sqrt{kleu}$ - 'hear'. Skr. á-su-srōt from sru- 'flow'. Gr. κέ-κριμαι from κρίνω 'I sentence', ἕληθι 'be gracious' for \*σι-σλη-θι (I § 565 p. 423). O.Ir. ad-ge-grannatar 'persecuti sunt', ro selach 'I struck down' i. e. se-ślach (I § 576 pp. 431 f.). Goth. gai-grōt from grēta 'I cry', fai-flōk from flōka 'I lament', sai-slēp sai-zlēp from slēpa 'I sleep'.

Skr.  $sa\text{-}sm\acute{a}ra$  from smar- 'remember',  $a\text{-}\acute{s}i\text{-}\acute{s}nat$  from  $\acute{s}nath$ - 'pierce'. Gr.  $\emph{e}\emph{i}\mu\alpha\varrho\tau\alpha\iota$  'it is fated' for \* $\sigma\epsilon\text{-}\sigma\mu\alpha\varrho\tau\alpha\iota$  (I § 565 p. 422),  $\pi\acute{e}\text{-}\pi\nu\emph{i}\gamma\mu\alpha\iota$  from  $\pi\nu\emph{i}\gamma\omega$  'I choke',  $\pi\sigma\iota\tau\nu\emph{i}\omega$  'I pant'. Mid.Ir. ro senaich 'stillavit' i. e.  $se\text{-}\dot{s}naich$  (I § 576 p. 431).

<sup>1)</sup> We are not at liberty to explain si-sic- $\bar{e}$  by saying that sa-= Idg. se- was the reduplicator in pr. Aryan (§ 851).

Avest. hi-štaiti O.Pers. a- $\ddot{s}$ -stat $\bar{a}$  (I § 558 Rem. 1 p. 410), Gr.  $\ddot{s}$ - $\sigma\tau\eta\mu\mu$   $\ddot{s}$ - $\sigma\tau\eta\mu\alpha$ , Lat. si- $st\bar{o}$  Umbr. se-stu 'sisto', O.Ir. do-airissid sessam for \*si-st- (I § 109 e p. 103, § 516 p. 377), from  $\sqrt{st\bar{a}}$ - 'stand'. Avest. partic. hi- $sp\bar{o}semna$ - from  $\sqrt{spe\hat{k}}$ - 'conspicere'. O.Ir. se-scaind 'he leapt'.

There are several variations from this type, of which the chief here follow.

The first is the commonest of them all (it is found in Sanskrit, Greek, Italic, Germanic), and perhaps began in the proethnic period. When a root began with s + anExplosive, both were often taken on into the Reduplicator, instead of simply the s. Thus Goth, stai-stald from stalda 'I possess', skai-skáiþ from skáida 'I divide'. In Sanskrit, Greek, and Italic dissimilation came in and destroyed the likeness of root and reduplicator; s was dropped either in the reduplicator (so Sanskrit, Greek, Latin) or in the root (Italie). Skr. ta-sthāú tí-štha-ti from sthā- 'stand', ca-skánda, 2<sup>nd</sup> and 3<sup>rd</sup> sing. káni-škan, cani-škada-t from skand- 'leap', pa-spṛdhế from spardh- 'vie, strive for', pani-ṣpadá-s 'quivering' from spand-'quiver'. This example of the principle of dissimilation Greek and Latin show only in a few nouns: κο-σκυλμάτια 'shreds of leather' qui-squiliae, κα-σκάνδιζ 'leek' are examples (Fritsche, Curt. Stud. vi 319 f.). With s dropt in the rootsyllable Lat. ste-tī sti-tī Umbr. stiti-steteies Lat. spo-pondī sci-cidī. Compare Osthoff, Paul Braune's Beitr. vIII 540 ff.; I do not think that his hypothesis is overthrown by Meringer in Zeitschr. öst. Gymn., 1887, pp. 371 f.

Remark 1. The reason why the present Lat. si- $st\bar{o}$  kept the old method, while  $stet\bar{i}$   $stit\bar{i}$  did not, was that this was the only reduplicated present with a root beginning in s + explosive. Observe too that all its perfect forms were once distinguished by the vowel e in the reduplicator instead of i (§ 471).

Secondly, when a verb stem beginning in two consonants simplified these to one in its unreduplicated forms, the reduplicated forms were treated as though the verb began originally in one consonant (§ 475). Gr. Dor.  $\pi \acute{\epsilon} - \pi \bar{\alpha} \mu \alpha \iota$  T possess, have authority over instead of \* $\kappa \epsilon - \pi \pi \bar{\alpha} \mu \alpha \iota$  i. e. \* $\hat{k} \epsilon - \hat{k} \mu \bar{a}$  (cp.

Skr. -śi-śvi-š), because in the present and other tenses \* $k \mu \bar{a}$ - became  $\pi \bar{a}$ - (I § 166 p. 147, § 654.4 pp. 500 f., II § 117 pp. 370, 371). σε-σόβημαι for \*τε-σσοβ- (cp. Skr. ta--tyája) following σοβέω 'I scare away' ground-form \*tjogéjō (Ι § 459 p. 337).  $\tau \varepsilon - 9 \eta \rho \bar{\alpha} \pi \alpha$  Thess.  $\pi \varepsilon - \varphi \epsilon \iota \rho \dot{\alpha} \pi \sigma \nu [\tau \varepsilon \varsigma]$  beside  $9\eta\varrho$  Thess.  $\varphi\epsilon\ell\varrho$  'wild beast' for Idg. \* $gh\mu\bar{e}r$ - O.C.Sl.  $zv\check{e}r\bar{\imath}$ Lith. žvėri-s (see Buck, Amer. Journ. Phil. xi 211 ff.), so that the reduplication would properly have been xe-. Locr. partic. Γε-Γαδημότα following Γανδάνω (άνδάνω) 'I please' from V suād- (cp. Skr. sa-svadē). ὁέ-ριπται (Pindar) following ὁίπτω 'I throw' for \*Fρίπτω; and Att. ἔροιπτω instead of the regular \*(f)ενοίπται (the Author, Gr. Gr. 2 p. 31). νε-νηχθαι from νήχω 'I swim' for \*σναχω (Skr. 3rd pl. sa-sn-ur). Lat, me--mor memoria formed from a perfect \*me-morī, which probably arose on the analogy of unreduplicated forms with mer- for smer- (cp. merda for \*smerdā etc., I § 570 p. 427), cp. Skr. sa--smāra. O.Ir. perf. 3rd sing. rir 'gave away, sold' from  $\sqrt{per}$ instead of \*i-r for \*pi-pr-e on the principles laid down in I § 339 p. 268, cp. § 878 below.

An exceptional type of reduplication is sometimes seen in Greek where verbs beginning in more than one consonant often have  $\hat{\epsilon}$ - for their reduplication, instead of one consonant  $+ \varepsilon$ , even where the known phonetic laws did not demand that the consonant should drop. Examples are:  $\hat{\epsilon}$ - $\beta\lambda\acute{\alpha}\sigma\tau\eta\varkappa\alpha$  beside  $\beta\varepsilon$ - $\beta\lambda\acute{\alpha}\sigma\tau\eta\varkappa\alpha$ ,  $\varepsilon$ - $\gamma\varrho\alpha\mu\mu\alpha\iota$  (Cret. and elsewhere) beside  $\gamma\acute{\varepsilon}$ - $\gamma\varrho\alpha\mu\mu\alpha\iota$ ,  $\varepsilon$ - $\gamma\nu\omega\varkappa\alpha$ ,  $\varepsilon$ - $\pi\tau\eta\mu\alpha\iota$  beside  $\chi\acute{\varepsilon}$ - $\pi\tau\eta\mu\alpha\iota$ ,  $\varepsilon$ - $\sigma\sigma\nu\mu\alpha\iota$  ( $\sqrt{q}ieu$ -). Probably  $\varepsilon$ - $\varrho\omega\gamma\alpha$  ( $F\varrho\eta\gamma$ -) and  $\varepsilon$ - $\varrho\varrho\bar{\tau}\varphi\alpha$  ( $F\varrho\bar{\tau}\pi$ -) are of this sort, since there is no trace of F having been used and dropped in these forms. See Curtius' Verb H  $^2$  144 ff. Lastly we must mention  $\varepsilon$ - $\sigma\tau\alpha\lambda\varkappa\alpha$ ,  $\varepsilon$ - $\sigma\pi\alpha\varrho\mu\alpha\iota$ ,  $\varepsilon$ - $\varrho\varrho\dot{\tau}\eta\varkappa\alpha$  (orig.  $\sigma\epsilon$ - $\sigma\varrho\nu$ -) and the like, beside  $\mathring{\alpha}\varphi\acute{\varepsilon}\sigma\tau\alpha\lambda\varkappa\alpha$   $\mathring{\varepsilon}\varphi\acute{\varepsilon}\sigma\tau\alpha\lambda\varkappa\alpha$  (inser.), and  $\mathring{\varepsilon}$ - $\sigma\tau\eta\varkappa\alpha$   $\varepsilon$ - $\sigma\tau\alpha\mu\varepsilon\nu$ . The last perfect kept its spiritus asper because 7- $\sigma\tau\eta\mu\iota$   $\mathring{\varepsilon}$ - $\sigma\tau\alpha\mu\varepsilon\nu$  had it. $^1$ )

In Boeotian or Laconian we must add to the perfect the aorist form ἔττακα for \*ἔστακα. Hesychius' gloss ἔττακαν ἔστησαν should probably be assigned to one or other of these dialects (cp. I § 566 p. 423).

Remark 2. It is an obvious suggestion that in  $\hat{\epsilon}\beta\lambda\acute{\alpha}\tau\eta\varkappa\alpha$  etc. we have the augment in place of the reduplication, since in verbs with a vowel initial the augmented preterite and the perfect came to have the same beginning: e. g.  $\mathring{\eta}\varrho\acute{\epsilon}\vartheta\iota\zeta_0\nu$ :  $\mathring{\eta}\varrho\acute{\epsilon}\vartheta\iota\eta\alpha\iota$  ( $\mathring{\epsilon}\varrho\varepsilon\vartheta\iota\zeta_0\nu$ ),  $\mathring{\eta}\varkappa\eta\alpha\alpha$ :  $\mathring{\eta}\varkappa\eta\mu\alpha\iota$  ( $\mathring{\epsilon}\sigma\varkappa\acute{\epsilon}\omega$ ),  $\mathring{\alpha}\psi$ - $t\varkappa\acute{\alpha}\mu\eta\nu$ :  $\mathring{\alpha}\varphi$ - $i\gamma\mu\alpha\iota$ . But if so we should expect similar forms in verbs which began with one consonant, and such forms as  $*\mathring{\epsilon}-\beta\eta\varkappa\alpha$  instead of  $\beta\acute{\epsilon}-\beta\eta\varkappa\alpha$  (see § 475). 1)

We cannot suppose that the form  $\tilde{\epsilon}$ - $\varrho\varrho\omega\gamma\alpha$  stands for  $*F\epsilon$ - $\varrho\varrho\omega\gamma\alpha$ , and that it gave the type for  $\tilde{\epsilon}$ - $\beta\lambda\dot{\alpha}\sigma\tau\eta\alpha\alpha$  etc., because the dialect of Gortyn a has  $\tilde{\epsilon}$ - $\gamma\varrho\alpha\mu\alpha\alpha$ , and this dialect kept initial F before an  $\epsilon$ -sound.

The Cretan perfects  $\frac{\partial \pi}{\partial t} - \eta_{\sigma \tau e \lambda x e} + \eta_{\sigma \tau e \lambda x e}$  mentioned in § 472 Rem., page 17 above, with  $\eta_{\tau}$ , only give a fresh problem to solve.

## THE AUGMENT. 2)

§ 477. The Augment  $(\alpha \ddot{v}\xi\eta\sigma\iota\varsigma)$ , as it is called, is a syllable, Idg. \*e- = Skr. a- Armen. e- Gr.  $\dot{\epsilon}$ -, which prefixed to verbal forms serves to mark past time.

<sup>1)</sup>  $\xi \lambda o \gamma \chi \alpha$  instead of  $\lambda \epsilon \lambda o \gamma \chi \alpha$  in two late sepulchral inscriptions is probably not a mistake in the graving, but a misformation, due to contamination of the perfect  $\lambda \epsilon \lambda o \gamma \chi \alpha$  or  $\epsilon \epsilon \lambda \lambda \lambda \chi \alpha$  at a time when this kind of perfect had become unfamiliar. (Thumb, Mitteil. des deutsch. arch. Inst. in Athen, xvi 176).

<sup>2)</sup> R. Garnett, On the Origin and Import of the Augment in Sanskrit and Greek, Proceedings of the Philol. Society I (1844) p. 265 ff. Fr. Müller, Einiges über das Augment, Kuhn-Schleicher's Beitr., III 250 ff. J. Davies, On the Temporal Augment in Sanskrit and Greek, Hertford 1865. Faust, Zur idg. Augmentbildung, Strassb. 1877. A. H. Sayce, The Origin of the Augment, Transactions of the Philol. Society, 1885—1887, pp. 652 ff. Bréal, De l'augment, Mém. de la Soc. de lingu. VI 333 ff.

J. Avery, The Unaugmented Verb-Forms of the Rig- and Atharva-Vedas, Proceedings of the Amer. Orient. Soc., May 1884, pp. xi f., und Journal of the Amer. Orient. Soc. xi 326 ff.

Ebel, Die scheinbaren Unregelmässigkeiten des griech. Augments, Kuhn's Zeitschr. Iv 161 ff. La Roche, Das Augment des griech. Verbums, Linz 1882. Pöhlmann, Quomodo poetae epici augmento temporali usi sint, Tilsit 1858. Grashof, Zur Kritik des homer. Textes in Bezug auf die Abwerfung des Augments, Düsseldorf 1852. K. Koch, De augmento apud Homerum omisso, Brunswick 1868. Skerlo, Über den Gebrauch (die Bedeutung) des Augments bei Homer, Graudenz 1874. Molhem, De augmenti apud Homerum Herodotumque usu, Lund 1876. Bumke, De augmento verbi Herodotei, Braunsberg 1835. H. Lhardy, Quaestionum de dialecto Herodoti caput primum: De augmento, Berl. 1844.

It was originally an independent word, an adverb, followed by the verb, which then became enclitic; e. g. \*é liqet 'he left' (Armen. e-lik Gr.  $\xi$ - $\lambda ln \varepsilon$ ), and it may be compared with the Irish particle ro (= Gr.  $n \rho o$ ) which is used before verbs of the historic tenses. But in all the languages which have kept the Augment, it has become an inflexional prefix (cp. II § 4 page 6). A trace of its original adverbial character remains in the accentuation of Greek forms like  $n \alpha \rho - \dot{\epsilon} - \sigma \chi o \nu$  ('I offered'), which involves the same principle as that of  $n \alpha \rho - \dot{\epsilon} \nu - \vartheta \varepsilon \varepsilon$  ('put in between') and of Skr.  $sam-\dot{a}-cinut\bar{\epsilon}$  ('he heaps together, collects').

As to the origin of this adverb e, and of  $\bar{e}$ , which as we shall see later was used in the same way in the parent language, only uncertain conjectures are possible.

Remark. Older explanations are cited by Curtius, Verb I<sup>2</sup> 109 ff. Sayce's new suggestions do not commend themselves to me (see page 24 footnote). It would be best to regard \*e as a locative of the pron. stem o-, with temporal meaning (see III § 409 p. 329); compare \*te (Lith.  $t\dot{e}$  O.C.Sl. te) from \*to- and the like (III § 424 p. 349). The relation of \*e:\* $\bar{e}$  has plenty of parallels, as \*te:\* $t\bar{e}$ , \*ne:\* $n\bar{e}$  (III p. 349 footnote, § 415 Rem. p. 337). Compare also Per Persson, Studia etymologica, p. 78.

If the verb had other prefixes besides the Augment, this stood immediately in front of the verb. But sometimes a verb compounded with a preposition became to all intents and purposes a simple form, and then the augment came right in front. Skr.  $a-p\bar{\eta}daya-t$  'pressed' for \*pi-zd- ('sit upon'), Gr.  $\hat{\epsilon}-\pi ls\zeta o\nu$  for  $\pi \iota(\sigma)\epsilon\delta$ -, see § 795. Skr. epic a-sambhramat 'he trembled'. Gr. Att.  $\hat{\epsilon}-\kappa \dot{\alpha}\vartheta s\nu \delta o\nu$  beside  $\kappa \alpha\vartheta -\eta \tilde{\nu}\vartheta o\nu$  'I slept'. When the structure of verbs was thus forgotten, there could even be a double augment: Skr. epic  $apr\bar{a}i\tilde{s}t$  beside  $pr\bar{a}i\tilde{s}t$  =  $pra-\bar{a}i\tilde{s}t$  'he drove out', Gr.  $\dot{\eta}\nu - \epsilon\iota\chi \dot{\iota}\mu\eta\nu$  'I endured'. The same thing occurs in reduplicated forms; see § 850.

§ 478. The augment with verbs beginning in a Consonant. Examples: Pr. Idg. \*é bherom 'I bore': Skr. á-bharam

Kloppe, Dissert. de augmento Herodoteo, cp. I. II., Schleusingen 1848. Sorof, De augmento in trimetris tragicis abiecto, praemissa de crasi, elisione, aphaeresi quaestione, Breslau 1851.

Avest. a-berem O.Pers. a-baram, Gr.  $\check{\epsilon}$ - $\varphi\epsilon\varphi o\nu$ .  $3^{\rm rd}$  sing. Skr.  $\acute{a}$ -da-dhāt  $\acute{a}$ -dhāt Armen. e-d Gr.  $\grave{\epsilon}$ - $\tau i \vartheta \epsilon i$  1st pl.  $\check{\epsilon}$ - $\vartheta \epsilon \mu \epsilon \nu$ ,  $\checkmark$  dhē-'place'.  $3^{\rm rd}$  sing. Skr.  $\acute{a}$ -bōdhat a-buddha a-būbudhat Gr.  $\grave{\epsilon}$ - $\pi \epsilon \acute{\nu}$ - $\vartheta \epsilon \tau o$   $\grave{\epsilon}$ - $\pi \acute{\nu} \vartheta \iota \sigma o$   $\grave{\epsilon}$ - $\hbar \acute{\nu} \vartheta \iota \sigma o$   $\acute{\nu} \sigma o$ 

All that is left of the augment outside of these three groups are a few obscure Germanic forms: Goth. iddja 'he went' = Skr.  $\acute{a}$ -yāt (I § 142 p. 127), A.S.  $3^{\rm rd}$  pl.  $e\acute{o}dun$  = Goth.  $iddj\bar{e}dun$ , cp. §§ 587, 592, 886 Rem. But these are not free from doubt, because we find in Sanskrit epics the unaugmented form  $iy\bar{a}$ -t as well as a-y $\bar{a}$ -t (with iy- instead of y- like iy- $\bar{e}$ , § 493). So iddja too may represent the unaugmented Idg. \* $ii\bar{e}$ -t.

In Greek,  $\vec{\epsilon}$ - was often obscured by being contracted with the following vowel, after  $\sigma$  or f which once began the root had dropped (cp. I § 165 p. 146, § 564 p. 421, § 603 pp. 455 f.); e. g.  $\epsilon i \pi \delta \mu \eta \nu$  for  $\epsilon i - (\sigma) \epsilon \pi \sigma \mu \bar{\alpha} \nu$  from  $\epsilon \pi \sigma \mu \alpha \nu$  sequor,  $\epsilon i \bar{\rho} \pi \sigma \nu$  for  $\epsilon i - (\sigma) \epsilon \rho \pi \sigma \nu$  from  $\epsilon \sigma \pi \sigma \nu$  for  $\epsilon i - (\sigma) \epsilon \rho \pi \sigma \nu$  from  $\epsilon \sigma \pi \sigma \nu$  for  $\epsilon i - (f) \epsilon \sigma \nu$  (Hom.  $\epsilon i \delta \sigma \nu$ , Lesb.  $\epsilon \nu i \delta \sigma \nu$ ),  $\epsilon i \rho \gamma \alpha \zeta \delta \mu \eta \nu$  for  $\epsilon i - (f) \epsilon \rho \gamma \alpha \zeta \sigma \mu \eta \nu$  (an inser. of Hermione has  $\epsilon i - \epsilon \rho \gamma \alpha \sigma \tau$ ) from  $\epsilon \rho \gamma \alpha \zeta \sigma \mu \nu$  (I work'. On  $\epsilon i - \sigma \iota \nu$ ) I was accustomed', orig.  $\epsilon i - \sigma \iota \nu$ ) from  $\epsilon \rho \gamma \alpha \zeta \sigma \nu$  I dragged', orig.  $\epsilon i - \sigma \iota \nu$  from ompare I § 563. 7 p. 420, and the Author Gr. Gr. § 13 p. 33. The aspirate of  $\epsilon \iota \iota \sigma \iota \mu \nu \nu$  e  $\epsilon \iota \iota \nu \nu$  is that of  $\epsilon \iota \iota \nu \nu$  apple  $\epsilon \iota \iota \nu \nu$  (for  $\epsilon \iota \iota \nu$ ) from  $\epsilon \iota \nu \nu$  from  $\epsilon \iota \nu \nu$  is doubtless due to the transference of the internal  $\epsilon \iota \nu \nu$  for  $\epsilon \iota \iota \nu$  for  $\epsilon \iota \nu$  or  $\epsilon \iota \nu$  is doubtless due to the transference of the internal  $\epsilon \iota \nu$  (Skr.  $\epsilon \iota \nu$ ) and other words, see Kretschmer, Kuhn's Zeitschr. xxxi 421.

In Greek, again, the augmented preterites of verbs which have lost their initial consonant are often treated like those of verbs that never had any (§ 480). This is commonest in later times. An example is Att.  $\tilde{\psi} \times \eta \sigma \alpha$  instead of \* $\hat{\epsilon}$ -(f)01- $\times \eta \sigma \alpha$ , from (f)012 $\hat{\epsilon} \omega$  'I live, dwell', following such forms as  $\tilde{\psi} \delta \eta \sigma \alpha$  (old $\hat{\epsilon} \omega$  'I swell': Armen. aitnum 'I swell' O.H.G. eiz 'sore, abscess').

On the relation of  $^*\bar{e}$ - and  $^*e$ - see § 477 with the Remark, page 25.

Remark. On Greek forms with  $\mathring{\eta}$ - compare G. Meyer, Gr. Gr. <sup>2</sup> pp. 421 ff.; the Author, Gr. Gr. <sup>2</sup> p. 150, and the works there cited.

Another view, which I think not probable, is that certain verbs with initial f have a prothetic  $\hat{\epsilon}$ -, and that from these were made preterites with the temporal augment  $(\hat{\eta} \epsilon i \delta \eta)$  being to  $\hat{\epsilon} \epsilon \iota \sigma i \mu \epsilon \nu \sigma \sigma$  is to  $\hat{\epsilon} \varrho \epsilon \iota \sigma \delta \nu \nu \nabla r e \nu d h$ , cp. I § 626 pp. 470); afterwards, according to this view, other verbs with initial f but without prothetic  $\hat{\epsilon}$ - took  $\hat{\eta}$ - for augment.

On the other hand, I agree with those who refuse to see the Idg. augment  $*\bar{e}$ - in  $\vec{\eta}$ - $\beta_{0}\nu\lambda\dot{\phi}_{\mu}\eta\nu$  'I wished',  $\vec{\eta}$ - $\delta_{\nu}\nu\dot{\phi}_{\mu}\eta\nu$  'I could', and  $\vec{\eta}$ - $\mu\epsilon\lambda\lambda\nu$  'I intended, I was to' do so and so. These forms occur in Attic from 300 B.C. onwards, and  $\vec{\eta}_{\mu}\epsilon\lambda\lambda\nu$  as early as Hesiod (Thesg. 478, 888, 898). It is a fair conjecture that these were modelled on  $\vec{\eta}$ - $\theta\epsilon\lambda\nu$  'I wished', from  $\theta\epsilon\lambda\nu$ . In this Verb  $\vec{\eta}$ - was no augment but a preposition, another ablautfrom of  $\vec{\omega}$ - in  $\vec{\omega}$ - $\theta\epsilon\lambda\nu$  etc., and identical with Skr.  $\vec{a}$  'to towards'. The  $\vec{\epsilon}$ -of  $\vec{\epsilon}$ - $\theta\epsilon\lambda\nu$  is a third ablaut-form of the same prefix, to be compared with  $\vec{\omega}$  in Avest.  $\vec{\omega}$ - $\theta\epsilon\lambda\nu$  but the use of  $\vec{\eta}$ - with  $\theta\epsilon\lambda\nu$  was confined to its preterite in prehistoric times, because  $\vec{\epsilon}\theta\epsilon\lambda\nu$ :  $\vec{\eta}\theta\epsilon\lambda\nu$  seemed to be related as were  $\vec{\epsilon}\theta\ell\lambda\nu$ :  $\vec{\eta}\theta\epsilon\lambda\nu$ . Cp. Osthoff, Perf. 129, 604; Bartholomae, Ar. Forsch. II 169; above, vol. III § 246 p. 145.

<sup>1)</sup> Some scholars would write  $\epsilon \vec{\upsilon} \epsilon \ell \delta \eta$  in the Aeolic fashion, for which there is no authority at all. Attie  $\vec{\eta} \delta \epsilon \iota$  cannot be contracted from  $\vec{\epsilon} \epsilon \iota \delta$ -but only from  $\vec{\eta} \epsilon \iota \delta$ -.

§ 480. In verbs with initial Sonant the augment has everywhere ceased to be a separate syllable. It was contracted with the root-initial in the original language (cp. I § 114 p. 107).

Examples. Pr. Idg. \*ēsm for \*e esm or \*ē esm, cp. pres. \*es-mi = Skr. ásmi etc.: Skr. ásam Avest.  $3^{rd}$  sing. ās O.Pers. aham i. e. āham, Gr. Hom.  $\tilde{\eta}a$  Att.  $\tilde{\eta}$   $3^{rd}$  sing. Dor.  $\tilde{\eta}_S$ ; 1) cp. O.C.Sl. -jachŭ for \*ēsom in imperfects like neséachŭ (§§ 493, 510, 903). Pr. Idg.: \*ēim from \*ei-mi 'I go': Skr. áyam  $3^{rd}$  sing. āit Avest.  $3^{rd}$  sing. āip O.Pers. ayam i. e. āyam, Gr.  $\tilde{\eta}a$  instead of \* $\tilde{\eta}a$  for \* $\tilde{\eta}ka$  (§ 502); compare Lith. ėjaŭ 'I went' from the stem \*ei-ā- (§ 586). Gr.  $\tilde{\eta}o$ iζov from  $\tilde{\iota}o$ iζω 'I strive'. O.C.Sl. s-aorist jasŭ = \*ēt-so-m,  $\sqrt{ed}$ - 'eat'.

It is extremely probable that the same augment is seen in Lithuanian present forms of the substantive verb beginning with  $\bar{e}$ -, as pl.  $\bar{e}$ same  $\bar{e}$ sate dual  $\bar{e}$ sava  $\bar{e}$ sata beside  $\bar{e}$ same etc. and  $\bar{e}$ sme ( $\bar{e}$ sme) etc. Like O.C.Sl.  $-(j)ach\bar{u}$   $-(j)a\bar{s}e$  etc. (see above), these were originally imperfect. But after all the other preterites of present stems with thematic vowel had fallen into disuse, this imperfect of es- was quite isolated; step by step it gave way to  $buva\bar{u}$ , while at the same time the forms which ended like those of the present system came to be used as equivalent to them; and later the participle  $\bar{e}$ s $\bar{u}$ s was formed and used side by side with  $\bar{e}$ s $\bar{u}$ s, and in some dialects  $\bar{e}$ s $\bar{u}$   $\bar{e}$ s $\bar{u}$  beside  $\bar{e}$ s $\bar{u}$   $\bar{u}$ s. Perhaps Lat.  $\bar{e}$ s 'thou art' (also  $\bar{e}$ s) is also an augmented form, and represents Idg. \* $\bar{e}$ s-s.2)

Remark. Osthoff (Perf., 184 ff.) assumes that Lat.  $\bar{e}s$   $\bar{e}st$   $\bar{e}stis$  from  $ed\bar{o}$ , and Lith.  $\bar{e}dmi$   $\bar{e}du$  etc. O.C.Sl.  $jam\bar{s}$  ( $\bar{e}m\bar{s}$ ) are forms of the augmented imperfect used as present. I think that their  $\bar{e}$ - may very well have this origin. But another supposition is quite as good, nay

<sup>1)</sup> We are certainly tempted to follow Bopp, Lagarde, and Bugge, and add Arm.  $\bar{e}i$  'eram' 3rd sing.  $\bar{e}r$ ; but Idg.  $\bar{e}$  seems always to become Arm. i. Compare Hübschmann, Kuhn's Zeitschr. XXIII 12.

<sup>2)</sup> So too the augment has crept into the present and future in Modern Greek, as  $\sigma \tilde{\alpha}_{S} \in \beta \lambda \epsilon' \pi \omega$ ,  $\vartheta \hat{\alpha} = \sigma \tilde{\alpha}_{S} \in \delta \omega' \sigma \omega$  (Hatzidakis, Kuhn's Zeitschr. XXX 375); and so the augment of Armen. e-kn 'he came' and e-d 'he placed' has found its way into allied forms, as fut. ekic and edic (Hübschmann, Arm. Stud. 1 28; Bugge, Kuhn's Zeitschr. XXXII 38).

better — that they represent the ablaut-grade Idg. \* $\bar{e}d$ -. Then \* $\bar{e}dmi$ : \*edmi (8kr.  $\acute{a}dmi$ ) as Skr. imper. mid.  $s\acute{a}k$ - $\check{s}va$ :  $s\acute{a}k$ - $\check{s}va$  ( $\sqrt{se\hat{g}h}$ -), and as Skr.  $s\acute{a}hati$ :  $s\acute{a}hat\bar{e}$  (Gr.  $\check{\epsilon}_{\chi\bar{e}\tau\alpha\iota}$ ),  $dh\acute{a}vati$ :  $dhavat\bar{e}$  (Gr.  $\vartheta\acute{e}\omega$ ), Gr.  $\mu\acute{\gamma}^{\delta}o\mu\alpha\iota$ :  $\mu\acute{e}\deltao\mu\alpha\iota$ , Lith.  $b\acute{e}gu$ : Gr.  $\varphi\acute{e}\betao\mu\alpha\iota$ , and so forth (§ 471 p. 16); and, if so, the  $\bar{e}d$ - of \* $\bar{e}dmi$  must be identified with that of the s-aorist Lat.  $\bar{e}ssem$  O.C.Sl.  $jas\check{u}$  ( $\check{e}s\check{u}$ ), and probably with that of the perfect forms Lat.  $\bar{e}d\bar{\iota}$ , Lith.  $\check{e}d\bar{e}s$  O.C.Sl.  $jad\check{u}$  ( $\check{e}d\check{u}$ ); see loc. cit. above. One view only I must distinctly oppose; the view of those who regard this root as not belonging to the recognised e-series, but to an  $\bar{e}$ -series, and who regard Skr.  $\acute{a}dmi$  as not original, while the \* $\bar{e}dmi$  of Latin and Balto-Slavonic is. Compare § 494.

How came this  $\bar{e}$ -grade ( $m\bar{e}d$ - etc.) to exist in e-roots? It is impossible to say. It is found, in the proethnic stage and later, not only in the present and aorist, but in the perfect too (§ 848.3), and also in nouns (e. g. Gr.  $\mu \tilde{\eta}_i \delta o_i \ \mu \tilde{\eta}_i \sigma t \omega_i$  Armen. mid); and we have no right to limit this  $\bar{e}$  to any single tense. It is certainly remarkable that the perfect forms with  $\bar{e}$  never had the reduplication (Skr.  $s\bar{a}h$ - $v\delta s$ - etc.). But there are other original unreduplicated perfects, as for example \*uoide 'knows') see loc. cit.).

What was originally the quality of the resultant vowel, when an augment was contracted with the initial a- or o- of a root, it is hard to say. The Aryan languages of course always have a-, whether the root began in e, o, or a; as Skr. ájat from ájati 'he drives' Gr. άγει, ápasyat from apasyáti 'is active' Lat. operātur. In Armenian, verbs beginning with a- have apparently no augment in the preterite, as ac 'he led', ar 'he took' auc 'he anointed' anc ' $\pi\alpha\rho\tilde{\eta}\lambda\vartheta\varepsilon$ '; we also find a re-formation with augment ē-anc (with later ē instead of e). Greek forms like  $\tilde{\alpha}\gamma o \nu$  Ion.  $\tilde{\eta}\gamma o \nu$  (from  $\tilde{\alpha}\gamma \omega$  'I lead'),  $\tilde{\omega}\zeta o \nu$  (from  $\tilde{\sigma}\zeta \omega$  'I smell'), ωσησα (from οἰδέω 'I swell') are suspicious, because their long vowel might come from analogy, once such forms as \*esti  $(\breve{\epsilon}\sigma\tau_l)$ : \* $\bar{\epsilon}st$   $(\bar{\eta}_S)$  had produced a belief that the lengthening of an initial vowel marked the past tense. Beyond all doubt this is the cause of the long vowel in such words as τιέτευσα (from ίχετενω 'I beseech') and υμεναίουν (υμεναιώ 'I sing the bridal song'); compare what is said is § 643 on ὄρ-νν-μι: ὄρ-νν-μεν.

§ 481. In the plural and dual of the pret. of \*es-mi 'I am' and \*ei-mi 'I go', if Idg. \*e- is allowed to be their augment, we should expect forms like Skr. \*ά-sma \*á-san, Gr. \*εἶμεν Lesb. \*ἔμμεν and Skr. \*έma \*á-yan, Gr. \*εἶμεν,

op. pres. 1st pl. Skr. s- $m\acute{a}s$ , i- $m\acute{a}s$  and the unaugmented imperf. Skr. Ved. s-an Avest. h-en and Avest. i- $t\bar{a}$  Gr. i- $\tau\eta\nu$ . One such form is Avest. ahma Gathic  $\bar{e}hm\bar{a}=$  pr. Ar. \*a-sma. Otherwise we find only  $\acute{a}sma$   $\acute{a}san$   $\bar{a}ima$   $\acute{a}yan$ , Avest.  $3^{rd}$  dual  $\bar{a}item$ , O.Pers.  $3^{rd}$  pl. aha aya i. e. doubtless  $\bar{a}ha$   $\bar{a}ya$ , Gr.  $\mathring{\eta}\mu\epsilon\nu$   $\mathring{\eta}\sigma\tau\epsilon$ , O.C.Sl.  $2^{nd}$  pl. -(j)as-te. If we suppose that the augment here was  $\bar{e}$  (cp. § 477 and Rem. p. 25, § 479 pp. 26 f.), the sing. and dual-pl. agree in their initial syllable right back as far as the parent speech. However, it is possible, and probably better, to assume that the long vowel came from the singular, the initial of  $\acute{a}sam$   $\mathring{\eta}a$  as compared with  $\acute{a}smi$   $\epsilon l\mu l$  being classed in the popular imagination with that of the preterites  $\acute{a}jam$   $\acute{a}nam$   $\mathring{\eta}\varrho\omega\nu$  etc., which had a long initial vowel in all persons.

Remark 1.  $\eta$  in  $\tilde{\eta}_{\mu\bar{\nu}\nu}$   $\tilde{\eta}_{\tau\bar{\nu}}$  must be a re-formation (cp. I § 611 p. 461). But there is no need to bring in the influence of the sing.  $\tilde{\eta}_{\alpha}$ , since  $^*\bar{e}$  + i-ent may conceivably have been the 3<sup>rd</sup> plural (cp. § 1020. 1. a).

Remark 2. Osthoff's view (Perf., 151 f.) that Skr.  $\acute{a}sta$  Gr.  $\mathring{\eta}\sigma\tau\varepsilon$  came from \* $\acute{e}$  est $\acute{e}$ , and that \*est $\acute{e}$  was the weak-grade form of  $\swarrow$  es- with secondary or bye-accent, is no longer tenable. See Bartholome, Bezz. Beitr. XVII 105.

In Sanskrit, verbs beginning with  $\bar{u}$ -,  $\bar{i}$ -, or  $\gamma$ - have  $\bar{a}u$ -,  $\bar{a}i$ -, and  $\bar{a}r$ - in their augmented preterite.  $\bar{a}\acute{u}nat$  from  $un\acute{a}tti$  'wets' (ud-).  $\bar{a}\acute{u}hat$  from  $\acute{u}hati$  'removes, pushes'.  $\bar{a}\acute{i}chat$  from  $\acute{i}ch\acute{a}ti$  'wishes'.  $\bar{a}\acute{i}\acute{s}ata$  from  $\bar{i}\acute{s}at\bar{e}$  'owns'.  $\acute{a}rchat$  from  $\gamma ch\acute{a}ti$  'reaches, gets'. The augment here was probably  $\bar{e}$ ; see § 479 above, on  $\acute{a}$ - $\gamma rnak$  etc. Other attempts to explain these are given by Schleicher Comp. Power power of the schleicher Comp. Power of the schleicher Vocalismus, I 44) and Bartholomae, Ar. Forsch. II 74 f.

§ 482. In Herodotus are a series of apparently unaugmented forms, of which αἴτεε (αἰτέω Ἱ ask), εὕχετο (εὕχομαι Ἱ pray), αὕξετο (αΰξω Ἱ increase) are examples. These may be quite regular, and come from older forms with initial αἰ-, ε̄ψ-, ᾱψ-, as laid down in vol. I § 611 p. 461.

The vowels in the first syllable of such forms as Att. ητουν (αἰτέω), ηυξάμην (εὐχομαι), ηυξον (αὔξω), and ἤντησα (ἀντάω Τ meet), ἦοχον (ἄρχω Τ lead), ὤρνυον (ὄρνῦμι ὀρνύω

'I arouse, set a-going') is due to the analogy of  $\bar{\eta}\gamma\sigma\nu$ : ἄγω,  $\bar{\eta}\rho\iota\zeta\sigma\nu$ : ἐρίζω etc.  $\bar{\eta}'\mu\epsilon\nu$   $\bar{\eta}'\tau\epsilon$  are discussed in § 481 with the Remark, just above.

The use of both augmented and unaugmented forms (as \*é-bherom and \*bhérom in the sense of 'I carried') continued in the separate languages, and survivals of it occur right down into the historic period. The facts are as follows.

In Sanskrit of the Vedic period both modes of expression are used together; in the Rig-Veda they are about equally balanced. But even in Vedic we can see a growing preference for forms with the augment. In the Brahmanas and in Epic poetry the augment is rarely omitted. And in later or classical Sanskrit, which was ruled by the native grammarians, augmented forms alone are used. In Avestic the double usage is also found, though the augment occurs rarely in comparison with the number of times it is omitted. But Old Persian seems to know no preterites save those which have an augment (a few forms in this language are doubtful).

In Armenian the augment was kept only before monosyllabic verbal forms which kept their root vowel, or before those which without it would not have been a complete syllable. Thus the  $3^{rd}$  sing. aor. e-lik = Gr.  $\tilde{e}\text{-}\lambda\iota\pi\varepsilon$  has it, but  $1^{st}$  sing. lki has it not.\(^1) It is found in other persons besides the  $3^{rd}$  sing. with the aorists of the roots  $dh\bar{e}\text{-}$  'place',  $d\bar{v}$ - 'give', and gem- 'come'; thus  $1^{st}$  sing. e-di e-tu e-ki  $3^{rd}$ 

<sup>1)</sup> It is a fair assumption that, in the 1st sing., \*eliki beside \*liki dropt out of use before \*liki became monosyllabic.

sing. e-d e-t e-kn. That the augment was kept or dropt according to the number of syllables in the word is clear from 1st pl. tuak beside sing. 1st pers. e-tu 2nd e-tur 3rd e-t pl. 2nd e-tuk 3rd e-tun, and by comparison with 1st pl. e-dak e-kak (beside e-di e-ki). The augment of edi and eki passed into other parts of the verb, for which see page 28, footnote 2.

In the Greek of Homer and the later epic poets, the use of the augment is artificial. In the later epic it is less and less omitted as the language approaches more nearly to ordinary prose. In prose, augmented forms predominated from the very first. The only exceptions are the pluperfect, which shows the old variation, e. g. πεπόνθη πεπόνθειν with  $\vec{\epsilon} - \pi \epsilon \pi \acute{o} \nu \vartheta \eta$   $\vec{\epsilon} - \pi \epsilon \pi \acute{o} \nu \vartheta \epsilon \iota \nu$ , and the iterative preterite in -σχον in Herodotus, as φεύγεσχον, which never has the augment. Perhaps the reason for these exceptions was that the forms of the 2<sup>nd</sup> plural and dual pluperfect (§ 836) and φευγέσκετε φευγέσκετον could have only one meaning, while τρέπετε τρέπετον, τράπετε τράπετον, τρέψατε τρέψατον could be either indicative or imperative. This made the augment useful to make the sense clear. In Sanskrit and Old-Persian there was the same ambiguity (e. g. Skr. bhárata = ábharata, and also imperative); and there too a desire for clearness may have caused the augmented forms to become by degrees the only mode of expressing past action.

In all other branches of our group unaugmented forms gained the day. The scanty and obscure remnants of the augmented class have already been given. Examples of unaugmented forms are:

Latin. -bam in plantā-bam for \*fu-ā-m 'I was' (§ 583). dīxit: Gr. δείξε ἔ-δείξε (§§ 823, 867. 3). scidit: Skr. chidá-t á-chida-t (§§ 523, 528, 867. 5).

Old-Irish. s-aorist ro-char 'he loved' for \*-caras-t (§ 840).

Old High German. teta O.Sax. deda 'I did', if it is an imperfect like Greek τίθην ἐ-τίθην (§§ 545. 886), and O.H.G. O.Sax. wissun 'they krew', if it be for \*uits-nt (§ 837). Compare Kluge in Paul's Grundr. 1 375.

Lithuanian. bùvo 'he was' for \*bhuyā-t: cp. Lat. -bat; mìné 'he thought, devised' for \*mynē-t: cp. Gr. μάνη ἐ-μάνη (§ 587). Old Church Slavonic. bě 'he was' for \*bhyē-t: cp. Gr. φύη ἐ-φύη (§ 587); aor. vezŭ 'I carried, vexi': Skr. váha-m ά-vaha-m (§ 514); s-aorist děchữ 'I laid': Skr. dhásam á-dhāsam (§ 812).

## FORMATION OF THE TENSE STEM. 1)

## GENERAL REMARKS.

§ 484. In classifying forms of a verbal system the grammars regard meaning rather than form. The result is that forms which are closely connected in structure and in derivation have often to be kept apart, and at the same time

<sup>1)</sup> Many works on the Present Stem (Imperfect-Present and Aorist-Present) include a more or less general discussion of tense formation, and it is not always easy to choose where to name them. For this reason, works on the Present Stem will here be included along with those on Tense-Formation in general. For works on the sio-Future, see § 747; for the s-Aorist § 810; for the Perfect, § 843 (the Germanic weak preterite § 907).

Indo-Germanic. L. Tobler, Übergang zwischen Tempus und Modus, ein Capitel vergleichender Syntax im Zusammenhang mit Formenlehre und Völkerpsychologie, Zeitschr. f. Völkerpsych. II 29 ff. A. Herling, Vergleich. Darstellung der Lehre vom Tempus und Modus, Hanover 1840. L. Meyer, Über Tempusbildung und Perfecta mit Präsensbedeutung, Benfey's Orient und Occident 1 201 ff. F. H. Trithen On the Formation of the Past Tense in certain of the Indo-European languages, Proceed. of the Philol. Soc. I (1844) pp. 273 ff. G. Gerland, Intensiva und Iterativa und ihr Verhältnis zu einander, Leipz. 1869. H. Osthoff, Über Aoristpräsens und Imperfectpräsens, Paul-Braune's F. Hartmann, De aoristo secundo, Berl. 1881. Beitr. vm 287 ff. O. Hoffmann, Das Präsens der idg. Grundsprache in seiner Flexion und Stammbildung, Gött. 1889. The Author, Zur Geschichte der präsensstammbildenden Suffixe, Sprachwiss. Abhandl. aus G. Curtius' Gramm. Gesellsch. 1874 pp. 153 ff. Bartholomae, Altindisch āsīš lateinisch erās. Stud. zur idg. Sprachgesch. π 61 ff. J. Schmidt, Die ursprüngl. Flexion des Optativs und der auf  $\bar{a}$  auslautenden Präsensstämme, Kuhn's Zeitschr. xxiv 303 ff. G. Curtius, Die Verstärkungen im Präsens-A. Kuhn, Über die durch Nasale erweiterten stamme, ibid. I 259 ff.

others which are in structure and derivation quite distinct must be brought together. Questions of use belong to Syntax. Here we have to examine the structure of the Indo-Germanic verb, and to identify what is morphologically the

Verbalstämme, ibid. II 392 ff., 455 ff. H. Osthoff, Über eine bisher nicht erkannte Präsensstammbildung des Idg., Vortrag auf der Münchener Philologenvers. 1891 (Zeitschr. für deutsche Philol. xxiv 215 ff., Anzeiger für idg. Sprach- und Altertumsk. I 82 ff.). The Author, Die achte Conjugationsclasse des Altindischen und ihre Entsprechung im Griechischen, Kuhn's Zeitschr. xxiv 255 ff. J. H. Moulton, The -nā-Class of Unthematic Verbs, Amer. Journ. Phil. x 283 ff. A. Ludwig, Die Verba auf [lat.] -erare [germ.] -izon, Kuhn's Zeitschr. xvIII 52 ff. Th. Benfey, Einige ursprüngliche Causalia aus Bildungen durch sanskritisch paya, ibid. vII 50 ff.

Aryan. The Author, Die siebente Präsensclasse des Arischen, Morph. Unters. III 148 ff. Bartholomae, Zur dritten, achten, neunten Präsensclasse, zur Desiderativbildung [im Arischen], Ar. Forsch. II 69 ff., 86 ff., 89 f., 90 ff. Whitney, Numerical Results from Indexes of Sanskrit Tense- and Conjugation-Stems, Proceed. Amer. Or. Soc., May 1885, pp. Lanman, On Multiform Presents and on Transfers of Conjugation in the Sanskrit Verb System, ibid. pp. xxxvi ff. Whitney, On the Classification of the Forms of the Sanskrit Aorists, ibid. 1875-76 The Author, Über einige ai. Verba der fünften und neunten Conjugationsklasse, Kuhn's Zeitschr. xxiv 286 ff. A. H. Edgren, On the Verbs of the so-called tan-class in Sanskrit, Proceed. Amer. Or. Soc., May 1885, pp. xxxix f. Van den Gheyn, Note sur la 8e classe des verbes sanscrits, Brüssel 1880. Idem, Remarques sur quelques racines sanscrites de la 8e classe, Brussels 1884. Idem, Nouvelles recherches sur la 8e classe des verbes sanscrits, Brussels 1886. Edgren, On the propriety of Retaining the Eighth Verb-Class in Sanskrit, University Studies Published by the Univ. of Nebraska I 1 (1888). Goldschmidt, Bildungen aus Passiv-Stämmen im Prakrit, Zeitschr. der deutsch. morg. Gesellsch. xxix 491 ff., xxx 779. Jacobi, Über unregelmässige Passiva im Prākrit, Kuhn's Zeitschr. xxviii 249 ff. E. Wilhelm, Zum Übergang von der unthematischen in die thematische Conjugation [im Avest.], Bezzenberger's Beitr. x 314 ff. Idem, De verbis denominativis linguae Bactricae, Jena 1878. Bartholomae, Zur fünften und neunten Präsensclasse [im Iran.], Bezzenberger's Beitr. XIII 60 ff.

Greek and Latin. Herm. Schmidt, Doctrinae temporum verbi Graeci et Latini expositio historica, Halle 1836. Idem, De verbi Graeci et Latini doctrina temporum, Wittenb. 1842. A. Kerber, Significationes temporum verbi Graeci et Latini in uno conspectu collocantur, Halle 1864. Düntzer, Über die dem Griech. und Latein. eigentümlichen Tempusund Modusbildungen, Höfer's Zeitschr. f. die Wiss. d. Sprache II 76 ff. same; and we must not be led into classifying forms according to their uses, or describing them by the terms which belong to syntax, except where this is possible without neglect of the forms as such, and without interfering with the terminology and general arrangement of the subject in this book.

Greek. G. B. Bonino, Il tema del presente nel verbo greco, Turin 1879. H. Malden, On connecting vowels in Greek, Trans. Philol. Soc. 1862-63 pp. 283 ff. G. Mahlow, Über den Futurgebrauch griech. Präsentia, Kuhn's Zeitschr. xxvI 570 ff. W. Kühne, Das Causativum in der griech. Sprache, Leipz. 1882. H. Rumpf, Quaestionum Homericarum specimen: De formis quibusdam verborum in  $\mu \iota$  in aliam declinationem traductis, Giessen 1850. H. Ebel, Verkannte Präsensformen [fεῖμαι ἔργαται etc.], Kuhn's Zeitschr. IV 201 ff. L. Meyer, Die homer. Formen des Zeitworts είναι, ibid. IX 373 ff., 423 ff. G. Meyer, Die mit Nasalen gebildeten Präsensstämme des Griechischen mit vergleichender Berücksichtigung der andern idg. Sprachen, Jena 1873. Die Präsentia auf -ώννυμι, Bezzenberger's Beitr. I 222 ff. Max Müller, Die siebente [skr.] Conjugation im Griech., Kuhn's Zeitschr. IV 270 ff. The Author, Das νν in έννυμι, ζώννυμι, κορέννυμι und ähnl. Präsentien, Kuhn's Zeitschr. xxvu 589 ff. R. Fritsche, Über die Ausdehnung der Nasalclasse im Griech., Curtius' Stud. vn 381 ff. A. Stolpe, Iterativorum Graecorum vis ac natura ex usu Homeri atque Herodoti demonstrata, G. Curtius, Die iterativen Präterita auf σεον, Kuhn's Zeitschr. I 27 ff. Max Müller, Die griech. Verba auf mr., ibid. IV 362 ff. I. Herrmann, De verbis Graecorum in αθείν εθείν exeuntibus, Erfurt 1832. Wentzel, Qua vi posuit Homerus verba quae in θω cadunt? Oppeln G. Mekler, Griech. verba contracta mit langem Themavocal, in Beiträge zur Bildung des griech. Verbums (Dorpat 1887) pp. 1 ff. der Pfordten, Zur Geschichte der griech. Denominativa, Leipz. 1886. L. Sütterlin, Zur Geschichte der verba denominativa im Altgriech. I, Lobeck, De mutatione terminationum coniugationis Strassb. 1891. circumflexae, Königsb. 1845. G. Curtius, Zur Geschichte der griech. zusammengezogenen Verbalformen, Curtius' Stud. m 377 ff. B. Mangold, De diectasi Homerica, imprimis verborum in  $-\alpha \omega$ , *ibid*. VI 139 ff. Allen, The Epic Forms of Verbs in άω, Transact. of the Americ. Philol. Associat. IV (1873) pp. 1 ff. J. Wackernagel, Die epische Zerdehnung, Bezzenberger's Beitr. IV 259 ff. Inama, Degli aoristi greci, Rivista di L. Meyer, Griech. Aoriste, Berl. 1879. A. Zickler, filol. II 249 ff. De causis duplicis formae aoristi Graeci, 1865. Th. Nölting, Über den genetischen Zusammenhang des Aoristus II mit dem Perfectum II der The Author, Über einige griech. griech. Sprache, Wismar 1843. Präteritalformen mit α vor der Personalendung, Bezzenberger's Beitr. II L. Doederlein, De aoristis quibusdam secundis, Erl. 1857.

§ 485. The first point to realise is that there never was any real difference between the Present stem and the Strong Aorist. There is no difference, for example, between the imperfect Skr.  $\acute{a}$ - $bh\bar{a}$ -t Gr.  $\ddot{\epsilon}$ - $\phi\eta$  ( $\sqrt{bh\bar{a}}$ - to

W. Schulze, Zwei verkannte Aoriste (ταχον und ἀιον], Kuhn's Zeitschr. xxix 230 ff. Ebel, Reduplicierte Aoriste im Griech., ibid. II 46 ff. G. Curtius, Der erste Aorist des Passivs, ibid. I 25 ff. J. Wackernagel, Der Passivaorist auf -9ην, ibid. xxx 302 ff. W. Kühne, De aoristi passivi formis atque usu Homerico, Marburg 1877 and Güstrow 1878. Walker, Greek Aorists and Perfects in -κα, Class. Review, v 446 ff. Hatzidakis, Zur Präsensbildung des Neugriechischen, Kuhn's Zeitschr. xxvII 69 ff.

Albanian. G. Meyer, Das Verbum substantivum im Albanesischen, in M. Hertz zum 70. Geburtst., 1888, pp. 81 ff.

Italic. Corssen, Zur Bildung der Präsensstämme, in Beitr. zur ital. Sprachkunde pp. 475 ff. Cludius, Über die Bildung des Verbi sum, Günther und Wachsmuth's Athenäum II (Halle 1817) 136 ff. Darmesteter, De coningatione Latini verbi dare, Paris 1877. Thielmann, Das Verbum dare im Lateinischen, Leipz. 1882. F. Fröhde, Die lat. Präsentia auf -llo, Bezzenberger's Beitr. III 285 ff. K. F. Johansson, Några ord om de latinska verbalbildningarne med n i presensstammen, Akadem. afhandlinger til prof. S. Bugge, Christiania 1889, pp. Ch. Ploix, Des verbes latins en sco, Mém. d. l. Soc. d. lingu., VI 399 ff. K. Sittl, De linguae Latinac verbis incohativis, Archiv f. lat. Lexikogr. I 465 ff. C. Pascal, I suffissi formatori delle conjugazione latine, Revista di filol. XIX 449 ff. R. Thurneysen, Über Herkunft und Bildung der lat. Verba auf -io der 3. und 4. Conj. und ihr gegenseitiges Verhältniss, Leipz. 1879. C. Peter, Über die schwachen Verba der lat. Sprache, Rhein. Mus. III 95 ff., 360 ff. M. Bréal, Verbes dérivés latins, Mém. d. l. Soc. d. lingu. vi 342 ff. F. de Saussure, Sur une classe de verbes latins en -eo, ibid. III 279 ff. C. Pauli, Geschichte der lat. Verba auf uo, Stettin 1865. O. I. Fehrnborg, De verbis Latinis in uo divisas desinentibus, Stockholm 1889. C. Paucker, Die verba denominativa auf -are, Kuhn's Zeitschr. xxvi 261 ff., 415 ff. R. Jonas, De verbis frequentativis et intensivis apud comoediae Latinae scriptores, (I) Posen 1871, (II) Meseritz 1872. Idem, Gebrauch der Verba frequentativa und intensiva in der älteren lat. Prosa (Cato, Varro, Sallust), Posen C. Paucker, Die verba frequentativa, Kuhn's Zeitschr. 1879 und 1884. Wölfflin, Die Verba frequentativa und intensiva, xxvi 243 ff., 409 ff. Archiv f. lat. Lexikogr. IV 197 ff. Idem, Die verba desuperlativa, ibid. G. Curtius, Über die Spuren einer lat. o-Conjugation, Symbola philol. Bonn. 1864 pp. 271 ff. = Kleine Schriften II 133 ff. Wölfflin, Die verba desiderativa, Archiv f. lat. Lexikogr. 1 408 ff. G. Curtius, De aoristi Latini reliquiis, Kieler Lectionsverzeichn. 1857-58 = Curtius'

show, disclose, inform') and the aorist Skr.  $\acute{a}$ -sthā-t Gr.  $\acute{\epsilon}$ - $\sigma\tau\eta$  ( $\checkmark$  stā- 'stand'); between the imperfect Skr.  $\acute{a}$ -druha-t ( $\checkmark$  dreugh- 'deceive') Gr.  $\acute{\epsilon}$ - $\gamma\lambda\nu\varphi\epsilon$  ( $\checkmark$  gleubh- 'split, incise') and the aorist Skr. budhá-nta Gr.  $\acute{\epsilon}$ - $\pi\nu'\vartheta\epsilon$ - $\tauo$  ( $\checkmark$  bheydh- 'wake,

Stud. v 429 ff. Corssen, Kein Aoristus II im Lateinischen, in Beitr. zur ital. Sprachk. pp. 538 ff. F. G. Fumi, Sulla formazione latina del preterito e futuro imperfetti, Progr. del R. Liceo Chiabrera in Savona 1875—76.

Keltic. D'Arbois de Jubainville, Etude sur le présent du verbe irlandais, Mém. d. l. Soc. d. lingu. v 237 ff. Wh. Stokes, The Neo-Celtic Verb Substantive, Trans. Phil. Soc. 1885—87, pp. 202 ff. Idem, The Old-Irish Verb Substantive, Kuhn's Zeitschr. xxvIII 55 ff. Windisch, Das ir. praesens secundarium, ibid. xxvII 156 ff. Idem, Das ir. t-Präteritum, Kuhn-Schleicher's Beitr. vIII 442 ff. Thurneysen, Das sogen. Präsens der Gewohnheit im Irischen, Idg. Forsch. I 329 ff. Lottner, Traces of the Italic imperfect in the Keltic languages, Trans. Phil. Soc. 1859, pp. 31 ff. Thurneysen, Zu den ir. Verbalformen sigmatischer Bildung, Kuhn's Zeitschr. xxxI 62 ff. — Further on page 4, footnote.

Germanic. Amelung, Die Bildung der Tempusstämme durch Vokalsteigerung im Deutschen, Berl. 1871. Peterson, Vom Ablaut mit bes. Rücksicht auf den Ablaut des starken Zeitworts im German., Lund A. Moller, Die reduplicierenden Verba im Deutschen als abgeleitete Verba, eine etymol. Untersuchung, Potsd. 1866. H. Lichtenberger, De verbis quae in vetustissima Germanorum lingua reduplicatum praeteritum exhibeant, Nancy 1891. G. Burghauser, Idg. Präsensbildung im German., Wien 1887. J. von Fierlinger, Zur deutschen Conjugation (Präsentia der Wurzelclasse, Zur westgerm. Flexion des verb. subst.), Kuhn's Zeitschr. xxvII 432 ff. H. Kern, Over eeinige vormen van 't werkwoord zijn in 't Germaansch, Taal- en Letterbode v 89 ff. J. Schmidt, Die german. Flexion des verbum substant. und das hiatusfüllende r im Hochd., Kuhn's Zeitschr. xxv 592 ff. W. Wilmanns, Die Flexion der Verba tuon, gan, stan im Ahd., Zeitschr. f. deutsch. Alterth. XXXIII 424 ff. Skladny, Über das gotische Passiv, Neisse 1873. Inchoative or n-Verbs in Gothic, Amer. Journ. Phil. VII 38 ff. Zur Flexion der schwachen Verba, Paul-Braune's Beitr. vm 90 ff. Die schwachen Verba zweiter und dritter Classe, ibid. IX 504 ff. Author, Die got. Imperativform hiri und die Denominativa von consonantischen Stämmen, Morph. Unters. IV 414 ff.

Balto-Slavonic. G. Uljanov, Značenija glagolnych osnov v litovsko-slavjanskom jazykě (meaning of verbal stems in Lithu-Slavonic), Russkij filol. věstnik xxiv 105 ff., xxv 41 ff. O. Wiedemann, Das litau. Präteritum, ein Beitrag zur Verbalflexion der idg. Sprachen, Strassb. 1891. Leskien, Die Präsensbildungen des Slavischen und ihr Verhältniss zum Infinitivstamm, Arch. f. slav. Philol. v 497 ff. Miklosich,

notice, learn'). Often the same form is imperfect in one language and aorist in another; the forms é-gene-t (\$\sigma gene-t\$ gignere') and \*\elle-d\hat{n}ke-t\$ (\$\sigma denk-t\$ bite') are imperfect in Sanskrit (\$\delta janat \tilde{a}da\delta at\$), and aorist in Greek (\$\elle t \gene{t} \elle vero \delta \delta at\$). Or the same form is both, in one and the same language; Skr. \$\delta -p\vec{a} -t\$ drank' is imperfect of the pres. \$p\delta - ti\$, and aorist of the pres. \$p\delta b a - ti\$. What the meaning of a given form was, whether imperfect or aorist, depended on its relation to others. See Delbrück, Ai. Verb. p. 16, Ai. Tempuslehre p. 5. For our purpose, then, the stems of the present and the strong aorist go together; and where it is advisable to refer to the difference in the kind of action implied, we shall use the terms imperfect-present and aorist-present.

Some of the forms which in grammars of this or that language are called Future Indicative were originally Conjunctive; for example, Lat. eri-s  $ag\bar{e}$ -s. These will be found under Conjunctive (§§ 910 ff.). In form they belong to the Present. In the same place will be found the Idg. series of forms built up with the suffix  $-si_0$ -, as Skr.  $d\bar{a}$ -syámi Lith.  $d\hat{u}$ -siu 'dabo'. The  $-si_0$ - stands on the same level as -so-sko- and other formative suffixes used in the present tense; it is probably made up of -s(o)- +  $-i_0$ -, as  $-ni_0$ - is of -n(o)- +  $-i_0$ - (§ 743). Thus these futures are treated under the Present Tense.

With the Present also should strictly speaking be classed the s-Aorist. Its characteristic s cannot be separated from the s which is so common in present and regular in future stems; and its whole inflexion follows the same principle as the present. The s-aorist would properly go with Class XIX of Present Stems (cp. §§ 655, 656). A separate chapter is given all the same to this

Das Imperf. in den slav. Sprachen, Sitzungsber. d. Wien. Akad. LXXVII 5 ff. O. Wiedemann, Zur Stammbildung der Verben auf -nati, Arch. f. slav. Philol. x 652 ff. W. Burda, Ein Beispiel der Präsensstammbildung mittels ta im Slavischen, Kuhn-Schleicher's Beitr. vi 392. Miklosich, Verba intensiva im Altslowenischen, ibid. I 67 ff. Idem, Einfacher Aorist [in Old-Slovenian], Sitzungsber. der Wien. Akad. LXXXI 100 ff.

Aorist (§§ 810 ff.), but merely to assist in getting a general view of this large group of forms.

As to the proethnic Perfect, as \*dedorke = Skr. dadárša Gr. δέδορκε (V derk- 'see'), it is distinguished from present forms by its grade of ablaut in the singular indicative active, by some special personal endings in the indicative, and (if we include the verb infinite) by a peculiar formation in the participle active. The remaining forms of the perfect system, with which we must include the pluperfect, have exact counterparts in the system of the present, and nothing but its use can tell us whether a given one of these forms is perfect, present, or agrist; even the reduplication with e is not confined to the perfect (§ 471 pp. 15 f.). Often the kind of action denoted is so little obvious, that grammarians doubt whether to class certain forms under Perfect or Present Stem (cp. Delbrück, Altind. Verb. 122 f., Whitney's Sanskrit Gram. § 868, Curtius Verb II<sup>2</sup> 24 f.). It is clear that notwithstanding these points of contact between the two classes, a special chapter must be given to the perfect, on account of the peculiarities which it has.

We therefore divide Verb Forms, from the point of view of the Formation of these Tenses, into three groups:

- I. Present (including Imperfect- and Aorist-Present).
- II. s-Aorist.
- III. Perfect.
- § 486. Before we proceed to our subject in detail, two distinctions must be explained which are usually made, and to which some attention must be given in discussing Tense Morphology. These are (1) the distinction between Primitive or Primary verbs, and Derivative or Secondary verbs (Denominative or Deverbative): (2) that between Root-Determinatives, and Tense-Suffixes, or the elements used in forming a tense stem.
- § 487. First Primitive and Derivative Verbs. Primitives, such as \*es-ti 'est' and \*aĝe-ti 'agit', are contrasted with two classes of derived verbs: (1) a class which in the formation of

the stem is wholly verbal, as much as are the primitives; as Sanskrit Desideratives and Intensives ( $ni-n\bar{\imath}-\dot{\imath}a-ti$   $n\bar{e}-n\bar{\imath}-y\dot{a}-t\bar{e}$  from  $n\dot{a}ya-ti$  'leads'), and Inchoatives in Latin ( $gem\bar{\imath}sc\bar{o}$  from  $gem\bar{o}$ ): (2) those which clearly contain a Noun Stem, called Denominatives; as Skr.  $g\bar{a}tu-y\dot{a}-ti$  'procures access' from  $g\bar{a}t\dot{u}-\dot{\imath}$  'access', Gr.  $\pi o \mu a \dot{\imath} \nu \omega$  'I tend' from  $\pi o \mu \dot{\eta} \dot{\nu}$  'herdsman', Lat. planta-t from planta.

- (1) The formation of Desideratives, Inchoatives, Intensives, Iteratives, Frequentatives, Causatives and the rest is in principle absolutely the same as that of the so-called Primitive verbs connected with them. There is a distinction, however, in the meaning of the present tense; in these verbs the present had a second special meaning in addition to that of time. This distinguished them from the primitives, which had a simpler meaning in the present, and the formation with some special meaning became a more or less fertile type. But they were not originally derived from their primitives for the express purpose of conveying this new meaning; the new meaning, indeed, does not always date from the proethnic stage at all, but belongs to a later period, and it often has nothing to do with the form, but depends on other circumstances. This is the case with Lat. inchoatives in -sco (§ 674). Thus it is clear that we cannot use this different meaning as a principle of classification; our aim is historical, and we base our classification on the conditions which prevailed in the proethnic stage, and as far as possible on etymology. We must then be content to point out the special meaning where it is of any importance, and, wherever it is possible, to explain how the meaning came in.
- (2) It is less easy to classify the second group of forms, and to find out how far indicative stems, which we see combined with personal endings into a word, are purely verbal, and how far they are wholly or partly nominal. If we could only see which were based on noun stems and which derived from verbs, this would of course be the main principle of distinction.

There is no manner of doubt that the Idg. languages had

not only denominative verbs with an additional suffix between stem and personal ending — such as Skr. gātu-yá-ti apas-yá-ti ('is active', from apas- 'work') Lith. pasako-ju ('I recount' from pāsaka 'account'), which have -io- between stem and ending - but also others where the personal suffix was added immediately to the noun stem. Such forms are Lat. planta-s planta-t etc. from planta, O.H.G. salbō-s 'thou anointest' salbō-t etc. from salba 'ointment', Lith. ju'sto 'he girds' ju'sto-me from ju'sta 'girdle', Aeol. τίμα-μεν 'we honour' from τιμά 'honour'. Also Skr. mārga-ti 'tracks, traces' from mārga-s 'path, track', phala-ti 'bears fruit' from phála-m 'fruit', Gr. θέρμε-το 'grew warm' from θερμό-ς, ε-χραισμε 'was useful' beside χραισμέω, Skr. jíva-ti Lat. vīvi-t O.C.Sl. žive-tŭ 'lives' from jī-vá-s vī-vo-s ži-vŭ 'alive'. With very good reason, all forms with a thematic vowel, and therefore all presents formed by -o- -no- -to- -io- etc., have been explained as noun-stems with added personal endings (so, for example, Curtius Verb I<sup>2</sup> 14 f., 161, 239, 296): as specimens take Skr. ája-ti 'drives' Gr. άγει Lat. a gi-t with Skr. ajá-s 'driver' Gr. ayó-s Lat. prōd-igu-s; Skr. paṇa-tē 'buys' with pana-s 'wager, stipulation' Lith. pelna-s 'profit' (I § 259 p. 212), Skr. véna-ti 'yearns' with vēná-s 'yearning', Goth. fraíhni-þ 'asks' with Skr. praśná-s 'question'; containing -nno- -eno- -ono- (Class XIV): compare Skr. krpána-te 'he acts pitifully, begs' with krpaná-s 'pitiful, poor', Gr. θηγάνει 'sharpens' with θήγανο-ν 'something to sharpen with, whetstone', Goth. us-lūkni-ħ 'opens itself' with us-lūkn-s 'open', Lith. kùpinu 'I heap up' with kùpina-s 'heaped'; Skr. vēšta-tē 'turns round' with vēštá-s 'bond, noose', Gr. έ-βλαστε 'grew, sprouted' with βλαστό-ς 'bud, sprout'; Skr. půva-ti 'stinks' with půva-m 'ill smelling discharge, matter'. Even some non-thematic and primitive stems have the same kind of relation to noun stems. For example take Skr. dhṛṣṇu-más 'we are brave' and dhṛṣṇú-ṣ 'brave'. The rootextending suffix -a-, in \*bhuu-a- \*bhu-a- (Lith. bùvo Lat. -bat), \*tr-ā- (Skr. trā-sva imper. 'preserve, save', Lat. in-trā-mus  $tr\bar{a}$ -ns) it seems necessary to identify with the feminine suffix -ā-, compare Skr. ji-jyāú 'he has overcome' (fut. jyā-sya-ti etc.) Gr. Ion.  $\beta\varepsilon$ - $\beta i\eta$ - $\tau\alpha i$  (aor.  $\beta i\eta$ - $\sigma\alpha\tau o$  etc.) with fem. Skr.  $jy\bar{a}$ -  $jiy\bar{a}$ - 'power, superiority' Gr.  $\beta i\bar{a}$  from  $\sqrt{gei}$ - (Skr.  $j\dot{a}y$ -a-ti ji- $n\dot{a}$ -ti and others). So also -es-, which extends the root in \*u-es- 'clothe' (Skr.  $v\dot{a}s$ - $t\bar{e}$  Gr.  $\dot{\epsilon}\pi i$ - $s\sigma\tau\alpha i$  and other words) must be the same as the neuter suffix -es-, and the tense-formative - $\partial s$ - in Skr.  $\dot{a}$ - $j\bar{a}ri\dot{s}$ -ur 'they have grown old' the same as - $\partial s$ - the neuter suffix (Gr.  $\gamma\tilde{\eta}\rho\alpha\varsigma$ ). Many other proofs will meet us in the course of our enquiry.

It need hardly be said that these denominatives or nounverbs did not all appear at the same time. The different types of formation belong to very different periods; and in the earliest strata, e. g. in verbs of Class II such as Skr. ája-ti Lat. agi-t, their noun origin was forgotten even in the proethnic language.

But of what verbs, then, can we be certain that when their stem was fused with a personal pronoun it was a verb and not a noun? Of none at all. Even where the stem is the bare root, reduplicated or not, as in \*es-ti ĕ $\sigma$ - $\tau\iota$ , \*st $\bar{a}$ -t  $\sigma\tau\bar{\eta}$ , \*bhibhai-ti Skr. bibh $\bar{e}$ -ti, the stem may be regarded as a nomen action or agentis (cp. the Root Nouns,  $\Pi$  §§ 159 ff., pp. 478 ff.).

In the formation of those verbs which are traditionally called Denominative there is nothing to distinguish them from what are classed as primary verbs. Lat. plantā-s is just like intrā-s hiā-s, Aeol. ἐττμά-μεν like ἔδοά-μεν ἔτλη-μεν, Lith. jůsto like bijos lindo. Even the present formation with -iois nothing peculiar to the denominative class. We see in Skr. apas-yá-ti pṛtanā-yá-ti Gr. ὀνομαίνω etc. the same present secondary suffix -io- as we see in reduplicated forms such as Skr. dēdiś-yá-tē Gr. γαργαίρω (Class XXVII), in forms such as Skr.  $grbh\bar{a}-y\acute{a}-ti$ , pass.  $tr\bar{a}-y\acute{a}-t\bar{e}$ , Gr.  $\delta\rho\tilde{\omega}$  for  $*\delta\rho\bar{\alpha}-\iota\omega$ ,  $\iota\tilde{\omega}\mu\omega$  for \*loα-lo- (Class XXVIII), and in futures such as Skr. ta-s-yá-tē  $v\bar{e}d$ - $i\dot{s}$ - $y\acute{a}$ -ti (Class XXX). Lat.  $plant\bar{o}$  (for \* $plant\bar{a}$ - $i\bar{o}$ ) Skr. prtanā-yá-ti are related to Lat. plantā-s Lith. justas Lat.  $intr\bar{o}$  (for \*intr $\bar{a}$ - $i\bar{o}$ ) Skr.  $tr\bar{a}$ - $y\acute{a}$ - $t\bar{e}$  to Lat. in- $tr\bar{a}$ -s Skr. trā-ti trá-sva, as Skr. dēdiš-yá-tē to dēdiš-ţē, and as Skr. fut. vēdiš-yá-ti to aor. á-vēdiš-ma.

That the term Denominative Verbs cannot be restricted to one special mode of inflexion is clear from many other instances where verbs have been derived from nouns by simply imitating the inflexion of any Primary Verb. Primary verbs in -éįō (Causatives, and Intensives or Iteratives) were the model for Skr. mantráya-tē 'he takes counsel, advises' from mántra-s, and Goth. fulljan O.C.Sl. plŭni-ti 'to fill' from full-s plŭnŭ. Gothic, primary verbs like af-lifnan were the model for fullnan 'to become full' from full-s; in Lithuanian, kùpin-ti etc. were the model for such derivatives as linksmin-ti 'to make cheerful' from linksma-s, and virstù virsti etc. for gelstù gelsti 'to become yellow' from gelta-s. These and similar re-formations will be discussed in § 793. They were due to the fact that there were nouns from the same root as some of the primary verbs, and from these they were believed to be derived. Then real denominatives were formed and used along with these apparent ones.

Thus in our classification of verbs, which depends first and foremost upon differences of inflexion, no use can be made of the traditional distinction between Primary and Denominative.

Even if the term Denominative were to be restricted to its common application it would be misleading. The feeling of a speaker for his language can give no help here. Often it cannot be made out whether the speaker regarded a given form as Denominative or not; his feeling often changed according to suggested associations; and if feeling of this sort were made the standard, we should often enough be led to class with Denominatives verbs which were only so by false analogy, and to class as Primary some which were undoubtedly derived from a noun. If again we took as our standard not the feeling of the speaker, but the actual formation of the words, we should be no nearer to getting a settled boundary line. It is easy to say, let those verbs be called denominative which contain noun formative suffixes, thus showing their noun origin, words that is like Gr.  $\tau \bar{\iota} \mu \dot{\alpha} \omega$  from  $\tau \bar{\iota} - \mu \dot{\eta}$ ,  $\pi o \iota \mu \dot{\alpha} \dot{\nu} \omega$  from  $\pi o \iota - \mu \dot{\eta} \dot{\nu}$ , or Goth. fullnan from full-s (ground-form \*pl-no-s). But not

to mention that this criterion excludes verbs derived from root nouns, little is gained by this mode of classification; for the task of historical grammar is not so much to analyse the forms and to describe their etymological structure, as to discover their origin and growth. In numberless instances doubts arise as to the correctness of our terminology. The commonest example is that of two classes of verbs running together, a primary and a denominative; e. g. in Greek, verbs in - ėįō and verbs in -e-iδ both become -έω; in Germanic, verbs in  $-i\bar{o}$   $-\epsilon i\bar{o}$  and those in  $-\epsilon -i\dot{o}$  both became (Goth.) -ja; in Lithuanian, verbs in -éįō and verbs in -ā-mi (-ā-jō) both became -au (inf. -y-ti). Here the question whether a given verb is primary or denominative is absurd, because it may quite well have been both. For instance, Lith. bradaŭ bradýti 'to wade about' may be derived both from bradà subst. 'wading' on the analogy of jů'stau jů'styti 'to gird', a denominative from iù's-ta 'girdle', and from bredù 'I wade' on the analogy of -manaŭ -manýti, the old "primary" éjō-byeform of menù 'I remember'; and Greek τροπέω may come from τρόπο-ς on the analogy of νοστέω: νόσ-το-ς, and from τρέπω on the analogy of φορέω (= Skr. bhāráya-ti): φέρω.

But however faulty our grammatical terminology may be, we cannot afford to dispense with it altogether in a book like this. I shall keep the term Denominative for verbs derived from nouns in the later periods, when the verb stem was still more or less felt to be originally a noun; for instance, Skr.  $g\bar{a}tu-y\dot{a}-ti$ , Gr.  $\tau\bar{\iota}\mu\dot{a}\omega$ , and Lat. planta-t.

§ 488. Turn we now to the distinction drawn between Root-Determinatives and Suffixes or other elements used in forming the Tense Stem.

What is usually understood, or may be understood, by the term Root-determinative has been set forth in II § 8 Rem. 2 pp. 20 f. A reference should be added to Curtius, Greek Etymology<sup>2</sup> pp. 59 ff., and Fick, Wörterb. IV<sup>3</sup> 44 ff. <sup>1</sup>

<sup>1)</sup> Another work, systematic, and valuable in spite of much bold conjecture, is Per Persson's Studien zur Lehre von der Wurzelerweiterung

These elements may appear in any part of the verb. For instance, from Idg. \*rē-dh- 'take counsel' come Skr. á-rādha-t rādhnó-ti rádhya-tē rātsyá-ti, rarádh-a, á-rātsī-t, rāddhá-s rāddhvá etc.; from Idg. \*sr-eu- sr-u- 'flow' come Skr. sráva-ti, sravišyá-ti, susráv-a, srutá-s etc. But they are sometimes found only in present or agrist forms, and disappear in the rest; as Lat. per-cellō for \*-cel-dō beside perf. -culī, Lith. vér-du 'I boil' beside pret. viriaŭ inf. vir-ti, O.C.Sl. ži-va 'I live' beside aor. ži-chŭ inf. ži-ti. 1) Again, present formativesuffixes, to use the stock phrase, spread beyond their own proper area both in the original language and later. These two reasons make it impossible always to keep Root-Determinatives distinct from Present Formative-Suffixes; the origin of both, by the way, is equally obscure. The tense which we call Present was almost always the foundation for the whole structure of the Verb and its associated noun forms; and the spread of root determinatives over all the verbal system is due to the same principle which from Skr. pi-nva-ti 'fattens' makes the perfect pininva and the participle pinvi-tá-s, and makes Skr. á-yunk-š-mahi Lat. jūnx-ī Lith. jùnk-siu from yunkté jungō jùngiu (√ jeug- 'iungere').

There is something else which shows the impossibility of carrying out the usual distiction between Determinatives and ordinary Inflexions. In discussing the inflexion of the present in primary classes of verbs, it is too common to find the first syllable of a form taken for the uninflected kernel of it. Because in \*bhereti 'fert', the syllable bher- is this kernel, that is, the root, therefore in \*treseti (Skr. trásati Gr.  $\tau \varrho \acute{\epsilon} \iota$ ) the syllable tres- is called the root; then, because there is not the same syllable in Skr.  $tar-al\acute{a}-s$  'moving to and fro,

und Wurzelvariation, Upsala 1891. This has reached me too late for anything more than occasional use. With his treatment of the main questions of principle as set forth on pages 202 and following, I agree.

<sup>1)</sup> In Lat.  $v\bar{\imath}-v\bar{o}$  too the  $\mu o$ -suffix was once confined to the present.  $v\bar{\imath}x\bar{\imath}$  victum are re-formates, for  $v\bar{\imath}-s\bar{\imath}$  \* $v\bar{\imath}-tum$ . See Osthoff, Paul-Braune's Beitr. VIII 274; Stolz, Lat. Gr. 2 p. 383.

trembling' Gr. τρ-έμω Lat. tr-emō Lith. tr-imù 'I tremble', -es- is called a "determinative", whilst in Skr. vás-tē 'clothes himself' Gr. έπί-εσται ( $\sqrt{eu}$ -, in Lith. au-nu Lat. ex- $u\bar{o}$ ) -es- is not so called because these verbs are looked upon as parallel to forms like \*es-ti. But inasmuch as \*tres- and \*wes- run right through the whole system of their verbs, they have become "roots". And there is no more reason for separating Skr. 1st sing. tr-ásē v-ásē from 1st sing. yaj-asē rūj-asē than for separating (say) \*bhu-ō (Lat.  $-b\bar{o}$  O.C.Sl.  $3^{rd}$  pl. bq) Skr. a-hv-a-t Gr.  $\ddot{\varepsilon}-\pi\lambda-\varepsilon$  from \*bher- $\bar{o}$ (Gr. φέρ-ω) Skr. ά-vid-a-t. We always hear of an "s-suffix" in such words as Skr. yaj-asē; but why? Simply because the ending  $-as\bar{e}$  is not the first syllable of the word. The  $\bar{e}$  of \* $pl-\bar{e}$ - 'fill' (Skr.  $pr\acute{a}$ -si Gr.  $\pi\lambda \tilde{\eta}$ - $\tau o$  Lat. - $pl\bar{e}$ -s) is called part of the Root; but it is the same ē which we have in \*mun-ē-Gr. è-uávy Lith. mìn-e), \*tak-ē- (Lat. tac-ē-s O.H.G. dag-ē-s), where it is called Inflexion. And the "determinative" -dh- is called inflexional in Gr. φλεγέθω νεμέθομαι πελάθω, but not in  $\ddot{\varepsilon}$ - $\delta \rho \alpha$ - $\vartheta o$ - $\nu$   $\ddot{\varepsilon}$ - $\delta \alpha \rho$ - $\vartheta o$ - $\nu$ , or  $\ddot{\alpha} \chi$ - $\vartheta o$ - $\mu \alpha \iota$ . The question whether a verbal element, which can be analysed no further, is or is not a separate syllable has, it is true, some importance; for it influenced the grouping of the forms in the speaker's memory, and this affected the development of a language in many ways: e. g. the root in Lith. v-ejù O.C.Sl. v-ijq 'I wind, turn' (= Skr. v-áya-ti 'weaves'), since it formed in itself no syllable, did not follow the course taken by the other verbs in -ėįō (Class XXXII) in Balto-Slavonic. But this cannot justify the making a distinction, as is so often done, between things which are clearly connected. Dealing as we do with the parent language, and from this point investigating the growth of the Verbal System, we must discuss together Skr. v-ásē and yaj-- $as\bar{e}$ , Greek  $\pi\lambda$ - $\tilde{\eta}$ - $\tau o$   $\ddot{e}$ - $\beta\lambda$ - $\eta$  and  $\dot{e}$ - $\mu\dot{\alpha}\nu$ - $\eta$   $\dot{e}$ - $\beta\dot{\alpha}\lambda$ - $\eta$ .

If, as it seems right to do, a special Present Class is given to \*\'e\_s-ti\'\'is'\ (Skr. \'\alpha s-ti\),  $\sqrt{es-}$ ), another to \*\'uemo-ti\'\vec{vomits'}\ (Skr. \'vami-ti\),  $\sqrt{uem-}$ ), and a third to \*\bhsi bhs\'\vec{e}-ti\'\cho\'\vec{vemo-ti}\'\vec{vomits'}\ (Skr. \ps\'\alpha-ti\), it is only consistent to distinguish each of the following as another class of Present

Stems: — a u-: eu-class for Skr. sr-áva-ti Gr. ρ-έ(F)ει 'flows' Skr. á-su-srō-t from  $\sqrt{ser}$ - seen in Skr. sí-sar-ti, for Skr. dr-áva-ti 'runs' á-du-dr-uva-t from √ der-, seen in Skr. dr-á-ti dr-ama-ti 'runs', and others; an m-class for Skr. dr-ama-ti Gr. ε-δρ-αμο-ν from the above mentioned der-, for Gr. τρ-έμω Lat. tr-emō Lith. tr-imù 'I tremble' from  $\sqrt{ter}$ , seen in Skr. tar-alá-s moving to and fro, trembling tr-ása-ti trembles, and others; a u-class (probably connected closely with the u-: euclass) for Skr. ji-va-ti Lat. vī-vi-t O.C.Sl. ži-ve-tŭ 'lives' from  $\sqrt{gei}$ , seen in Avest. gay-a 'life' iy- $\bar{a}iti$ - 'life' Gr.  $\zeta \tilde{\eta}$  (for \*qi-ē-), O.C.Sl. ži-ti 'to live', for Avest, ni-šaurvaiti 'defends' Skr. dhúrva-ti 'harms' bhárvati 'chews, destroys' etc. In the same way we come to a p-class, a bh-class, a k-class, and so forth. But this principle will not be consistently carried out, for two reasons. First, in these and many similar classes which might be made only a few examples occur, and thus for our period such formative elements as these can hardly be said to have any real productive power. Secondly, any attempt to make such a classification complete would lead us into labyrinths of root-analysis which would properly be without the scope of a compendium like the present. Roots with this kind of Determinatives, then, which we do not place in any separate class, we shall generally assume to be incapable of further analysis; and thus we place (say) Gr. τρ-έμω in the same division as  $\nu \dot{\epsilon} \mu \omega$  and  $\gamma \dot{\epsilon} \mu \omega$ .

§ 489. The formation of the Moods, the stems of the Injunctive, Conjunctive, Optative, and Imperative, will follow that of the Tense Stem (§§ 909 ff.). It must however, be here pointed out that the elements which are generally regarded as mood-formative are sometimes etymologically the same as in the indicative. Injunctive and Indicative forms, of course, cannot be separated. And it is beyond all doubt that the short Conjunctive vowel (Gr. - $\varepsilon$ - -o-), as in \*es-e-ti Skr. ásati Lat. erit (indic. \*es-ti 'est'), Hom.  $\alpha$ - $\lambda \varepsilon$ - $\tau \omega$  (indic.  $\partial \lambda$ - $\tau o$  'sprang'), is the same as what is called the thematic vowel in the Indicative (as \*a $\hat{g}$ -e-ti Skr. ájati Lat. agit).

Further, I hold that the conjunctive vowel  $-\bar{a}$ - in Lat. ferā-s etc. is the same as  $-\bar{a}$ - found after weak root-forms in the indicative (Classes X and XI), and also the same as the  $\bar{a}$  which forms feminine nouns (§ 487 pp. 41 f.); thus Lat. fu- $\bar{a}$ -mus belongs to the same class of words as the Indic. Lat. -bā-mus (for \*fu- $\bar{a}$ -mos) and Lith. bùv-o-me (§ 578), and that Lat. poscat for \*porscā-t, the indic. O.H.G. forscōt 'demands', and the Skr. fem. prchā 'question' (common ground-form \*prk-skā-) in point of etymology must all go together. So also the Italic conjunctive  $-\bar{e}$ - is to be identified with the Indicative  $-\bar{e}$ - (Classes X and XI), and so forth.

In all these cases it were proper to keep together whatever forms are etymologically akin. But if we did so, a student who is used to the practice observed hitherto, of arranging forms according to their function, would hardly be able to find his way. So I prefer to give this up, and simply call attention to etymology and structure where it is convenient to do so.

## THE PRESENT STEM.

## IMPERFECT PRESENT AND AORIST PRESENT. 1)

- § 490. The classes of the Present Stem are very commonly divided into two groups:
- (1) The matic, or verbs in  $-\bar{o}$  (Bopp's First Main Conjugation); and
- (2) Non-thematic, or verbs in -mi (Bopp's Second Main Conjugation.

The first group has in the Indicative -o- or -e- just before the personal ending; but -ō is the ending of the 1<sup>st</sup> person singular. These vowels were distributed amongst the persons of the singular and plural (we may leave the dual out for the present) in very much the same way as they are in Greek; -e- in the 2<sup>nd</sup> person of both, and the 3<sup>rd</sup> singular, -o- in the 1<sup>st</sup> persons (but 1<sup>st</sup> sing. pres. act. -ō) and in the 3<sup>rd</sup> plural:

<sup>1)</sup> For works bearing on this subject, see footnote to page 33.

compare 2nd sing. εφερε-ς φέρε-αι έφέρε-ο (for the indic. pres. act. cp. Goth. bairi-s), 2nd pl. φέρε-τε έφέρε-τε φέρε-σθε έφέρε--σθε, 3rd sing. εφερε φέρε-ται εφέρε-το (for the indic. pres. act. cp. Goth. bairi-b); 1st sing. (φέρω) έφερο-ν (φέρο-μαι έφερό-μην), 1st pl. φέρο-μεν έφέρο-μεν φερό-μεθα έφερό-μεθα, 3rd pl. φέρο--ντι (φέρουσι) εφερο-ν φέρο-νται έφερο-ντο. The variation -e-: -ois the rule in all the present o-suffixes except -io-, where instead of it there is sometimes -i- -ī-; see § 702. The Conjunctive shows a long vowel before the personal endings, as 1st and 2nd pl. Gr.  $\varphi \dot{\epsilon} \rho \omega - \mu \dot{\epsilon} \nu \varphi \dot{\epsilon} \rho \dot{\omega} - \mu \dot{\epsilon} \vartheta \alpha \varphi \dot{\epsilon} \rho \eta - \tau \dot{\epsilon} \varphi \dot{\epsilon} \rho \eta - \sigma \vartheta \dot{\epsilon}$ Lat. ferā-mas ferā-tis Skr. bhárā-ma bhárā-mahāi bhárā-tha bhárā-dhvāi. The Optative has the thematic vowel -o-, and between it and the personal ending i, which, when the personal ending began in a consonant, combined with the thematic vowel into a diphthong and a single syllable, as 2nd sing. Gr. qépoi-g Goth. bairái-s Skr. bhárē-š.

To the second group belong all present stems which have no thematic vowel before the personal ending in the Indicative. The personal endings were mostly the same as in the first group. There is a strange difference in the first person singular pres. indic., which had in the parent language, as it has in Greek, the the ending -mi; Gr. εἶ-μι τίθη-μι δάμνη-μι στόρνῦ-μι etc., not like φέρω βόσεω τύπτω φορέω. In most non-thematic conjugations, the indicative had, and retains, a vowel grading; the syllable just before the personal ending, whether root or suffix, had the strong grade (and accent) in the singular of the active, and the weak grade (no accent) in the active dual and plural: compare Skr. act. sing. 1st pers. dvéš-mi (I hate') á-dvēš-am 2<sup>nd</sup> dvék-ši á-dvēt 3<sup>rd</sup> dvéš-ti á-dvēt, but pl. 1<sup>st</sup> pers. dviš-más á-dviš-ma etc., dual 1st pers. dviš-vás á-dviš-va etc., mid. sing. 1st pers. dviš-é á-dviš-i etc.; act. sing. 1st pers. kx-nō-mi ('I make')  $\acute{a}$ -kx-nav-am  $2^{\rm nd}$  kx-nō-ši  $\acute{a}$ -kx-nō-š  $3^{\rm rd}$  kx-nō-ti á-kṛ-ṇō-t, but pl. 1st pers. kṛ-ṇu-más á-kṛ-ṇu-ma etc., dual 1st pers. kr-nu-vás á-kr-nu-va etc.; mid. sing. 1st pers. kṛ-nv-é á-kṛ-nv-i etc. On the whole it may be said that the Conjunctive formed with -e- and -o- had the strong stem in active and middle; as  $3^{rd}$  sing. act.  $dv\acute{e}\check{s}-a-t(i)$   $k\gamma-n\acute{a}v-a-t(i)$  mid.  $dv\acute{e}\check{s}-a-t\bar{e}$   $k\gamma-n\acute{a}v-a-t\bar{e}$ . The optative had in the singular active  $-i\bar{e}--ij\bar{e}-$ ; in the other active forms and in the middle it had  $-\bar{i}-$  before personal endings beginning in a consonant and  $-i\dot{i}-$  or  $-\dot{i}-$  before a sonant; always with the weak form of the present stem: e. g. act.  $1^{st}$  sing.  $dvi\check{s}-y\acute{a}-m$   $k\gamma-nu-y\acute{a}-m$   $1^{st}$  pl.  $^*dvi\check{s}-\bar{i}-m\acute{a}$   $^*k\gamma-nv-\bar{i}-m\acute{a}$  (what we actually find are  $dvi\check{s}-y\acute{a}-ma$   $k\gamma-nu-y\acute{a}-ma$ , contrast Lat.  $s-\bar{i}-mus$  beside s-ie-m), mid.  $3^{rd}$  sing.  $dvi\check{s}-\bar{i}-t\acute{a}$   $k\gamma-nv-\bar{i}-t\acute{a}$   $1^{st}$  sing. Avest. tanuya i. e. ta-nv-iy-a.

§ 491. Great as is the importance of the difference between thematic and non-thematic stems, it seems best not to make it the chief principle of distinction in what follows.

<sup>1)</sup> The closest contact between them is in the 3rd pl. active and the partic. pres. active. I now depart from my previous view set forth in I § 226 p. 193, II § 125 p. 395 (and elsewhere); I now hold with Streitberg (Idg. Forsch. I 82 ff.) that the strong suffix-forms of these parts of nonthematic verbs (3rd pl. act., and pres. act. partic.) were -enti -ent and -ent-. e. g. \*s-énti 'sunt' partic. nom. pl. \*s-ént-es. It is possible that there were variants, also of the strong grade, -onti -ont and -ont. Then -ent-:-ont-:-yi- as in the gen. abl. sing. -es:-os:-s (III § 228 pp. 111 f.). If so, it is very possible that we should class together with the non-thematic conjugation e. g. Lat. sont sunt, sons, O.C.Sl. sqti (sqti) sy, and analyse them \*s-onti \*s-ont-s; that is to say, regard them as parallel to forms like es-t jes-ti (jes-ti). They would belong to both conjugations. This is, however, only a possibility; and I have accordingly treated forms with -o-, like Lat. sunt, in each case as thematic) and thematic only (below, §§ 492 ff.).

classification which takes as its principle some common points of structure or etymology other than the presence or absence of a thematic vowel. Thus one group will comprise presents which have a nasal-formative (as Skr. mṛnắ-ti mṛnắ-ti ṛnố-ti ṛnvắ-ti yunắk-ti yunja-ti); it is clear that this element was the same in all of them.

## A. CLASSES I TO VIII:

SIMPLE ROOT, OR ROOT WITH -o-, FOR THE PRESENT STEM; SOMETIMES REDUPLICATED.

Class I: Simple Root used for the Present Stem.

§ 492. This class disappeared in most languages, leaving only a few traces. It is commonest in Aryan, as are all the non-thematic forms.

§ 493. Idg. \* $u\acute{e}l$ -mi 'I choose, wish, will' 1st pl. \* $u\rlap/l$ - $m\acute{e}s$ : Skr.  $3^{rd}$  sing. mid.  $\acute{a}$ - $v\rlap/r$ -ta opt. vr- $iy\={a}$ -t ( $3^{rd}$  sing. mid. vur- $\bar{\imath}$ -ta '1)), Lat.  $2^{nd}$  sing. vel for \*vel-s (now a particle),  $2^{nd}$  pl. vol-tis, Lith. pa-velmi 'I will'  $3^{rd}$  sing. pa-velt. — With thematic vowel, Lat.  $vol\={o}$  (\* $u\rlap/l$ - $\bar{o}$ )  $3^{rd}$  pl. vol-u-nt.

\*gém-ti 'goes, comes'  $2^{nd}$  pl. \*gm-té: Avest.  $3^{rd}$  sing.  $jan-t\bar{u}$  Skr.  $2^{nd}$  pl.  $ga-th\acute{a}$   $3^{rd}$  sing. mid.  $\acute{a}-ga-ta$   $3^{rd}$  pl.  $\acute{a}-gm-an$ , Armen.  $3^{rd}$  sing. e-kn = Skr.  $\acute{a}-gan$ , Gr.  $3^{rd}$  dual  $\beta \acute{a}-\tau \eta \nu$ . Conjunctive: Avest.  $jim-a-\rlap{p}$  (I § 94 p. 89), cp. indic. Goth.  $qim-i-\rlap{p}$ . Optative: Skr.  $gam-y\acute{a}-m$  A.S. cyme (= Goth. \*kumjau). — With thematic vowel. Avest.  $g^em-a-\rlap{p}$   $\gamma m-a-\rlap{p}$  O.Pers. mid.  $a-gm-a-t\bar{a}$  Skr. opt.  $gam\acute{e}-t$  i. e. \*gmm- $\acute{e}-i-t$  O.H.G.  $1^{st}$  sing. indic. cumu i. e. \*gmm- $\acute{e}$ .

\*é½-mi 'I go' 1st pl. \*i-més: Skr. é-mi i-más 3rd pl. y-ánti, Gr. ɛੰ- $\mu$ i ' $\mu$ e $\nu$ , Lat. 2nd sing. ei-s  $\bar{\imath}$ -s, Lith. ei-mì; pret. \*ē½- $\eta$ : Skr. áy-am 3rd sing. āi-t 1st pl. āi-ma, Gr.  $\bar{\eta}$ - $\alpha$  1st pl.  $\bar{\eta}$ - $\mu$ e $\nu$  (cp. § 480 p. 28, § 481 p. 30). Conjunctive: Skr. 3rd sing. áy-

<sup>1)</sup> Instead of \*ur- $\bar{\imath}$ -ta (cp. partic. ur- $\bar{a}$ n $\acute{a}$ -s), see I § 157 p. 141. On the other hand, the regular form with v- is seen in Avest. Gath.  $vair\bar{\imath}$ - $maid\bar{\imath}$  for pr. Ar. \*vr- $\bar{\imath}$ -.

-a-ti áy-a-t (cp. indic. 3rd sing. mid. áy-a-tē, Lat. eō for \*e½-ō, eunt for \*e½-o-nt(i)). Optative: Skr. i-yā-t. Weak forms also found with  $\bar{\iota}$ -,  $i\dot{\iota}$ -: Skr. 1st pl. mid.  $\acute{\imath}$ -mahē opt.  $\bar{\imath}$ -yā-t, 3rd sing. mid.  $\bar{\imath}$ -ya-tē (Class XXVI), 1) Gr. conj. 1st pl.  $\acute{\iota}$ -o-μεν (but cp. § 914); Skr. 1st sing. mid. i-yē (cp. Avest. y-ōi), Lat. i-ēns, Gr. perhaps 3rd pl.  $\acute{\iota}$ -āσι (cp. § 502). — With thematic vowel Gr. opt.  $\acute{\iota}$ -o- $\iota$  partic.  $\acute{\iota}$ -o-ντ- pret. Hom.  $\acute{\eta}$ -ε  $\acute{\eta}$ -o-μεν (cp. conj.  $\acute{\iota}$ -o-μεν), Pelignian afāed 'abiit' for \*af-½e-d (§ 867. 5).

\* $\hat{k}$ ėns-mi 'I soothsay, praise, say' 1st pl. \* $\hat{k}$ ns-mės: Skr. 2nd pl.  $\hat{s}$ as-ta (Avest. 2nd pl. sas-tā with the nasal of the sing.), O.C.Sl. 3nd sing. setă i. e. \*se = \* $\hat{k}$ ens-t + an additional -tă, like pri-jettă instead of pri-je etc. (§§ 512, 830). Albanian gives us  $\theta$ om 'I say', for \* $\hat{k}$ ens-mi according to G. Meyer (M. Herz z. 70. Geburtst. 1888, p. 86; Etym. Wtb. der alb. Spr., 91; Alb. Stud. III 13, 63).

\*μέμd-mi 'I see, know' 1st pl. \*μid-més: Skr. véd-mi 1st pl. vid-más, Lith. veizdmi instead of regular \*vei(d)-mi (I § 547 Rem. 1 p. 401). Conjunctive: Skr. 3rd sing. véd-a-ti Gr. Hom. 1st pl. εἴδ-ο-μεν (cp. indic. Skr. vēd-a-tē Gr. εἴδ-ε-ται). Optative: Skr. vid-yá-m, Goth. 1st pl. vit-ei-ma. Imperative: Skr. viddhí Gr. ἴσθι, cp. Lith. veizdi veizd (I loc. cit., IV § 962). Also perf. 3rd sing. \*μόμd-e 'knows', with which the above named moodforms were associated (cp. II § 136 Rem. 1 p. 438, IV §§ 846, 912, 939, 959). — With thematic vowel: indic. \*μid-ό-, Skr. vid-á-ti Armen. e-git Gr. ἴδ-ε ενιδ-ε εἶδ-ε.

\*és-mi 'I am' 1st pl. \*s-més: Skr. ás-mi s-más, Armen. em (I § 561 p. 417), Gr.  $\varepsilon i \mu i$  Lesb.  $\varepsilon \mu \mu i$  (G. Meyer, in the work just cited, pp. 81 ff., Etym. Wtb. der alb. Spr. 160, Alb. Stud. III 63, 85), Lat. es-t Umbr.  $3^{\rm rd}$  pl. s-ent, O.Ir.  $3^{\rm rd}$  sing. is (I § 66 p. 55), Goth. im (I § 582 Rem. 2 p. 437)  $3^{\rm rd}$  sing. is-t, Lith. es-mì  $3^{\rm rd}$  sing.  $\varepsilon s$ -ti  $\varepsilon s$ -t O.C.Sl. jes-mǐ  $3^{\rm rd}$  sing. jes-tǐi; on the  $2^{\rm nd}$  sing. Skr. ási Gr.  $\varepsilon i$  see § 984.1. Pret. Skr. ás-am  $3^{\rm rd}$  sing. ás  $1^{\rm st}$  pl. ás-ma Gr.  $\tilde{\eta}$ -a  $\tilde{\eta}$   $3^{\rm rd}$  sing.  $\tilde{\eta} s$   $1^{\rm st}$  pl.  $\tilde{\eta} \mu s \nu$  O.C.Sl.  $2^{\rm nd}$  pl. -jas-te see § 480 p. 28, § 481

<sup>1)</sup> A different explanation of these Sanskrit forms may be found in Bartholomae's Ar. Forsch. II 73 f.

pp. 29 f.; Alban. 3<sup>rd</sup> sing. iš for \*es-t (G. Meyer, in the first work eited above, p. 91). Conjunctive: 3<sup>rd</sup> sing. Skr. ás-a-ti ás-a-t Lat. (fut.) er-i-t (cp. indic. Hom. ε-o-ν opt. ε-o-ν, also εόντω εών, Lith. es-ù = esmì 1<sup>st</sup> pl. ēs-a-me partic. ēs-ās, O.C.Sl. pret. -jach-ŭ -jaš-e § 480 p. 28). Optative: Skr. s-yā-m s-iyā-m, Lat. 2<sup>nd</sup> sing. s-iē-s 1<sup>st</sup> pl. s-ī-mus, O.H.G. 1<sup>st</sup> pl. s-ī-m. — With thematic vowel: partic. Gr. ŏντ- instead of \*όντ- \*s-o-nt- (on the analogy of εἰμὶ etc. which begin with a smooth breathing) Lat. s-o-n-t- 'he who is the doer, guilty' O.Icel. sannr 'true, really guilty' (pr. Germ. \*s-a-np-a-) Lith. sās sanczio O.C.Sl. sy sašta, indic. Lat. s-u-m s-u-mus s-u-nt O.C.Sl. 3<sup>rd</sup> pl. s-atŭ.

\*dhégh-mi 'I burn': Skr.  $2^{nd}$  sing. dhák- $\S i$  Lith. deg-m i. The conjunctive implied by these forms is hidden in the indic. Skr.  $d\acute{a}h$ -a-ti Lith. deg- $\mathring{u}$ . The weak form \*d(h)gh- cannot be found; we have evidence for it in Avest.  $3^{rd}$  pl. imper. sc- $ant \mathring{u}$  beside  $1^{st}$  sing. indic. hax- $m \~{\iota}$  (pr. Ar. \*sak- $m \~{\iota}$ ) from  $\sqrt{seq}$ -'sequi', Skr.  $3^{rd}$  pl.  $\acute{a}$ - $k \~{\S}$ -an  $3^{rd}$  sing. mid. gdha i. e. \*ghs+ta (I § 591 p. 449) beside  $3^{rd}$  sing.  $\acute{a}$ -ghas from ghas- 'eat'.

\*dhế-t \*é-dhē-t 'he placed'  $2^{\rm nd}$  pl. \*dhɔ-té: Skr. dhấ-t á-dhā-t  $3^{\rm rd}$  sing. mid. á-dhi-ta  $2^{\rm nd}$  sing. imper. dhi-ṣvá, Armen.  $1^{\rm st}$  sing. e-di  $3^{\rm rd}$  sing. e-d, Gr.  $2^{\rm nd}$  pl.  $\check{\varepsilon}$ - $\vartheta \varepsilon$ - $\tau \varepsilon$   $3^{\rm rd}$  sing. mid.  $\check{\varepsilon}$ - $\vartheta \varepsilon$ - $\tau o$  ( $\vartheta \varepsilon$ - instead of \* $\vartheta \alpha$ -, I § 109 c pp. 101 f., the Author Gr. Gr.  $2^{\rm nd}$  pp. 27 f.), Lat. con-di-mus (I § 370 p. 282). Optative: Avest. d-yā- $\rlap{p}$ . Imperative: Lith. dế-k. — With thematic vowel Skr. práti dh-a-t, a-dh-a-t,  $1^{\rm nd}$  Lat.  $1^{\rm st}$  sing. con-d-ō  $3^{\rm rd}$  pl. -d-u-nt, Avest. opt.  $2^{\rm nd}$  sing. d-ōi-š.

\* $d\delta$ -t \* $\dot{e}$ - $d\bar{o}$ -t 'he gave'  $2^{\rm nd}$  pl. \* $d\vartheta$ - $t\dot{e}$ : Skr.  $\dot{a}$ - $d\bar{a}$ -t 3<sup>rd</sup> sing. mid.  $\dot{a}$ -di-ta, Armen. 1<sup>st</sup> sing. e-tu 3<sup>rd</sup> sing. e-t, 1<sup>st</sup> pl. pres. ta-mk, Gr.  $2^{\rm nd}$  pl.  $\ddot{\varepsilon}$ - $\delta o$ - $\tau \varepsilon$  3<sup>rd</sup> sing. mid.  $\ddot{\varepsilon}$ - $\delta o$ - $\tau o$  ( $\delta o$ - instead of  $\delta \alpha$ -, cp. on  $\vartheta \varepsilon$ -, above), 2) Lat. da-mus red-dimus. Optative:

<sup>1)</sup> Less probably, some scholars take (a-)dhat to be \*dhatt = \*dha--dh+t, i. e. formed from the weak present stem \*dha-dh- (cp. a-dha-t-tam).

<sup>2)</sup> Pauli (Altital. Forsch. III 258) compares Venetian zoto 'dedit' with Gr. Jóro. Admitting that the explanation is in the main correct

Avest.  $d-y\bar{a}-p$ . Imperative: Lat. ce-do, Lith.  $d\mathring{u}-k$ . — With thematic vowel: Skr.  $\mathring{a}da-t$  i. e.  $\bar{a}+a-d-a-t$ , Lat. red-d-u-nt, Avest. opt.  $2^{nd}$  sing.  $d-\bar{o}i-\check{s}$ . 1)

\*stā-t \*é-stā-t 'he placed himself',  $2^{nd}$  pl. \*stə-té: Skr. á-sthā-t,  $3^{rd}$  sing. mid. á-sthi-ta, Gr. ĕ- $\sigma\tau\eta$ , mid.  $3^{rd}$  sing. èπί- $\sigma\tau\alpha$ - $\tau\alpha$ 2),  $2^{nd}$  sing. è- $\sigma\tau\alpha$ - $\eta\varsigma$  = Skr. á-sthi-thās (§ 503). Imperative: Lith. stó-k. — With thematic vowel: Skr. āsth-a-t, Avest. a-xšt-a-p mid. xšt-a-ta (xšt- instead of št-, see Bartholomae Handb. § 100 Anm. 3 p. 43, and št- instead of st-following compounds like paiti-štā-).

§ 494. As the examples in § 493 shew, roots of the e-series took regularly the e-grade (1st strong grade) in strong forms. But probably in the parent language there were forms with the 3rd strong grade, or ē-grade, also in use.

<sup>(</sup>cp. G. Meyer, Berl. Phil. Wochenschrift 1892 col. 312 f., Thurneysen Wochenschr. class. Phil. 1892 col. 290 f.), it is a question whether zoto should not be regarded as \*dō-to (cp. the s-aorist zonasto 'donavit').

<sup>1)</sup> Probably to the same class belongs Avest., being daduye 2nd pl. indic. pres. mid. See Bartholomae, Idg. Forsch. I 495.

<sup>2)</sup> Fick's connexion of this verb with Skr. partic. cit-tá-s is worthless (Fick, Gött. gel. Anz. 1881 p. 1426, Wtb. I 20 f.).

<sup>3)</sup> In the English translation of this note, 'Spiritus Asper' is a clerical error for 'Spiritus Lenis'.

present forms with  $\bar{a}u$  instead of  $\bar{o}$ , as  $st\bar{a}u-ti$  'praises' (3<sup>rd</sup> pl.  $stuv-\acute{a}nti$  mid.  $stu-t\bar{e}$ , beside which are found 2<sup>nd</sup> sing.  $st\bar{o}-\check{s}i$  conj.  $st\acute{a}v-a-t$ ) and  $sn\bar{a}u-ti$  'drips' (cp. Gr.  $v\acute{s}\omega$   $v\acute{s}v\acute{o}o\mu\alpha\iota$ ), also  $m\acute{a}r\check{s}-\check{t}i$  'wipes' (3<sup>rd</sup> pl.  $mrj-\acute{a}nti$ ). 1)

Along with these non-thematic ē-forms stand usually others with the thematic vowel; thus, Lith. ĕd-u beside ĕd-mi, sĕd-u beside sĕd-mi, Skr. ās-a-tē beside ás-tē, dáś-a-ti beside dáṣ-ṭi, sáh-a-ti beside sák-ṣva, mārj-a-ti beside márṣ-ṭi. Compare Gr. μήδομαι etc., § 514.

§ 495. In all languages, as we shall see, it is common for the strong stem to spread into what should be weak-stem forms, but the reverse is rare.

We should especially mention here that the strong-grade  $\bar{a}$ ,  $\bar{e}$ , and  $\bar{o}$  spread from roots ending in them to the weak persons which properly had  $\bar{o}$ . This re-formation brought about some confusion with Class X, where there is no gradation.

Skr. 1<sup>st</sup> pl. ά-sthā-ma Gr. ἔ-στη-μεν instead of \*a-sthi-ma \*ἔ-στᾶ-μεν (cp. § 493 pp. 53 f.). The difference between ἔ-στη-μεν and ἔ-θε-μεν ἔ-δο-μεν was due to the intransitive meaning of ἔστην, and to the powerful attraction of a word closely connected in meaning — ἔβην ἔβημεν (Skr. ágām ágāma); cp. the Author, Kuhn's Zeitschr. xxv 220, Osthoff's Perfect 373 f., and below, § 497 Rem. As regards Lat. stā-mus beside dă-mus, see §§ 505, 584 Rem.

In Sanskrit we find also  $\acute{a}$ - $dh\bar{a}$ -ma  $\acute{a}$ - $d\bar{a}$ -ma instead of \*a-dhi-ma \*a-di-ma (cp. § 493 p. 53), and similarly  $\bar{a}$  instead of i in the plural and dual active of all roots ending in (Aryan) - $\bar{a}$ . Compare opt. 1st pl. s- $y\acute{a}$ -ma, instead of \*s- $\bar{\imath}$ -ma, following s- $y\ddot{a}$ -m, § 940.

Unlike Gr.  $\varphi\eta$ - $\mu i$  'I say':  $\varphi a$ - $\mu i \nu$ , which undoubtedly has original gradation (cp. O.H.G.  $bannu = *bh\partial$ - $nu\bar{o}$ , Gr.  $\psi a i \nu o$  \* $bh\partial$ - $ni\bar{o}$ , see §§ 611, 654), all recorded forms of Skr.  $bh\bar{a}$ -ti 'shines' follow Class X, as pl.  $bh\bar{a}$ -nti imper.  $bh\bar{a}$ -hi partic.

<sup>1)</sup> The ablant of  $st\bar{a}\acute{u}-ti$  and  $m\acute{a}r\r{s}-ti$  is exactly parallel to that of the s-Aorist. See § 811.

 $bh\bar{a}$ -ta-s etc. We must therefore assume for this Skr. verb a stem bh- $\bar{a}$ -, i. e. an extension of the root by the ungraduated suffix - $\bar{a}$ - ( $bh\acute{a}$ -ti:  $bh\acute{a}$  f. =  $ps\acute{a}$ -ti:  $ps\acute{a}$  f.), which is also possible for Lat.  $f\bar{a}$ -tur for and O.C.Sl. ba-ja 'fabulor' (§ 706). 1)

Remark. \*μes-taż 'clothes himself' (Skr. νάs-tē Gr. ἐπι-εσται ξσ-το) is not of this class, as it must be analysed \*μ-es-taż (§ 656).

§ 497. Like  $\tilde{t}$ -mahē (Gr.  $\tilde{t}$ -o- $\mu \epsilon \nu$  § 493 pp. 51 f., § 914), many other forms show the weak-grade with bye-accent. Thus Skr.  $\acute{a}$ -bhū-ma Gr.  $\check{\epsilon}$ - $\varphi \bar{v}$ - $\mu \epsilon \nu$  Umbr.  $f\bar{u}$ -tu 'esto' Lith. bú-k' be it' from  $\checkmark$  bheu- 'become, be'; compare the sing. with the same grade of root Skr.  $\acute{a}$ -bhū-t Gr.  $\check{\epsilon}$ - $\varphi \bar{v}$  (cp. perf. Skr. 2<sup>nd</sup> sing. ba-bhū-tha), without question somewhat influenced by preterites of Class X (§§ 597 ff.) such as Skr.  $\acute{a}$ -dr- $\bar{a}$ -t  $\acute{a}$ -dr- $\bar{a}$ -ma  $\acute{a}$ -gl- $\bar{a}$ -t  $\acute{a}$ -gl- $\bar{a}$ -ma Gr.  $\check{\epsilon}$ - $\delta \rho$ - $\bar{\alpha}$   $\check{\epsilon}$ - $\delta \rho$ - $\bar{\alpha}$ - $\mu \epsilon \nu$   $\check{\epsilon}$ - $\beta \lambda$ - $\eta$   $\check{\epsilon}$ - $\beta \lambda$ - $\eta$ - $\mu \epsilon \nu$ .

<sup>1)</sup>  $\sqrt{bh\bar{a}}$ - means 'to show, send forth, make known'. If we connect with it Skr.  $bh\dot{a}nati$  'sounds, calls out' (Osthoff, Perf. 353, Whitney, Skr. Roots 109 f.), this must be taken as an extension \*bh-enoor \*bh-nno- (§ 619). With the same extension Moulton connects Lat. fenestra (Proceed. Gamb. Phil. Soc. 1890, May 22, p. 9).

<sup>2)</sup> The  $3^{rd}$  pl. mid. Ved.  $\hat{a}$ -jan-ata beside  $\hat{a}$ -jan-a-nta may be similarly taken. It is true that the word may quite well be derived from \*e- $\hat{q}$ nn-nto (cp.  $\hat{a}$ - $\hat{f}$ n̂-ata).

Also from  $\sqrt{er}$  'set in motion' ( $\varepsilon \rho \varepsilon \tau \sigma \cdot \omega \rho u \dot{\eta} \vartheta \eta$ ,  $\varepsilon \rho \sigma \eta \cdot \sigma \rho u \dot{\eta} \sigma \eta$ ) Hesych., Skr.  $\dot{\alpha}r$ -ti aor. mid.  $\dot{\alpha}r$ -ta) we have an Idg. mid. \* $\bar{r}$ -tai: Skr.  $\dot{i}r$ - $t\bar{e}$  imper.  $\bar{\imath}r$ - $\dot{s}va$  Avest.  $ar^e$ - $\dot{s}va$  partic. Skr.  $\bar{\imath}r$ - $n\dot{\alpha}$ -s, Gr.  $\ddot{\sigma}\rho$ - $\sigma \sigma$  partic.  $\ddot{\sigma}\rho$ - $u\varepsilon v\sigma$ - $\varepsilon$  inf.  $\ddot{\sigma}\rho$ - $\vartheta u$  (I § 306 pp. 241 f.). The Skr.  $\bar{\imath}r$ - Gr.  $\dot{\sigma}\rho$ - were used before sonants too, instead of \*ir- $\dot{\alpha}\rho$ - (for \*r-r-), which gives us such forms as Skr.  $3^{rd}$  pl.  $\dot{\imath}r$ - $at\bar{e}$  (cp. Skr.  $\dot{\alpha}$ - $bh\bar{u}v$ -am instead of  $\dot{\alpha}$ -bhuv-am following  $\dot{\alpha}$ - $bh\bar{u}$ - $\dot{s}$  etc.)  $3^{rd}$  sing.  $\dot{\imath}r$ -a- $t\bar{e}$ , Gr.  $\dot{\sigma}\rho$ - $\sigma$ - $\tau$ - $\tau \omega$ ; another re-formation is the augment in  $\dot{\omega}\rho\tau \sigma$  (\* $\dot{\sigma}\rho\tau \sigma$  orig. without augment = \* $\bar{r}$ - $t\dot{\sigma}$ ). A Germanic form of this kind is A.S. ear- $\bar{d}$  'thou art', see § 509. In the same relation as  $\ddot{\sigma}\rho$ - $\sigma$ - $\tau \tau \sigma$  bears to  $\ddot{\sigma}\rho$ - $\sigma \sigma$ ,  $\ddot{\varepsilon}$ - $\mu \sigma \lambda$ - $\sigma \nu$  stands to  $\ddot{\varepsilon}$ - $\beta \lambda \omega$   $\dot{\varepsilon} \varphi \dot{\alpha} \nu \eta$ ,  $\ddot{\omega} \chi \varepsilon \tau \sigma$ ,  $\ddot{\varepsilon} \sigma \tau \eta$  Hesych., since  $\beta \lambda \omega$ - represents an Idg. \* $m\bar{\ell}$ - (cp. I§ 306 p. 243).

On de Saussure's hypothesis,  $bh\bar{u}$ - was the weak grade of  $bhe\bar{u}$ - (Skr. fut. bhavi- $\dot{s}y\dot{a}$ -ti etc.), and  $\bar{r}$ - the weak grade of er- (Skr. fut. ari- $\dot{s}y\dot{a}$ -ti etc.), and so on.

Remark. To this list of forms I have hithertho added Skr.  $\acute{a}$ - $g\bar{a}$ -ma Gr.  $\rlap/\epsilon$ - $\beta\eta$ - $\mu\epsilon\nu$ , 3rd sing.  $\acute{a}$ - $g\bar{a}$ -t  $\rlap/\epsilon$ - $\beta\eta$  (cp.  $\acute{a}$ - $bh\bar{u}$ -t  $\rlap/\epsilon$ - $q\bar{v}$ ), equating  $g\bar{a}$ - $\beta\eta$ -= \* $g\bar{q}$ -(I § 253 p. 206). But another hypothesis appears to be preferable from Skr.  $\rlap/\epsilon$ - $g\bar{a}$ -t Gr. Hom.  $\beta\iota$ - $\beta\dot{a}$ - $\beta$ , Skr.  $v\acute{t}$ - $g\bar{a}$ -man- n. 'step' Gr.  $\beta\tilde{\gamma}$ - $\mu\alpha$ , Skr. perf. mid. ja- $g\bar{e}$ , and others of the like nature. This is, that there were original variants \* $g\bar{a}$ - and \*gem-, like \* $dr\bar{a}$ - and \*drem- 'run' (§ 488 p. 47, § 579). It would be easy to decide this point, if only \* $g\bar{a}$ - could be found outside of Aryan and Greek. The derivation of Lett.  $g\hat{a}ju$  'I went' is doubtful (see Wiedemann, Das lit. Praet., 141 f.), and it is worse than unsafe to adduce O.H.G. pfad 'path' (Fick, Wtb. I 433).

§ 498. Aryan.  $\sqrt{qer}$  'make': Skr.  $2^{nd}$  sing.  $k\acute{a}r$ - $\mathring{s}i$   $2^{nd}$   $3^{rd}$  sing.  $\acute{a}$ -kar  $2^{nd}$  pl. kr- $th\acute{a}$   $3^{rd}$  pl.  $\acute{a}$ -kr-an  $3^{rd}$  sing. mid.  $\acute{a}$ -kr-ta, Avest.  $3^{rd}$  sing.  $cor^e \rlap/p = pr$ . Ar. \*car-t (I § 94 p. 89, § 647. 7 pp. 493 f.); on O.Pers.  $1^{st}$  pl. a- $k\rlap/u$ - $m \rlap/a$   $3^{rd}$  sing. a- $k\rlap/u$ - $t \rlap/a$  see Bartholomae, Ar. Forsch. II 67 f. Imperative: Skr. kr- $dh\acute{i}$ , mid. kr- $\mathring{s}v\acute{a}$  Avest.  $ker^e$ - $\mathring{s}v \rlap/a$ . Conjunctive: Skr.  $k\acute{a}r$ -a-ti Avest.  $1^{st}$  sing.  $car \rlap/a n \bar{\iota}$  (cp. indic. Skr. kar-a-ti  $\acute{a}$ -kar-a-t, imper.  $2^{nd}$  sing. O.Pers. pari- $kar \rlap/a$ ). Optative: Skr.  $1^{st}$  pl. kr- $iy \rlap/a$ -ma. Skr. kar- always instead of regular car- (kept in Avestic) from the weak stem, but  $\acute{a}$ -kar-ma  $k\acute{a}r$ -ta have -ar- on the analogy of the strong. On the difficult forms Skr. kur- $m \acute{a}s$  kur- $v \acute{a}s$  (whence sing. kur- $m \acute{i}$ ) opt. kur- $y \acute{a}$ -m etc., see I § 289 p. 231,

§ 290 Rem. p. 232, Hübschmann, Kuhn's Zeitschr. xxvII 112, von Fierlinger *ibid*. 438, Bartholomae Ar. Forsch. II 67 f., 86 ff., J. Wackernagel in E. Kuhn's Litteraturbl. III 55 f., and below in this volume, § 641.

 $\sqrt{der}$  'split, burst': Skr.  $2^{nd}$  sing.  $d\acute{a}r$ - $\check{s}i$   $3^{rd}$  sing.  $\acute{a}$ -dar; opt.  $d\bar{\imath}r$ - $y\bar{a}$ -t = \* $d\bar{\imath}$ - $i\bar{e}$ -t (cp. pass.  $d\bar{\imath}r$ - $y\acute{a}$ - $t\bar{e}$  partic.  $d\bar{\imath}r$ - $n\acute{a}$ -s).

√ ghen- 'strike, slay': 3rd sing. Skr. hán-ti Avest. jainti, Skr. 2<sup>nd</sup> pl. ha-thá 3<sup>rd</sup> pl. ghn-ánti, mid. 1<sup>st</sup> sing. Avest. γn-ệ 3rd sing. Skr. ha-té 3rd pl. Skr. ghn-atë; pret. 1st sing. Skr. á-han-am O.Pers. a-jan-am 2nd sing. Skr. á-han Avest. a-jēn (Bartholomae, Bezz. Beitr. XIII 64 f.) 3rd sing. Skr. á-han O.Pers. a-ja i. e. a-jan 2nd pl. Skr. á-ha-ta O.Pers. ja-tā; imperative Skr. ja-hí for \*jha-dhi (I § 480 p. 355) Avest. jaidi. The weak form Ar. \*jha- (Skr. ha- ja- Iran. ja-) instead of regular \*gha-=\*ghy- on the analogy of \*jhan-=\*ghen-, I §§ 453 f. pp. 335 f. Skr. 1st dual hanvas instead of \*ghan--vas = \*qhy-yes (I § 225 p. 193, § 229 p. 195). -n- passes by analogy into other weak persons: Skr. 1st pl. han-mas imper. han-dhí (contrast jahí). Conjunctive: Skr. hán-a-ti Avest. janaiti (cp. indic. Skr. han-a-ti a-han-a-t Avest. janaiti Gr. E-Geno-v). Optative: Skr. han-yā-t Avest. janyāb O.Pers. janiyā, pr. Ar. \*jhan-iā-t instead of regular \*ghanjāt for \*ghn-ie-t (I § 454 Rem. pp. 335 f.); also found, with regular form, mid. Skr. ghn-īya ghn-ī-ta, and, on the analogy of the active, han-ī-ta. — With thematic vowel: Skr. 2nd pl. ghn-a-ta a-ghn-a-n a-ghn-u-nta partic. ghn-a-māna-s (Avest. conj.  $3^{rd}$  pl.  $\gamma n - \bar{a} - \underline{b}$ ).

Pr. Ar. \*jan-ti Idg. \*gem-ti, see § 493 p. 51. Imperative: Skr. ga-dhí ga-hí Avest. gaidī.  $3^{\rm rd}$  pl. Skr. á-gm-an gm-án Avest. gem-en. Skr.  $1^{\rm st}$  dual gánvahi regular for \*gm-u-(I § 225 p. 193, § 229 p. 195), only with changed accent. -n- (for -m-) passing by analogy into other weak persons: Skr.  $1^{\rm st}$  pl. á-gan-ma  $2^{\rm nd}$  pl. gan-tá gán-ta beside ga-tá, g-instead of j- in Skr. á-gan gán-tu (Avest. jantū), j- instead of g- in opt.  $3^{\rm rd}$  sing. Avest. jam-yā-p O.Pers. jam-p-p (Skr. gam-yā-t), see I § 451 p. 334.

Skr.  $k ildes ilde{e}-ti$  Avest.  $\check{s}a ilde{e}-it\bar{\imath}$  'lingers, dwells',  $3^{rd}$  dual Skr.  $k ilde{s}i-t\acute{a}s$   $3^{rd}$  pl. Skr.  $k ilde{s}iy-\acute{a}nti$ , conj. Skr.  $k ilde{s}\acute{a}y-a-t$ : Gr. Hom.  $\check{\epsilon}v-\varkappa \tau i-\mu \epsilon vo-\varsigma$  'well built'. — With thematic vowel Skr.  $k ilde{s}iy-\acute{a}-ti$ .

 $\sqrt{k}le\mu$ - 'hear': Skr.  $2^{\rm nd}$  sing.  $\acute{s}r\acute{o}-\acute{s}i$ ,  $1^{\rm st}$  sing.  $\acute{a}-\acute{s}rav-am$   $3^{\rm rd}$  sing.  $\acute{a}-\acute{s}r\bar{o}-t$ ,  $2^{\rm nd}$  pl.  $\acute{s}ru-ta$  and following the singular  $\acute{s}r\bar{o}-ta$  Avest. srao-ta, Avest.  $2^{\rm nd}$  pl. mid.  $a-sr\bar{u}-d\bar{u}m$ , Skr. imper.  $\acute{s}ru-dhi$ ; conj. Skr.  $3^{\rm rd}$  dual  $\acute{s}r\acute{a}v-a-tas$ , opt. Avest.  $1^{\rm st}$  pl.  $srv\bar{v}m\bar{a}$  i. e.  $sruv-\bar{v}-m\bar{a}$ : Gr. imper.  $\varkappa\lambda\bar{v}-9\iota$   $\varkappa\lambda\bar{v}-\tau\varepsilon$  (cp. § 497 pp. 56 f.)  $H_{\varepsilon\rho\iota-\varkappa\lambda\dot{v}-\mu\varepsilon\nu\sigma-\varsigma}$ . — With thematic vowel Skr.  $\acute{s}ruv-a-m$  Gr.  $\varkappa\lambda\dot{v}\omega$  (cp. § 527).

 $\sqrt{der\hat{k}}$ - 'see': Skr.  $\acute{a}$ -dar $\acute{s}$ -am Avest. dars-em,  $1^{\rm st}$  pl. Skr.  $\acute{a}$ -d $r\acute{s}$ -ma, and also  $\acute{a}$ -dar $\acute{s}$ -ma following the singular; conj. Skr.  $d\acute{a}r\acute{s}$ -a-t Avest.  $1^{\rm st}$  pl.  $dar^{\it s}$ - $\bar{a}$ -ma (cp. indic. Skr.  $\acute{a}$ -dar $\acute{s}$ -a-t). — With thematic vowel Skr.  $3^{\rm rd}$  pl.  $\acute{a}$ -d $r\acute{s}$ -a-n opt.  $dr\acute{s}$ - $\acute{e}$ -t.

Skr. á-grabh-am Avest. grab-em 'I grasped',  $3^{rd}$  pl. Skr. á-grbh-ran.

Skr. chand- 'appear': 3rd sing. chánt-ti.

 $\sqrt{bheid}$ - 'findere': Skr. 1<sup>st</sup> sing.  $\acute{a}$ - $bh\bar{e}d$ -am 3<sup>rd</sup> sing.  $\acute{a}$ - $bh\bar{e}t$ ; — with thematic vowel opt. bhid- $\bar{e}$ -t. Avest. mip-(Skr. mith-) 'destroy': 3<sup>rd</sup> sing.  $m\bar{o}ist$ , conj.  $m\bar{o}ip$ -a-p (cp. indic. Skr.  $m\acute{e}th$ -a-ti), opt. mip- $y\bar{a}$ -p.

 $\sqrt{dheugh}$ - 'milk, give milk' (cp. Fick Wtb. I<sup>4</sup> 73): Skr. 3<sup>rd</sup> sing.  $d\acute{o}gdhi$  3<sup>rd</sup> pl. duh- $\acute{u}nti$ , mid. 3<sup>rd</sup> sing.  $dugdh\acute{e}$  3<sup>rd</sup> pl. duh- $at\acute{e}$  - $at\bar{e}$  conj.  $d\acute{o}h$ -a- $t\bar{e}$ , opt. duh- $\bar{\imath}$ -ta; — with thematic vowel  $\acute{a}$ -duh-a-t opt. duh- $\bar{e}$ -t.  $\sqrt{jeug}$ - 'iungere': Skr. 3<sup>rd</sup> sing. mid.  $\acute{a}$ -yuk-ta 1<sup>st</sup> pl.  $\acute{a}$ -yuj-mahi, Avest. 3<sup>rd</sup> pl.  $y\bar{u}j$ - $\bar{e}n$  1<sup>st</sup> pl. mid.  $yao\gamma$ - $maid\bar{e}$  with non-original strong stem; — with thematic vowel, Skr.  $\acute{a}$ -yuj-a-t.

 $\sqrt{uek}$ - 'wish, desire': Skr. 1<sup>st</sup> sing.  $v\acute{a}\acute{s}$ -mi 3<sup>rd</sup> sing.  $v\acute{a}\acute{s}$ -ti 1<sup>st</sup> pl.  $u\acute{s}$ - $m\acute{a}si$ , Avest.  $vasm\bar{\imath}$   $va\acute{s}ti$   $usmah\bar{\imath}$ , conj. Skr.  $v\acute{a}\acute{s}$ -a-t. Avest. vasap (cp. indic. Skr.  $v\acute{a}\acute{s}$ -a-ti imper.  $v\acute{a}\acute{s}$ -a). — With thematic vowel Skr.  $u\acute{s}$ - $\acute{a}$ - $m\bar{a}na$ -s.

Pr. Ar. \*as-ti, Idg. \*es-ti, see § 493 p. 52. Skr. sing. ás-mi ási ás-ti pl. s-más s-thá s-ánti, Avest. sing. ahmi ahi asti pl. mahi (I § 558.3 p. 414) stā henti, O.Pers. sing. amīy (I § 558.3 p. 415) ahy astiy 3rd pl. hatiy i. e. hantiy; O.Pers. 1st pl. amahy with a- from the singular. Pret. Skr. 1st sing. ás-am 3rd sing. ás O.Pers. 1st sing. aham i. e. āham Avest. 3rd sing. ās (I § 647.7 pp. 493 f., § 649.6 p. 496), pl. Skr. ás-ma ás-ta ás-an O.Pers. 3rd pl. aha i. e. āha, cp. § 481 pp. 29 f., also unaugmented Avest. 3rd sing. as 3rd pl. h-en Skr. s-án; on the 2nd and 3rd sing. Skr. ás-ī-ṣ ás-ī-t, see § 574. Imperative: Avest. z-dī; Skr. ēdhí for \*az-dhi (I § 591 p. 447) instead of regular \*dhi following the analogy of forms with strong root. Conjunctive: Skr. ás-a-ti ás-a-t Avest. anh-a-itī anh-a-ħ O.Pers. ah-a-tiy. Optative: Skr. s-yā-t s-iyā-t Avest. h-yā-ħ.

 $\sqrt{ed}$ - 'eat': Skr.  $\acute{a}d$ -mi  $\acute{a}t$ -ti. So in all the weak persons ad-, as  $3^{\rm rd}$  pl. ad-anti  $2^{\rm nd}$  pl. at- $t\acute{a}$  imper. ad- $dh\acute{a}$ , obviously because such forms as \*ta \*dhi were not clear enough (cp. above, Skr.  $\bar{e}dh\acute{a}$ ). Conjunctive: \*ad-a-ti \*ad-a-t (cp.  $2^{\rm nd}$  sing. mid. ad-a-sva Gr.  $\check{e}\delta$ - $\omega$  Lat. ed- $\bar{o}$  Goth. it-a). On the relation between  $\acute{a}d$ -mi and Lat.  $\bar{e}st$  Lith.  $\acute{e}st$ , see § 480 Rem. pp. 28 f., § 494 pp. 54 f.

Skr.  $dh\acute{a}k \vspace{1mu}ii$  and others of the same sort, see § 493 p. 53. Skr. bhi- $\vspace{1mu}ii$  'heals' (bhi- is a bye-form of abhi) was no longer recognised for a compound, hence  $3^{\rm rd}$  sing. a- $bhi \vspace{1mu}ii$  R.-V. x, 131. 5, following Class XV, and  $bh \bar{e} \vspace{1mu}ii$  'healing'.

 $\sqrt{dh\bar{e}}$ -  $d\bar{o}$ -, Skr.  $dh\bar{a}$ -  $d\bar{a}$ - Iran.  $d\bar{a}$ - (in Iranian the two stems ran into one, and it is no longer possible to distinguish their meaning exactly), see § 493 p. 53. Skr.  $\acute{a}$ - $dh\bar{a}$ -t  $dh\acute{a}$ -t  $\acute{a}$ - $d\bar{a}$ -t pl.  $\acute{a}$ - $dh\bar{a}$ -ma  $\acute{a}$ - $d\bar{a}$ -ma, Avest.  $d\bar{a}$ -p  $d\bar{a}$ - $m\bar{a}$  O.Pers. a- $d\bar{a}$ ; on  $\bar{a}$  in the plural, see § 495 p. 55; mid. Skr.  $\acute{a}$ -dhi-ta  $\acute{a}$ -di-ta,

imper. dhi-ṣvá. Conjunctive: Skr. dhá-ti pl. mid. dhā-mahē Avest. dā-itī mid dā-itē (§ 933). Optative: Avest. d-yā-þ.

 $\sqrt{st\bar{a}}$ -, see § 493 p. 55. Skr.  $\acute{a}$ -sth $\bar{a}$ -t  $\acute{a}$ -sth $\bar{a}$ -ma (like  $\acute{a}$ -dh $\bar{a}$ -ma, see above), Avest. paiti- $\check{s}$ t $\bar{a}$ - $\rlap/p$ ; mid. Skr.  $\acute{a}$ -sthi-ta. Conjunctive: Skr. sth $\acute{a}$ -ti  $2^{\rm nd}$  dual sth $\acute{a}$ -thas, Avest. mid.  $x\check{s}$ t $\bar{a}$ -it $\bar{e}$  (§ 933).

 $\sqrt{d\bar{a}}$ - 'separate, divide up' (Gr.  $\delta\tilde{a}$ - $\mu$ o- $\varsigma$ ) · Skr.  $d\hat{a}$ -ti 3<sup>rd</sup> pl.  $d\hat{a}$ -nti (like  $\acute{a}$ - $dh\bar{a}$ -ma, above), mid. 1<sup>st</sup> pl.  $\acute{a}$ -dimahi (cp. partic. di-ná-s di-tu-s Gr.  $\delta a$ - $\tau \dot{c}$ o- $\mu a \iota$ ).

Sometimes in place of  $-i = \text{Idg.} - \bar{\sigma}$  in roots of the latter kind, Sanskrit has  $-\bar{\imath}$ :  $\acute{a}$ - $dh\bar{\imath}$ -mahi from  $\surd dh\bar{e}$ -,  $m\bar{\imath}$ - $mah\bar{e}$  from  $\surd m\bar{e}$ - 'measure' (3<sup>rd</sup> sing.  $m\acute{a}$ -ti),  $d\bar{\imath}$ -ti from  $\surd d\bar{o}$ -,  $\acute{a}$ - $d\bar{\imath}$ --ti from  $\surd d\bar{a}$ -. This  $\bar{\imath}$  was connected with a very widespread Sanskrit re-formation.

Now this  $-\overline{\imath}$ -, originally only a variant of Ar. -i- = Idg. -i-, encroached upon Ar. -i- = Idg. -a-, so that in Aryan

<sup>1)</sup> It is probable that another strong grade of the same determinative is contained in the Idg. present in  $-\dot{e}_1\bar{o}$  (as Skr.  $\dot{s}v$ - $\dot{a}ya$ -ti vart- $\dot{a}ya$ -ti Lat. qu- $e\bar{o}$  mon- $e\bar{o}$ ), to which belonged a participle in -i-to-s and  $-\bar{e}$ -to-s (Class XXXII). And I would now (with Bezzenberger, Zur Gesch. der lit. Spr., 195) recognise a form exactly answering to Skr.  $\dot{a}j\bar{a}i$ - $\dot{s}$  in Gr.  $\ddot{a}ye_{t}$ - $\ddot{a}y$ 

 $\bar{\imath}$  as well as i was found in the same ablaut series with  $\bar{\alpha}.^{1}$ ) Hence arose the above named forms  $\acute{a}dh\bar{\imath}mahi$  instead of  $\acute{a}dhimahi$  beside  $\acute{a}dh\bar{\alpha}m$  etc., and hence  $\acute{s}i$ - $\acute{s}\bar{\imath}$ - $\acute{h}i$  \* $\acute{s}i$ - $\acute{s}\bar{\imath}$ - $\acute{t}\bar{\imath}$  instead of \* $\acute{s}i$ - $\acute{s}i$ - $\acute{h}i$  \* $\acute{s}i$ - $\acute{s}i$ - $\acute{t}\bar{\imath}$  (cp.  $\acute{s}i$ - $\acute{t}\acute{a}$ - $\acute{s}i$ ) beside  $\acute{s}i$ - $\acute{s}\bar{\imath}$ - $\acute{t}i$  (§ 538),  $m\gamma$ - $n\bar{\imath}$ - $m\acute{a}s$  instead of \* $m\gamma$ -ni- $m\acute{a}s$  (cp. Gr. - $\nu\alpha$ - $\mu$  $\varepsilon\nu$ ) beside  $m\gamma$ - $n\acute{a}$ -mi (§ 597),  $\acute{a}$ - $star\bar{\imath}$ - $\ddot{\imath}$  instead of \*a-stari $\ddot{\imath}$  (§ 839). Last of all, - $\bar{\imath}$ - even pushed out  $a = \bar{\imath}$  in the root of forms like pass. \*dha-ya- $t\bar{e}$  = Avest. da-ye- $t\bar{e}$  (I § 109. a. p. 101), and so we have  $dh\bar{\imath}$ - $y\acute{a}$ - $t\bar{e}$  (§§ 707, 709).

It is true that there are other instances besides these of variation between Idg. i and  $\bar{\imath}$ ; for instance, in the syllable of reduplication, §§ 467, 469, 473. Whether these had anything to do with associating  $\bar{\imath}$  with  $i=\bar{\imath}$ , and if so, how far, I leave an open question.

§ 499. A few more examples may here be added to those already given of the confusion between weak and strong stem.

Strong Stem instead of Weak. Skr. 2<sup>nd</sup> dual spar-tam beside spr-tam from spar- 'save, win'. <sup>2</sup>) Avest. 3<sup>rd</sup> sing. mid. man-tā beside Skr. á-ma-ta from man- 'think'. Skr. 1<sup>st</sup> pl. á-hē-ma (cp. 3<sup>rd</sup> pl. á-hy-an) from hi- 'impel'. Skr. 2<sup>nd</sup> pl. stō-ta (cp. 2<sup>nd</sup> dual stu-tam) Avest. 1<sup>st</sup> pl. mid. stao-maiāē from stu- 'praise' (cp. Skr. stāú-ti § 494 p. 54). Skr. 2<sup>nd</sup> pl. vart-ta (cp. 3<sup>rd</sup> pl. á-vyt-ran) from vart- 'vertere'. Avest. 2<sup>nd</sup> pl. sas-tā beside Skr. śas-ta from \$\sqrt{kens-}\$ 'foretel' (§ 493 p. 52). Skr. 1<sup>st</sup> pl. chēd-ma from chid- 'cut'. Skr. 2<sup>nd</sup> pl. mid. vōḍhvam beside ūḍhvam 2<sup>nd</sup> dual act. vōḍham (I § 404. 2 pp. 298 f., § 482 p. 356) compared with 2<sup>nd</sup> sing. vákṣi, \$\sqrt{ueŷh-}\$ 'vehere'. Skr. 3<sup>rd</sup> sing. mid. á-tak-ta beside ták-ti 'runs, pushes, shoots', \$\sqrt{teq-}\$, cp. the weak grade tq- in Avest. partic. perf. ta-pk-uṣ-(I § 473. 2 p. 349).

<sup>1)</sup> Bartholomae (loc. cit.) assumes  $\bar{a}:\bar{\imath}$  to be an orig. ablaut; he believes  $\bar{a}$  came from  $\bar{a}\underline{i}$  in Idg., and e. g. Lat.  $er\bar{a}s$  (contrasted with Skr.  $\acute{a}s\bar{\imath}-\check{s}$ ) is derived by him from \*es $\bar{a}\underline{i}$ -s. I cannot approve this theory.

<sup>2)</sup> Avestic mid.  $3^{rd}$  sing.  $var^e$ - $t\bar{a}$  1st pl.  $var^e$ -maid $\bar{\imath}$ , compared with Skr.  $\acute{a}$ -vq-ta, are not safe examples to oite in proof of this re-formation, because  $var^e$ - may come from  $*v\bar{\gamma}$ -.

Weak Stem instead of Strong: much rarer. Skr. i-mi beside  $\acute{e}$ -mi from i-'go' (already cited, § 498 p. 59). Skr.  $3^{\rm rd}$  sing.  $\acute{a}$ - $v_7k$  beside  $v\acute{a}rk$  (mid.  $\acute{a}$ - $v_7k$ -ta) from varj-'twist' (but vice versa  $2^{\rm nd}$  dual vark-tam instead of  $v_7k$ -tam). Avest.  $2^{\rm nd}$  sing. a- $per^e$ š instead of \*a-fraš ground-form \*e-pre $\^{k}$ -s from  $\lor$  pre $\^{k}$ -'ask' (vice versa,  $3^{\rm rd}$  sing. mid. fraŠ- $t\bar{a}$  instead of \* $per^e$ Š- $t\bar{a}$ ).

§ 500. In Aryan, the ever increasing use of thematic forms was helped on by the like endings -am in the first person singular, and -anti -an in the third plural. Sometimes the desire for clear expression came in too. Thus Skr.  $2^{nd}$  and  $3^{rd}$  sing.  $\acute{a}da$ -s  $\acute{a}da$ -t drove out  $*\bar{a}t$  (both persons) from  $\sqrt{ed}$ - 'eat' ( $1^{st}$  sing.  $\acute{a}d$ -am  $3^{rd}$  pl.  $\acute{a}d$ -an), 1) and in Avestic  $-at\bar{e}$  -ata (= Skr.  $-at\bar{e}$  -ata), endings of the  $3^{rd}$  pl. middle, were almost entirely dropped in favour of the thematic endings  $-ant\bar{e}$  -anta, by which the plural was more clearly marked; e. g.  $\mathring{a}nh$ - $ant\bar{e}$  as contrasted with Skr.  $\acute{a}s$ - $at\bar{e}$  'they sit' (§ 1067. 1).

Much the same may be said of the other non-thematic present classes. Compare particularly the Avest.  $3^{\rm rd}$  pl. of Classes III and V, in -anti -enti instead of -aiti (= Skr. -ati), §§ 540, 556, 1018. 1. b.

§ 501. Armenian. e-kn 'he came': Skr.  $\acute{a}$ -gan, common ground-form \*e-gem-t, see § 493 p. 51; the 1<sup>st</sup> sing. eki and 3<sup>rd</sup> pl. ekin are said to be adformates of edi edin (see below); Bugge, Kuhn's Zeitschr. XXXII 75.

em 'am': Skr. ás-mi, see § 493 p. 52; 2<sup>nd</sup> sing. es for \*es-si (I § 559 p. 416); 3<sup>rd</sup> sing. ē following berē 'fert' for \*bhere-ti (vice versa, 2<sup>nd</sup> sing. beres follows es); 3<sup>rd</sup> pl. en doubtless for Idg. \*s-enti (Bugge, Kuhn's Zeitschr. xxxii 71), cp. § 1019.

e-di 'I placed': Skr.  $a\text{-}dh\bar{a}\text{-}m$ , see § 493 p. 53;  $2^{\text{nd}}$  sing. e-di-r  $3^{\text{rd}}$  sing. e-d  $2^{\text{nd}}$  pl. e-di-k  $3^{\text{rd}}$  e-di-n. di- = Idg. \* $dh\bar{e}\text{-}(\text{I}$  § 71 p. 62), and thus the strong stem has here passed into

<sup>1)</sup> Similarly, the forms with an  $\bar{\imath}$ -determinative,  $\acute{a}s-\bar{\imath}-\check{\varsigma}$   $\acute{a}s-\bar{\imath}-t$  'eras erat' establish themselves in place of  $\acute{a}s$  (Vedic for both persons); see § 574.

the plural. The same is true of e-tu 'I gave': Skr.  $\acute{a}$ -d $\bar{a}$ -m, see § 493 p. 53;  $2^{\rm nd}$  sing. e-tu-r  $3^{\rm rd}$  sing. e-t  $2^{\rm nd}$  pl. e-tu- $\rlap/k$   $3^{\rm rd}$  pl. e-tu-n; tu- = Idg. \*d $\~{o}$ - (I § 87 p. 84). But ta- = Idg. \*d $\~{o}$ - is the stem of the present  $1^{\rm st}$  pl. ta- $m\rlap/k$  'damus', whence a appears instead of u in the singular ta-m (I § 109. a. p. 101).

gom 'I am' is compared by Hübschmann (Arm. Stud. I 25, 61) with Gothic visa 'I remain, tarry'; and he conjectures that it is derived from \*ues-mi; Bugge (as cited, page 7) offers another explanation, but hardly improves upon this.

V bher- 'ferre':  $2^{nd}$  pl.  $\varphi \dot{\epsilon} \varrho - \tau \dot{\epsilon}$  instead of \* $\varphi \varrho \alpha - \tau \dot{\epsilon}$  \* $\varphi \alpha \varrho - \tau \dot{\epsilon}$ : Skr. bhár-ti  $2^{nd}$  dual bhr-tám, Lat. fer-t (§ 505).

 $\sqrt{ger}$ - 'swallow': ἔ-βοω - ἕφαγεν, ἔδακε, διέσπασεν; βοω- = \* $g\bar{r}$ -, weak grade like  $\phi\bar{v}$ - in ἕ- $\phi\bar{v}$ , § 497 p. 56.

 y-at-t. — With thematic vowel: indic. pres. ελσ-ίουσι pret. Hom.  $\ddot{\imath}$ - $\varepsilon$   $\ddot{\eta}$ - $\varepsilon$   $\ddot{\eta}$ -o $\mu\varepsilon\nu$  Att. imper.  $\dot{\imath}$ - $\dot{o}$ - $\nu\tau\omega\nu$  opt.  $\ddot{\imath}$ -o- $\iota$  partic. i-ό-ντ- (cp. J. Baunack, Curt. Stud. x 96 ff., Rhein. Mus. XXXVII 472), and compare conj. ἴ-ω ἴ-ω-μεν.

 $q \vartheta \varepsilon_{\ell}$ - 'destroy' = Skr.  $k \check{s} a y$ -:  $3^{rd}$  sing. mid.  $\check{\varepsilon}$ - $q \vartheta \iota$ - $\tau o$ : Skr. imper. kši-dhi. Conjunctive φθί-ε-ται; in Skr. we should expect \*kšay-a-tē on the analogy of kši-dhi (cp. indic. kšay--a-ti). Partic.  $\varphi \vartheta t$ - $\mu \varepsilon \nu \sigma \cdot \varsigma$ . — Whether  $\varphi \vartheta t \omega$  ( $\varepsilon \varphi \vartheta \iota \varepsilon \nu$ ,  $\Sigma$  446) is  $\varphi \vartheta \iota \underline{\iota} - \omega$  or  $\varphi \vartheta \iota - \underline{\iota} \omega$  is not clear; cp. § 527 Rem.

 $\sqrt{leu}$ - 'loose': mid. 3<sup>rd</sup> sing. λύ-το λῦ-το, 3<sup>rd</sup> pl. λύ-ντο (cp. § 1068).

1st pl. ἴδ-μεν (Att. ἴσμεν) 2nd pl. ἴσ-τε may be connected with the sing. \*ueid-mi or oid-a, it matters not which; see § 493 p. 52.

 $\epsilon l\mu i$  'I am', Idg. \*és-mi, see § 493 p. 52. 2nd sing.  $\epsilon i$ for  $*\dot{\epsilon}(\sigma)\iota = \text{Skr. } \acute{asi}$ , also  $\epsilon \dot{i}\zeta$  ( $\epsilon \dot{i}\zeta$ ) and  $\dot{\epsilon}\sigma - \sigma \dot{\iota}$ , see § 987.1.  $3^{rd}$  sing.  $\ddot{\epsilon}\sigma - \tau \iota$  ( $\dot{\epsilon}\sigma - \tau \dot{\iota}$ ): Skr.  $\dot{a}s - t \dot{\iota}$ .  $1^{st}$  pl.  $\epsilon \dot{\iota} \mu \dot{\epsilon} \nu$  (Dor.  $\epsilon \dot{\iota} \mu \dot{\epsilon} \dot{\epsilon}$ ) for \* $\epsilon \sigma \mu \epsilon \nu$  shows the strong stem for the weak (cp. O.Icel. er-o er-u § 507), like the 2nd pl. ἐσ-τὲ and the 3rd pl. Ion. ἔασι for \*ἐσ-αντι; Att. ἐσμὲν follows ἐστὲ in having σ. The 3rd pl. Dor. εντὶ Att. εισὶ instead of \*έντι = Goth. sind, Idg. \*s-enti (§ 1020.1); for the breathing compare οντ- instead of \*ό-ν-τ-§ 493 p. 53. With 3rd pl. Dor. Evti goes the participle Dor. έντ-, nom. pl. έντ-ες whose fem. έσσα is a transformation of \* $\dot{\alpha}\sigma\sigma\alpha$  (cp. Skr. s- $\alpha t$ - $\dot{\tilde{\eta}}$ ). Pret. 1st sing. Hom.  $\ddot{\tilde{\eta}}\alpha$  Att.  $\ddot{\tilde{\eta}}$  for \* $\bar{e}s$ -m,  $3^{rd}$  sing. Dor.  $\bar{\eta}\varsigma$  for \* $\bar{e}s$ -t,  $1^{st}$  pl.  $\bar{\eta}\mu\epsilon\nu$  for \* $\bar{\eta}\sigma$ - $\mu\epsilon\nu$ (I § 565 p. 410),  $2^{nd}$  pl.  $\tilde{\eta}\sigma$ - $\tau\varepsilon$ ,  $3^{rd}$  pl. Dor. etc.  $\tilde{\eta}\nu$  for  $*\tilde{\eta}(\sigma)$ - $\varepsilon\nu$ = Skr. άs-an (§ 1020. 1), also Boeot. παρ-εῖαν for \*ήαν (§ 1021.1); for the augment, see § 480 p. 28, § 481 pp. 29 f.  $1^{\text{st}}$  sing.  $\sqrt[3]{\nu}$   $2^{\text{nd}}$  pl.  $\sqrt[3]{\tau}$  are re-formates caused by preterites like  $\xi \beta \lambda \eta \nu$ , Class X, the point of contact being  $\eta \mu \epsilon \nu$ . The  $3^{\rm rd}$  sing. Hom.  $\tilde{\eta} \in \nu$  Att.  $\tilde{\eta} \nu$  is probably identical with  $3^{\rm rd}$  pl. Dor.  $\bar{\eta}\nu$  for  $*\dot{\eta}(\sigma)$ - $\epsilon\nu$ ; the Indicative had adopted  $-\alpha\nu$  $(-\sigma\alpha\nu)$  in other forms in place of 3<sup>rd</sup> pl.  $-\epsilon\nu$  (§ 1021), and thus  $\tilde{\eta}_{\varepsilon\nu}$  ceased to be a clear plural, beginning with sentences like  $\hat{a}$   $\delta \hat{\eta}$  τετελεσμένα  $\hat{\eta}$ εν ( $\Sigma$  4), ένθα μάλιστα μάχη Brugmann, Elements. IV.

καὶ φύλοπις ἦεν (N 789). In the dialect of Herodotus ἦα became κω (I § 611 p. 462), whence by analogy κω-ς κω-τε, cp. § 504. On  $\eta \sigma \theta \alpha$  and Hom.  $\xi \eta \sigma \theta \alpha$   $\xi \eta \nu$   $\eta \eta \nu$ , see §§ 583, and 858. 2. Imper. "io9" for Idg. \*z-dhi with prothetic vowel (I § 626 p. 470); and Hecataeus has  $\tilde{\epsilon}\sigma\vartheta\iota$  with the strong stem introduced. The old conjunctive (Skr. ás-a-ti ás-a-t Lat. er-i-t) was lost in the historic period, and in its place we find εω εωμεν ω ωμεν like Skr. as-ā-t. Opt. εἴην for \*¿σ-ιη-ν or \*¿σ-ιη-ν with the strong tense-stem (cp. § 943). — There is connexion between 1st pl. ¿µèv in Callimachus, the Thess. 1st sing. εμί, and Hom. inf. εμεν εμεναι: either on the analogy of  $\epsilon l \sigma i : \tau \iota \vartheta \epsilon \tilde{\iota} \sigma \iota$  (Dor.  $\ell \nu \tau i : \tau \ell \vartheta \epsilon \nu \tau \iota$ ) and of  $\epsilon \tilde{\iota} \eta \nu :$ τιθείην, infinitives were formed to match with τίθεμεν and τιθέμεν τιθέμεναι (cp. Mess. conj. ηνται and Hom. conj. μετ-ήω (§ 934); or the parallel forms ἔασι: ἴασι, ἔω: ἴω and so forth gave the impression that the two verbs were distinguished by having one s and the other t before the same endings, and thus suiv and susv(a) came into existence on the analogy of "μεν (1st pl.) and "μεν(α). In any case, εμὶ was not made until after  $\dot{\epsilon}\mu\dot{\epsilon}\nu$ . — The enclisis of  $\epsilon l\mu i$ , as of  $\varphi\eta\mu i$ , is due to the fact that the finite verb was always enclitic in the original language; see I § 669 p. 534, and Wackernagel, Kuhn's Zeitschr. xxIII 457 ff. — On the thematic forms (\*s-o- and \*es-o-), see § 493 p. 53.

 $\vec{\eta}$  'said' (with pr. Greek  $\eta$ ) for \* $\vec{\eta}$  $\varkappa$ - $\tau$  (I § 652.5 p. 496), ep. Skr.  $\vec{a}h$ -a Lat.  $\vec{a}j\bar{o}$ . The ablaut in the root needs explaining (cp. Lat. ad- $\vec{a}gium$ :  $pr\bar{o}d$ -igium). In the mould of  $\varphi\vec{\eta}_{l}$  ' $\xi\varphi\eta\nu$ ,  $\varphi\eta\vec{u}$ ,  $\varphi\eta\vec{o}$  beside  $\varphi\vec{\eta}$  ' $\xi\varphi\eta$  (pr. Gr.  $\varphi\vec{a}$ -) were cast  $\vec{j}\nu$ ,  $\vec{\eta}\vec{u}$ ,  $\vec{\eta}\vec{o}$ .

 $\sqrt{dh\bar{e}}$ - 'place': έ-θε-μεν etc., see § 493 p. 53. Similarly, from  $\sqrt{s\bar{e}}$ - 'send forth, let go, sow': ε $\bar{t}$ μεν pr. Gr. \*έ-(σ)ε-μεν (cp. § 478 p. 26), unaugmented  $\varkappa \acute{\alpha}\vartheta$ -ε-μεν  $\acute{\alpha}\varphi$ -έ-την, ξύν-ε-το; Fick's comparison (Wtb. I <sup>4</sup> 13 f.) with Skr.  $s\bar{a}$ - in  $\acute{a}va$ -s $\bar{a}$ -'let go' (3<sup>rd</sup> sing.  $\acute{a}$ -s $\bar{a}$ -t 2<sup>nd</sup> dual si-tam) is unsafe.

 $\sqrt{d\bar{o}}$ - 'give':  $\ddot{\varepsilon}$ - $\delta o$ - $\mu \varepsilon \nu$  etc., see § 493 p. 53. Similarly from  $\sqrt{\hat{k}\bar{o}}$ - 'to be sharp, have one's wits sharpened by

experience' (Gr.  $\varkappa \tilde{\omega}$ - $\nu o$ - $\varsigma$ , Lat.  $c\bar{o}s$  ca-tu-s, O.Ir. cath 'wise'):  $\ddot{\epsilon}$ - $\varkappa o$ - $\mu e \nu$  '  $\ddot{\eta} \sigma \vartheta \acute{\sigma} \mu e \vartheta \alpha$  and  $\varkappa \acute{\sigma} \nu$  '  $e l \vartheta \acute{\sigma} \varsigma$  Hesych., cp. partic.  $\vartheta \acute{\sigma} \nu$ .

 $\sqrt{bh\bar{a}}$ - 'show, make open, declare':  $q\eta$ -μὶ Dor.  $q\bar{a}$ -μὶ 1st pl.  $q\alpha$ -μὲν 2nd pl. mid.  $q\alpha$ -σθε, cp. § 495 p. 55.

 $\sqrt{st\bar{a}}$ - 'stare': ἔ-στη-ν ἔ-στη-μεν, 2<sup>nd</sup> sing. mid.-pass. ἐ-στά-θης (: Skr. ά-sthi-thās, § 503) etc., see § 493 p. 54, § 495 p. 55.

§ 504. Some preterite tenses of this sort form a subclass apart, in having developed from the  $-\alpha$  of the 1<sup>st</sup> pers. sing. and  $-\alpha \nu$  in the 3<sup>rd</sup> plural, a flexion like the s-aorist  $(-\sigma\alpha - \sigma\alpha c$  etc.), in which the strong stem appeared instead of the weak in the active plural and dual and in the middle voice.

 $\sqrt{g}heu$ - 'pour': ε-χε(f)-α, Aeol. (Hom.) εχευ-α 3<sup>rd</sup> sing. mid. ε-χυ-το χύ-το: Skr. 2<sup>nd</sup> sing. hō-ṣi. From this beginning we have εχεας εχευας εχευ εχευε εχευαμεν εχεύαμεν and so forth, instead of \*ε-χευς \*ε-χευ \*ε-χυ-μεν, and middle εχευ'ανο.  $\sqrt{g}$ eu- 'set in motion, drive' (Gr. σσε-f- σε-f-. I § 489 p. 360): Aeol. (Hom.) ε-σσευα σεῦα imper. σύ-θι 'ελθε (Hesych.) 3<sup>rd</sup> sing. mid. ε-σσυ-το σύ-το. Hence ε-σσευας and so on, also middle σευ'ανο. Similarly δέανο 'videbatur' doubtless is due to \*ε-δεα = \*e-de-m: Skr. redupl. ά-d-t-d-t-t imper. dī-di-hi (δοάσσανο with the root-grade do-i is derived from some noun). Herodotus has εας and εανε from εα 'eram', see § 502 p. 66.

Of the same sort are the reduplicated  $\eta \nu - \epsilon \gamma \varkappa - \alpha \eta \nu \epsilon \gamma \varkappa \alpha \zeta$  etc., and  $\epsilon \bar{\ell} \pi - \alpha \epsilon \bar{\ell} \pi \alpha \zeta$  ( $F \epsilon \iota \pi - = * \iota \varrho - \iota \varrho q - 1$ ); see §§ 557, 569. Parallel to  $\eta \nu \epsilon \gamma \varkappa \alpha$  is the form  $\eta \nu - \epsilon \iota \varkappa \alpha$ , which is not reduplicated, but is derived from another root and compounded with the preposition  $\hat{\epsilon} \nu$ - (the Author, Idg. Forsch. I 174);  $\eta \nu \epsilon \iota \varkappa \alpha$  too received the inflexion of the s-aorist.

It is easy to understand how this amalgamation with the s-aorist came about, if we may assume that the first step was to change the  $3^{rd}$  person singular active. This would become \* $\tilde{\epsilon}\nu$ - $\epsilon\iota(\kappa\tau)$ , and if in its stead was used a form with the thematic vowel,  $\tilde{\epsilon}\nu$ - $\epsilon\iota\kappa\epsilon$  (beside  $\sigma\nu\nu$ - $\epsilon\nu\epsilon'\kappa\epsilon\tau\alpha\iota$  Hesiod), and similarly  $\tilde{\epsilon}\chi\epsilon(F)\epsilon$  (from  $\tilde{\epsilon}\chi\epsilon\sigma\nu$ ) replaced \* $\tilde{\epsilon}$ - $\sigma\sigma\epsilon\nu$ , and so forth, the rest followed naturally: for - $\alpha$  in the first and - $\epsilon$  in the third person brought the forms into direct relation with the s-aorist.  $\tilde{\epsilon}\alpha\varsigma$   $\tilde{\epsilon}\alpha\tau\epsilon$  are late, and copied straight from  $\tilde{\epsilon}\chi\epsilon\alpha\varsigma$   $\tilde{\epsilon}\chi\epsilon'\alpha\tau\epsilon$ .

Remark. According to Fick (Gött. gel. Anz. 1881, pp. 1432 f) and others, in all these preterites the  $2^{\rm nd}$  sing.  $(-\alpha - \varepsilon)$ ,  $2^{\rm nd}$  pl.  $(-\alpha - \tau \varepsilon)$ , etc., contain original dissyllabic roots ending with  $\vartheta$  (= Gr.  $\alpha$ ), in which case they will belong to our Class IX. For instance,  $\chi \varepsilon F \alpha - in \varepsilon \chi \varepsilon \alpha \varepsilon$  is connected by these scholars with Skr. havi- in havi-. This view seems to me less probable. Even granting it, however, confusion with the s-aorist is not by any means excluded.

§ 505. Italic. A peculiarity of Latin is the combination of thematic and non-thematic forms to make up the persons of the present indicative. A first pers. sing. in Idg. -mi cannot be proved for Italic.

 $\sqrt{bher}$ - 'bear': Lat. fer-t: Skr.  $bh\acute{a}r$ -ti;  $2^{nd}$  pl. fer-tis imper. fer-te have taken the strong stem, like Gr. φέρ-tε (§ 502 p. 64), and like Skr.  $2^{nd}$  dual bhar- $t\acute{a}m$  beside the regular bhr- $t\acute{a}m$ . The  $2^{nd}$  sing. indic. fer-s and the  $2^{nd}$  sing. imper. fer both represent the Idg. injunctive \*bher-s: fer is regular (as par for \*pars and the like, I § 655 p. 506), but fer-s has had -s added again. ) In the pres. indic.,  $fer\bar{o}$ 

<sup>1)</sup> That fer comes from \*fere, as Pauli asserts (Altit. Stud., IV 29), I do not believe. If fere in the Song of the Arval Brethren really means 'bring', this, and no other, would represent Idg. \*bhere; and fere would stand to fer as Marruc. 3rd sing. pres. fere-t to Lat. fer-t.

ferimus ferunt have a thematic vowel. Umbr. fertu 'ferto' may be identical with Lat.  $fer-t\bar{o}$ , or it may be the same as the thematic Gr.  $g\epsilon\rho\dot{\epsilon}-\tau\omega$  (see I § 633 p. 474).

Vuel- 'wish': Lat. 2nd sing. injunct. vel for \*uel-s (I § 655 p. 506), now a particle, 1) 2nd pl. voltis for \*uel-tes: Skr. á-ve-ta etc., see § 493 p. 51. 3rd sing. volt instead of \*vel-t. On 2nd sing. veis vēs, see below. Optative: vel-i-m vel-ē-mus, like Goth. 1st pl. vil-ei-ma (1st sing. viljau), with strong stem, 2) as contrasted with Skr. 3rd sing. mid. vur-ē-ta for \*uel-ē-to (see p. 51 footnote); in consideration of nölē nölēte nölētē (nölē for ne-volē as mālē for \*mag(e)-volē mavolē, cp. I § 432 c p. 322 on the word avilla), this irregularity may be easily explained on the supposition that there was an indic. \*uel-(i)iē \*uel-ē-s (Class XXVI), which is represented by O.H.G. 1st sing. willu Goth. inf. viljan partic. viljands O.C.Sl. velja veli-ši etc. (§ 727).3) — With thematic vowel indic. pres. volē, volumus volimus (§ 530), volunt, for \*uel-ē etc. Umbr. veltu 'eligito' is as ambiguous as fertu, see above.

Lat.  $2^{nd}$  sing. vei-s  $v\bar{\imath}$ -s (beside in- $v\bar{\imath}tu$ -s), alien forms absorbed into the conjugation of  $vol\bar{o}$ : Skr.  $v\acute{e}$ -ti 'presses on, strives'  $3^{rd}$  pl. vy- $\acute{a}nti$ .

 $\sqrt{ei}$  go':  $2^{nd}$   $3^{rd}$  sing. Lat. ei-s  $\bar{\imath}$ -s and i-t ground-forms \*ei-s and \*ei-ti, see § 493 p. 51. The  $\bar{\imath}$ - (also written ei-) of the present of the Latin finite verb,  $\bar{\imath}$ -mus  $\bar{\imath}$ -tis  $\bar{\imath}$ -tur  $\bar{\imath}$ -te etc., should strictly be i-, cp. Skr. i-más etc. This is doubtless not the (weak grade)  $\bar{\imath}$  of Skr.  $\bar{\imath}$ -mah $\bar{e}$  Gr.  $\bar{\imath}$ -o- $\mu s \nu$  (p. 52), but the strong grade ei-, cp. Pelign. ei-te ite. The rare Lat.  $3^{rd}$ 

<sup>1)</sup> Compare Umbr. heris — heris 'vis — vis' = 'vel — vel'. Originally it was no doubt a question: 'will you have this? will you have that?'

<sup>2)</sup> I do not consider that proof has been shown for deriving velin from \*volim by vowel assimilation. vel shows that Latin had the grade yel- in this root.

<sup>3)</sup> A different account of Lat.  $n\bar{o}l\bar{\iota}$  may be seen in Knhn's Zeitschr. xxx 313 (Wackernagel's), and Stolz, Lat. Gr.<sup>2</sup> pp. 378, 379.

pl. int was coined to complement  $\bar{\imath}mus$  on the strength of  $sta-nt: st\bar{a}-mus, ple-nt: pl\bar{e}-mus$  etc.

Partic.  $i\bar{e}ns$  like  $prae-s-\bar{e}ns$  (II § 126 p. 396, and IV p. 50, footnote). With thematic vowel  $e\bar{o}$  for  $*ei-\bar{o}$ , eunt, partic. eunt-is etc., and the conj. eam: cp. Skr. indic. mid. dy-a- $t\bar{e}$ .  $ambi\bar{o}$  ambiunt are doubtless not to be compared with Gr. loo slo-lovow etc. (pp. 52, 65); they must be a re-formation following  $f\bar{v}nio$ , the compound being treated like a simple word.

Ves- 'be': 3rd sing. Lat. es-t, Umbr. est est Osc. est ist: Skr. άs-ti, § 493 p. 52. 2nd sing. es for \*es-s, also ēs, the latter perhaps augmented (§ 480 p. 28). Weak stem s- in the 3rd pl. Umbr. s-ent Osc. s-et. The 2nd pl. Lat. es-tis has taken the strong stem, like Gr. ἐσ-τὲ. Conjunctive: Lat. erō er-i-s etc. with future meaning (§ 910). Optative: 2nd sing. Lat. s-iē-s s-ī-s Umbr. sir si sei, see § 946. To the the thematic stem s-o- belong 1st sing. Lat. s-u-m Osc. súm sum for \*s-o-m, the injunctive form, 1st pl. Lat. sumus simus (so too possumus possimus, cp. volumus volimus above) for \*s-o-mos, 1) 3rd pl. Lat. s-o-nt sunt Falisc. sunt, partic. Lat. sōns sont-is (cp. the Author, Bericht der sächs. Ges. der Wiss., 1890, pp. 230 ff.).

Remark 1. Side by side with potis sum (poti-s 'mighty, powerful, able' = Gr.  $\pi o - n - z$ ), for which a plural potis sumus was formed instead of \*potēs sumus after potis had crystallised (ep. Skr.  $d\bar{a}t \acute{a}smas$  'we will be giving' instead of  $d\bar{a}t \acute{a}rah$  smas, and like phrases), was a variant pote sum. pote is an adverb (acc. sing. neut. for \*poti, or loc. in orig. -ē, see III § 260 p. 160), cp. bene sum, tūtō sum. potisset potisse are for potis 'sset 'sse, cp. situst for situs 'st. But potes potest potestis come from pote es etc. So also possum possim (whence possem posse by complementary analogy) come from \*potsum \*potsim, pote-sum, pote-sim. It is doubtful, however, whether -e- disappeared by regular syncope, or whether potest: est suggested \*potsum: sum (I § 501 p. 367).

Ved- 'eat': ēs ēst ēstis ēste, pass. ēstur (on -st- instead of -ss- -s- see I § 501 Rem. 2 p. 368); with thematic vowel edō edimus edunt, also edis edit etc. See § 480 Rem. pp. 28 f., § 494 pp. 54 f., § 498 p. 60. Optative: ed-i-m ed-ī-mus instead

<sup>1)</sup> I § 110 page 105 should be corrected by this statement.

of \*d- $\bar{\imath}$ -, perhaps to distinguish this optative from the old optative of  $d\bar{o}$ - 'give' (see below).

V  $dh\bar{e}$ - 'place': Lat. con-di-mus con-di-tis  $cr\bar{e}dimus$  for \*-fa-mos \*-fa-tes: Gr.  $\ddot{\epsilon}$ - $\theta\epsilon$ - $\mu\epsilon\nu$ , see § 493 p. 53. The forms  $-d\bar{o}$  -dis -dit -dunt are thematic.

| dō- 'give': Lat. da-mus da-tis red-dimus -ditis: Gr. ἔ-δο-μεν. see § 493 p. 53.¹) Imperative: ce-do (2nd pl. ce-tte for \*ce-date \*ce-dite, I § 633 p. 474), see § 957. The old optative stem \*d-ī- (cp. Avest. 3nd sing.  $d-y\bar{a}-\bar{p}$ ) is found in Osc. da-did 'dedat'; to this the conj. da-dad Lat.  $d\bar{e}-dat$  is related like Lat. ed-ā-mus: ed-ī-mus (see above). The old singular forms \*dō-m \*dō-s \*dō-t are gone; we have instead dō dās dat. The last two represent the stem used in composition for the conjunctive,  $d-\bar{a}-$  (cp. -bās for \*bhu-ā-s indic. beside conj.  $fu-\bar{a}-s$ , see § 578); and these created dō on the analogy of stō: stās, flō: flās etc. In composition, we see the same inflexion as legō has: vēn-dō red-dō -dis -dit -dimus -diti -dunt. But undoubtedly -dimus -ditis are what \*-damus \*-datis must regularly become, cp. fut. O.Lat. reddibō for \*red-dabō.

Remark 2. The compounds of  $dh\bar{e}$ - and  $d\bar{o}$ - were confused in Latin, beginning with the 1st and 2nd plural; -di- = \*-fa- \*-dh- and = \*-da- \*-da-. Compare Darmesteter, De coni. Lat. verbi dare, Paris 1877; Postgate, Dare, 'to give' and -dere 'to put', Trans. Phil. Soc. 1880—81 pp. 99 ff.; Thielmann, Das verbum dare im Lat., Leipzig 1882; the Author, Liter. Centr. 1882 col. 1389 ff.

Whether the forms  $st\bar{a}$ -s sta-t from V  $st\bar{a}$ - 'stand' are rightly placed here with the rest, as is suggested by Skr.  $\acute{a}$ -sth $\ddot{a}$ -t and Gr.  $\check{\epsilon}$ - $\sigma \iota \eta$  (§ 493 p. 54), is very doubtful because of  $st\bar{a}$ -mus  $st\bar{a}$ -tis. One cannot see why an orig. \* $st\bar{a}$ -mus (cp.  $d\breve{a}$ -mus) should have been altered ( $\check{\epsilon}\sigma \iota \eta \mu \iota \nu$  as compared with  $\check{\epsilon}$   $dou \iota \nu$  is quite a different thing, see § 495 p. 55); and so it

<sup>1)</sup> Bréal (Mém. Soc. Ling., VII 326) thinks he may regard as an unaugmented preterite dat in Vergil's cratera antiquom quem dat Sidonia Dido (Aen. IX 266). Many points in Vergil's manner are in favour of Bréal's assumption (see Ladewig on Aen. I 79, II 275, Kühner Ausf. Gr. II 90).

is preferable to refer the whole present of this verb  $st\bar{o}$  to \* $st\bar{a}$ - $i\bar{o}$ ; see § 584 Rem., § 706. This is supported by Umbr. stahu 'sto'.

§ 506. Keltic. Ves- 'to be', 1) 3rd sing. O. Ir. is O.Cymr. iss is for \*es-ti. 3rd pl. O.Ir. it O.Cymr. int for \*s-enti (II p. 196, footnote). The a- of the Irish proclitic sing. 1st pers. am 2nd at (3rd relat. as), plur. 1st ammi 2nd adib (3rd rel. ata), is from -e. The form am then had no -i at the end; and since it is usually written am with one m, it seems to have had m spirant, like Mid.Cymr. wyf. It must therefore not be derived from \*esmi. The 2nd sing. at Mid.Cymr. wyt may contain the pronoun of the 2nd person, and may thus be explained as \*esi+t-. Mid.Cymr. 1st sing. wyf seems to be due to the analogy of the 2nd sing. Is Ir. am the same? Others regard these forms as coming from the root ei- 'go'. The 1st pl. ammi Mid. Cymr. ym may be \*esmesi. In the 2nd pl. adib, -b is certainly an affixed personal pronoun, and -dithe ending of the 2<sup>nd</sup> pl. = -thi -the (ground-form \*-tesi, the suffix re-formed on the analogy of the 1st pl., see § 1014). This brings us back to an imaginary ground-form \*s-e-tesi + sv-, which would be a re-formate following the 3rd pl. \*senti; and so perhaps the 1st pl. should be derived from \*s-esmesi, a later contamination.

Again, the Keltic t-preterite, as it is called, is partly of the same kind. In the 3<sup>rd</sup> sing. of this preterite, the ending t is said to represent the middle ending \*-to (Strachan, Bezz. Beitr. XIII 128 ff., and Zimmer, Kuhn's Zeitschr. XXX 204 ff.): e. g. O.Ir. as-bert 'dixit' Mid.Cymr. kymerth 'sumpsit' for \*kymberth from \subsetembol{'bher-}. When -t ceased to be understood as a personal ending, the other persons which completed the tense were formed on the model of stems ending in -t: O.Ir. sing.

<sup>1)</sup> Compare Zimmer, Kelt. Stud. 11 133; Stokes, The Neo-Celtic Verb Subst., 43 ff., Kuhn's Zeitschr. xxvIII 93 ff.; d'Arbois de Jubainville, Mém. Soc. Ling., v 239 f.; Strachan, Bezz. Beitr. xv 114 ff. In the text I follow chiefly information received from Thurneysen.

1st pers. -burt 2nd -birt, plur. 1st -bartmar 2nd \*-bartid 3rd -bartatur. Compare Lith. eitù 'I go' formed from eī-t 'he goes' = Skr. é-ti § 686 Rem. 2, Gr. è $\delta\delta\delta\eta\eta\nu$  from è- $\delta\sigma'$ - $\eta\eta_S$  = Skr. á-di-thās § 589. In forms like as-bert Straehan sees rootaorists of this class, Zimmer s-aorists (\*ber-s-to). As a matter of faet, both these aorists may have been the source for some preterites such as these. To our Class I belong O.Ir. ro-ēt 'he took' for \*-em-to, Mid.Cymr. gwan-t 'pereussit, feriit'.

§ 507. Germanie. V uel- 'wish': opt. Goth. viljau pl. vilei-ma O.H.G. 2<sup>nd</sup> and 3<sup>rd</sup> sing. vili O.Ieel. 1<sup>st</sup> sing. vilja. The strong stem (cp. Skr. vr-iyā-t vur-ī-ta), like that of Lat. velim, is due to a eonfusion with the indie. \*uel-(i)io- \*uel-ī- (O.H.G. villu O.C.Sl. velja). See § 493 p. 51, § 505 p. 69, § 928.

V\*gem- 'go, eome': opt. A.S. cyme = Goth. \*kumjan: Skr.  $gam-y\acute{a}-m$ , see § 493 p. 51.

Ves- 'to be', see § 493 p. 52. The indicative forms are Goth. im, is, ist, sijum sium, sijuh siuh, sind; O.H.G. bim, (bist bis), ist, birum, birut, sint; O.Ieel. em, est, es (Run. is). erom erum, erod erud, ero eru. First it must be mentioned that the O.H.G. 2nd sing. bist bis belongs to a present to be described below in §§ 707 and 722, formed from V bhey-, namely 1st sing. \*bhu-ijō 2nd sing. \*bhu-i-si etc. (A.S. 1st sing. béo 2nd sing. bis 3rd sing. biđ, O.Ir. biu etc.), and that the similarity of bis and \*is (= Goth. is) produced b-im b-irum b-irut. 1st sing. Goth. im O.H.G. (b-)im for \*immi \*ismi = Skr. ás-mi (I § 582 Rem. 2 p. 436); O.Ieel. em instead of regular \*im following the plural forms which begin with e, whence also the e in est and es. Whether the 2nd sing. Goth. is comes from Idg. \*esi or \*es-si (see § 984.1), eannot be decided; O.Icel. est like O.H.G. bist has -t on the analogy of the preterite (§ 990.3); on the very rare O.Icel. 2nd sing. es, see Noreen in Paul's Grundr. I 515. The 3rd sing. Goth. O.H.G. ist is for Idg. \*es-ti; O.Ieel. es (Run. is) A.S. O.Sax. is are doubtless the old injunctive Idg. \*es-t; the 3rd pl. O.Ieel. er-o is also injunctive (other explanations are suggested by J. Sehmidt, Kuhn's Zeitschr. xxv 593; von Fierlinger, ibid.

XXVII 440 footnote 2; Noreen, loc. cit.; Osthoff, Perf. 428 f.). In the plural, the weak stem is seen in Goth. s-ind O.H.G. s-int = Idg. \*s-enti. O.Icel. ero eru is pr. Germ. \*iz-unp (§ 1025.1 b), an injunctive in which the strong stem has taken the place of the weak (cp. Gr.  $\xi\bar{\alpha}\sigma\iota$ , § 502 p. 66). As the ending of \*izunp agreed with the so-called preterite-presents, such as Goth. mun-un (§ 508), on their analogy the 1st pl. O.Icel. erom O.H.G. (b-)irum and the 2nd pl. O.Icel. erod O.H.G. (b-)irut appeared. These forms then produced O.H.G. Frank. sind-un O.Sax. A.S sind-un. Goth. sijum sijup are probably transformed from \*iz-um \*iz-up, caused partly by sind, partly by the feeling that the opt. sijau sijais etc. should contain a stem sij-. — The optative has always a weak root: 1st sing. Goth. s-ijau O.H.G. s- $\bar{\imath}$  O.Icel. s- $j\bar{a}$ ; on the inflexion, see § 947. — Partic. \*s-und- = Idg. \*s-nt- in Goth. sunjis 'true' for \*sund--ja = Skr. sat- $y\acute{a}$ - 'true'; also thematic \*s-o-nt- in \*sanp-a-'true, truthful' A.S.  $s\bar{o}d$  O.Icel. sannr (cp. § 493 p. 53).

O.H.G. tuom 'I do' (O.Sax. A.S.  $d\bar{o}$ -m) must be derived from V  $dh\bar{e}$ -, along with the pret. te-ta and the subst.  $t\bar{a}$ -t (Goth. ga- $d\bar{e}$ -di-) and others, but its vowel makes it impossible to derive the word from \* $dh\bar{e}$ -mi. Perhaps it contains \*dh- $\bar{a}$ -(Class X, § 585), found in other parts of the verb as a conjunctive stem (Lat. con-da-mus); ep. Lat.  $2^{nd}$  sing. d- $\bar{a}$ -s 'thou givest' = conj. (red-) $d\bar{a}s$  (§ 505 p. 71, § 937).

Remark. On O.H.G.  $st\bar{a}m$   $st\bar{e}m$  'I stand' and  $g\bar{a}m$   $g\bar{e}m$  'I go', see § 708. They certainly do not belong to this class of presents.

§ 508. Some Preterite-Presents may also be placed in this class. Goth. mun-un 'they think', opt. 1st pl. mun-ei-ma: Skr. mid. 3rd sing. á-ma-ta partic. man-āná-s, \( \nu\) men- 'think, mean'. Goth. ga-daúrs-un O.H.G. gi-turrun 'they dare', opt. Goth. ga-daúrs-ei-ma O.H.G. gi-turr-ī-m: Skr. partic. dhṛṣ-āná-s, \( \nu\) dhers- 'dare'. Goth. vit-un O.H.G. wizz-un 'they know', opt. Goth. vit-ei-ma O.H.G. wizz-ī-mēs: Skr. vét-ti opt. vid-yá-t etc., see § 493 p. 52; the weak forms of this verb were present and perfect at the same time.

If this view be right, Goth. mun-un ga-daurs-un vit-un were originally injunctive, like Icel. er-o er-u (§ 507 p. 73). We shall meet again with present forms among the preterite-presents (§§ 646, 887, 893).

§ 509. Connected with Skr.  $tr-t\bar{e}$  imper. Avest.  $ar^e-s\nu a$  Gr.  $\delta\varrho-\sigma\sigma$ , which point to an Idg. mid. pres. \* $\bar{r}$ - $ta\bar{\iota}$  (mentioned above, § 497, page 57) are  $\Lambda$ .S.  $2^{\rm nd}$  sing.  $ear-\bar{d}$   $ar-\bar{d}$  ear-t thou art' pl. ear-un ar-on with ar-= Idg. \* $\bar{r}$ -. For the meaning cp. Gr.  $\delta\varrho-\omega\varrho-a$ , which in late Greek had also the meaning 'I am'. On the  $2^{\rm nd}$  sing., see § 990. 3.

Remark. Germ. ar- was probably not a perfect stem, which would have been  $\bar{o}r$ -. This is said to correct the note in Idg. Forsch. 1 81.

Von Fierlinger (Kuhn's Zeitschr. xxvII 436 ff.) deduces some other presents with weak stem and secondary accent, from thematic forms with peculiar vocalism. Thus, for Goth. fara 'I fare, go', V per- (in Gr.  $\pi \epsilon \rho \acute{a}\omega$  'I pass through' etc.), he assumes an older present stem \* $p_{\bar{t}}$ -, 1<sup>st</sup> pl. \* $p_{\bar{t}}$ - $m\acute{e}s$  (cp. Skr. 2<sup>nd</sup> sing.  $p\acute{a}r$ - $\acute{s}i$ ).

§ 510. Balto-Slavonic. To Idg. \*ueid-mi 'I see' belong Lith. veizd-mi, and imperative Lith. veizdi veizd O.C.Sl. viždī, — the imperative forms have non-original strong stem, and the O.C.Sl. form has ž instead of z, see § 493 p. 52, §§ 949, 962. An undoubted re-formate is Lith. pa-výzdmi instead of pa-výdžiu 'invideo', also used (cp. § 511).

Idg. \*es-mi 'I am', see § 493 p. 52. The Lithuanian forms here to be cited are scattered over various dialects. 1st sing. Lith. es-mì O.C.Sl. jes-mǐ; on the analogy of thematic verbs with -u Lith. esmũ (like Lett. esmu Pruss. asmu), and then a 2nd person esmì was made on the analogy of sukì: sukù. 2nd sing. Lith. esì (Pruss. assai assei asse essei) O.C.Sl. jesi, see § 991. 3rd sing. Lith. ēs-ti ēs-t (Pruss. ast est) O.C.Sl. jes-tũ. The 1st and 2nd pl. may have taken es- instead of sin pr. Balto-Slav.: Lith. ēs-me ēs-te (Pruss. asmai, astai asti estei) O.C.Sl. jes-mũ jes-te. Partic. Pruss. -sins dat. -sentismu: cp. Lat. -sēns and (ir. Dor. "rv-ες (p. 50 footnote). —

\*s-o- in O.C.Sl. 3rd pl. sqtŭ partic. Lith. sās sanczio O.C.Sl. sy sąsta. \*es-o- in Lith. 1st sing. esù 1st pl. ẽsame 2nd pl. ẽsate partic. ẽsās. It is not clear whether Lith. opt. (permissive) 3rd sing. tesẽ 'sit' is to be analysed te-sẽ (cp. Pruss. 2nd pl. opt. sei-ti) or as t-esẽ. With augment pr. Balto-Slav. \*ēs-o-m etc.: in O.C.Sl. this occurs in the imperfects nesĕ-achŭ -aše -aše pl. -achomŭ -ašete -acha, unthematic 2nd pl. -as-te also found (so too the dual has both -asta -aste and -ašeta -ašete), sec § 903; in Lith. the preterite ē- passed into the present, ėsù ėsì ė̃sa ė̃same ė̃sate partic. ė̃sās, sec § 480 p. 28. — On Lith. 3rd sing. yrà, which comes from the root of Skr. źr-tē Avest. are-šva (tr. ὄρ-ωρ-α A.S. ear-ā, see J. Sehmidt in Kuhn's Zeitschr. xxv 595 f.

The present of V ed-'eat' was in pr. Balto-Slav. \* $\bar{e}d$ -mi; for its  $\bar{e}$  sec § 480 Rem. pp. 28 f., § 494 p. 54. Lith. sing. 1st pers.  $\acute{e}mi$  'I devour' 3rd sing.  $\acute{e}sti$   $\acute{e}st$  pl. 1st  $\acute{e}me$  2nd  $\acute{e}ste$  dual 1st  $\acute{e}dva$  2nd  $\acute{e}sta$  (on  $\acute{e}dmi$   $\acute{e}dme$  see I § 547 p. 401); O.C.Sl. sing. 1st pers.  $jam\check{i}$  2nd jasi 3rd  $jast\check{i}$  pl. 1st  $jam\check{i}$  2nd jaste 3rd jad- $et\check{i}$  (on 1st dual  $jav\check{e}$  instead of \* $jadv\check{e}$ , see I § 547 Rem. 3, p. 401). — Also thematic Lith.  $\acute{e}du$   $\acute{e}di$  etc., Pruss. opt. 2nd pl. idaiti O.C.Sl. partic. jady jadašta.

Other presents of this class are found in one only of the two branches, Baltic or Slavonic, not in both:

§ 511. In Lithuanian there is a fine array of present forms of this class, but nearly all are defective and have only one or two persons left, chiefly the first and third. Some of them have come into this class quite late. Compare § 496 p. 56. Lists of *mi*-forms may be found in Schleicher pp. 250 ff., Kurschat pp. 304 ff., Bezzenberger Beitr. lit. Spr. 198 ff. (a few more come from the dialects).

We begin with those which may be regarded as representing Idg. originals.

pa-velmi 'I will'  $2^{\rm rd}$  sing. pa-velt , refl.  $1^{\rm st}$  sing.  $velm\ddot{e}\text{-}s$  : Skr.  $\acute{a}\text{-}vr\text{-}ta$  etc., see § 493 p. 51.

ei-mì 'I go': Skr.  $\acute{e}$ -mi etc., see § 493 p. 51.  $2^{nd}$  sing. ei-sì  $3^{rd}$  sing.  $e\~{i}$ -ti  $e\~{i}$ -ti. The strong stem passes into the

plural: 1st eī-me 2nd eī-te; but 2nd pl. High Lithuanian eīste on the analogy of este: eme, dűste: dűme. Old injunctives are ei 'let him go' (te ne ei 'let him not go') ei-mè 'let us go' (dual ei-và). Imper. eī-k = Lat. ī (§ 957). Indic. now usually ei-nù, as Class XIII (§ 615). Pruss. 2nd sing. ēi-sei 3rd sing. ēi-t 1st pl. ēi-mai. Partic. Lith. ent-'going' (in old printed books) doubtless stands for \*i-ent-, first in compounds with prefix ending in a consonant, such as isz-ent- (I § 147 p. 132), cp. p. 50 footnote; but it is possible that it comes from \*iē-nt-, Class X; see § 593. — \*i-o- appears to be contained in Pruss. opt. 2nd sing. jeis 2nd pl. jeiti.

 $l\ddot{e}k-m$ ì 'I remain'  $3^{rd}$  sing.  $l\ddot{e}k-ti$   $l\ddot{e}k-t$ : Skr.  $2^{nd}$  dual rik-tam  $2^{nd}$  sing. mid.  $rik-th\ddot{a}s$ ,  $\bigvee leiq$ - 'linquere'.

ráudmi 'I lament' (regularly \*raumi, I § 547 p. 401): Avest. 3<sup>rd</sup> sing. mid. raostā with irregular strong stem (cp. § 499 p. 62), √ reud- 'rudere'; cp. Skr. rōdi-ti pl. rudi-mas § 574. deg-mì 'I burn': Skr. 2<sup>nd</sup> sing. dhákṣi, see § 493 p. 53.

sédmi 'I sit'  $3^{rd}$  sing. sést  $1^{st}$  pl. refl. sédmé-s: Skr.  $2^{nd}$  sing. sát-si,  $\bigvee$  sed 'sedere', see § 494 pp. 54 f.

 $j \tilde{u}'s\text{-}mi$  'I gird' (beside  $j \tilde{u}'siu$ ): Avest. 3rd sing.  $y \bar{a}s\text{-}ti,$  stem  $j \bar{o}s\text{-}.$  Compare § 656.

The imperatives  $d\tilde{e}$ -k 'lay' (inf.  $d\tilde{e}$ -ti,  $\bigvee dh\bar{e}$ -) and  $d\tilde{u}'$ -k 'give' (inf.  $d\tilde{u}'$ -ti,  $\bigvee d\bar{o}$ -), of which the latter must be compared with Lat. ce-do, show the same formation as  $e\tilde{i}$ -k (= Lat.  $\tilde{i}$ ). O.Lith.  $d\tilde{u}$ -di 'give' doubtless = \* $d\bar{o}$ -dhi. See I § 547 Rem. 1 p. 401, IV §§ 546, 957, 962.

Some other presents of the same sort, to which there is nothing which answers outside the Baltic group, may here be named: bar-mi 'I scold' 3<sup>rd</sup> sing. ap-bart, V bher- (Lat. feriō), bar- for \*bh̄r-; snēk-ti 'it snows', V sneigh-; mēg-mì 'I sleep' 3<sup>rd</sup> sing. mēkt 2<sup>nd</sup> pl. mēkte; ráug-mi 'I belch', V reug- (Gr. ἐρεύγομαι); ') sérg-mi 'I protect, watch' 3<sup>rd</sup> sing. sérkti; kósmi 'I cough' (Skr. kās-a-tē).

<sup>1)</sup> On account of a form riángmi, Wiedemann (Lit. Praet. 186) derived this word from a groundform \*rēng-mi (ep. § 494 pp. 54 f.); which is very dubious.

All these verbs have in Lithuanian, beside this present formation, another with the same meaning, which in High Lithuanian is almost the only one. It is certailly no mere chance that in so many presents of the mi-class, the bye-form is a verb in -iu with accentuated root (1st pl. -i-me Class XXVI § 727), as sědžiu, sérgiu, kósiu, žýdžiu (žýdmi 'I bloom'), cziáudžiu (cziáudmi 'I sneeze'), stóviu (stóvmi 'I stand'), mérdžiu (merdmi 'I lie a-dying') etc. With these verbs in -iu, the 2nd and 3rd sing, ran together and became indistinguishable iu form (2nd sing. -i for \*-ii, 3rd sing. -i for \*-i-t), and it is probable that it was a wish to keep these persons distinct which first produced the non-thematic forms in most of these verbs. Perhaps on the analogy of sést(i) (sédmi) beside sédžiu was formed sérkt(i) etc.

Observe also tenk-mi instead of tenkù 'I last' (pret. tekaŭ inf. tèkti), and the 2nd pl. gélbste (gélpste), from gélbmi 'I help' 3rd sing. gélbt(i) gélpt(i), — for its s, compare that of eī-s-te § 511 p. 77.

§ 512. Slavonic. The form only without parallel in Lithuanian is se-tü 'iuquit', explained in § 493 p. 52.

## Class II: Root + Thematic Vowel forming the Present Stem.

§ 513. This class of present stems, invariably the largest in all Indo-Germanic languages, falls into two divisions, according as the accent falls (A) upon the root syllable or (B) upon the thematic vowel. When the root carried the accent, it was of the strong grade (1st strong grade in the e-series), but weak grade if the accent fell upon the thematic vowel; e.g. (A) \*bhéudh-o-Skr.  $b\delta dh$ -a- Gr.  $\pi \varepsilon \tilde{v} \vartheta$ -o-  $(b\delta dh$ -a-ti  $\pi \varepsilon \dot{v} \vartheta$ -o- $\mu \alpha \iota$   $\pi \varepsilon \dot{v} \vartheta$ - $\varepsilon$ - $\sigma \vartheta \alpha \iota$ ); (B) \*bhudh-ó- = Skr. budh-á- Gr. πυθ-ό- (budh-á-nta ε-πύθ--ε-το πυθ-έ-σθαι), from V bheudh- 'wake, notice, learn'. The indicative often gives both forms from the same root, particularly often in Aryan and Greek. This we see in the above example; others are Skr. tár-a-ti: tir-á-ti 'oversteps, passes', kárš-a-ti: kṛš-á-ti 'draws, ploughs', sárp-a-ti 'crawls': á-sṛp-a-t; (fr. Att.  $\tau \varrho \acute{\epsilon} \pi - \omega$ : Dor.  $\tau \varrho \acute{\epsilon} \pi - \omega$  (instead of \* $\tau \varrho \alpha \pi - \omega$ ) 'I turn',  $\lambda \epsilon \acute{\epsilon} \pi - \omega$ ' I leave' inf.  $\lambda \epsilon \acute{\epsilon} \pi - \epsilon \iota \nu$ :  $\check{\epsilon} - \lambda \iota \pi - \epsilon - \nu$  inf.  $\lambda \iota \pi - \epsilon \check{\iota} \nu$ ,  $\check{\epsilon} \chi - \omega$ ' I have inf.  $\check{\epsilon} \chi - \epsilon \iota \nu$ :  $\check{\epsilon} - \sigma \chi - \epsilon - \nu$  inf.  $\delta \chi - \epsilon \check{\iota} \nu$ ; Lat.  $\bar{\iota} c - \bar{\varrho}$ :  $ic - \bar{\varrho}$ ,  $r \bar{\iota} d - \bar{\varrho}$  (O.H.G. r iu z u):  $r u d - \bar{\varrho}$  |  $r e u d - \iota$  | Goth. r e i h a 'I fight' pr. Germ. \* $u \acute{\epsilon} \chi - \bar{\varrho} \iota$ : O.I.cel. v e g 'I compel' pr. Germ. \* $u \acute{\epsilon} \chi - \bar{\varrho}$ . Goth. t r u d - a 'I tread': O.H.G. t r i t - u; O.C.Sl. d e r - q 'I tear': Czech d r - u Serv. -d r - e m, O.C.Sl.  $\check{z} i d - q$  'I wait' (Lith.  $g e i d \check{z} \check{\iota} u$ ):  $\check{z} \check{\iota} d - q$ , I.ith.  $m \acute{e} l \check{z} - u$  'I milk': O.C.Sl.  $m l \check{u} z - q$ . The two kinds are often found in different languages with the same root; as from  $\nu l \ell d r \ell u \ell d r \ell u$  hurt, deceive' Aryan has only \* $\ell r u g h \ell e$ , Skr.  $\ell r u g u$ .

To decide the historical relation of these two kinds, two facts have to be taken into account. First, that in Aryan and Greek, Type B constantly expressed acrist action, and A present action.<sup>2</sup>) Secondly, that type A is conjunctive to indicative forms of Class I, and B often occurs as a variant indicative stem along with stems of Class I, no distinction being drawn between these two present stems in meaning; see §§ 493 ff. How these facts are to be explained is still obscure. Only thus much may be called probable, that Type A had originally both indicative and subjunctive meaning (cp. § 489 pp. 47 f., §§ 578, 910).

Remark. Because of the frequency with which these two types (II A and B) are found in the same verb, many scholars, among them Fick and Paul, have supposed that from different persons of the same stem, we have the two stems bhéydh-o-bhéydh-e- and bhudh-ó bhudh-é-by levelling; originally, they assume, the varying accent produced \*bhéydh-o- and \*bhudh-é- (e. g. 1st pl. \*bhéudh-o-mos but 2nd pl. \*bhudh-é-te ); then, by levelling, we have 2nd pl. \*bhéydh-e-te beside \*bhudh-é-te following \*bhéydh-o-mos, and vice versa we have \*bhudh-ó-mos beside

<sup>1)</sup> I here assume that  $\bar{u}\bar{o}$  comes from \* $e\dot{v}\bar{c}\bar{o}$  and  $r\bar{u}d\bar{o}$  from \* $roud\bar{o}$  \* $reud\bar{o}$ . But this is not certain; for  $\bar{\imath}$  und  $\bar{u}$  may represent Idg,  $\bar{\imath}$  und  $\bar{u}$ .

<sup>2)</sup> Type B is found distinguishing the aorist sense from other present stems, and not only those of the A type; as Skr.  $\acute{a}chida$ -t Lat. scidi-t (§ 528), but pres. Skr.  $chin\acute{a}t$ -ti opt.  $chind\bar{e}$ -ta Lat.  $scind\bar{o}$ .

\*bhéudh-o-mos following \*bhudh-é-te, and so on.¹) This must have happened, if it did happen, in the proethnic language, because even then the type \*bhudhó- had become associated with acristic action, and \*bhéudho- with the meaning of the conjunctive.

To explain the relation of II A and B, others call attention to the change of accent in the Balto-Slavonic present indicative, as Lith. vedit vedit  $v\bar{e}da$ . But the original accent of the Balto-Slavonic verb, which is the important point, has not yet been made out for certain; the only certain point is that the 1st sing. accented its final, Lith. vedit sukit = Russ. vedit skit. And even if the accentuation varied then in the different persons, how can it be proved that this mode was older than the Sanskrit?

The same double forms are seen in Class XIII (as Gr. δήλομαι: βωίλομαι, § 607), and Class XXVI (as O.H.G. wirk(i)u: Goth. vaúrkja, § 705). What may be the cause of the difference is no less dark in these than in the other.

§ 514. Class II A: the Root Syllable accented and in the strong Grade. Some forms are used as both indicative and conjunctive, as. indic. Skr.  $\acute{a}y$ -a-tē Lat.  $e\bar{o}$  eunt, conj. Skr.  $\acute{a}y$ -a-ti  $\acute{a}y$ -a-t (beside indic.  $\acute{e}$ -ti); see § 493 ff. Here we confine ourselves to o-forms with indicative meaning.

Pr. Idg.  $bh\acute{e}r-\bar{o}$  'I bear'  $3^{rd}$  sing. \* $bh\acute{e}r-e-t(i)$ : Skr.  $bh\acute{a}r-\bar{a}mi$   $bh\acute{a}r-a-ti$ , Armen. ber-em (§ 978)  $ber\bar{e}$  for \*ber-e-ti (I § 483 p. 357), Gr.  $q\acute{e}\varrho-\omega$ , Lat.  $fer-\bar{o}$ , O.Ir. -biur for \* $ber-\bar{o}$  ber-i-d, Goth.  $ba\acute{i}r-a$   $ba\acute{i}r-i-\bar{p}$ , O.C.Sl.  $ber-e-t\ddot{u}$ ; pret.  $3^{rd}$  sing. \* $\acute{e}-bher-e-t$ : Skr.  $\acute{a}-bhar-a-t$ , Armen. e-ber, Gr.  $\ddot{e}-\varphi \acute{e}\varrho-\varepsilon$ ; imper.  $2^{nd}$  sing. \* $bh\acute{e}r-e$ : Skr.  $bh\acute{a}r-a$ , Armen. ber, Gr.  $\varphi\acute{e}\varrho-\varepsilon$ , O.Ir. beir, Goth.  $ba\acute{i}r$ ; opt.  $2^{nd}$  sing. \*bher-o-i-s; Skr.  $bh\acute{a}r-\bar{e}-\check{s}$ , Gr.  $\varphi\acute{e}\varrho-o-\iota-s$ , Goth.  $ba\acute{i}r-\acute{a}-i-s$ , O.C.Sl. ber-i. \* $\mathring{g}\acute{e}n-\bar{o}$  'I beget': Skr.  $j\acute{a}n-\bar{a}mi$ , Gr. 'pret.  $\acute{e}-\gamma \acute{e}\nu-\acute{o}-\mu\eta\nu$  (§ 518), O.Lat.  $gen-\bar{o}$ . \* $u\acute{e}\acute{e}-\bar{o}$ : Avest.  $vay-\bar{e}mi$  'I drive, scare off', Lith.  $vej-\grave{u}$  'I pursue'. \* $pl\acute{e}u-\bar{o}$  'I swim, flow, sail': Skr.  $3^{rd}$  sing. mid.  $pl\acute{a}v-a-t\bar{e}$ , Gr.  $\pi\lambda\acute{e}(F)-\omega$ , Lat.  $3^{rd}$  sing. \*plov-i-t (imperf.  $plov\bar{e}bat$  Petron., inf. per-plovere

<sup>1)</sup> Such levelling as this would not be extraordinary. For instance, the present of Lat. vindicō becomes in O.Fr., regularly, venge venches venchet vengons rengiez venchent; from this we have two series derived, (1) venge venges venget vengons vengiez vengent, and (2) venches venche venchet venchons venchiez venchent (Neumann, Zeitschr. Rom. Phil., xiv, 562).

Fest.), O.C.Sl. 3rd sing. plov-e-tŭ. \*uért-ō 'verto': Skr. várt-āmi, Lat. vert-ō, Goth. vairp-a. \*léngh-ō: Skr. 3rd sing. mid. ráh-· · -a-tē 'hastens, accelerates', O.Ir. lingid 'springs up' (R. Schmidt, Idg. Forsch. I 48 ff., 76), O.H.G. gi-lingu 'I have good progress or result'. \*nés-e-taj: Skr. nás-a-tē 'approaches lovingly, joins company with some one', Gr. νέ(σ)-ε-ται 'returns home', Goth. ga-nis-a 'I am saved, survive, recover'. \*ĝéus-ō 'I taste, try, enjoy': Skr. jóš-āmi Gr. γεύ-ω γεύ-ο-μαι (cp. the Author Gr. Gr.<sup>2</sup> p. 31), Goth. kius-a. \*uégh-ō 'veho': Skr. váh-āmi, Gr. Pamphyl. imper. Fεχ-έ-τω (?), Lat. veh-ō, Goth. ga-viga, Lith. vež-ù O.C.Sl. 3rd sing. vez-e-tü. \*séq-e-taj is with, follows': Skr. sác-a-tē, Gr. ξπ-ε-ται, Lat. sequ-i-tur, O.Ir. sech-idir (now a weak verb), Lith. sek-û. \*péq-ō 'I cook'; Skr. pác-āmi, Lat.  $coqu-\bar{o}$  for \*quequ- $\bar{o}$  \*pequ- $\bar{o}$  (I § 336 p. 267), O.C.Sl. 3rd sing. peč-e-tŭ. \*áĝ-ō 'I drive, lead': Skr. áj-āmi, Armen. ac-em, Gr. αγ-ω, Lat. ag-ō, O.Ir. ag-im, O.Icel. infin. aka.

On present forms with Idg.  $\bar{e}$  in place of e, as Gr.  $\mu\dot{\eta}\delta$ -o- $-\mu\alpha\iota$  Lith.  $b\bar{e}g$ -u Skr.  $s\bar{a}h$ - $\bar{a}mi$   $m\bar{a}rj$ - $\bar{a}mi$ , see § 471 p. 16, § 480 Rem. pp. 28 f., § 494 pp. 54 f. To the same list perhaps belongs the West-Germ.  $2^{\rm nd}$  sing. pret., as O.H.G.  $m\bar{a}zi$  AS.  $m\bar{a}te$  'measurest' (Gr. mid.  $\dot{\epsilon}$ - $\mu\dot{\gamma}\delta\epsilon$ 0 -0v), O.H.G.  $\bar{a}zi$  'atest' (Lith.  $\dot{\epsilon}d$ -u 'to eat', but cp. the augmented Skr.  $\dot{a}d$ -a-s Gr.  $\dot{\gamma}\delta$ - $\epsilon$ - $\epsilon$ ), see § 893.

§ 515. Aryan. Skr. bhár-a-ti 'fert' Avest. baraiti, pret. 3rd pl. Skr. ά-bha-ra-n Avest. bar-e-n O.Pers. a-bar-a: Armen. ber-em etc., see § 514 p. 80. Skr. nám-a-ti 'bows' Avest. nemaiti, √nem-. Skr. náy-a-ti 'leads' Avest. nayeiti O.Pers. pret. 1st sing. a-nay-a-m. Skr. cyáv-a-tē 'raises itself, stirs' Avest. šavaitē O.Pers. pret. 1st sing. a-šiyav-a-m: Gr. Aeol. σενω, √qieu-. Skr. párd-a-tē 'farts': Gr. πέρδ-ε-ται, O.H.G. firz-u, Lett. perd-u. Skr. śás-a-ti 'utters solemnly, praises' Avest. sanghaiti Gathic sēnghaitī 'speaks, teaches', √kens-. Skr. pret. á-bandh-a-t 'he bound' Avest. bandaiti: Goth. bind-a, √bhendh-. Skr. bhéd-a-ti 'splits': Goth. beit-a 'I bite', √bheid-. Avest. snaež-aiti 'it snows' (I § 454 p. 335): Gr. νείφ-ει, Lith. dial. snēg-a Lett. snig, √ sneigh-. Skr. bódh-a-ti Brughann, Elements. IV.

'wakes, awakes, is observant' Avest. mid.  $bao\bar{d}ait\bar{e}$ : Gr.  $\pi\epsilon\dot{v}\vartheta$ - $\epsilon$ - $\tau\alpha\iota$  'learns, discovers', Goth. ana-biuda 'I bid, command', O.C.Sl. bljud-e- $t\bar{u}$  'observes', with secondary (l)j,  $\checkmark$   $bhe\underline{u}dh$ -. Skr.  $p\acute{a}t$ -a-ti 'flies' Avest. pat-e-nti 'they fall, run' O.Pers. ud- $apatat\bar{a}$  'he raised himself': Gr.  $\pi\acute{e}\tau$ - $\epsilon$ - $\tau\alpha\iota$  'flies', Lat. pet- $\bar{o}$ . Skr.  $\acute{a}j$ -a-ti 'leads, drives' Avest. azaiti: Armen. acem etc., see § 514 p. 80. Skr.  $\acute{a}rh$ -a-ti 'earns, deserves' Avest.  $ar^ejaiti$ : Gr. pret.  $\vec{\eta}\lambda\varphi$ -o- $\nu$  'I earned',  $\checkmark$  algh-.

§ 516. Sanskrit had so many presents of Class II A with  $\acute{a}$  in the root syllable, that other stems which had originally a unaccented in the root, accented it on their analogy; e. g.  ${}^*d\mathring{n}\mathring{k}$ - $\acute{e}$ -ti 'bites' properly becomes  ${}^*da\mathring{s}\acute{a}ti$ , but what we find is  $d\acute{a}\mathring{s}ati$ , cp. also  $da\mathring{s}$ -a-ti from  ${}^*de\mathring{n}\mathring{k}$ -e-ti. See I § 672 p. 537. But this retraction of accent is found with other root vowels as well, not a only; as  $g\acute{i}r\~{a}mi$  beside  $gir\~{a}mi$  (§ 525); cp.  $h\acute{i}nv$ -a-ti  $h\acute{i}$ -nv-a-nti in contrast with hi- $n\acute{o}$ -ti hi-nv- $\acute{a}nti$  § 651.

§ 517. Armenian. berem 'I bring, carry': Skr. bhárāmi etc., see § 514 p. 80. celem 'I split', beside Lith. skelù (skel-iù) 'I split'. e-ker 'he ate': Skr.  $3^{rd}$  sing. gar-a-t (should be \*jar-a-t, but follows  $gir\acute{a}$ -ti and others),  $\sqrt{ger}$ -. e-tes 'he saw' (tes- for \*ters-, I § 263 p. 214): Skr.  $\acute{a}$ -dar $\acute{s}$ -a-t, Gr.  $\acute{b}$ :  $\acute{e}$ - $\emph{con-dercar}$  'conspicitur',  $\sqrt{der\^{k}}$ -. liz-em 'I lick': Gr.  $\lambda \emph{el}\chi$ - $\omega$ .

Remark. Whether the *i* of gitem 'I know' was Idg. ei, which would connect the verb with Skr.  $v\bar{e}d$ -a- $t\bar{e}$  Gr.  $\epsilon i\delta$ - $\epsilon$ - $\tau a\iota$ , or Idg. oi, which would make it a transformation of the perfect (Gr.  $oi\delta a$ ), is not to be decided, Bartholomae's efforts notwithstanding (Bezz. Beitr. xvII 94 f.). The meaning does not prove a perfect origin for it.

§ 518. Greek.  $\delta \dot{\epsilon} \varrho - \omega$  'I flay'; Goth. ga - taira O.H.G. zir - u 'I tear to pieces, I destroy', O.C.Sl.  $der - e - t \check{u}$  'tears to pieces'.  $\sigma \tau \dot{\epsilon} v - \omega$  'I groan, bewail': Skr. stan - a - ti 'thunders, roars'.  $\dot{\varrho} \dot{\epsilon} (F) - \varepsilon \iota$   $\dot{\varrho} \dot{\epsilon} i$  'flows': Skr.  $sr \dot{a} v - a - t i$ .  $\vartheta \dot{\epsilon} (F) - \omega$  'I run': Skr.  $dhav - a - t \check{e}$  'streams, flows' (on  $dh \dot{a} v - a - t i$  see § 480 Rem. p. 29).  $\tau \dot{\epsilon} \varrho n - \omega$  'I satisfy, please': Skr.  $t \dot{a} r p - a - t i$ .  $\dot{a} \mu \dot{\epsilon} \dot{\lambda} \gamma - \omega$  'I milk': O.H.G. milch - u, Lith.  $m \dot{\epsilon} l \check{z} - u$ .  $\dot{\epsilon} i \dot{\sigma} - \sigma - u u$  'I appear, am like': Skr.  $v \bar{e} d - a - t \bar{c}$ .  $n \varepsilon \dot{t} \vartheta - \omega$  'I persuade': Lat.  $f \bar{\iota} d - \bar{\varrho}$ , Goth. b e i d - a

'I await'. εν-ω 'I burn' Ion. εν-ω (cp. the Author, Gr. Gr.  $^2$  p. 31): Skr. σε-α-ti, Lat.  $\overline{u}r-\overline{v}$ ,  $\sqrt{e}us-$ ; ενω for  $*ενh\overline{v}$  as εiπομην for \*εhεπομην, see § 478 p. . ερεν'θ-ω 'I redden, make red': O.Icel  $ry\overline{d}$  (inf.  $rj\overline{v}da$ ), ν reudh-. στεγ-ω 'I cover': Skr. sthag-a-ti (grammarian's word), Lat.  $teg-\overline{v}$ . εχ-ω 'I hold, have': Skr.  $sdh-a-t\overline{v}$  'overcomes' (on sdh-a-ti see § 480 Rem. p. 29). ζε-ω 'I seethe, boil': Skr. a-yas-a-t, O.H.G. jis-u gis-u,  $\sqrt{jes-}$ . aεθ-ω 'I burn', ν aedh- (I § 93 p. 87, § 318 p. 237). τηκ-ω 'I melt' Dor. τακ-ω, ληγ-ω 'I cease',  $\sqrt{sleg}$ - (I § 565 p. 423).

Since the preterites  $\hat{\epsilon}\gamma\epsilon\nu\dot{\epsilon}\rho\mu\eta\nu$  'I became'  $\hat{\epsilon}\vartheta\epsilon\nu\nu\nu$  'I struck  $\hat{\epsilon}l\lambda\nu\nu$  'I seized' were used as aorists, their infinitives and participles were accented like forms of Class II B:  $\gamma\epsilon\nu\dot{\epsilon}\sigma\vartheta\alpha\iota$ ,  $\hat{\epsilon}\lambda\dot{\omega}\nu$ ,  $\vartheta\epsilon\nu\dot{\omega}\nu$  instead of \* $\gamma\dot{\epsilon}\nu\epsilon\sigma\vartheta\alpha\iota$ , \* $\epsilon\lambda\dot{\omega}\nu$ , \* $\vartheta\epsilon\nu\omega\nu$ . As regards the aorists  $\tilde{\epsilon}\tau\epsilon\kappa\nu$  'I bore, begot' and Dor. Lesb.  $\tilde{\epsilon}\pi\epsilon\tau\nu$  'I fell' ( $\tau\epsilon\kappa\epsilon\tilde{\iota}\nu$ ,  $\pi\epsilon\tau\dot{\omega}\nu$ ), these may possibly belong by rights to II B, and may have exchanged their  $\vartheta$  for e (ep. Bartholomae, Bezz. Beitr. xvII 109). Compare § 527.

§ 519. Italic. Lat. fer-ō, cp. Umbr. conj. ferar 'let him bear' (fertu 'ferto' for \*fere-tod?): Skr. bhár-a-ti etc., see § 514 pp. 80 f.). col-ō for \*quel-ō (I § 172.3 p. 152): Skr. cár-a-ti 'moves, goes', Gr. πέλ-ε-ται 'is in motion, versatur' (this should really be τελ-, but follows the analogy of ε-πλ-ε-το etc., see I § 427 b with Rem. 1, pp. 313 f.), V qel-. Lat. sonō (inf. sonere) for \*suen-ō (cp. colō): Skr. sván-a-ti 'sounds, echoes'.  $trem-\bar{o}$ : Gr.  $\tau \rho \dot{\epsilon} \mu - \omega$  'I tremble' (cp. § 488 p. 47). ex-uō for \*-ouō \*-euō (cp. Umbr. an-ovihimu induimino § 716).  $serp-\bar{o}$ : Skr.  $s\acute{a}rp-a-ti$  Gr.  $\acute{\epsilon}\rho\pi-\epsilon\iota$  'crawls'.  $deic-\bar{o}$   $d\bar{\imath}c-\bar{o}$ , Umbr. deitu teitu 'dicito' (I § 502 p. 368), cp. Osc. deicans 'dicant': Goth. ga-teiha 'I announce, inform', V deik-. Lat. mējō probably for \*mejhō (I § 389 p. 291, § 510 p. 374): Skr. méh-a-ti Avest. maęzaiti, Armen. miz-em, A.S. mīz-e, V meiĝh-. doucō dūcō for \*deuk-ō: Goth. tinh-a 'I draw' √deuk-. ed-ō: Gr. έδ-ω Goth. it-a (on Lith. ĕd-u see § 480 Rem. pp. 28 f.).  $tex-\bar{o}$ : Skr. tákš-a-ti 'makes'; Gr. τέκτων prevents our deriving the

present from \*tek-se-ti, and putting it in Class XX; see I § 554 p. 408, Kretschmer, Kuhn's Zeitschr. xxxi 433. Lat.  $ag-\bar{o}$ , Umbr. aitu aitu Osc. actud 'agito' (I § 502 p. 368): Skr.  $\acute{aj}$ -a-ti etc., see § 514 p. 81. Lat.  $scab-\bar{o}$ : Goth. skab-a 'I scrape, shave' (I § 346 p. 271).

§ 520. Keltic. Irish Presents of the 1<sup>st</sup> and 3<sup>rd</sup> conjugations (o- and io-stems) are so often confused that the distinction between them cannot be made of any practical use. This makes it quite uncertain whether the following specimens belonged to Class II originally or not.

O.Ir. -biur ber-im 'I bear, bring': Skr. bhár-a-ti etc., see § 514 p. 80. cel-im 'I hide': O.H.G. hil-u 'I hide' (it is doubtful whether to add Lat. oc-culō, as being for \*-celō, or to place it in II B). mel-im 'molo', V mel- (O.C.Sl. mel-ja inf. mlě-ti). con-dercar 'conspicitur: Skr. á-darš-a-t etc., see § 517 p. 82. reth-im 'I run': cp. Lith. rit-ù 'I roll' (II B). ē-rig (Mid. Ir.) imper. 'raise yourself, rise': Gr. δρέγ-ω 'I reach', Lat. reg-ō. lengim 'I spring' 3rd sing. lingid): Skr. ráh-a-tē etc., see § 514 p. 81. scendim (Mid. Ir.) 'I spring', Mod. Cymr. cy-chwynnaf 'I spring up', pr. Kelt. \*skuend-: it appears to be connected with Skr. skánd--a-ti 'springs' Lat. scando, but the vowels are not clear (cp. Kretschmer in Kuhn's Zeitschr. xxxi 379, R. Schmidt Idg. Forsch. I 75 f.). tiag-im 'I go': Gr. στείχ-ω 'I go', Goth. steig-a 'I climb', V steigh-. fed-im 'I lead': Lith. ved-ù 'I lead' O.C.Sl. ved-e-tŭ, Vuedh-. tech-im 'I flee': Skr. tak-a-ti 'runs, pushes, shoves' (in the grammarians), Lith. tek-ù 'I run, flow' O.C.Sl. teč-e-tŭ 'runs, flows'. can-im 'I sing': Lat. can-ō.

§ 521. Germanic. Goth. ga-taira O.H.G. zir-u 'I tear, destroy': Gr. δέρ-ω etc., see § 518 p. 82. O.H.G. brim-u 'I growl, roar': Lat. frem-ō (cp. Osthoff, M. U., V 93 ff., Per Persson Stud. zur Lehre der Wurzelerweiterung, 288). Goth. ga-pairsa 'I dry up': Gr. τέρσ-ε-ται 'dries'. O.H.G. wirr-u 'I mix up, confuse' (instead of \*wirs-u by analogy of gi-worran and other such, where -rr- comes from -rz-, cp. I § 582 Rem. 1 p. 435): Lat. verrō for \*vers-ō (also vorrō). O.H.G.

smilz-u 'I melt': Gr. μέλδ-ε-ται 'melts, liquefies'. Goth. bind-a O.H.G. bint-u 'I bind': Skr. ά-bandh-a-t, V bhendh-, see § 515 p. 81. Goth. leihv-a O.H.G. līh-u 'I lend': Gr. λείπ-ω Lith. lēk-ù 'I leave', V leiq-. O.H.G. sīhu 'I strain, filter': Skr. sḗc-a-tē 'pours', V seiq-. Goth. vis-a O.H.G. wis-u 'I remain, linger': Skr. vás-a-ti 'lingers, dwells'. Goth. qip-a O.H.G. quid-u 'I say, speak'. Goth. skáid-a O.H.G. sceid-u 'I sever', V skhait- skhaid- scindere. ') Goth. áuk-a 'I increase (trans. or intr.)', V aug-. Goth. lēt-a O.H.G. lāz-u 'I leave': cp. Gr. ληδεῖν · νοπιᾶν, κεκμηκέναι Hesych. (Sütterlin, Habilitations-Thesen p. 3) and Lat. lassu-s; the d of lēd- is perhaps a root-determinative (§ 699).

§ 522. Balto-Slavonic. Lith. gen-ù 'I drive', O.C.Sl. žen-e-tŭ 'drives': Skr. han-a-ti Avest. janaiti 'strikes, kills' (§ 498 p. 58), Gr. ε-θεν-ο-ν θεν-είν 'strike' (§ 518 p. 83). O.C.Sl. pije-tŭ pije-tŭ 'drinks' (inf. pi-ti) probably for \*pei-e-ti (cp. poji-ti 'to give to drink'): Skr. páy-a-tē 'swills, strains', cp. § 535. O.C.Sl. slov-e-tŭ 'is called' for \*slev-e-tŭ: Gr. κλέ(F)-ε-ται 'celebratur', V kley-. Lith. kert-ŭ 'I hew': Skr. kartati 'cuts' (instead of \*cart-a-ti, following krt-a- krnt-a etc.), V qert-. O.C.Sl. brěžetů 'cares for, tends' for \*berg-e-tŭ (I § 281 p. 224, § 464 p. 340): Goth. bairg-a 'I keep, preserve' O.H.G. birg-u 'I save, hide', V bhergh. Lith. bred-ù 'I wade', O.C.Sl. bred-e-tŭ 'wades'. Lith. velk-ù 'I drag, pull', O.C.Sl. vlěč-e-tŭ 'drags, pulls' (like brěžetŭ above): Gr. ελκ-ω 'I drag, pull', V suelq- uelq-. Lith. les-ù 'I pick': Goth. lis-a 'I pick, gather'. Lett. strig-u 'I sink in' (= Lith. \*strëg-ù), O.C.Sl. striž-e-tŭ 'shears, shaves': O.H.G. strīhh-u 'I strike, stroke', V streig-. Lith. lēk-ù 'I leave': Gr. λείπ-ω etc., see § 521 p. 85. O.C.Sl. žid-e-tŭ 'waits': cp. Lith. geidžiù 'I desire after' (Class XXVI). O.C.Sl. bljud-e-tŭ 'observes': Skr. bōdh-a-ti etc., see § 515 pp. 81 f. Lith. deg-ù 'I burn', O.C.Sl. žež-e-tŭ 'burns' for

<sup>1)</sup> Not sqhait-, as assumed in I § 553 p. 406. See Hübschmann, Zeitschr. deutsch. morg. Ges., xxxvIII 424 f., Burg, Kuhn's Zeitschr. xxIX 367.

\*geg-e-tŭ and this for \*deg-e-tŭ (cp. Russ. iz-gaga 'heart-burn'): ') Skr. dáh-a-ti 'burns', ν dhegh-. Lith. pesz-ù 'I pluck': Gr. πέχ-ω 'I shear'. Lith. kós-u 'I cough': Skr. kás-a-tē 'coughs'.

§ 523. Class II B: the Accent falls upon the thematic Vowel, and the Root is Weak.

This class may have been produced by adding a thematic vowel to forms of Class I with the weak stem; see § 491, page 50.

Pr. Idg. \*grr-\u00e0 'I swallow' 3rd sing. \*grr-\u00e0-t(\u00e0), \u2222 ger-: Skr. gir-ámi gil-ámi, O.C.Sl. žir-e-tü. \*mļl-ó- from 1/mel-'grind' (O.Ir. melim, II A, § 520 p. 84): Armen. mal-em 'I shatter, crush', Lat. mol-ō, Mod. Cymr. mal-af 'I grind'. \*qmm-ó- \*qm-ó- from  $\sqrt{\text{gem-'go, come'}}$  (Goth. qim-a): Skr. opt.  $gam-\acute{e}-t$  Avest.  $g^em-a-\rlap/p$   $\gamma m-a-\rlap/p$  O.Pers. mid.  $a-gm-a-t\vec{a}$ , O.H.G. cum-u (I § 227 p. 193); whether Lat. conj. ad-venat (properly \*-vem-ā-t, but changed by analogy of veniō -ventu-s, see I §§ 207, 208 pp. 174 f.) and Osc. indic. kúmbened 'convēnit' (-n- instead of -m- as in Latin) should be placed here or in Class II A is uncertain; — and a parallel stem, Idg. \*aém-ti § 493 p. 51. \*unn-ó- from / uen- 'win, love': Skr. opt. 1st pl. van-é-ma (conj. van-á-ti), Goth. un-vunands 'not rejoicing'. 2) \*nm-ó- from / nem- 'take : Lat. emō, Lith. imù O.C.Sl. ima; see I § 219 Rem. 2 p. 187, § 238 p. 199; Solmsen in Kuhn's Zeitschr. xxix 81; Brückner, Arch. slav. Phil., x 183 (not so Fick, Wtb. I4 363, Wiedemann Lit. Praet. 118). \*bhuu-ó- \*bhu-ó- from V b heu- 'become, be': Skr. 3rd sing. á-bhuv-a-t bhúv-a-t (for the accent, see

<sup>1)</sup> Vol. I § 379 Rem. p. 286, should be corrected. It can hardly be right to separate zega from degu, as Miklosich does (Etym. Wörterb. 407).

<sup>2)</sup> A comparison of un-vunands with forms like kunnum = Idg.  ${}^*\hat{g}_{n}$ -nu-més (§ 646) shews that n and m following n and m as transition-consonants or consonant glides were pronounced more weakly than when they had their ordinary value. Thus it would be better to write  ${}^*u_n^n$ - $\dot{o}$ -, and on the same principle  ${}^*bhu^u$ -o- (= Skr.  $bh\dot{u}v$ -a-t),  ${}^*du^u\bar{v}_0$  (= Gr.  $\dot{\sigma}\dot{v}\omega$ ) rather than  ${}^*bhuu$ -o-  ${}^*duu$ - $\bar{o}$ . The difference is seen in pr. Gr.  ${}^*hek^u$ -eta $\bar{u}$  =  $\hat{v}_{n}v_{n}u$  an  $(h)ikuos = \hat{v}_{n}n_0$ .

Avest.3<sup>rd</sup> sing. bv-a-p 3<sup>rd</sup> pl.  $b\bar{u}n$  i. e. buv-e-n, Lat. aor. (perf.) fui-t (compare conj. Osc.  $fuid = *fu-\bar{e}-t$  and O.Lat.  $fu-\bar{a}-s$ ) fut. -bo- bunt for \*-fu-o- (§ 899) Osc. indic. aor. aa-mana-ffed 'mandavit' = Avest. bv-a-p (§§ 874, 899), O.Ir. no charub for \*cara-b(u)ō (carā-? § 899), O.C.Sl. 3rd pl. injunct. bq for \*bu-o-nt (§ 727); it is not certain that Gr. qu'w belongs to this class, as it may be derived from \*\varphi v-\varphi \omega\$ (we have in Aeolic \( qvi \omega \) § 527 Rem., § 707). \*qrt-ó- from V qert- 'cut': Skr. á-krt-a-t, O.C.Sl. čržt-e-tž. \* $dr\hat{k}$ -ó- from  $\sqrt{der\hat{k}}$ - 'see': Skr.  $3^{\rm rd}$  pl.  $\acute{a}$ - $dr\acute{s}$ --α-n opt. drš-έ-t, Gr. ε-δρακ-ο-ν inf. δρακ-εῖν. \*mļĝ-ó- from V melĝ-'stroke, milk': Skr. mrj-á-ti 'strokes off, cleans', Mid. Ir. bleqaim 'I milk', O.C.Sl. mlŭz-e-tŭ 'milks'. \*dnk-ó- from V denk- 'bite': Skr. dáš-a-ti (for the accent, see § 516 p. 82, § 525), Gr.  $\ddot{\varepsilon}$ -δαz-ο-ν (I § 224 p. 192). \*rud-ό- from  $\checkmark$  reud- 'lament': Skr. rud-á-ti Lat. rud-ō O.H.G. 2nd sing. pret. rugg-i for \*rut-i-z (§ 893). \*uid-ó- from V ueid-: Skr. á-vid-a-t 'he found' Avest. Gathic vīd-a-p, Armen. e-git 'he found', Gr. i'd-ov Lesb. ε-νιδ-ο-ν 'I saw' inf. ιδ-είν, inf. Goth. vit-an O.H.G. wizz-an 'know'. \*s-6- from Ves-'be': Lat. s-u-m s-u-mus s-u-nt, partic. Gr. ων Lat. sons O.Icel. sannr Lith. sas O.C.Sl. sy, see § 493. \*dh- $\acute{o}$ - from  $\bigvee dh\bar{e}$ - ' $\tau\iota\vartheta\acute{\epsilon}\nu\alpha\imath$ ': Skr. dh-a-t, Lat. con- $d\bar{o}$ , see § 493 pp. 52 f. Goth. magan 'be able' partic. magands, O.C.Sl. mogą 'I can', beside Gr.  $\mu \tilde{\eta} \chi o_S$  'help, remedy' ( $\eta = \bar{\alpha}$ ), ep. § 887.

§ 524. Aryan. Skr.  $sphur-\acute{a}-ti$  'pushes away, accelerates',  $\bigvee sper-;$  Avest. sparaiti may belong either to II A or II B (cp. I § 290 p. 232). Skr.  $tir-\acute{a}-ti$   $tur-\acute{a}-ti$  'presses or passes through',  $\bigvee ter-.$  3<sup>rd</sup> pl.  $r-a-nt\bar{e}$ ,  $\bigvee er-$  'set in motion'. Imperative:  $j\bar{n}-a$ ,  $\bigvee \bar{g}en-$  'know'. Optative:  $san-\acute{e}-t$ ,  $\bigvee sen-$  'win', cp. I § 231.  $k\bar{s}iy-\acute{a}-ti$   $k\bar{s}y-\acute{a}-ti$  'lingers, dwells'. a-khy-a-t 'he looked' (in composition), variant stem  $khy-\bar{a}-$  § 736. Optative: 1<sup>st</sup> pl.  $huv-\acute{e}-ma$  pret.  $\acute{a}-hv-a-t$  from  $h\bar{u}-$  'call to',  $\bigvee \bar{g}heu-dhuv-a-ti$  'shakes': is Gr.  $\vartheta v'\omega$  'I offer' the same as this, or does it come from  $*\vartheta v-\iota\omega$ ? see § 527 Rem.  $suv-\acute{a}-ti$   $sv-\acute{a}-ti$  'begets creates'.  $srj-\acute{a}-ti$  'sends forth', Avest.  $her^ez-aiti$ . Skr.  $bhrjj-\acute{a}-ti$  'roasts' (perf.  $babhr\acute{a}jja$  and  $babh\acute{a}rja$ ): Gr.  $\varphi o\acute{v}\gamma-\omega$  Lat.  $fr\bar{\iota}g-\bar{\iota}e$ ,

Idg. \*bhrzg-é-ti or bhrzg-é-ti (cp. Thurneysen, Kuhn's Zeitschr. xxx 353). á-vrt-a-t, V uert-: does Lat. vortō (beside vertō) come from pre-Italic \*urt-ó? 3rd pl. spūrdh-á-n beside spárdh--a-tē 'strives',  $sp\bar{u}rdh$ - =  $*sp\bar{r}dh$ -, cp. partic. sprdh- $\bar{u}n\dot{a}$ -s.  $3^{rd}$  sing. (aor.)  $bhra\dot{s}$ -a-t 'fell' beside pres.  $bhr\dot{q}\dot{s}$ -a- $t\bar{e}$ .  $vi\dot{s}$ - $\dot{a}$ - $t\bar{e}$ 'enters', Avest. vīs-aitē. Skr. á-sic-a-t 'he poured out': O.H.G. sīg-u 'I fall down, trickle' pr. Germ. \*sīkō, V seig-. Partic.  $di\dot{s}$ - $\acute{a}$ - $m\bar{a}$ na-s,  $\sqrt{dei}\hat{k}$ -: cp. O.Icel. tega 'to show' (beside  $tj\bar{a}$  = Goth. teihan, II A). bhuj-á-ti 'bends, pushes away', Avest. būj-a-p 'pushed away': Gr.  $\ddot{\epsilon}$ - $\varphi v \gamma$ -o-v 'I fled' inf.  $\varphi v \gamma$ - $\epsilon \tilde{\iota} v$ , A.S.  $b \bar{u}_{\overline{J}}$ -e'I bow', V bheug- bheug-. Skr. 2nd sing. druh-a-s, Avest. družaiti, V dhreugh- 'deceive, lie'. Skr. guh-a-ti 'hides' (for accent see § 525) 2nd sing. quh-a-s, Avest. mid. ā-guz-ē. From  $V d\bar{o}$ -'give' Skr. da-t ( $\bar{a}+a-d-a-t$ ), Avest. 2<sup>nd</sup> sing. opt.  $d\bar{o}i-\dot{s}$ : Lat. red-dō, see § 493 pp. 53 f. From √stā- 'stand' Skr. āstha-t Avest. a-xšt-a-p, see § 493 p. 54. Skr. -h-a-ti in ujha-ti 'lets go' for \*ud + jhati, beside  $j\acute{a}-h\bar{a}-ti$  'leaves'.

§ 525. Many forms of this class have in Sanskrit the accent of  $\Pi$  A; as  $d\acute{a}\acute{s}$ -a-ti V  $de\^{n}\acute{k}$ -,  $g\acute{n}r$ - $\bar{a}mi$  beside gir- $\acute{a}mi$  (§ 523 p. 86),  $bh\acute{u}v$ -a-t (p. 86),  $k\acute{r}p$ -a- $t\bar{e}$  'laments'. Compare § 516, page 82.

Remark. After what has been said in I § 313 p. 251 and other places, it must seem doubtful whether such a word as Skr.  $p\acute{a}c$ -a-ti 'coquit' represents original \* $p\acute{e}q$ -e-ti (II A), or orig. \*peq-e-ti (II B) with weak grade stem and secondary accent, the word accent having been afterwards retracted. I hold that Bartholomae is right in allowing only  $\theta$  as the weak grade with secondary accent for roots of the form peq- (Bezz. Beitr., xvII 109 ff.), which brings presents like  $p\acute{a}c$ -a-ti under II A. Bartholomae, page 117, conjectures that an Ar. \*sid- $\acute{a}$  = \*spd- $\acute{o}$ - from peq 'sit' is contained in Avest.  $hi\acute{d}$ -a-iii.

§ 526. Armenian. mal-em 'I crush, shatter'  $\sqrt{mel}$ : Lat.  $mol - \bar{v}$  etc., see § 523 p. 86. barj - i 'I raised' (pres. barnam for \*barj - na - m): Skr. brh - a - ti 'strengthens, lifts up',  $\sqrt{bher \hat{g}h}$ . e - git 'he found' (pres. gt - anem): Skr. a - vid - a - t etc., see § 523 p. 87. e - lik 'he left' (pres. lk - anem): Gr.  $e - ki\pi - o - v$  inf.  $ki\pi - e \bar{v}$ ,  $\sqrt{leiq} - e - tuk$  'he spewed' (pres. tk - anem).

§ 527. Greek. Here the original distinction of accent between II A and II B is seen in the infinitive, but hardly anywhere else; e. g.  $\lambda \epsilon i n - \epsilon i \nu$ :  $\lambda \iota n - \epsilon i \nu$  (cp. I § 676 Rem. 1 p. 541). But in Greek this distinction was seized upon and connected with the distinction between present and aorist; so much so, that when verbs of II A were used as aorists, or verbs of II B for the present, their accent was changed; thus we have  $\gamma \epsilon \nu - \epsilon' - \sigma \theta \alpha \iota$ , not \* $\gamma \epsilon' \epsilon \nu - \epsilon - \sigma \theta \alpha \iota$  (see § 518 p. 83), and  $\gamma \epsilon \alpha' \epsilon \nu - \epsilon - \sigma \theta \alpha \iota$  (p. § 775 Rem.). In the finite verb, the original accent of II B remained in a few imperatives like  $i \delta - \epsilon'$ , see § 958. It is difficult to judge whether the old accent remains in words whose root has ceased to form a separate syllable, as  $3^{rd}$  sing.  $\sigma \chi - \epsilon' - \tau \sigma$  conj.  $\sigma \chi - \epsilon' \sigma$  from  $\nu / s \epsilon g \hbar$ , because the accent must rest on this syllable in any case (cp. I § 676 Rem. 1 p. 543).

Remark 1. The same cause which changed \*γραφών γραφείν to γράφων and γράφειν, acted upon all other classes of thematic stems where the thematic vowel originally carried the accent, causing a change of accent whenever these stems were used as imperfect-presents. Thus we have δάκνων instead of \* $\delta$ ακ-νών cp. Skr.  $g_r^*$ - $\eta$ ά-ta (§ 611), τίνων instead of \*τινών \*τιν Εών cp. Skr. γ-ηνά-ti (§ 652), ἴσεων instead of \*λοκών \*Εικ-σκών cp. Skr. g-chá-ti (§ 673), βαίνων instead of \*βαινών \*βαν-μών cp. Skr. -gam- $-y\dot{a}$ - $t\bar{e}$  (§ 713),  $\ddot{e}$  $\tau\tau\omega\nu$  instead of  $*\dot{e}$  $\tau\tau\omega\nu$  \*f $\alpha\iota - f$  $\iota\varkappa - \iota\omega\nu$  cp. Skr.  $v\bar{e}$ -vij- $y\dot{a}$ - $t\bar{e}$ (§ 730),  $l\alpha\ell\nu\omega\nu$  instead of  $*l(\sigma)=\alpha\nu=t\omega'\nu$  ep. Skr.  $i\xi=a\eta=y\dot{a}=ti$  (§ 743). This applies to all denominative verbs (Class XXXI), as δράων δρών φιλέων φιλών 1) κονίων φετύων ονομαίνων αγγέλλων instead of \*δραών \*φιλεών etc., compare Skr. prtanā-yá-ti vasna-yáti arāti-yá-ti gātu-yá-ti vṛṣaṇ-yá-ti adhvar-ya-ti. For these denominatives another fact has to be taken into In proethnic Greek, verbs in -fw like guldw had become indistinguishable from verbs of Class XXXII, in  $-\dot{e}i\bar{\rho}$ , as  $\varphi \circ \varrho \dot{\epsilon} \omega = \mathrm{Skr.}$ bhāráyāmi (§ 801); and even before the accent was seized upon to help in distinguishing agrist from present, \*φιλεών may have become φιλέων by analogy of φορέων, and then the verbal nouns of other denominative classes may have been drawn into the same circle of attraction.

 $\ddot{\epsilon}$ -πταρ-ο-ν 'I sneezed' πταρ-εῖν from V pster-.  $\ddot{\epsilon}$ -βαλ-ο-ν 'I threw' βαλ-εῖν from V gel-.  $\ddot{\epsilon}$ -πλ-ε  $\ddot{\epsilon}$ -πλ-ε-το 'versabatur' from

<sup>1)</sup> Observe that the circumflex of these contracted nom. sing. masc. forms,  $\delta \varrho \tilde{\alpha} r - \varphi \iota \lambda \tilde{\omega} r$ , supports the theory of a change of accent here set forth. The old accentuation of the thematic vowel would have produced  $*\delta \rho \omega r - *\varphi \iota \lambda \tilde{\omega} r$  like  $\delta \sigma \tau \omega \dot{r}$ , for  $\delta \sigma \tau \alpha \omega \dot{r}$ .

 $\sqrt{gel}$ .  $\xi - \tau \alpha \mu - o - \nu$  'I cut'  $\tau \alpha \mu - \epsilon \tilde{\iota} \nu$  from  $\sqrt{tem}$ .  $\xi - \vartheta \alpha \nu - o - \nu$  'I died' θαν-εῖν instead of \*φαν-, beside ε-θενο-ν from V ghen- (I § 429 Rem. 1 p. 317): Russ. žnu 'I cut off' for \*gin-a, see § 534.  $\ddot{\varepsilon}$ -κταν-ο-ν 'I killed' κταν-είν from κτεν-, beside 1st pl.  $\ddot{\varepsilon}$ -κτα-μεν Class I § 502 p. 64.  $\vec{\alpha}\nu$ -olyw 'I open' for \* $\vec{o}$ -Fig- $\omega$ , cp. Hom.  $ω^{-i\gamma-\nu\nu-\nu\tau o}$  and Lesb. inf.  $\dot{o}$ -ε $i\gamma-\eta\nu$  (§ 643).  $\ddot{\epsilon}$ - $\pi\iota$ -o- $\nu$  'I drank'  $\pi\iota$ -ε $\tilde{\iota}\nu$ beside πι-θι Class I; κλύ-ω 'I hear' beside κλυ-θι Class I, § 498 p. 59 (cp. W. Schulze, Kuhn's Zeitschr. xxix 240); it is not certain, I freely admit, that these stems in -1-o- and -v-o- are rightly classed here; see the Remark. βρακ-εῖν συνιέναι ('grasp') Hesvch.: Skr. mrś-á-ti 'touches, grasps'. γράφ-ω 'I scratch in, incise, write', V gerph- (A.S. ceorfan 'cut, carve' Mid.H.G. kerben to notch, indent kerve 'a notch'). Dor. τράπ-ω 'I turn' (Att. τρέπ-ω II A), Att.  $\ddot{\varepsilon}$ -τοαπ-ο-ν τραπ-ε $\tilde{\iota}$ ν. κάρφ-ω 'I dry up, wither', beside Lith. skreb-iù 'I grow dry'. ε-λακ-ο-ν 'sounded, cried, spoke' λακ-είν: Lat. logu-or (cp. Bartholomae, Bezz. Beitr. xvii 121).  $\ddot{\varepsilon}$ - $\pi\alpha\vartheta$ -o- $\nu$  'I experienced'  $\pi\alpha\vartheta$ - $\varepsilon$ i $\nu$ , beside  $\pi\dot{\varepsilon}\nu\vartheta$ -o $\varsigma$ .  $\dot{\varepsilon}$ - $\pi\dot{\iota}\vartheta$ - $\varepsilon$ - $\tau o$  'he obeyed, listened to πιθ-έ-σθαι, V bheidh-; on Goth. us-bida (Romans 9. 3), see § 722. Γκ-έ-σθαι 'to arrive' beside pres. Είκ-ω. ε-στιχ-ο-ν 'I climbed, went' στιχ-εῖν, V steigh-. γλύφ-ω 'I dig in. engrave, incise': A.S. clūf-e 'I cleave, split' (O.H.G. chliub-u, II A); on Lat.  $gl\bar{u}b\bar{-}\bar{o}$  see § 529.  $\hat{\epsilon}\bar{-}\pi\nu'\bar{\vartheta}\bar{-}\epsilon\bar{-}\tau o$  he learnt  $\pi\nu\bar{\vartheta}\bar{-}\epsilon\bar{-}$ -σθα: Skr. 3rd pl. budh-á-nta, V bheudh- (§ 513 p. 79).  $\ddot{\eta}\lambda\nu\vartheta$ -o- $\nu$  aor. 'I came' beside fut.  $\dot{\epsilon}\lambda\dot{\epsilon}\dot{\nu}\sigma\sigma\mu\alpha\iota$ .  $\dot{\kappa}\dot{\nu}\vartheta$ - $\dot{\epsilon}$  'he hid' beside  $z \varepsilon v \vartheta - \omega$ .  $\varepsilon - \sigma \chi - o - v$  'he held, had'  $\sigma \chi - \varepsilon \tilde{i} v$ , beside  $\tilde{\varepsilon} \chi - \omega$ ,  $\sqrt{segh}$ -. ε-πτ-ε-το 'he flew' πτ-έ-σθαι beside πέτ-ε-ται. Partie. μακ-ών 'bleating, crying' beside μηκάομαι.

Remark 2. It is hard to classify forms in  $-\iota \omega - \iota o - \nu$  and  $-\nu \omega - \nu o - \nu$ , along with which forms in t and  $\bar{v}$  are common. There is nothing a prior;

against assuming that these have the suffix -io- (Class XXVI), and that -i- fell out between vowels; indeed, this must be done for forms like Lesb. φυίω (Ι § 130 p. 118). πίσμαι πιέμεν beside πίσιαι έπιον may be illustrated by Skr.  $p\bar{\imath}-y\acute{a}-t\bar{e}$ ,  $\vartheta \acute{v}\omega$  beside  $\vartheta \acute{v}\omega$  by Skr.  $dh\bar{u}-y\acute{a}-t\bar{e}$ ,  $\lambda \acute{v}\omega$  beside  $\lambda \dot{\nu} \omega$  by O.Icel.  $l\bar{y}$ -ja 'destroy, crush' (see § 707, and Osthoff, M. U. IV 12 ff.). But t and v may come from forms of Class I, by presents passing from this class into the thematic conjugation, cp. for example  $\pi \bar{\iota} - \dot{\epsilon} - \mu \epsilon \nu$  thematic and  $\pi \tilde{\iota} - 9 \iota$  non-thematic,  $\lambda \tilde{v} \omega$  thematic and  $\lambda \tilde{v} - \tau o$  not (also  $\lambda \hat{v} - \tau o$ , for  $\lambda \dot{v}\omega$  cp. Lat.  $lu\bar{o}$  so- $lu\bar{o}$  so- $lv\bar{o}$ ),  $\omega - \varrho \dot{v}\omega$  Troar' (also variant  $\omega \varrho \dot{v}\omega$ , cp. Skr.  $ruv-\dot{a}-ti$ ) but Skr. opt.  $r\bar{u}-y\bar{a}-t$  (Lat.  $r\bar{u}$ -mor Goth.  $r\bar{u}$ -na). Then these v- and v-forms would naturally be compared with veoiro beside ve-no, -μολο-ν beside -βλω, and other such, see § 497 p. 57. Another possibility is that the long vowel came in by analogy of other tenses, λύω following λύ-σω, θύω following θύ-σω, just as we see Att. γεύω (not \*γέω) by analogy of γεύ-σω (the Author, Gr. Gr. 2 p. 31), and Lesb. αδικήει (instead of  $\partial \delta(x \dot{\epsilon} \dot{\epsilon})$  by analogy of  $\partial \delta(x) - \sigma \omega$  (§ 775).

Italic. Lat. vol- $\bar{o}$  vol-u-nt,  $\sqrt{u}$ el-, see § 493 p. 51. mol-ō: Armen. malem etc., see § 523 p. 86. O.Lat.,  $\sqrt{tel}$ .  $-b\bar{o}$ , future ending, for \*bh\(\varphi\)-\(\bar{o}\), see § 523 pp. 86 f.  $lu-\bar{o}$  so- $lu\bar{o}$  so- $lv\bar{o}$ : cp. Gr.  $\lambda v'-\omega$  'I loose' § 527 Rem. doubtless for \*cors-\(\bar{o}\), cp. ac-cers\(\bar{o}\) \§ 662. nivit (O.Lat.) for \*niqv-i-t (with variant ninqu-i-t, Class XVI): Gr. νίφ-ει 'it snows (also νείφ-ει, II A), O.Ir. snigid 'it drops, rains',  $\sqrt{sneigh-1}$ dī-vidō (Umbr. vetu 'dividito' II A, see the Author, Ber. sächs. Ges. Wiss., 1890, p. 211), beside Skr. vidh- 'to become empty of, to lack' pres. vindhá-tē Class XVI. rudō: Skr. rud-á-ti,  $s\bar{u}g$ - $\bar{o}$ : O.Ir.  $s\bar{u}g$ -im O.H.G.  $s\bar{u}g$ -u A.S. see § 523 p. 87. sūz-e sūc-e O.C.Sl. sŭsa 'I suck'; we must suppose a root seukor seug-.2), Lat. Osc. s-u-m Lat. s-u-mus s-u-nt, Ves-, see § 523 p. 87. co-inquō probably for \*-in-squō, beside secāre. pac-i-t O.Lat. (beside pang-ō Class XVI), √pāk- pāĝ-; tag-i-t O.Lat. (beside tang-ō Class XVI), cp. te-tigi-t Gr. τε-ταγ-ών 'grasping' Class VI (§ 564).

<sup>1)</sup> Since only the 3<sup>rd</sup> sing. *nivit* occurs, there is the possibility of its being a denominative *nivīve* (Thurneysen, Über die Herkunft und Bildung der lat. Verba auf  $-i\bar{o}$ , p. 8).

<sup>2)</sup> The 1/sueq-, discussed by Osthoff in Paul-Braune's Beitr. VIII 279 f., must be kept quite distinct.

Then again, it is probable the 3<sup>rd</sup> sing. and 1<sup>st</sup> pl. of certain Latin perfects, which were originally thematic aorists, belong to this class of forms. tuli-t tuli-mus, see tulō above. fidi-t fidi-mus: Skr. opt. bhidēy-am beside á-bhēt 'he split'. scidi-t scidi-mus: Skr. á-chid-a-t 'he cut off'. Compare § 867.

§ 529. In Italic it is often doubtful whether a verb belongs to II A or II B; as in the following instances. Lat. oc-culō, which may represent either \*-celō (cp. O.Ir. cel-im O.H.G. hil-u § 520 p. 84) or \*-cllo. ad-venat Osc. kúm-bened 'convēnit', see § 523 p. 86. Lat. glūb-ō, cp. O.H.G. chliubu and A.S.  $cl\bar{u}fe \S 527$ , p. 90 (cp. p. 79 footnote 1, on  $\bar{\iota}c\bar{o}$   $r\bar{u}d\bar{o}$ ). This doubt is most common with verbs in -uō, because -uō in unaccented position may come from \*-ouō (\*-euō) or from \*- $au\bar{o}$  (I § 172.1 p. 152). Thus clu- $\bar{o}$  'I am called, pass for (Gr. κλύω and κλέ(F)ομωι), 'ru-" 'I snatch, tear, carry off, root up' (Gr. ἐρνίω 'pull, draw' O.C.Sl. rŭv-e-tŭ 'evellit' and Skr. ráv-a-ti 'he dashes to pieces'), nu-ō (Skr. náv-a-tē 'moves'), clu-ō 'I purify' (Skr. śruv-a-ti 'melts'), in-gruō (Litt. griūvù 'I break down' § 535), plu-i-t (cp. plovē-bat § 514 p. 80). Lastly, some verbs may belong to the jo-class, as suō cp. Goth. siu-ja etc. § 707.

§ 530. The quality of the thematic vowel should be observed in the 1<sup>st</sup> pl. sumus simus (possumus possimus), volumus volimus, quaesumus as contrasted with ferimus etc. In these u and i are used to represent a sound between the two (as in māgnuficus māgnificus, maxumus maximus), which was here the regular descendant of Idg. -o- (cp. Gr. φέρ-ο-μέν). The assumption that -i- in leg-i-mus is due to the analogy of leg-i-tis, and replaced u i, is not supported by ferimus beside fertis as compared with volumus: vultis. sumus must in time have got a distinct u (by analogy of sum and sunt, where u is regular for o in a closed syllable); for the Romance languages show sometimes a form which must come from sumus (Span. Port. somos etc.), sometimes one which must come from simus (Roumanian semü etc.). On the whole subject see L. Havet, Mém. Soc. Ling. vi 26 f.

§ 531. Keltic. Compare the general remarks in the beginning of § 520, on page 84; whence it follows that some of the examples here given may really belong to the io-class (§ 719).

O.Ir. marim 'I remain' (also conjugated in the ā-class), ground-form \*smṛr-ō V smer-. ad-gaur 'convenio' for-con-gur 'I command', ground-form \*gṛr-ō, cp. Skr. gir- 'voice'. Mod. Cymr. malaf 'I grind, grind to powder' V mel-: Armen. malem etc., see § 523 p. 86). ') Mid.Ir. blegaim 'I milk': Skr. mṛj-ā-ti etc., see § 523 p. 87. O.Ir. dligim 'I earn, have a claim', cp. Goth. dulg-s 'debt, guilt'. ar-fiuch 'I fight' for \*uikō, cp. O.H.G. upar-wihit § 532. nigim 'I wash' do-fo-nug -nuch 'I wash off', cp. Gr. viζω 'I wet, wash', Class XXVI, V neig-snigi-d 'it drops, rains': O.Lat. nivi-t § 528 p. 91.

§ 532. Germanic. In pr. Germanic the accent still lay upon the thematic vowel, which is proved by a number of forms like O.Icel. veg as contrasted with Goth. veiha from Vueiq- (§ 513 p. 79). Also the West-Germ. ending of the 2<sup>nd</sup> sing. O.H.G. -is A.S. -es as contrasted with Norse -r (for -z), and the A.S. ending of the 3<sup>rd</sup> sing. -ed, which point to pr. Germ. \*-i-si and \*i-pi, are in some cases to be referred to verbs which in pr. Germ. belonged to Class II B; see § 990. 1. § 998. 1.

Goth. skulan O.H.G. scolan 'to owe', partic. Goth. skulands O.H.G. scolant-i (indic. skal): 2) Lith. skylii 'fall in debt' instead of \*skil-ii (§ 535),  $\vee$  skel- in Lith. skelii (i. e. \*skel-iii 'I owe something'. Goth. vulands 'seething, boiling', cp. O.H.G. walm 'heat, glow'. O.H.G. cum-u O.Icel. kom kem (inf. koma) 'I come': Skr. opt. gam-é-t,  $\vee$  gem-, see § 523 p. 86. Goth. A.S. munan 'to think' (indic. man): Lett. úf-minu 'guess at, hit upon',  $\vee$  men-

<sup>1)</sup> For Cymric, much the same is true as for Irish (above, § 520 p. 84). Cymric does not enable us to decide whether \*malō or some such form as \*maliiō was original.

<sup>2)</sup> The latest discussion of forms with s- instead of sk-, as O.H.G. sulen, is by Johansson in Paul-Braune's Beiträge xiv 295.

Goth. un-vunands 'not pleased': Skr. opt. van-é-ma, V uen-, § 523 p. 86. O.H.G. chiuw-a 'I chew': O.C.Sl. žīv-e-tŭ 'chews' for \*giuv-e-tu, groundform \*giuv-v. Goth. trud-a O.Icel. trođ (inf. trođa) 'I step, tread' as contrasted with O.H.G. trit-u II A. Goth. qa-daursan 'to dare' (indic. ga-dars): Skr. dhṛṣ-á-nt- 'daring', V dhers-. O.H.G. scalt-u 'I thrust, hit' ground-form \*skldh-\(\bar{o}\) as opposed to O.H.G. scilt-u 'I scold' II A. Goth. qaqqa O.H.G. qanqu 'I go' ground-form \*\hat{gh\overline{n}}{gh-\overline{o}}, cp. Lith. ženg-iù 'I stride'. Goth. blanda O.H.G. blantu 'I mix' ground-form \*bhlūdh-ō, cp. Goth. blind-s 'blind', Lith. blendžiù'-s(i) 'I darken myself' (of the sun); O.C.Sl. bled-a 'I wander' for \*bhlendh- or \*bhlndh- (§ 535). O.H.G. upar-wihit 'exsuperat' inf. -wehan, O.Icel. veg 'I conquer, kill' inf. vega (pret. vā, transferred to the e-series): O.Ir. ar-fuch 'I fight', Vueig-, cp. Goth. veih-a 'I fight' II A; the O.H.G. is a contamination of \*uiz-o and \*uéix-o. Goth. vitan O.H.G. wizzan 'to know' partic. vitands wigganti: Skr. á-vid-a-t etc., see § 523 p. 87; add 1st pl. injunctive A.S. wuton for \*witon followed by the infinitive = 'let us ....', cp.  $w\bar{\imath}tan$  'to take heed, follow a direction, prepare to start' (O.Sax. wita § 1029). Goth. bi-leiba O.H.G. bi-lību 'I remain': Skr. á-lip-a-t 'he anointed, smeared', Lith. li-pù 'I climb, clamber' O.C.Sl. pri-lĭpŭ 'adhaesi', V leip-. O.Icel. sof sef 'I sleep' inf. sofa: cp. A.S. swefan II A, V suep-. Goth. lūk-a O.H.G. lūhh-u 'I shut': Skr. ruj-á-ti 'breaks open, breaks to pieces'. O.H.G. brūhh-u A.S. brūc-e 'I use, enjoy': Lat. fruor for \*frugv-or. A.S. dut-e 'I utter a sound': Skr. tud--á-ti 'pushes'. A.S. sōđ O.Icel. sannr 'true' pr. Germ. \*s-a-n\bar{b}-a-, beside indic. \*es-ti 'is', see § 523 p. 87. O.Icel. tek 'I take' inf. taka, cp. Goth. tēk-a II A. O.H.G. bahh-u 'I bake', cp. Gr. φώγ-ω 'I roast' II A. O.H.G. wat-u O.Icel. ved (inf. vada) 'I wade', cp. Lat. vād-ō II A. 1)

To this class also belongs the West Germ. 2<sup>nd</sup> sing. preterite: — O.H.G. wurti A.S. wurde 'becamest': Skr. á-vyt-a-s,

<sup>1)</sup> For these and other Germanic examples I refer to Osthoff, Paul-Braune's Beitr. VIII 287 ff.; Burghauser, Idg. Präsens-Bildung im Germ. pp. 28 ff.; Bremer, Zeitschr. deutsch. Phil. XXII 495 f.

O.H.G. mulki 'milkedst': Skr.  $\acute{a}$ -mrj-a-s, O.H.G. bizzi A.S. bite 'bitedst': Skr.  $\acute{a}$ -bhid-a-s, O.H.G. zigi 'pullest': Skr.  $\acute{a}$ - $di\acute{s}$ -a-s, sigi 'strainedst': Skr.  $\acute{a}$ -sigi 'criedst': Skr.  $\acute{a}$ -sigi 'criedst': Skr.  $\acute{a}$ -sigi 'criedst': Skr.  $\acute{a}$ -sigi 'criedst': Skr.  $\acute{a}$ -sigi 'chosest': Skr.  $\acute{a}$ -sigi 'criedst': Skr.  $\acute{a}$ -sigi 'chosest': Skr.  $\acute{a}$ -sigi See § 893.

§ 533. As pr. Germ.  $\bar{\imath}$  may come from either  $\bar{\imath}$  or ei in Indo-Germanic, we cannot tell whether to place in A or B Goth. fra-veita 'I avenge' and O.H.G.  $w\bar{\imath}z$ -u 'I punish, reprove' ( $\vee$  ueid-), with not a few others.

§ 534. Balto-Slavonic. In Slavonic this class is much larger than in Baltic.

O.C.Sl. žīr-e-tŭ 'devours': Skr. gir- $\acute{a}$ -ti, see § 523 p. 86; similarly tiretu 'terit' vter-, miretu 'dies' vmer-, stiretu 'stretches' V ster-, and others. Lith. pil-ù 'I shed' V pel-'I fill', cp. Skr. imper. pūr-dhí Class I. Lith. im-ù 'I take' O.C.Sl.  $im\text{-}e\text{-}t\breve{u}$  'takes', ground-form \* $\eta m\text{-}\acute{\sigma}$ , see § 523 p. 86. O.C.Sl. žīm-e-tŭ 'presses', cp. Gr. γέμ-ω 'I groan' II A. Lith. qin-ù 'I keep off, avert', Russ. žn-e-tŭ 'cuts off, reaps' for pr. Slav. \*žin-e- $t\bar{u}$  \*gin-e- $t\bar{u}$  (I § 36 p. ): Gr.  $\vec{s}$ - $\vartheta \alpha \nu$ -o- $\nu$ , see § 527 p. 90. Lith. pin-ù 'I plait, twist', O.C.Sl. pin-e-tu 'stretches, hangs', V(s)pen-. O.C.Sl. po-činetii 'begins', V qen-, cp. po-konĭ 'beginning'. O.C.Sl. rŭv-e-tŭ 'evellit': Gr. ἐρύ-ω etc., see § 529 p. 92. O.C.Sl. žīv-e-tŭ 'chews' for \*giŭv-e-tŭ: O.H.G. chiuw-u, see § 532 p. 94. O.C.Sl. pljīv-e-tū 'spews' for \*(s)piŭv-e-tŭ: Lat. spu-ō (cp. su-ō § 529 p. 92); bljīv-e-tŭ 'vomits, breaks wind' for \*bljuv-e-tu, kljuv-e-tu 'pecks, picks' for \*kljŭv-e-tŭ; on the Lith. blūv-ù klūv-ù, which answer to the last two, see § 535. O.C.Sl. vrīz-e-tŭ 'binds, shuts', Vuerĝh-(Lith. verž-iù 'I fasten, confine'). O.C.Sl. vrĭž-e-tŭ 'throws' 1st sing. vrig-a, V yerg-, Goth. vairp-a 'I throw' II A. O.C.Sl. vriš-e-tū 'thrashes, threshes' 1st sing. vrich-a, V uers-, Lat. verr-ō II A. O.C.Sl. mlŭz-e-tŭ 'milks': Skr. mrj-á-ti etc., see § 523 p. 87. O.C.Sl. dlŭb-e-tŭ 'sculpit', V dhelbh-, O.H.G. bi--tilbu 'I bury', II A. O.C.Sl. rīc-i 'I say' 2nd sing. opt., groundform \*rq-o-i-s, beside indic. reč-e-tu 1st sing. rek-q II A, in

Czech also indic. řku for \*rīk-a; by analogy of rīc-i were formed tīc-i pīc-i žīz-i from tek-a 'I run' pek-a 'I bake' žeg-a 'I burn' (cp. § 686 on Lith. gistu instead of gestù). Lith. suk-ù Russ. sk-u (for \*sŭk-a) 'I turn, twist'. Lith. pis-ù 'coeo': Skr. á-piṣ-a-t 'trod, beat, ground', \(\nu\) peis-. Lith. sus-ù 'I become scabby' Lett. sus-u 'I become dry': Skr. á-suṣ-a-t 'dried up, wore away' (I § 557. 4 p. 413). O.C.Sl. žīd-e-tū 'waits' beside žid-e-tū II A, § 522 p. 85. O.C.Sl. sŭp-e-tū 'sheds, strews', inf. su(p)-ti. Lith. plak-ù 'I strike, whip', \(\nu\) plāq- plāg-'plangere', cp. Goth. flōk-a 'I bewail' II A.

§ 535. In Lithuanian, i and u in the root syllable were often lengthened. skylù 'I fall in debt' instead of \*skil-ù, compare Goth. skulan, see § 532 p. 93; kylù 'I raise myself' instead of \*kil-ù, \( \sqrt{qel-}; \) svyrù 'I get the better' instead of \*svir-ù, \( \sqrt{suer-}. \) griūvù 'I break down' instead of \*griuv-ù: Lat. in-gruō, see § 529 p. 92; blūvù 'I break out into bellowing or bleating' klūvù 'I stick fast to anything, hang on to' beside O.C.Sl. bljīv-e-tū kljīv-e-tū, see § 534 p. 95. See Leskien, Arch. slav. Phil. v 530, and Wiedemann, Lit. Prät. 71 ff., where the pretty conjecture is offered that on the analogy of pairs of forms like pres. gyjù (gy-jù): pret. gijaū (gij-aū), a present skylù was formed for skilaū, a present griūvù for griuvaū, and so forth.

In Slavonic, it is often doubtful whether a verb belongs to A or B. This is the case with  $p\bar{\imath}j$ -e- $t\bar{\imath}\iota$  'drinks',  $b\bar{\imath}j$ -e- $t\bar{\imath}\iota$  'strikes', whose - $\bar{\imath}j$ - may be orig. - $i\bar{\imath}\iota$ - or orig. - $e\bar{\imath}\iota$ - (I § 68 p. 60); cp. Leskien as above cited, pp. 501 ff.; Skr.  $p\acute{a}y$ -a- $t\bar{\imath}\iota$  supports the derivation of  $p\bar{\imath}j$ -e- $t\bar{\imath}\iota$  from \* $pe\bar{\imath}\iota$ -e- $t\bar{\imath}\iota$  (§ 522 p. 85). The same doubt meets us in forms with -e- in the root syllable, since this may be orig. either -p- or -en-, e. g. \*bled-e- $t\bar{\imath}\iota$  'wanders' from V bhlendh- (see § 532 p. 94); cp. lee $\bar{\imath}$ -e- $t\bar{\imath}\iota$  'bends', § 637.

### Class III.

Reduplication ending in  $-\bar{\imath}$  or  $-\bar{\imath}$  + simple Root forming the Present Stem.

§ 536. We begin with words from roots containing i or u, which have the same vowel in the reduplication; see § 469, page 14. Next follow stems which have i in the reduplication, but some other vowel in the root; see § 473 pages 17 ff.

Class IV, non-thematic, bears the same relation to this as Class II to Class I (§ 491 p. 50).

§ 537. Roots with i- and u-vowels. Only in Aryan and Germanic.

Pr. Idg. \*bhi-bhái-mi 'I quake, am afraid' 1st pl. \*bhi-bhi-més 3rd pl. \*bhi-bhi-nti: Skr. bi-bhé-mi 3rd dual bi-bhi-tas bi-bhī-tas 3rd pl. bi-bhy-ati, and O.H.G. bi-bē-m, which fell under the influence of verbs in which -ēm was a suffix, and so lost the gradation of its stem. 1) Conjunctive: Skr. bī-bhay-a-t. Optative: Skr. bi-bhi-yā-t. — With thematic vowel Skr. 3rd sing. bi-bhy-a-ti.

Aryan. Skr.  $ci-k\bar{e}-mi$  Tobserve, notice  $3^{rd}$  sing. impermid.  $ci-ki-t\bar{a}m$   $2^{nd}$  sing. imper. act.  $ci-k\bar{\imath}-hi$ ; conj. Avest.  $ci-kay-a-\bar{p}$ . Skr.  $\acute{a}-d\bar{\imath}-dh\bar{e}-t$  'he looked'  $1^{st}$  pl.  $d\bar{\imath}-dhi-mas$  mid. pres.  $d\acute{\imath}-dhy-\bar{e}$  pret.  $\acute{a}-d\bar{\imath}-dh\bar{\imath}-ta$ ; conj.  $d\bar{\imath}-dhay-a-t$ . Skr.  $\acute{a}-d\bar{\imath}-d\bar{e}-t$  'he appeared'  $3^{rd}$  pl.  $d\bar{\imath}-dy-ati$  imper.  $d\bar{\imath}-di-hi$   $di-d\bar{\imath}-hi$ ; conj.  $d\acute{\imath}-day-a-t$ ; — with thematic vowel Gr.  $\acute{\delta}i-\acute{\zeta}i-o-\mu ai$  T seek, strive' (orig. 'look out for something') for  $*\delta_i-\acute{\delta}_i-o-\mu ai$  (see § 469 p. 14, § 549). Skr.  $d\bar{\imath}-$  and  $dh\bar{\imath}-$  both became  $d\bar{\imath}-$  in Avestic cp. Avest.  $dad\bar{\imath}-$  it = Skr.  $d\acute{\imath}-$  and  $d\acute{\imath}-$  both became  $d\bar{\imath}-$  in Avestic cp. Avest.  $dad\bar{\imath}-$  it = Skr.  $d\acute{\imath}-$  and  $d\acute{\imath}-$  and  $d\acute{\imath}-$  and  $d\acute{\imath}-$  both became  $d\bar{\imath}-$  in Avestic cp. Avest.  $dad\bar{\imath}-$  it works'  $1^{st}$  pl.  $vi-vi\check{\imath}-$  mas, conj.  $2^{nd}$  sing.  $vi-v\bar{\imath}-$  skr.  $vi-v\bar{\imath}-$  i'works'  $1^{st}$  pl.  $vi-vi\check{\imath}-$  mas, conj.  $2^{nd}$  sing.  $vi-v\bar{\imath}-$  s.  $iy-\bar{\imath}-$  i'goes' only found in the  $2^{nd}$  sing. pret.  $a\acute{\imath}-$  s, Avest.  $3^{rd}$  pl. conj. yeyan = Ar.  $*i\check{\imath} a\acute{\imath}-$  and (§ 473 p. 19).

<sup>1)</sup> Cp. § 465 p. 12, § 469 p. 14, § 739 on O.H.G.  $r\bar{e}r\bar{e}m$  and Goth. reira.

Skr.  $ju-h\acute{o}-mi$  'I offer, sacrifice'  $1^{\rm st}$  pl.  $ju-hu-m\acute{a}s$   $3^{\rm rd}$  pl.  $j\acute{u}-hv-ati$ , conj.  $2^{\rm nd}$  pl. ju-hav-a-tha, opt.  $1^{\rm st}$  pl.  $ju-hu-y\acute{a}-ma$ .  $1^{\rm st}$  pl.  $ju-h\bar{u}-m\acute{a}si$  from  $h\bar{u}-$  'call'.  $3^{\rm rd}$  pl.  $s\acute{u}-\check{s}v-ati$  from su- 'press'.

Sometimes a strong stem has got into the place of the weak (cp. § 499 p. 62), as Avest.  $2^{nd}$  sing. mid. ji- $\gamma ae$ -ša from ji- 'live', Skr.  $2^{nd}$  pl. ju- $h\acute{o}$ -ta from hu- 'offer, sacrifice',  $2^{nd}$  sing. yu- $y\~{o}$ -dhi  $2^{nd}$  dual yu- $y\~{o}$ -tam from yu- 'keep off'.

Remark. k in Skr. ci- $k\acute{e}$ -mi ( $\sqrt{q}e\acute{z}$ -), and  $\gamma$  in Avest. ji- $\gamma a e$ - $s\~{a}$  ( $\sqrt{g}e\acute{z}$ -) are taken from the perfect, where they were regular before o in the sing. indic. active (I  $\S$  445 ff. pp. 331 ff.). In considering  $j\acute{t}$ -g-g-ti ( $\S$  540), if its root belonged to the e-series, we must remember that one of the stems of this verb is jighr-, and gh was regular there; so with  $j\~{a}$ -gar-ti from  $\sqrt{g}$ er- we must remember the stem  $j\~{a}$ -gr- ( $\S$  560).

§ 538. Roots with other Vowels.

In Aryan, roots with a long a-vowel have generally in the reduplication  $a=\operatorname{Idg.} e$  instead of i, when the weak stem in the root syllable had not  $\bar{\imath}$ . Examples: Skr.  $d\acute{a}-d\bar{a}-ti$  mid.  $da-t-t\acute{e}$  from  $\sqrt{d\bar{o}}$ - 'give',  $j\acute{a}-h\bar{a}-ti$  pl. ja-hi-mas from Ar.  $\acute{z}h\bar{a}$ -'leave, give up'. But on the contrary  $\acute{s}i-\acute{s}\bar{a}-ti$  imper.  $\acute{s}i-\acute{s}\bar{\imath}-hi$  mid.  $\acute{s}i-\acute{s}\bar{\imath}-t\bar{e}$  from  $\sqrt{k\bar{o}}$ - 'whet, sharpen'. In the latter word we see the Idg. root-determinative  $\bar{\imath}$ , which so often forced its way into the place of Ar.  $i=\operatorname{Idg.} \imath$  (see § 498 pp. 61 f.); and this  $\bar{\imath}$  is regularly echoed by i in the reduplicator; compare  $\acute{s}i-\acute{s}\bar{\imath}-hi$  with  $di-d\bar{\imath}-hi$  from  $d\bar{\imath}$ - 'appear'. Skr.  $ja-h\bar{\imath}-tam$  beside regular ja-hi-tam (see Whitney, Sanskrit Roots, p. 204) has been altered by the influence of the mid.  $j\acute{\imath}-h\bar{\imath}-t\bar{e}$  (§ 540), similarly  $ra-r\bar{\imath}-dhvam$  by that of  $ri-r\bar{\imath}-hi$  ( $r\bar{a}$ - 'give').

So too the  $\bigvee dh\bar{e}$ - 'place' in Balto-Slavonic reduplicates with e, as Lith.  $2^{\rm nd}$  pl.  $d\dot{e}$ -ste like O.H.G. da-tth $\dot{a}$ .

These forms with e belong to Class V, not like Gr.  $\delta i - \delta \omega \mu \iota$   $\tau i - \vartheta \eta \mu$  etc. It seems to me impossible to decide whether in Idg. the same present stem had both i and e in its reduplicated forms, as  $*dhi - dh\bar{e} - ti$  and  $*dhe - dh\bar{e} - ti$ , or whether e only came in by analogy of Class V, and is of later date than the parent language. If the latter, then the influence of perfects with e in the reduplicator must by taken into account (§ 555).

Compare Gr.  $t\lambda a \vartheta \iota = *\sigma \iota - \sigma \lambda \alpha - \vartheta \iota$  and Lesb.  $t\lambda a \vartheta \iota = *\sigma \iota - \sigma \lambda \alpha - \vartheta \iota$  § 542.

Under these circumstances, I cite Aryan and Balto-Slavonic forms both in Class III and Class V.

§ 539. Pr. Idg. \*bhi-bher-mi 'I bear' 1st pl. \*bhi-bhr-més 3rd pl. \*bhi-bhr-nti: Skr. bi-bhar-mi 2nd dual bi-bhr-thás 3rd pl. bi-bhr-ati, Gr. 1st pl. \* $\pi$ i- $\varphi$ 0\alpha-u\epsi inferred from inf. \$\delta\sigma\sigma\psi\omega\epsi\omega\epsi\omega\

\*pi-pel-mi 'I fill': Skr. pi-par-mi pi-pr- $m\acute{a}s$ , Gr.  $-\pi l$ - $\pi \lambda \alpha$ - $\mu \varepsilon \nu$  (on the singular  $-\pi l$ - $\pi \lambda \eta$ - $\mu$ , see § 542). — With thematic vowel Skr.  $3^{rd}$  sing. mid.  $\acute{a}$ -pi-pr-a-ta.

\*ni-nes-mi from  $\sqrt{nes}$ - 'go towards' (Gr.  $\nu \not\in$ -0- $\mu a\iota$  Skr.  $n \not as \cdot a \cdot t \vec{e}$ ): Skr.  $3^{rd}$  pl. mid.  $n \not is - at \vec{e}$  'they touch their bodies, kiss' partic.  $n \not is - \bar{a} n a - s$ . — Gr.  $\nu \not is o \mu a\iota$  'I go back, return' for \* $\nu \iota - \nu \sigma - \iota o - \mu a\iota$  (the Author, Gr. Gr.  $^2$  § 45. 5 p. 61) contains a stem \* $\nu \iota - \nu \sigma - \sigma$  or \* $\nu \iota - \nu \sigma - \sigma$  (see § 733).

\*dhi-dhē-mi 'I place' 1st pl. \*dhi-dh-més and doubtless \*dhi-dhə-més ¹) 3rd pl. \*dhi-dh-ŋti: Skr. dá-dhā-mi da-dh-más (cp. 2nd pl. mid. da-dhi-dhvē) dá-dh-ati, Gr. τί-θη-μι τί-θε-μεν, O.H.G. te-ta O.Sax. de-da perhaps for \*dhi-dhē- (§§ 545, 886), Lith. 2nd pl. dèste i. e. \*de-d+te. Optative: Skr. da-dh-yā-t. — With thematic vowel Skr. dá-dh-α-ti Lith. de-d-ù.

\*si- $s\bar{e}$ -mi 'I send forth, let go, throw, sow' 1st pl. \*si-s- $m\acute{e}s$  and doubtless \*si-s- $m\acute{e}s$ : Gr. i- $\eta$ - $\mu i$  ' $\epsilon$ - $\epsilon$ - $\mu$  $\epsilon \nu$  (Lat. serimus for \*si-sa-mos? § 543). — With thematic vowel Lat.  $ser\bar{o}$  for \*si-s- $\bar{o}$ .

\*di- $d\bar{o}$ -mi 'I give' 1st pl. \*di-d- $m\acute{e}s$  and doubtless \*di- $d\bar{o}$ - $m\acute{e}s$ , 3rd pl. \*di-d- $n\acute{t}i$ : Skr.  $d\acute{a}$ - $d\bar{a}$ -mi da-d- $m\acute{a}s$   $d\acute{a}$ -d-ati, Gr.  $\delta l$ - $\delta \omega$ - $\mu \iota$   $\delta l$ - $\delta \sigma$ - $\mu \iota \nu$ , 2nd pl. Lith.  $d\mathring{u}$ ste and O.C.Sl. daste instead of \*deste (§ 546). Optative: Skr. da-d- $y\acute{a}$ -t. — With thematic

<sup>1)</sup> This form may be due to the analogy of  $dho-m\acute{e}(m)$ , cp.  $\emph{\'e}-\emph{9e}-\mu\emph{ev}$ . But it does not follow, as some have said, that the form cannot be original.

vowel Skr. dá-d-a-ti Sabell. (Vest.) di-d-e-t 'dat', cp. Lith. Lett. dådu and O.C.Sl. partic. dady gen. dadašta § 546.

\*si-stā-mi 'I place, sisto': Gr. Ί-στη-μι ῗ-στα-μεν, O.H.G. se-stō-m. Skr. 1<sup>st</sup> sing. tí-ṣ̄thāmi may be added, and perhaps Lat. sistimus (§ 543). — With thematic vowel Skr. ti-ṣ̄th-a-ti Lat. si-st-ō Umbr. se-st-u.

Idg. \*pi-pō-mi 'I drink' is implied by such forms as Skr. mid. 3rd pl. pi-p-atē partic. pi-p-āná-s; to this may be referred Falisc. pipafo 'bibam' (§ 594 Rem.). With thematic vowel Skr. pi-b-a-ti Lat. bibō instead of \*pi-b-ō O.Ir. 3rd sing. ibid for \*pi-b-e-ti, although the -b- of these words is certainly obscure (cp. I § 325 p. 263). Perhaps the 2<sup>nd</sup> sing. imper. \*pi-b-dhi and 2nd pl. mid. \*pi-b-dhu-, forms which must have had a place among the original non-thematic persons, caused some confusion in the sound.1) In these -b- was regular, because -p- had been assimilated to the following voiced sound. On the same principle we have explained the variants \*dekmt-(Skr. dašat-) and deĥmd- (Gr. δεκάδ-), as being due to cases which had a bh-suffix, such as the instr. pl. \*dekmd-bhi(s) (II § 123 p. 392). Then p must have levelled out b in the nonthematic conjugation (Skr. pi-p-atē), because this was closely associated with \* $p\bar{o}$ -ti (Skr.  $p\bar{a}$ -ti), and was especially exposed to the influence of the reduplicated perfect (Skr. pa-p-έ Gr. πέ--πο-μαι). Similarly, Gr. βό-σκω 'I feed, tend' may be connected with Skr. pā-ti 'tends' through the imperative \*b-dhi.

§ 540. Aryan. Skr. ji-ghar-ti 'smells' 3<sup>rd</sup> pl. ji-ghr-ati; with thematic vowel ji-ghr-a-ti: on gh, see § 537 Rem. p. 98. Skr. ti-tar-ti 'gets over', partic. ti-tr-at-. Skr. iy-ar-ti, for its reduplication see § 473 p. 19. Skr. 2<sup>nd</sup> and 3<sup>rd</sup> sing. dī-dhar 2<sup>nd</sup> pl. di-dhq-tá from dhar- 'hold fast'. Skr. imper. pi-prg-dhi from parc- 'to mix'.

<sup>1)</sup> There is no reason that I know of why we should suppose that our prehistoric ancestors had this imperative very often on their lips. But be it remembered that from the one imperative form  $d\bar{e}hi$  'give' in Pali, the whole of the present tense,  $d\bar{e}mi$   $d\bar{e}si$  etc., has sprung into existence (E. Kuhn, Beitr. zur Pali-Gramm., 98).

Skr. si- $\check{s}ak$ -ti Avest. hi- $\check{s}ax$ -ti,  $\checkmark$  seq-'accompany' (cp. Skr.  $2^{nd}$  pl.  $s\acute{a}$ - $\check{s}c$ -ati, Class V,  $\S$  555). Skr.  $v\acute{i}$ -vak-ti from  $\checkmark$  ueq-'speak'. Avest.  $2^{nd}$  pl. injunct. nista = \*nista i. e.\*\*ni-nd+ta from nad-'roar, abuse'; — with thematic vowel Skr.  $3^{rd}$  sing.  $n\acute{i}$ -nd-a-ti  $\S$  550. Avest.  $3^{rd}$  sing. injunct. di-das from das-'consecrate, offer up'.

Roots in Ar.  $-\bar{a}$  reduplicate with i in Sanskrit when the weak forms have  $\bar{\imath}$  as root-determinative (§ 538 p. 98).  $\bigvee m\bar{e}$ -'measure' mid.  $3^{\rm rd}$  sing.  $mi-m\bar{\imath}-t\bar{e}$   $3^{\rm rd}$  pl.  $mi-m-at\bar{e}$ ; — with thematic vowel opt.  $mi-m-\bar{e}-t$ .  $\bigvee \bar{k}\bar{o}$ -'sharpen, whet'  $\dot{s}i-\dot{s}\bar{a}-ti$  imper.  $\dot{s}i-\dot{s}\bar{\imath}-hi$ ; — with thematic vowel  $3^{\rm rd}$  pl.  $\dot{s}i-\dot{s}-a-nti$ .  $ji-h\bar{\imath}-t\bar{e}$  'yields, departs'  $3^{\rm rd}$  pl.  $ji-h-at\bar{e}$  beside act.  $j\dot{a}-h\bar{a}-ti$  ja-hi-mas  $(ja-h\bar{\imath}-tam)$  and other forms have  $\bar{\imath}$  by analogy of the middle, see § 538 p. 98).

 $V dh\bar{e}$ - 'place' and  $V d\bar{o}$ - 'give' (almost indistinguishable in Iranian, because of the change of dh to d, I § 481 p. 355): Skr. dá-dhā-ti dá-dā-ti Avest. da-đā-iti O.Pers. pret. a-da-dā. 1st pl. Skr. da-dh-más da-d-más Avest. da-đ-mahi, in the Gathas  $da-d^e$ -mah $\bar{\imath}$ ; mid.  $3^{rd}$  sing. Skr.  $dhatt\acute{e}$  Avest.  $dazd\bar{e}$ from dhē- (I § 482 Rem. 1 p. 356), Skr. datté Avest. dastē from do-. Imperative: Skr. dhēhi for pr. Ar. \*dha-z-dhi from  $dh\bar{e}$ -, and  $d\bar{e}hi$  for pr. Ar. \*da-z-dhi from  $d\bar{o}$ -, Avest. da-z-di; Skr. has also the re-formate daddhi instead of dhēhi and of dēhi both (I § 476 p. 351, § 482 Rem. 1. p. 356). In Skr. we also find da-dhi- (cp. Gr. τι-θε-), e. g. da-dhi-dhvé da-dhi--švá beside dha-d-dhvē dha-t-sva. 3rd pl. Skr. dá-dh-ati dá-dh--atē dá-d-ati dá-d-atē (Avest. da-þ-enti da-d-entē, cp. § 500 p. 63, § 1018. 1. b). Optative: Skr. da-dh-ya-t da-d-ya-t Avest. Gath. daidyā-p. — With thematic vowel dá-dh-a-ti  $d\acute{a}$ -dh-a- $t\bar{e}$   $d\acute{a}$ -d-a-ti  $d\acute{a}$ -d-a- $t\bar{e}$ , Avest. da-p-a-iti da-p-a- $it\bar{e}$ , which forms are also conjunctive (§§ 931 f.)

§ 541. Confusion of Strong and Weak Stem.

Strong instead of Weak: Skr.  $2^{nd}$  pl. iy-ar-ta, imper.  $\dot{s}i$ - $\dot{s}\bar{a}$ -dhi,  $2^{nd}$  pl.  $d\acute{a}$ - $dh\bar{a}$ -ta  $\acute{a}$ -da- $dh\bar{a}$ -ta  $\acute{a}$ -da- $d\bar{a}$ -ta.

Weak instead of Strong: Skr. Ep. da-d-mi Avest. 3<sup>rd</sup> sing.  $dazd\bar{\imath}$  ( $\lor$   $dh\bar{e}$ -) and dasti. These forms are due to the analogy

of  $\acute{a}d$ -mi  $\acute{a}t$ -ti and the like, the reduplication having been lost sight of in the (pr. Ar.) forms \*dhadh-mas(i) \*dad-mas(i) opt. \*dhadh- $y\bar{a}$ - \*dad- $y\bar{a}$ - conj. \*dhadh-a- \*dad-a-, which were conceived to be simple roots (cp. the end of § 540). This also produced the forms Skr. pass. dad- $y\acute{a}$ - $t\bar{e}$  partic. dat- $t\acute{a}$ -s from  $\bigvee d\bar{o}$ -, and Avest. inf.  $dast\bar{e}$  from  $\bigvee d\bar{o}$ - and inf.  $dazd\bar{e}$  from  $\bigvee dh\bar{e}$ - (cp. Bartholomae, Ar. Forsch. III 48).

§ 542. Greek. From roots ending in -r and -l we have only the weak stem, the strong forms following Class XI. Thus  $-\pi i - \pi \lambda \alpha - \mu \epsilon \nu$  'we fill'  $-\pi i - \pi \lambda \alpha - \tau \alpha \iota$ : Skr.  $pi - pr - m \acute{a}s$ ; \* $\pi i - \phi \varrho \alpha \epsilon - \mu \epsilon \nu$  'we bring': Skr.  $bi - bhr - m \acute{a}s$  (§ 539, p. 99). But  $-\pi i - \pi \lambda \eta - \mu \iota$  instead of \* $\pi \iota - \pi \iota \lambda - \mu \iota$  from the stem \* $pl - \bar{e} - \iota$ , cp. unreduplicated Skr.  $pr \acute{a} - si$  á  $-pr \bar{a} - t$  Gr.  $\pi \lambda \tilde{\eta} - \tau o$  Lat.  $im - pl \bar{e} - t u r$ .  $-\pi i - \pi \varrho \alpha - \mu \epsilon \nu$  'we kindle', sing.  $-\pi i - \pi \varrho \eta - \mu \iota$ ,  $\checkmark per - (\text{Mod. Slov. } per \bar{e}ti$  'moulder' O.C.Sl. para 'steam'). The nasal in  $\pi \iota \mu - \pi \lambda \alpha \mu \epsilon \nu$   $\pi \iota \mu - \pi \varrho \alpha \mu \epsilon \nu$  comes from  $\pi \iota \mu \pi \lambda \dot{\alpha} \nu \omega$ , see § 621.  $i \lambda \alpha \vartheta \iota$  'be gracious'  $i \lambda \alpha \tau \epsilon \iota$  ' $\lambda \alpha \mu \iota \iota$  for \* $\sigma \iota - \sigma \lambda \alpha - \iota$  (I § 565 p. 422),  $\checkmark sel - \iota$ , cp. Lesb.  $i \lambda \lambda \alpha - \vartheta \iota$  for \* $\sigma \epsilon - \sigma \lambda \alpha - \vartheta \iota$ , Class V.

 $\tau$ ί-θη-μι 'I place'  $\tau$ ί-θε-μεν  $\tau$ ί-θε-ται,  $\tilde{\imath}$ -η-μι 'I send forth' for  $*\sigma \iota - \sigma \eta - \mu \iota$   $i - \varepsilon - \mu \varepsilon \nu$   $i - \varepsilon - \tau \alpha \iota$ ,  $\delta \iota - \delta \omega - \mu \iota$  'I give'  $\delta \iota - \delta \sigma - \mu \varepsilon \nu$   $\delta \iota - \delta \sigma - \tau \alpha \iota$ , "-στη-μι 'I place' "-στα-μεν "-στα-ται, see § 539 p. 100. Hom.  $3^{\rm rd}$  sing.  $\delta l - \delta \eta$  imper.  $3^{\rm rd}$  sing.  $\delta l - \delta \dot{e} - \nu \tau \omega \nu$  from  $\sqrt{d\bar{e}}$  'bind'. In the stems  $\tau \iota - \vartheta \varepsilon - \iota - \varepsilon - \vartheta \iota - \vartheta \varepsilon - \vartheta \iota - \vartheta \sigma - \varepsilon$  and  $\sigma$  have taken the place of a previous  $\alpha = \text{Idg. } \partial$ , as in  $\ddot{\epsilon} - \vartheta \epsilon - \mu \epsilon \nu \ \ddot{\epsilon} - \vartheta \delta - \mu \epsilon \nu \ \S \ 493$ p. 53, and in τέ-θε-ται δέ-δο-ται § 856: cp. Skr. da-dhi-dhvé ja-hi-mas. The loss of forms without a, answering to the Skr. da-dh-más etc., is a consequence of the different forms which some of the persons of this tense assumed in due course; we should have by rule \*τιθμεν \*θιστε; \*διδμεν \*διστε, \*ξμεν \*ίστε.  $3^{rd}$  pl. Dor.  $\tau i \vartheta \varepsilon \nu \tau \iota$   $\delta i \vartheta \circ \nu \tau \iota$  instead of  $\tau \iota - \vartheta - \alpha \tau \iota$   $\star \delta \iota - \vartheta - \alpha \tau \iota$ , see § 1020. Sometimes the strong stem prevails, or words follow the analogy of Classes X and XI: Hom. partic. τι-θή-μενο-ς instead of  $\tau \iota - \vartheta \dot{\epsilon} - \mu \varepsilon \nu \sigma - \zeta$ , imper.  $\delta \iota - \delta \omega - \vartheta \iota$  (like Pali  $da - d\bar{a} - hi$ ). On the analogy of verbs in -εω -οω -αω: pres. τιθεῖ διδοῖ, imperf. ἐτίθει ἔει ἐδίδου, imper. τίθει δίδου ἴστα, inf. τιθεῖν συν-ιείν, partic. Delph. διδέουσαι; and then again ἐτίθεις -ει and <sup>τ</sup>εις -ει produced the 1<sup>st</sup> sing. ἐτίθειν and τ΄ειν after the model of η̈ειν 'I went' as compared with η̈εις η̈ει.

As regards vioqua beside Skr.  $3^{rd}$  pl.  $n_2^{r}s$ - $at\bar{e}$ , see § 539 p. 99, § 733.

§ 543. Italic. There are no forms at all which can be certainly placed in this class. The conjugation was thematic, that of Class IV; as 1<sup>st</sup> sing. Lat. si-st-ō Umbr. se-st-u. However, as we must regard red-dimus red-ditis, notwithstanding reddunt, as descended from \*red-dāmus \*red-dātis (§ 505, p. 71), so we may regard serimus seritis, sistimus sistitis as derived regularly from \*si-sā-mos \*si-sā-tes (Gr. "ι-ε-μεν -τε), \*si-stā-mos -tes (Gr. "ι-στα-μεν -τε).

§ 544. Keltic. The thematic type is seen in O.Ir. i-b-i-d (§ 554), and the extension with -io- in -airissiur (§ 733).

 $\bar{a}$ -conjunctives are the future Mid. Ir. gignid 'nascetur' for \*gi-gen- $\bar{a}$ -ti, O.Ir. fo-didmae 'patieris'  $3^{rd}$  pl. fo-didmat (from pres. fo-daim 'patitur'), see Thurneysen, Kuhn's Zeitschr. XXXI 77 ff. They have the look of conjunctives belonging to thematic Class IV A. But probably the conjunctive vowel  $\bar{a}$  had here taken the place of older -o--e- (by association with the unreduplicated conj. imperf., -genad, and the reduplicated conjunctive of Class IV B or Class VI,  $b\bar{e}ra$ ); then the forms will originally have been like Skr. bi-bhar-a-t, and gignid must be closely connected with Avest.  $z\bar{\imath}$ -zan-a-p  $z\bar{\imath}$ -zan-a-nti Skr. a- $j\bar{\imath}$ -jan-a-t (§ 548).

§ 545. Germanic. O.H.G.  $se\text{-}st\bar{o}\text{-}m$  'sisto, I arrange, design',  $\sqrt{st\bar{a}}$ , with gradation lost, see § 539 p. 100. Whether O.H.G. te-ta O.Sax. de-da 'did' is an imperf. like Gr.  $\tau l\text{-}\vartheta \eta \nu$  or an old perfect, remains doubtful; see § 886.

§ 546. Balto-Slavonic. A few relics are the presents of  $\sqrt{dh\bar{e}}$ - 'set, place' and  $d\bar{o}$ - 'give', but with e in the reduplicator (§ 538 p. 98).

In pr. Balto-Slavonic the forms were \*dhe-dh-mi and de-d-mi, which may be compared with Skr. da-d-mi and Avest.  $dazd\bar{\imath}$  dasti (§ 541 pp. 101 f.). But they did not, as these did, arise only by the weak stem spreading into the singular, but from

this and another cause together; the other cause was, that the 2<sup>nd</sup> sing. middle, which originally had the weak stem, had got an active meaning (see § 991 on Lith. desë-s dåsi O.C.Sl. dasi). And since \*dhe-dh-mi became \*dedmi in pr. Balto-Slav. (I § 549 p. 402), the two verbs were confused in the present, and the same forms served for both (cp. Avest. dađaiti = Skr. dádhāti and dádāti, § 540 p. 101).

However, it was only in the meaning of 'I lay' that \*dedmi survived for any time. Lith sing. 1st pers. dèmi for \*dedmi,  $2^{nd}$  reflex. desë-s for \*de-t-së-s,  $3^{rd}$  dèsti dèst,  $2^{nd}$  pl. dèste. Now the verb is mostly thematic, de-d-ù dedì dēda etc. And děmi  $3^{rd}$  sing. désti too took è from non-present forms déjau désiu and the like, just as Gr. Lesb. à duníw instead of à dinéw follows à duní-ow, and yevw instead of \*yéw follows yevow etc. (§ 775). But in Slavonic we have deždetǔ = \*de-d-ie-tǔ, following the jo-class (§ 733).

In the meaning 'I give', \*dedmi was changed to \*dodmi in pr. Balto-Slavonic by analogy of non-present forms with  $*d\bar{o}$ -, There is a reason why the vowel of the root got into \*dedmi 'I give' and not into \*dedmi 'pono'. It is that the difference between the vowel of the first syllable of the present and that of the other tenses was in \*dedmi 'pono' only one of quantity, but in the other it was a difference of quality also; \*dedmi: aor. \*dē-s- was backed up by such verbs as \*tekō: aor. \*tēk-s-(O.C.Sl. teka těchŭ), but there was no parallel for \*dedmi: aor. \* $d\tilde{o}$ -s-. Lith. sing. 1<sup>st</sup> pers.  $d\mathring{u}mi$ , 2<sup>nd</sup>  $d\mathring{u}si$  for \* $d\mathring{u}$ -t-si, 3rd dů'sti dů'st, pl. 1st dů'me, 2nd dů'ste; dů'mi dů'me for \*důdmi \*důdme. Now generally thematic, dů'du etc. (also Lett. důdu). O.C.Sl. dami dasi dastu damu daste dadetu; damī damū have -m- for -dm-. Partic. thematic dady (dadašta) like Lith.  $d\mathring{u}'d\bar{a}s$ . As regards 1st dual Lith.  $d\mathring{u}'va$ O.C.Sl. davě, sce I § 547 p. 401.

Remark. The forms of the 2<sup>nd</sup> pl. found in old Lith. books, destit(e) and dustit(e) instead of deste and duste, were derived from the 3<sup>rd</sup> sing, and pl. on the analogy of turi-t(e): turi, to distinguish more clearly 2<sup>nd</sup> plural from 3<sup>rd</sup> singular and plural.

#### Class IV.

Reduplication ending in  $-\tilde{\imath}$  or  $-\tilde{\imath}$  + Root + Thematic Vowel, forming the Present Stem.

§ 547. This class, like Class II, falls naturally into two sections, according as the root has the strong or the weak grade. The strong form, as in Class II, is the same as that of the non-thematic Conjunctive. Compare § 513 pp. 78 ff.

§ 548. A. Strong Root Syllable.

In Aryan, this section includes a large class of forms, the Sanskrit Causative Aorist; an aorist formation which generally is found along with the present formed by -áya-(§§ 795 ff.). As to the varying quantity of the reduplicating vowel, see § 473 pp. 17 f.

Skr.  $3^{\rm rd}$  pl. mid.  $\acute{a}-b\bar{\imath}-bhay-a-nta$  beside  $bi-bh\bar{c}-ti$  'fears'. Imperative: mid.  $pi-pr\acute{a}y-a-sva$  beside  $\acute{a}-pi-pr\bar{e}-t$  'he satisfied, pleased'.  $\acute{a}-cu-cyav-a-t$  beside  $3^{\rm rd}$  pl.  $\acute{a}-cu-cyav-ur$  from cyu-'to move, stir'.

Skr.  $\acute{a}$ - $t\bar{\imath}$ -tar-a-t Avest. ti-tar-a-p from Skr. ti-tar-ti 'gets over or beyond'. Skr.  $p\bar{\imath}$ -par-a-t from pi-par-ti 'fills',  $\acute{a}$ - $d\bar{\imath}$ -dhar-a-t beside  $2^{\rm nd}$  and  $3^{\rm rd}$  sing.  $d\bar{\imath}$ -dhar from dhar- 'hold fast'. Avest.  $b\bar{\imath}$ -bar-ami (cp. Skr. conj.  $2^{\rm nd}$  sing. bi-bhar-a-si) beside Skr. bi-bhar-mi 'I carry'. Skr. a- $j\bar{\imath}$ -jan-a-t 'was born' Avest.  $z\bar{\imath}$ -zan-a-p  $3^{\rm rd}$  pl.  $z\bar{\imath}$ -zan-a-nti,  $\sqrt{g}$ en-.

Skr.  $\acute{a}$ - $p\bar{\imath}$ -pat-a-t,  $\checkmark$  pet- 'fly',  $\acute{a}$ - $s\bar{\imath}$ - $\check{s}ad$ -a-t,  $\checkmark$  sed- 'sit'.

On the Irish conjuntive, used for the future, of which we have an example in gignid 'nascetur' for \*gi-gen- $\bar{a}$ -ti, see § 544, page 103.

Germanic. Apparently we have a form of this sort in Goth. rei-rái-þ 'moves, trembles', connected with Skr. lē-láy-a-ti 'wavers, trembles'; it may come from pr. Germ. \*rī-rēi-ō (§ 469 p. 14, § 708). But this is not a certainty, because it has not yet been made out to what vowel series the root belongs (in Sanskrit we see a pret. á-lē-lē-t, § 568).

§ 549. B. Weak Root Syllable.

Roots with i- and u- vowels. Avest. imper. di-dy-a (conj. di-dy-a-p), Gr.  $\delta i$ ζομαι for \* $\delta \iota$ - $\delta \iota$ -o-μαι beside Avest. didaeiti, see § 537 p. 97;  $\delta i$ - $\zeta \eta$ -μαι (Class XI):  $\delta i$ - $\zeta$ -o-μαι: Avest. didaeiti = - $\pi i$ - $\pi \lambda \eta$ - $\mu$ ι: Skr.  $\acute{a}$ -pi-pr-a-ta: Skr. pi-par-ti. Skr. pi-phy-a-ti 'drives on' beside hi- $n\bar{o}$ -ti Class XVII; gh instead of h (I § 445 p. 331, § 454 p. 335) answers to k in the 3<sup>rd</sup> pl. ci-ky-ati, see § 537 Rem. p. 98. Also Skr. aorists such as  $\acute{a}$ - $\acute{s}$ - $\acute{s}$ - $\acute{r}$ -

§ 550. Roots with other vowels.

<sup>1)</sup> Bechtel does not convince me that I am wrong in supposing the Idg. form to be  $*si-zd-\bar{o}$  (Bechtel, Hauptprobl. der Idg. Lautlehre, 254). That  $ai\partial i\mu ai$  comes form  $aiz\partial -$  or  $ais\partial -$  is unproven. Compare Idg. Forsch. I 171 f.

<sup>2)</sup> This conjecture (cp. Osthoff, Perf. 394 f., and Bartholomae, Ar. Forsch. 11 84, Bezz. Beitr. XVII 116) seems to me more likely than that sugested by others (as Fick, Wtb. I 496), namely, that Skr. nind-a-ti was formed from a neid-on the principle of Class XVI. The Skr. re-formation perf. ni-nind-a etc. may be compared with perf. sīd-atur fut. sīd-išya-ti beside sīd-a-ti.

§ 551. Aryan. Skr.  $3^{\rm rd}$  pl.  $\acute{a}$ -bi-bhr-a-n partic.  $b\acute{i}$ -bhr-a--māṇa-s from  $b\acute{i}$ -bhar-ti 'bears', cp. Avest.  $b\bar{\imath}$ -bar-āmi (§ 548 p. 105). Skr.  $3^{\rm rd}$  sing.  $\acute{a}$ -pi-pr-a-ta from pi-par-ti 'fills'. Skr.  $j\acute{i}$ -ghr-a-ti from  $j\acute{i}$ -ghar-ti 'smells'. Skr.  $j\acute{i}$ -ghn-a-tē from han-'strike, slay'. Skr.  $p\acute{i}$ -bd-a-tē 'becomes firm, strong',  $\checkmark$  ped-. Skr.  $t\acute{i}$ - $s\acute{i}$ -th-a-ti, Avest.  $h\acute{i}$ - $s\acute{i}$ -a-iti O.Pers. mid. a-i- $s\acute{i}$ -a-tā: Lat.  $s\acute{i}$ - $s\acute{$ 

Another group of forms which comes in here is composed of such Skr. aorists as  $\acute{a}$ - $v_{\bar{i}}$ -

§ 552. Greek.  $\gamma i-\gamma \nu-0-\mu\alpha i$ , see § 550.  $\mu i-\mu \nu-\omega$  beside  $\mu \not\in \nu-\omega$  'I remain'.  $i-\sigma \chi-\omega$  beside  $\varepsilon \chi-\omega$  (\* $\sigma \varepsilon \chi-\omega$ ) 'I hold, have',  $\sqrt{segh}$ .  $\pi t-\pi \tau-\omega$  'I fall'; whether  $\bar{\iota}$  was original (ep. Skr.  $\dot{\iota}-p\bar{\iota}-pat-a-t$ , § 548 p. 105) is very doubtful; see § 473 p. 18.  $\tau i\pi\tau\omega$  'I beget' for \* $\tau \iota-\tau \varkappa-\omega$  beside  $\ddot{\varepsilon}-\tau \varepsilon \varkappa-0-\nu$ , cp. the Author, Gr. Gr. § 62 p. 74.  $i\dot{\alpha}\chi\omega$  'I cry out, shriek' for \* $f\iota-f\alpha\chi-\omega$ , cp.  $\delta \nu\sigma-\eta\chi\dot{\eta}\varsigma$  (cp. W. Schulze, Kuhn's Zeitschr. xxix 230 ff.). On present stems extended by the suffix  $-\dot{\varrho}o$ - see § 733.

§ 553. Italic. Lat. gi-gn- $\bar{o}$ , see § 550. Lat.  $s\bar{\imath}d\bar{o}$  for \*si-zd- $\bar{o}$ , the second sibilant of which is kept in Umbr. ander-sistu 'intersidito' for \*- $sizd(e)t\bar{o}$  (cp. ander-sesust 'intersederit'): ¹) Skr.  $s\bar{\imath}d$ -a-ti etc., see § 550. Lat.  $ser\bar{o}$  'I sow' for \*si-s- $\bar{o}$ , beside Gr.  $\tilde{\imath}$ - $\eta$ - $\mu$ , § 539 p. 99. Lat.  $bib\bar{o}$  instead of \*pi-b- $\bar{o}$ : Skr. pi-b-a-ti etc., see § 539 p. 100; for the assimilation of p-to -b-, cp. Umbr. řeře 'dedit' instead of \*teře (fut. perf. teřust dirsust). Vest. di-d-e-t 'dat' (Pelign. dida 'det' Umbr. dirsa dersa teřa 'det' dirstu teřtu 'dato'), beside Gr.  $\delta i$ - $\delta \omega$ - $\mu$ , § 539 p. 99. Compare § 871, on Osc. fi-fik-us.

<sup>1)</sup> For this explanation of the Umbrian form I have to thank a former pupil, Dr. von Planta. See now his dissertation, Vocalismus der osk.-Umbr. Dialekte, Strassburg 1892, pp. 214, 277, and his Grammatik.

§ 554. O.Ir. *i-b-i-d* 'bibit' for \**pi-b-e-ti*: Skr. *pi-b-a-ti* etc., see § 539 p. 100. As to -*airissim* -*airissiur* 'I stand, remain standing, exist', see § 733.

Futures like do- $b\bar{e}r$  'I will give' may be also added; they were originally  $\bar{a}$ -conjunctives of this class. See § 565.

## Class V:

Reduplication in -e (-ē) + simple Root, used for the Present Stem.

§ 555. This class has a very close connexion with the Perfect. The two are distinguished in the indic. present by different personal endings (cp. Skr. 3<sup>rd</sup> pl. sά-śc-ati: perf. 3<sup>rd</sup> pl. sa-śc-úr, from √seq- 'be with, accompany'), and in the vocalisation of the singular, as 3<sup>rd</sup> sing. Idg. \*se-seq-ti (Skr. \*sa-sak-ti): perf. \*se-soq-e (Skr. \*sa-sāc-a). But there was no difference at all between the Preterite of Class V and the Preterite of the Perfect Class (pluperfect), nor between their Conjunctive, Optative, and Imperative moods. Perhaps there was originally only Class VI, which now appears complementary to the fifth class (Skr. sá-śc-a-ti Gr. εσπ-ο-ι-το), but then had the same relation to the perfect as Class II to I, Class IV to III; and then perhaps the indic. present forms of the fifth class were coined on the analogy of classes I and III.

§ 556. Aryan. Skr.  $ja-j\acute{a}n-ti$  (grammarians), Avest. za-zan-ti 'gignit' (Bartholomae, Ar. F. II 82); cp.  $\acute{a}-ji-jan-a-t$   $z\bar{\imath}-zan-a-p$  § 548 p. 105. Skr.  $3^{rd}$  pl.  $s\acute{a}-\dot{s}c-ati$ , see § 555; cp.  $s\acute{\imath}-\dot{s}ak-ti$  § 540 p. 100.  $b\acute{a}-bhas-ti$  'chews, eats'  $3^{rd}$  pl.  $b\acute{a}-ps-ati$ , conj. ba-bhas-a-t.  $\acute{a}-ja-k\ddot{\xi}-ur$  'they ate', imper. jagdhi for " $ja-g\check{z}-dhi$ , partic.  $ja-k\ddot{\xi}-at$ - from ghas- 'eat' (there is a re-formed  $3^{rd}$  sing.  $jak\ddot{\xi}i-ti$  on the lines of Class IX); with thematic vowel  $ja-k\ddot{\xi}-a-ti$ . Partic.  $j\acute{a}-k\ddot{\xi}-at$ - from has- 'laugh'. Avestic  $ni-\ddot{s}aehasti$  for "sa-sasti Idg. "se-sed+ti,  $\sqrt{sed}$  'sedere'; — perhaps a parallel thematic by-form is Gr.  $\xi\zeta o\mu au$  i. e.  $\xi-z\delta-o-\mu au$  (§ 563).

Skr.  $d\acute{a}$ - $dh\bar{a}$ -ti 'places'  $d\acute{a}$ - $d\bar{a}$ -ti 'gives' Avest. da- $d\bar{a}$ -iti, see § 540 p. 99. Skr.  $j\acute{a}$ - $h\bar{a}$ -ti 'leaves, gives up' 1<sup>st</sup> pl. ja-hi-mas 3<sup>rd</sup> pl. ja-h-ati, Avest. za- $z\bar{a}$ -iti; — with thematic vowel, Skr. ja-h-a-ti.

§ 557. Greek. Lesb.  $\tilde{\epsilon}\lambda\lambda\alpha\vartheta\iota$  'be gracious' for  $\sigma\epsilon-\sigma\lambda\alpha-\vartheta\iota$ , pl.  $\tilde{\epsilon}\lambda\lambda\alpha\tau\epsilon$ , beside  $\tilde{t}\lambda\alpha\vartheta\iota$  Class III, § 542 p. 102.  $\varkappa\dot{\epsilon}-\varkappa\lambda\nu-\vartheta\iota$  'hear', pl.  $\varkappa\dot{\epsilon}-\varkappa\lambda\nu-\tau\epsilon$ : but Skr.  $\acute{a}-\dot{s}u-\dot{s}\tau\alpha\nu-u\tau$  belong to Class III.  $\epsilon\tilde{t}n-\alpha$  'I spoke' (Cret. Gort.  $\pi\varrho\sigma-\digamma\epsilon\iota\pi\acute{\alpha}\tau\omega$ ) contains a stem \*ue-uq- (as regards  $\digamma\epsilon\iota\pi$ - for \* $u\bar{\epsilon}uq$ -, see the Author, Kuhn's Zeitschr. xxv 306, Gr. Gr.  $^2$  p. 157; Wackernagel, Kuhn's Zeitschr. xxix 151 f.; Meillet, Mém. Soc. Ling. vii 60); this weak stem eventually ran right through (cp. Skr. da-d-mi § 541 p. 101, Lith.  $d\dot{\epsilon}mi$  for \*de-d-mi § 546 p. 104); the - $\alpha$ - of  $\epsilon\bar{t}\pi-\alpha-\varsigma$   $\epsilon\bar{t}\pi-\alpha-\tau\epsilon$  is to be explained as in  $\tilde{\epsilon}\chi\epsilon\nu\alpha\varsigma$ , see § 504 p. 67; — with thematic vowel, Skr.  $\acute{a}-v\bar{o}c-\alpha-t$  Gr.  $\check{\epsilon}-\epsilon\iota\pi-\sigma-\nu$ , see § 661.

§ 558. Keltic. Original Conjunctives of this class (cp. Skr. ba-bhas-a-t) are the Irish reduplicated futures, Mid.Ir. ge-gn-a 'vulnerabo' O.Ir. do-gega 'eligam' etc. They originally had the thematic vowel, which they exchanged for  $\bar{a}$  in the same way as did the future of which gignid is an example, Class III § 544. However, the e of the reduplicator is doubtless, as Thurneysen says, a mutation of i (Kuhn's Zeitschr., xxxi 77 f.); then the forms are not different from gignid and others of that kind.

§ 559. Balto-Slavonic. Lith dèsti 'lays' for \*dhe-dh+ti instead of \*dhe-dhē-ti, Lith dù'sti O.C.Sl. (Russ.) dastĭ 'gives' for \* $d\bar{o}$ -d+ti instead of \*de- $d\bar{o}$ -ti, see § 546 pp. 103 f.

§ 560. Forms with Idg. ē instead of e in the Reduplication (§ 472 p. 17). These are Intensives in Sanskrit; e. g. Skr. dā-dhar-ti beside (dar-dhar-ti) from dhar-'hold fast', 3<sup>rd</sup> pl. nā-nad-ati from nad-'shriek, roar'; cp. Avest. partic. pā-peret-āna- neut. used as a subst. 'fighting'.

Skr.  $j\bar{a}$ -gar-mi 'I watch'  $3^{rd}$  pl.  $j\dot{a}$ -gr-ati imper.  $j\bar{a}$ -gr-hi, and an irregular form with weak stem,  $j\bar{a}$ -gr-mi; — thematic

 $j\bar{a}$ -gr-a-ti. Compare perf.  $j\bar{a}$ - $g\acute{a}r$ -a Gr.  $\acute{\epsilon}\gamma\acute{\eta}$ - $\gamma\epsilon\varrho$ - $\mu\alpha\iota$ . On the g of  $j\bar{a}$ -gar-mi, see § 537 Rem. p. 98.

Remark. The fut. jāgarišyáti perf. jajāgāra may be compared with lašišyati lalāša beside lašati for \*le-ls-e-ti, with jahišyati ájijahat beside ja-h-a-ti (§ 562), and others like them; see § 752.

A Greek intensive of this sort is Hom.  $\delta\eta$ - $\delta\epsilon\chi$ - $\alpha\tau\alpha\iota$  'they welcome, greet' imperf.  $\delta\eta$ - $\delta\epsilon\varkappa$ - $\tau o$  (read  $\delta\eta$ -, not  $\delta\epsilon\iota$ -, — so J. Wackernagel), from  $\delta\epsilon\varkappa o\mu\alpha\iota$   $\delta\epsilon\chi o\mu\alpha\iota$  'I receive'.

### Class VI.

Reduplication in  $-e(-\bar{e}) + \text{Root} + \text{Thematic Vowel}$  forming the Present Stem.

§ 561. On the relation of this class to the last, see § 555.

Pr. Idg. \*ghe-ghn-o- from  $\bigvee$  ghen- 'strike, kill': Skr. partic. ja-ghn-a-nt- (cp. ji-ghn-a-tē § 551 p. 107), Gr.  $\check{\varepsilon}$ - $\pi\varepsilon$ -qv-o-v inf.  $\pi\varepsilon$ -qv- $\varepsilon$ - $\mu\varepsilon v$ ; conj. Avest. ja- $\gamma n$ -d-p. \* $\mu\varepsilon$ - $\mu q$ -o- from  $\bigvee$   $\mu eq$ - 'speak': Skr.  $\acute{a}$ - $v\bar{o}c$ -a-t, Gr.  $\check{\varepsilon}$ - $\varepsilon in$ -o-v inf.  $\varepsilon in$ - $\varepsilon iv$  (on  $F\varepsilon in$ - for \* $\mu e$ - $\mu q$ - see § 557). \*se-sq-o- from  $\bigvee$  seq- 'be with, accompany': Skr.  $s\acute{a}$ - $s\acute{c}$ -a-ti, Gr.  $\check{\varepsilon}$ - $\sigma n$ - $\varepsilon$ - $\tau o$  opt.  $\check{\varepsilon}$ - $\sigma n$ - $\sigma$ - $\iota$ - $\tau o$  inf.  $\check{\varepsilon}$ - $\sigma n$ - $\varepsilon$ - $\sigma \vartheta \alpha i$ . Skr.  $d\acute{a}$ -dh-a-ti 'places', Lith. de-d-u,  $\bigvee$   $dh\bar{e}$ -.

§ 562. Aryan. Skr. partic. ja-ghn-a-nt-, Avest.  $3^{rd}$  pl.  $ja-\gamma n-e-nti$  conj.  $ja-\gamma n-\bar{a}-\bar{p}$ : Gr.  $\tilde{\epsilon}-n\epsilon-\varphi\nu-o-\nu$  etc., see § 561. Skr.  $a-v\bar{o}c-a-t$ , Avest.  $vaoc-a-\bar{p}$  imper.  $vaoc-\bar{a}$ : Gr.  $\tilde{\epsilon}-\epsilon n-o-\nu$ , see § 561. Skr.  $y\acute{e}\check{s}-a-ti$  'boils' for pr. Ar. \* $ia-i\check{s}-a-ti$  ground-form \*je-js-e-ti from  $\sqrt{jes}$ - (Skr.  $y\acute{a}s-ya-ti$  Gr.  $\sqrt{\epsilon}\omega$ ), cp. with io-extension Avest.  $yae\check{s}yeiti$  § 733; Skr.  $a-y\check{e}\check{s}-a-t$  served as model for  $a-n\check{e}\check{s}-a-t$  from  $na\check{s}$ - 'to be destroyed' (Avestic has  $nasa-\bar{p}$ , regular), and the perfect  $n\check{e}\check{s}-\acute{u}r$  follows  $s\bar{e}d-\acute{u}r$   $y\bar{e}m-\acute{u}r$ , unless it is preferable to derive  $a-n\check{e}\check{s}a-t$  directly from the perfect stem, and regard it as a pluperfect (§ 854). Skr.  $la\check{s}a-ti$  'desires' probably for \* $la-l\check{s}-a-ti$  (I § 259 p. 212), cp.  $l\bar{a}-las-a-s$  'covetous' Gr.  $\lambda\iota\lambda\alpha\iotao\mu\alpha\iota$  'I desire' for \* $\lambda\iota-\lambda\alpha\sigma-\iotao-\mu\alpha\iota$  (§ 733). Skr. a-pa-pt-a-t,  $\iota$  pet- 'shoot through the air, fly'. Skr.  $sajjat\bar{e}$  'hangs to something, sticks' for \*sa-zj-a- (I § 591

pp. 448 f.),  $\bigvee$  seg- (Lith. seg- $\hat{u}$  'I fasten'). Skr.  $d\acute{a}$ -dh-a-ti 'places'  $d\acute{a}$ -d-a-ti 'gives' Avest. da-p-a-iti from  $\bigvee$   $dh\bar{e}$ - and  $\bigvee$   $d\bar{o}$ -, see § 540 p. 99, § 561. Skr. ja-h-a-ti 'leaves, gives up', see § 556 p. 109. Skr.  $r\acute{a}$ -r-a- $t\bar{e}$  from  $r\bar{a}$ - 'pour', cp.  $2^{\rm nd}$  pl. ra- $r\bar{r}$ -dhvam (§ 538 p. 98).

With  $\bar{a}=\operatorname{Idg.}\bar{e}$  in the reduplication (cp. § 560) Skr.  $j\bar{a}$ -gr-a-ti 'wakes' and Avest. 3<sup>rd</sup> sing. conj.  $v\bar{a}ur\bar{a}it\bar{e}$  (for \* $v\bar{a}$ -vr-) from var- 'choose' (cp. Bartholomae, Bezz. Beitr. XIII 79 f.).

§ 563. Greek.  $\tilde{\epsilon}$ - $\pi\epsilon$ - $\varphi\nu$ -o- $\nu$ ,  $\tilde{\epsilon}$ - $\epsilon$ i $\pi$ -o- $\nu$ ,  $\tilde{\epsilon}$ - $\sigma$ - $\epsilon$ - $\tau$ o, see § 561. This type of a rist was fertile in the Homeric dialect, and in the poetic style developed out of it (cp. Curtius, Verb., II 29 ff.). We may add:  $\hat{\epsilon}$ - $\kappa \hat{\epsilon}$ - $\tau$ o from  $\kappa \hat{\epsilon}\lambda$ -o- $\mu \alpha \iota$  I call, summon, ask',  $\pi \hat{\epsilon}$ - $\pi \alpha \lambda$ - $\omega' \nu$  from  $\pi \hat{\alpha} \lambda \lambda \omega$  I swing, brandish' ( $\nu$  pel-),  $\tau \hat{\epsilon}$ - $\tau \hat{\alpha} \hat{\rho}$ - $\epsilon$ - $\tau$ o from  $\tau \hat{\epsilon} \hat{\rho}$ - $\omega$  I satisfy, refresh, please',  $\pi \hat{\epsilon}$ - $\pi \hat{\nu} \hat{\sigma}$ -o- $\iota$ - $\tau$ o  $\pi \hat{\epsilon}$ - $\pi \hat{\nu} \hat{\sigma}$ - $\omega' \nu$  from  $\pi \hat{\epsilon} \hat{\nu} \hat{\sigma}$ - $\omega$  I persuade',  $\pi \hat{\epsilon}$ - $\pi \hat{\nu} \hat{\sigma}$ -o- $\iota$ - $\tau$ o from  $\pi \hat{\epsilon} \hat{\nu} \hat{\sigma}$ -o- $\iota$ - $\omega$  i'I am hidden'.  $\tau \hat{\epsilon}$ - $\tau \alpha \hat{\nu}$ - $\omega' \nu$  'grasping'.

In the later language we find presents in connexion with these agrists, as  $\pi \dot{\epsilon} \varphi \nu \omega$ ,  $\kappa \dot{\epsilon} \kappa \lambda o \mu \omega$ . Exoma is one of this sort; for  $\dot{\epsilon} - z \delta - o - \mu \omega$ , from  $\nu$  sed-'sit' (§ 556 p. 108), unless the form comes from \* $\dot{\epsilon} \delta - \iota o - \mu \omega$  = O.H.G. sizzu Class XXVI (§ 721).

§ 564. Italic. Lat. tendō Umbr. ostendu 'ostendito' (I § 499 p. 366) is often derived from \*te-tn-ō (V ten-),¹) to which Gr. τι-ταίνω would be related in the same way as λιλαίομαι to Skr. laṣ̄ati (§ 562), cp. Skr. ta-tán-a-t; others analyse ten-dō, and refer it to class XXV (cp. II p. 161 footnote 2, IV § 696); and now R. S. Conway identifies it with Gr. τείνω for \*ten-iō (Class. Rev., v 297), as G. Curtius had done before him.

More certain examples may be found among the Latin perfects, as te-tig-i-t, te-tig-i-mus: Gr.  $\tau \varepsilon$ - $\tau \alpha \gamma$ - $\omega' \nu$ , pe-pul-i-t: Gr.  $\pi \varepsilon$ - $\pi \alpha \lambda$ - $\omega' \nu$ . See § 867.

<sup>1)</sup> Bartholomae (Stud. idg. Spr. II 95) assumes that \*te-tn\varphi\$ by analogy of forms with ten- became \*tentn\varphi-, and hence  $tend\vec{o}$ .

§ 565. Keltic. In this class we may place the Irish  $\bar{a}$ -conjunctive with future meaning. O.Ir.  $dob\bar{e}r$  'I will give'  $1^{st}$  pl.  $do-b\bar{e}ram$  for \*bhe-bhr- $\bar{a}$ -, Vbher- 'ferre'. fris-gēra 'respondebit' beside pres.  $3^{rd}$  sing. fris-gair. nad-cēl 'quod non celabo' beside pres. celim. Mid.Ir. fo-dēma 'patietur' beside fo-daim 'patitur'. As regards the compensatory lengthening in these forms, see I §§ 523, 526 pp. 380 f. It is true that the Irish sound-laws do not make it certain that e was the original reduplicating-vowel of this conjunctive. It may have been i, and Thurneysen (Kuhn's Zeitschr., xxxi 81) assumes this in view of gignid etc. (§ 544 p. 103). Since in the reduplicated present both e and i have always been used side by side (cp. Skr. ja-ghn-a-nt- and ji-ghn-a-tē § 561 p. 110), it is hardly possible to draw the line.

§ 566. Balto-Slavonic. Lith. de-d-ù 'I lay': Skr. dá-dh-a-ti; Lith. dù'd-u 'I give' O.C.Sl. partic. dad-y 'giving'. See § 546 p. 104.

# Class VII.

Complete Reduplication + Root forming the Present Stem.

§ 567. On the form of reduplication used in this and the following thematic Class see §§ 465—467, 470, 474.

§ 568. Roots beginning in a Consonant. Certain examples only in Aryan (Intensive Verbs).

Skr. car-kar-mi imper.  $car-ky-t\bar{a}d$ , Avest. 1st pl.  $car^e-ker^e-mah\bar{\imath}$  from kar- 'think of, remember'. Skr. 2nd sing.  $d\acute{a}r-dar-\check{s}i$  imper. dar-dy-hi, Avest. opt.  $dar^e-dair-y\bar{a}-p$  from dar- 'split'; '1) — with thematic vowel dar-dir-a-t. Skr. 3rd sing. mid.  $sar-sy-t\bar{e}$   $sar-sr-\check{e}$  from sar- 'flow'. Skr.  $j\acute{a}n$ -ghan-ti conj. jan-ghán-a-t

<sup>1)</sup> The second syllable of the Avestie form shows irregularly the strong grade, unless \*- $d\bar{r}$ - $i\bar{e}$ -t (I § 306 pp. 241 f.) is to be assumed for the ground-form (cp. Skr.  $d\bar{r}r$ - $y\bar{a}$ -t  $\acute{a}$ -dar-dir-ur dar-dir-a-t).

from han- 'strike, kill'. Skr. d- $l\bar{e}$ - $l\bar{e}$ -t from  $l\bar{\iota}$ - 'oscillate'. Skr.  $1^{st}$  pl.  $n\bar{o}$ -nu-mas from nu- 'shriek, cry, call'; — with thematic vowel  $3^{rd}$  pl. mid.  $n\bar{o}$ -nuv-a-nta. Skr. partic. mid.  $j\bar{o}$ -huv- $\bar{a}$ na-s from  $h\bar{u}$ - 'call'; — with thematic vowel Skr.  $j\bar{o}$ -huv-a-t. Avest. zao-zao- $m\bar{\iota}$  'I pour out, consecrate'. Skr. var-vart-ti  $3^{rd}$  pl. var-vrt-ati from vart- 'vertere'. Skr. mid.  $3^{rd}$  sing.  $d\bar{e}$ - $di\bar{s}$ - $t\bar{e}$   $3^{rd}$  pl.  $d\bar{e}$ - $di\bar{s}$ - $at\bar{e}$  Avest.  $da\bar{e}$ - $d\bar{o}i\bar{s}$ -at- from Ar.  $di\bar{s}$ - 'show; — with thematic vowel Skr.  $d\bar{e}$ - $di\bar{s}$ -a-m.

Sanskrit has also some forms with  $\tilde{t}$  after the reduplication (§ 467 p. 13).  $bar\bar{\imath}$ -bhar-ti 3<sup>rd</sup> pl.  $bh\acute{a}ri$ -bhr-ati from bhar'ferre'. Partic.  $gh\acute{a}ni$ -ghn-at- beside  $j\acute{a}n$ -ghan-ti (p. 112).  $n\acute{a}v\bar{\imath}$ - $n\bar{o}$ -t beside  $n\bar{o}$ -nu-mas (see above).  $var\bar{\imath}$ -vart-ti beside  $v\acute{a}r$ -vart-ti (above).  $k\acute{a}ni$ -kranti for  $k\acute{a}ni$ -krad-at- from krand'roar'.

§ 569. Roots beginning in a Sonant.

Skr. ál-ar-ti 'raises itself'.

Gr.  $\eta \nu \cdot \epsilon_{j} \nu \cdot \alpha$  I brought' partic. mid.  $\dot{\epsilon} \nu \cdot \epsilon_{j} \nu \cdot \alpha$   $\dot{\epsilon} \nu \cdot \epsilon_{j} \nu \cdot \alpha$ , Idg. \*en-e $\hat{n}\hat{k}$ -. With  $\dot{\eta} \nu \epsilon_{j} \nu \cdot \alpha_{s}$  -at  $\epsilon$  etc. compare  $\dot{\epsilon}_{j} \epsilon_{j} \nu \alpha_{s}$  etc. § 504 p. 67. Whether the Skr.  $2^{\rm rd}$  and  $3^{\rm rd}$  sing.  $\bar{a}nat$   $3^{\rm rd}$  dual anaṣ-tām conj.  $1^{\rm st}$  pl. anaṣ-ā-mahāi, which belong to the same root, are reduplicated or not, is a question. anaṣ- may be derived from \*en- $\hat{n}\hat{k}$ -, or from \*ene $\hat{k}$ - (cp. Gr.  $\delta \iota$ - $\eta \nu \epsilon \nu \cdot \dot{\gamma} \epsilon$ ).

### Class VIII.

Complete Reduplication + Root + Thematic Vowel forming the Present Stem.

§ 570. Roots beginning in a Consonant.

Certain examples only in Aryan (Intensives), compare § 568. Skr. shows injunctives like dar-dir-a-t,  $n\bar{o}$ -nuv-a-nta,  $j\bar{o}$ -huv-a-t,  $d\bar{e}$ - $di\dot{s}$ -a-m, see above. Avest. nae- $ni\check{z}$ -a-iti 'washes' beside Skr.  $n\bar{e}$ - $n\bar{e}k$ -ti mid.  $n\bar{e}$ -nik- $t\bar{e}$ : cp. conj.  $v\bar{o}i$ - $v\bar{i}d$ - $\bar{a}$ - $it\bar{e}$  beside Skr. partic.  $v\bar{e}$ -vid- $\bar{a}$ na-s from vid-'find'.

§ 571. Roots beginning in a Sonant.

Armen. ar-ar-i aor. of ar-ne-m 'I make', Gr. ηρ-αρ-ο-ν inf. αρ-αρ-εῖν aor. of αρ-αρ-ίσεω 'I fit'. Skr. ām-am-a-t aor. of Brugmann, Elements. IV.

am- 'injure' (pres. amī-ti) Gr. η̈γ-αγ-ο-ν ἀγ-αγ-εῖν from ἄγ-ω 'I lead'. ¹)  $3^{rd}$  pl. ἀκ-άχ-ο-ντο from ἀκ-αχ-ίζομαι 'I am troubled'. ἄλ-αλκ-ε 'I warded off'. η̈ν-εγκ-ο-ν 'I brought'. ἐν-εγκ-εῖν beside η̈ν-εγκ-α (§ 569). Compare § 470.

Skr.  $\bar{a}nin-a-t$  ( $pr\bar{a}nina-t$ ) from an-'breathe',  $\bar{a}rjij-a-t$  from arj-(gj-) 'direct, procure',  $\bar{a}ubjij-a-t$  from ubj-'keep down', and other examples, only found in the grammarians. Gr.  $\dot{\epsilon}\varrho\dot{v}_{\mu\alpha\mu}$ -o- $\nu$  from  $\dot{\epsilon}\varrho\dot{v}_{\mu-\omega}$  'I hold back',  $\dot{\gamma}\nu\dot{t}_{\mu\alpha\mu}$ -o- $\nu$  from  $\dot{\epsilon}\nu\dot{t}_{\mu-\tau\omega}$  'I address'. Compare § 474 p.

### B. CLASS IX.

ROOT + -2- OR ROOT + - $\bar{\imath}$ -, WITH OR WITHOUT REDUPLICATION, FORMING THE PRESENT STEM.

§ 572. We have here two classes of forms to deal with; examples of which are (1) Skr.  $v\acute{a}mi-ti$  Gr.  $\acute{a}\gamma\alpha-\mu\alpha\iota$ , and (2) Skr.  $am\bar{\imath}-ti$ .

The first has  $\vartheta$  after the root. Whether this  $\vartheta$  was part of the root, as some scholars too confidently assert, or a true suffix (I § 14 p. 17), is doubtful. In Greek along with  $\alpha$  are found both  $\varepsilon$  and  $\sigma$ . Bartholomae seems to be right in seeing here the Idg. e and  $\sigma$  (Bezz. Beitr. xvII 109 ff.).

-∂- was never found except before personal endings which begin with a consonant; cp. Skr.  $r\bar{o}di$ -ti pl. rud-anti.

Forms with  $-\bar{\imath}$ - are only found in Aryan. This vowel, Idg.  $\bar{\imath}$ , was certainly a suffix of some kind (root-determinative); a general discussion of it has been given above, § 498 pp. 61 f. Used in the same way we find  $\bar{a}i$  in Sanskrit ( $\dot{a}j$ - $\bar{a}i$ - $\dot{s}$ ), perhaps the same as  $\varepsilon \iota$  in Gr.  $\ddot{\alpha}\gamma$ - $\varepsilon \iota$ - $\ddot{\alpha}\gamma$ - $\varepsilon \iota$  (see p. 61 footnote). But it cannot be made in the least probable that  $-\bar{\imath}$ - was ever confined to the plural and dual active and the middle of all three numbers, or  $-\bar{a}i$ - to the singular active, like Skr.  $k\gamma$ - $n\nu$ - $m\dot{a}s$  etc. as contrasted with  $k\gamma$ - $n\dot{a}$ - $m\dot{a}$ :  $-\bar{\imath}$ - is particularly common in the singular active in Sanskrit.

<sup>1)</sup> On Benfey's Skr.  $\acute{aj}$ -ij-a-t, see Hübschmann, Idg. Vocalsyst., 66; Bartholomae, Bezz. Beitr. xvII 116 f.

The spread of  $-\bar{\imath}$ - in Sanskrit was due in great part to a confusion with -i- =  $-\imath$ -. We have therefore to compare, say,  $\dot{s}ami$ - $\dot{s}va$ :  $\dot{s}am\bar{\imath}$ - $\dot{s}va$  with Skr.  $\dot{a}$ -dhi-mahi:  $\dot{a}$ - $dh\bar{\imath}$ -mahi.

It is not always possible to say whether  $-\overline{\imath}$ — was attached to a form in pre-Aryan times, or took the place of  $i=\vartheta$  in Aryan itself. Thus  $-\vartheta$ — and  $-\overline{\imath}$ — may here be comprehended in one class.

§ 573. To forms without Reduplication we cannot point with any confidence except in Aryan and Greek. But Bugge conjectures that some such are contained in the Arm. 2<sup>rd</sup> aorist mid., e. g. cnay from pres. cnani-m 'pario, gigno, nascor': cna- for \*geno- (cp. § 583 p. 125). See Bugge, Indogerm. Forsch., I p. 439.

§ 574. Sanskrit. Forms with -i-.  $v\acute{a}mi-mi$   $v\acute{a}mi-ti$  (3<sup>rd</sup> pl. vam-anti, pret.  $\acute{a}$ -vam- $\bar{\imath}$ -t), beside Gr.  $\acute{\epsilon}\mu\acute{\epsilon}\omega$ .  $\acute{a}ni$ -ti 'breathes' 3<sup>rd</sup> pl. an- $\acute{a}nti$  (pret.  $\acute{a}n$ - $\bar{\imath}$ -t). Imper. stani-hi from stan- 'thunder'. Imper.  $\acute{s}ami$ - $\acute{s}va$  from  $\acute{s}am$ - 'take pains'.  $r\bar{o}di$ -ti 'laments, cries'. 1<sup>st</sup> pl. rudi-mas 3<sup>rd</sup> pl. rud-anti imper. rudi-hi (pret.  $\acute{a}$ - $r\bar{o}d$ - $\bar{\imath}$ -t).  $sv\acute{a}pi$ -ti 'sleeps'.  $\acute{s}vasi$ -ti 'snorts' imper.  $\acute{s}vasi$ -hi instead of \* $\acute{s}u$ \* $\acute{s}i$ - $\acute{h}i$  cp. mid.  $\acute{s}u$ \* $\acute{s}$ - $\ddot{e}$  (pret.  $\acute{a}$ - $\acute{s}vas$ - $\ddot{\imath}$ -t). Also  $\acute{s}r$ -nv-i- $\acute{s}\acute{e}$  beside  $\acute{s}r$ -nv-i- $r\acute{e}$  like ja-jn-i- $\acute{s}\acute{e}$  beside ja-jn-i- $r\acute{e}$ . On  $\bar{\imath}\acute{s}$ -i- $t\bar{e}$  beside  $\bar{\imath}$ \$ $\bar{\imath}$ - $t\bar{e}$ , see § 853.

-i- in these Verbs is not usually confined to the present stem. Compare  $\dot{s}ami-\dot{s}va$  with  $\dot{s}ami-t\acute{a}-s$   $\acute{a}-\dot{s}ami-\dot{s}-ta$  (Gr.  $\kappa\acute{a}\mu a-\tau o-\varsigma$ ),  $j\acute{a}ni-\dot{s}va$  with  $jani-t\acute{a}r-jani-\dot{s}y\acute{a}-ti$  (Gr.  $\gamma \epsilon \nu \acute{\epsilon}-\tau \omega \varrho$  Lat. geni-tor).

To these I add a few forms which both Indian grammarians and European scholars call parts of the iṣ- aorist, to wit:  $2^{rd}$  sing. varti-thās from vart- 'vertere', á-jay-i-t from ji- 'conquer', á-tāri-ma from tar- 'move across, place or pass over', and like forms, along with the  $2^{rd}$  pl. mid in -idhvam instead of -idhvam (§ 839) given by the Indian grammarians, e. g. ábōdhi-dhvam. It is true the popular feeling associated these with the s-aorist, as it did the forms á-dhi-thās á-dhi-ta á-kṛ-thās á-kṛ-ta; but neither of the two kinds had any real

connexion in form with it (§ 816).¹) Perhaps this apparent connexion was cemented by the original 2<sup>nd</sup> sing. of the *iṣ̃*-aorist, ending in \*-*iṣ̃* (for \*-*iṣ̃*-ṣ́) which may have been unconscionsly analysed into \*-*i*-ṣ́ (§ 839); cp. ánāit following ánāiṣ́ for \*a-naiṣ́-ṣ́ (§ 816).

 $-\bar{\imath}$ - is commonest in the  $2^{rd}$  and  $3^{rd}$  sing. pret. active (cp. the above examples).  $am-\bar{\imath}-ti$  'injures' ( $3^{rd}$  pl.  $am-\acute{a}nti$ ) imper.  $am-\bar{\imath}-\check{\imath}va$ . Imperative:  $\dot{\imath}am-\bar{\imath}-\check{\imath}va$  -dhvam beside  $\dot{\imath}ami-\check{\imath}va$  (p. 115).  $tav-\bar{\imath}-ti$  'thrives, is strong'.  $3^{rd}$  dual  $\dot{\imath}-grh-\bar{\imath}-t\bar{\imath}am$  'they seized' mid.  $2^{nd}$  sing.  $grh-\bar{\imath}-th\bar{\imath}as$   $grh-\bar{\imath}-\check{\imath}sva$ ,  $3^{rd}$  sing.  $\dot{\imath}-grabh-\bar{\imath}-t$ , cp.  $grbh-\bar{\imath}-t\acute{\alpha}-s$   $grah-\bar{\imath}-\check{\imath}sya-ti$   $\acute{\alpha}-grabh-\bar{\imath}-\check{\imath}s-t$ " (erat'.

The verb  $br\acute{a}v-\bar{\imath}-ti$  'says' has  $-\bar{\imath}$ - only in those persons which elsewhere have -i-, and obviously follows the i-verbs: thus  $br\acute{a}v-\bar{\imath}-mi$   $-\bar{\imath}-\bar{\imath}i$   $-\bar{\imath}-ti$ ,  $\acute{a}-brav-\bar{\imath}-\bar{\imath}$   $-\bar{\imath}-t$ , but  $\acute{a}-brav-am$   $br\bar{\imath}u-m\acute{a}s$   $bruv-\acute{a}nti$ . Compare Avest. mraom i. e.  $mrav-em=\acute{a}-brav-am$ , mid.  $mruy\bar{e}$  i. e.  $mruv-\bar{e}$  (Bartholomae, Handb. § 92 p. 40) =  $bruv-\acute{e}$ ,  $mr\bar{u}it\bar{e}$   $mr\bar{u}-ta$  = Skr.  $br\bar{u}-t\acute{e}$   $\acute{a}-br\bar{u}-ta$  and  $mrao-\check{s}$   $mrao-\check{p}$  as contrasted with  $\acute{a}-brav-\bar{\imath}-\bar{s}$   $-\bar{\imath}-t$ , like Skr.  $3^{rd}$  sing.  $\acute{a}s$  contrasted with  $\acute{a}s-\bar{\imath}-t$ ; but Avestic itself has a similar  $\bar{\imath}$ -form in  $vy\bar{a}-mrv\bar{\imath}t\bar{a}$  (Y. 12.6.), if Bartholomae rightly takes this as  $3^{rd}$  sing. mid. imperf. (see Kuhn's Zeitschr. xxvIII 37, Stud. Idg. Spr. II 127). By levelling we have Skr. imper.  $brav\bar{\imath}-hi$  instead of  $br\bar{\imath}-hi$ , and  $br\bar{\imath}-mi$  instead of  $br\acute{\imath}-v-i-mi$ .

From presents in -aya-ti: Skr.  $\bar{u}nay-\bar{\imath}-\bar{\$}$  from  $\bar{u}na-ya-ti$  leaves unfulfilled',  $dhvanay-\bar{\imath}-t$  from dhvanaya-ti 'envelops', ep. opt. mid.  $k\bar{a}may-\bar{\imath}-ta$  § 951.

This *i*- and  $\bar{\imath}$ -inflexion spread widely in Sanskrit because it often served to renew distinctions which had been worn away by phonetic change:  $\acute{a}s\bar{\imath}\check{s}$   $\acute{a}s\bar{\imath}t$  are clear;  $\acute{a}s$  for  $2^{\rm nd}$  and  $3^{\rm rd}$  person both, is not.

On the place which preterite forms in  $-\bar{\imath}-\bar{\imath}$   $-\bar{\imath}-t$  filled in the s-aorist, see § 839.

<sup>1)</sup> á-jayi-t: 3<sup>rd</sup> pl. á-jayi-š-ata = Gr.  $\hat{\epsilon}$ - $\chi \varrho \hat{\epsilon} \mu \alpha$ - $\tau o$  ( $\chi \varrho \epsilon \mu \hat{\alpha}$ - $\theta \varrho \hat{\alpha}$ ): 2<sup>nd</sup> sing. mid.  $\hat{\epsilon}$ - $\chi \varrho \epsilon \mu \hat{\alpha} \sigma$ - $\theta \eta \varsigma$  ( $\chi \varrho \epsilon \mu \alpha \sigma$ - $\tau o$ - $\varsigma$ ), see § 840.

The active forms perhaps became thematic in prehistoric times: ἐμέω 'I spew' instead of \*Fεμε-μι: Skr. vámi-mi, cp. ἔμε-σσα; δαμάω 'I subdue instead of \*δαμα-μμ, cp. δάμα-σσα παν-δαμά-τω $\varrho$ ; ἐλάω 'I drive' instead of \* $\mathring{\epsilon}$ λα-μμ, cp. ἔλα-σσα  $\mathring{\epsilon}$ λα-τή $\varrho$ ; ἀρόω 'I plough' instead of \* $\mathring{\epsilon}$ αρο-μ0, cp. ἀρ-η0ο-μ6νο- $\mathring{\epsilon}$ γρο-σα  $\mathring{\epsilon}$ 0ο-τ0ο-ν. On -ε- and -ο- beside -α- see § 572 p. 114. But the σσ-aorist makes it possible to regard these forms as originally ending in -εσ-ω -ωσ-ω -ωσ-ω, and answering to Skr. tαrάs-a-ti arcas- $\~{\epsilon}$ . See §§ 661, 842.

Remark. Many other forms seem to be of this group, but their explanation is obscure. See, for example, § 550 p. 106 for  $\ddot{\sigma}ro-\sigma\alpha\iota$   $\ddot{\sigma}ro-r\tau\alpha\iota$ , Osthoff Perf. 371, 409 for  $\pi\dot{\epsilon}\tau\alpha-\mu\alpha\iota$ , the Author in Kuhn's Zeitschr. XXIII 587 ff. for  $\ddot{\epsilon}\varrho\alpha-\mu\alpha\iota$ . On  $\ddot{\epsilon}-\chi\epsilon\alpha-\varsigma$   $\ddot{\epsilon}-\chi\epsilon\alpha-\mu\epsilon\nu$  and the like, which some scholars place in this category, see § 504 p. 67.

§ 576. In Latin, Germanic and Balto-Slavonic -ə- and Idg. -o- (in Latin, Idg. -e- as well) must necessarily run together into the same sound. Thus it is always possible that verbs which in these languages belong to Class II originally had -ə- and belonged properly to the ninth class. Lat. vomi-t vomi-mus cp. Skr. vámi-ti. Goth. -anan 'breathe, blow' cp. Skr. áni-ti (1st pl. -ana-m like ani-mas), O.H.G. riozan 'cry, weep' cp. Skr. rōdi-ti, A.S. swefan O.Icel. sofa 'sleep' cp. Skr. svápi-ti. Lith. 3rd sing. raūda 'cries, weeps' Lett. ráud, beside O.H.G. riozan and Skr. rōdi-ti. Certainty is very far from possible here; indeed, even in Sanskrit these roots can be inflected like Class II: vam-a-ti, án-a-ti an-á-ti, rōd-a-ti rud-a-ti, sváp-a-ti.

§ 577. Forms with Reduplication only found in Sanskrit; all have -ī-.

- $\bar{\imath}$ - in the 2<sup>nd</sup> and 3<sup>rd</sup> sing. of some preterites which are usually called pluperfect: as  $\acute{a}$ -ja-grabh $\bar{\imath}$ -t (1<sup>st</sup> sing.  $\acute{a}$ -ja-grabh-am) from grabh- 'seize',  $\acute{a}$ -bu-bh $\bar{\imath}$ j $\bar{\imath}$ -§ from bhuj- 'bend'.

Intensive:  $v\acute{a}$ - $vad\bar{\imath}$ -ti from vad-'speak',  $p\acute{a}$ - $pat\bar{\imath}$ -ti from pat-'fly'. Compare § 560 pp. 109 f. Intensive: dar- $dar\bar{\imath}$ -ti from dar-'split' beside  $d\acute{a}r$ -dar- $\check{\imath}$ , tar- $tar\bar{\imath}$ -ti (and with irreg. strong stem,  $2^{nd}$  dual  $tartar\bar{\imath}$ -thas) from tar-'step over', nan- $nam\bar{\imath}$ -ti from nam- to 'bow, bend oneself',  $r\acute{o}$ - $rav\bar{\imath}$ -ti from ru-'roar, cry',  $j\acute{o}$ - $hav\bar{\imath}$ -ti from  $h\bar{\imath}$ -'call'. Compare § 568 p. 113. The root syllable is never followed by  $-\bar{\imath}$ - when the reduplication ends in  $\check{\imath}$ : ep. § 467 p. 13.

# C. CLASSES X AND XI.

ROOT +  $-\bar{a}$ -,  $-\bar{e}$ -, OR  $-\bar{o}$ - FORMING THE PRESENT STEM.

§ 578. We have here to examine forms such as Gr.  $\tilde{\varepsilon}$ - $\delta\varrho$ - $\bar{\alpha}$ - $\nu$ ,  $\tilde{\varepsilon}$ - $\beta\lambda$ - $\eta$ - $\nu$ ,  $\tilde{\varepsilon}$ - $\sigma\beta$ - $\eta$ - $\nu$ ,  $\tilde{\varepsilon}$ - $\gamma\nu$ - $\omega$ - $\nu$ . These vowels 1) - $\bar{\alpha}$ -, - $\bar{e}$ -, and - $\bar{o}$ - never had any gradation, and the long vowel always runs right through all numbers of active and middle in the Indicative. But some modifications have arisen by a certain law affecting the European languages, by which long vowels were shortened before n or i + consonant; as Gr.  $3^{rd}$  pl.  $\tilde{\varepsilon}$ - $\gamma\nu\nu\nu$  for \* $\tilde{\varepsilon}\gamma$ - $\nu\omega$ - $\nu(\tau)$ , opt.  $1^{st}$  pl.  $\gamma\nu\nu\tilde{\nu}\mu\varepsilon\nu$  for \* $\gamma\nu\omega_{\ell}$ - $\mu\varepsilon\nu$  (I §§ 611, 612, 614, 615 pp. 461 ff.).

Originally the root had always its weak grade. In the aorists here cited it has ceased to be a syllable. But a syllable it still is in some forms, as \*bhuu-ā-: Lat. (conj.) fuā-s Lith. bùvo (beside \*bhu-ā- in Lat. -bā-s); \*ii-ē-: Skr. iy-ā-t, cp. perhaps Goth. iddja, whose i- may also be an augment (e-) (beside \*i-ē- in Skr. y-ā-ti); \*myn-ē-: Gr.  $\dot{\epsilon}$ - $\mu\dot{\alpha}\nu\eta$  Lith. minė; \*liq-ē-: Gr.  $\dot{\epsilon}$ - $\lambda\dot{i}\pi\eta$  Lat. lice-t; Gr.  $\dot{\epsilon}$ - $\beta\dot{\alpha}\lambda$ - $\eta$  (beside  $\dot{\epsilon}$ - $\beta\lambda$ - $\eta$ ).

These suffixes had properly nothing do do with either acrist or present meaning. This is clear because they never have been confined to one particular stem. We find them in

<sup>1)</sup> The newest theory on "Root-Forms in  $\bar{a}^{x}$ " may be seen by referring to Kretschmer, Kuhn's Ztschr. xxxi 403 ff.

the Perfect, as Skr.  $pa-pr\bar{a}\iota$  Gr.  $\pi\dot{\epsilon}-n\lambda\eta$ - $\nu\tau\alpha\iota$ ; in the Aorist, as Skr.  $3^{\rm rd}$  sing.  $\acute{a}-pr\bar{a}-s$  Gr.  $\ddot{\epsilon}-n\lambda\eta$ - $\sigma-\alpha$ ; in the Participle, as Skr.  $pr\bar{a}-t\acute{a}-s$  Lat.  $im-pl\bar{\epsilon}tu-s$ ; and in the Present, Skr.  $2^{\rm nd}$  sing.  $pr\acute{a}-si$  Lat.  $im-pl\bar{\epsilon}-s$  from stem \* $pl-\bar{\epsilon}-$  'fill'  $\checkmark$  pel-. Often it is just in the present stem that the stems formed with these suffixes do not occur; for instance, we have Skr. fut.  $hv-\bar{a}-sya-t\bar{\epsilon}$  O.C.Sl. aor.  $z\breve{u}v-a-ch\breve{u}$  Skr.  $hv-\bar{a}-tar-$  O.C.Sl.  $z\breve{u}v-a-tel\breve{\iota}$  'caller', but pres. Skr.  $h\acute{a}v-a-t\bar{\epsilon}$  O.C.Sl.  $zov-e-t\breve{u}$  'calls'; Skr.  $j\vec{n}-\bar{a}-t\acute{\iota}-\dot{\varsigma}$  'near kinsman' Gr.  $\kappa\alpha\sigma\acute{\iota}-\gamma\nu\eta\tau\sigma-\varsigma$   $\gamma\nu-\omega-\tau\acute{o}-\varsigma$  'kinsman, brother' Goth.  $kn\bar{o}ps$  (Stem  $kn-\bar{o}-di-$ ) 'stock, tribe' from  $\sqrt{g}en-$  'gignere; Gr.  $\dot{\epsilon}'\nu-\sigma\pi\dot{\eta}-\sigma\omega$  'I will say' O.Icel.  $sk\bar{a}ld$  'poet' for pr. Germ. \* $sk\bar{e}-\bar{d}l\acute{a}-$  (Lidén, P.-B. Beitr. xv 507) from  $\sqrt{s}eq-$  'say' pres.  $\dot{\epsilon}'\nu-\dot{\epsilon}n\omega$ .

These forms with  $-\bar{a}$ - in Italic, Keltic, and Slavonic are also used for the Conjunctive. Besides Lat.  $fu\bar{a}$ -s given above we may cite  $tul\bar{a}$ -s (cp. Gr. Dor.  $\tilde{\epsilon}$ - $\tau\lambda\bar{a}$ - $\varsigma$ ). It is no more strange to find these suffixes in two moods than to find -e-and -o- in both indicative and conjunctive.

So with the  $-\bar{e}$ - which meets us in Italic future and conjunctive series, as Lat. fut.  $so-lv-\bar{e}$ -s conj.  $\bar{i}$ - $r-\bar{e}$ -s Osc. sakraíter fusíd (§ 926), must be identified with  $-\bar{e}$ - in  $\dot{e}$ - $\beta\lambda$ - $\eta$ - $\nu$   $\dot{\epsilon}$ - $\mu\dot{\alpha}\nu$ - $\eta$ - $\nu$ ; compare Lat. ed-e-t with Lith. pret.  $\dot{e}d$ - $\dot{e}$ , Osc. fu-i-d 'sit' ( $i=\bar{e}$ ) with Gr. pret.  $\dot{\epsilon}$ - $q\dot{\nu}$ - $\eta$ .

Greek, in the mood answering to the Latin  $\bar{a}$ -conjunctive, has a variation, sometimes  $-\eta$ - and sometimes  $-\omega$ -; as  $\lambda l \pi \eta - \tau \epsilon \lambda l \pi \omega - \mu \epsilon \nu$ . Perhaps there were originally two sets of conjunctive forms, one with  $-\bar{e}$ - and one with  $-\bar{e}$ -; and from these a mixed paradigm was made,  $-\bar{e}$ - or  $-\bar{e}$ - being taken according as the corresponding indicative form had  $-\bar{e}$ - or  $-\bar{e}$ -. If so, the conjunctive  $\lambda l \pi \eta - \tau \epsilon$  must be really the same as the aorist passive  $(\hat{\epsilon})\lambda l \pi \eta - \tau \epsilon$ , Lat.  $l u \bar{e}$ -s the same as  $-b \bar{e}$ s,  $t u l \bar{e}$ -s the same as Gr.  $(\bar{\epsilon}-)\tau \lambda \bar{e}$ -S. There was a closer connexion between  $-\bar{e}$ - and  $-\bar{e}$ -than either of them had with  $-\bar{e}$ -, as is proved by such forms as  $*gi-\bar{e}$ - Gr.  $\zeta \bar{\eta}: *gi-\bar{e}-\zeta \omega - \omega$ ,  $*bhs-\bar{e}$ - Gr.  $\psi \bar{\eta}: *bhs-\bar{e}-\psi \omega - \varrho o$ - $\varsigma$  (other examples in § 587).

It would probably be much easier to thread our way through this labyrinth if we knew which of the three sounds

is represented by the  $-\bar{a}$ - of Aryan conjunctives. In the indicative forms, non-Aryan languages often give the clue; thus we derive Skr.  $pr\dot{a}$ -si from \* $pl\bar{e}$ -si because Greek has has  $\pi\lambda\tilde{\eta}$ - $\tau o$  and Latin - $pl\bar{e}$ -s, but  $dr\dot{a}$ -ti we derive from \*dr- $\bar{a}$ -ti because of Greek  $\tilde{\epsilon}$ - $\delta\rho\bar{\alpha}$ - $\nu$ .

Such of these forms which serve for the Conjunctive will be left for examination together when we come to the Conjunctive, §§ 918 ff. (cp. § 489 pp. 47 f.).

As has already been mentioned (§ 487 p. 41), I believe that this  $\bar{a}$ -suffix is the same as the feminine suffix  $-\bar{a}$ -; compare Skr. perf. ji- $jy\bar{a}u$   $jy\bar{a}$ -sya-ti Gr. Ion.  $\beta\varepsilon$ - $\beta i\eta$ - $\tau au$   $\beta \iota \eta$ - $\sigma \alpha ro$  with the fem. Skr.  $jy\bar{a}$ -,  $jiy\bar{a}$ -, Gr.  $\beta i\bar{a}$ , from  $\sqrt{gei}$ -subdue, force' (Skr.  $j\dot{a}y$ -a-ti ji- $n\dot{a}$ -ti). This is no bolder than to suppose that indic.  $\ddot{a}\gamma$ -o- $\mu\varepsilon\nu$  and conj.  $\varepsilon i\bar{a}$ -o- $\mu\varepsilon\nu$  contain the same -o- as  $\dot{a}\gamma$ - $\dot{o}$ - $\dot{c}$ . And some verbal stems with  $-\bar{e}$ -are actually used as nouns, as Gr.  $\chi \varrho$ - $\dot{\eta}$  'necessity' beside  $\kappa \dot{\epsilon}$ - $\chi \varrho \eta$ - $\mu uu$   $\chi \varrho$ - $\bar{\eta}$ - $\sigma \vartheta \alpha$ ; Hom.  $\dot{o}\mu o$ - $u\lambda$ - $\dot{\eta}$ , 'loud cry or call' beside Cret. partic.  $\dot{a}\nu \alpha$ - $u\lambda \dot{\eta}$ - $\mu \varepsilon \nu o$ - $\dot{c}$ ; Lat. qui- $\bar{e}$ -s abl.  $qui\bar{e}$  beside perf.  $qui\bar{e}$ - $v\bar{\iota}$ ; Skr. ps- $\bar{a}$ - 'food' beside ps- $\bar{a}$ -ti cp.  $\psi \bar{\eta}$  for \* $\psi \eta$ - $\iota \varepsilon \iota$ . The same  $\bar{e}$ -nouns are seen in Lat.  $pl\bar{e}$ -bam,  $lic\bar{e}$ -bat,  $\bar{a}r\bar{e}$ -bat,  $\bar{a}re$   $faci\bar{o}$ , O.C.Sl.  $b\bar{e}$ - $ach\bar{u}$  ž $ir\bar{e}$ - $ach\bar{u}$  and the like (§ 896 Rem., §§ 899, 903).

Verbs made with these suffixes are often extended by -io-; as beside Skr.  $sn-\bar{a}-ti$  'washes, bathes' Lat.  $n\bar{a}-s$   $n\bar{a}-mus$  we have Skr.  $sn\bar{a}-ya-t\bar{e}$  Lat.  $n\bar{o}$  for  $*n\bar{a}-(i)\bar{o}$  O.Ir.  $3^{rd}$  sing.  $sn\bar{a}id$ ; and it is impossible to draw a distinct line between the older inflexion and that with -io-. Thus we must make frequent comparisons with the io- conjugation of Class XXVIII.

In one other respect it is difficult, if not impossible, to draw a hard and fast line. The class of verbs to which grammarians mostly restrict the term Denominative are often inseparable from this tenth class and its io-extension; as Lat.  $plant\bar{o}$  (for \* $plant\bar{a}$ - $(i)\bar{o}$   $plant\bar{a}$ -s etc. from  $plant\bar{a}$ -'plant' like  $n\bar{o}n\bar{d}s$  etc., Gr. Lesb. i- $\tau t \mu \bar{a}$ - $\mu \epsilon \nu$  i- $\tau t \mu \bar{a}$ - $\tau \epsilon$  from  $\tau t \mu \bar{a}$ -'honour like i- $\delta \rho \bar{a}$ - $\mu \epsilon \nu$  i- $\delta \rho \bar{a}$ - $\tau \epsilon$ , Armen. jana-mk like mna-m mna-mk. That these denominatives had originally only -io- (or

-ie) in all persons cannot be proven (cp. § 487 p. 42); and in view of the great number of forms like Lat. plantā-s plantā-mus without -io- in the Idg. languages, it is very improbable.

## Class X.

Unreduplicated Root + - $\bar{a}$ -  $-\bar{e}$ - or  $-\bar{o}$ - forming the Present Stem.

§ 579. Root  $+ -\bar{a}$ -.

Pr. Idg. \*dr-ā-ti 'runs' (cp. Skr. dr-áva-ti dr-ama-ti etc., § 488 p. 47): Skr.  $dr\bar{a}$ -ti imper.  $dr\bar{a}$ -hi, Gr.  $\ddot{\epsilon}$ - $\delta\rho\bar{\alpha}$ - $\nu$   $\ddot{\epsilon}$ - $\delta\rho\bar{\alpha}$ - $\mu\epsilon\nu$ . \*tr- $\bar{a}$ -ti (cp. Skr. tar- 'press through, pass over'): Skr.  $tr\bar{a}$ -ti'rescues, saves' (orig. 'lets go through, or gets happily out of') mid. trá-sva trá-dhvam (trá-ya-tē), Lat. in-trā-s -trā-mus (1st sig. -trō for \*-trā-iō) and trāns Umbr. traf trahaf 'trans' (orig. nom. sing. of the participle, see Thielmann, Arch. Lat. Lex. IV 248 ff., 358 ff.).1) \*sn-ā-ti 'washes, bathes' intr. (cp. Skr. sn-āu-ti 'trickles' partic. sn-u-ta-s, Gr. v-św fut. v-sv-σομαι): Skr.  $sn\bar{a}$ -ti 3<sup>rd</sup> dual  $sn\bar{a}$ -tas ( $sn\bar{a}$ -ya- $t\bar{e}$ ), Lat.  $n\bar{a}$ -s  $n\bar{a}$ -mus(1st sing.  $n\bar{o}$ ), cp. Gr.  $\nu\dot{\alpha}\omega$  'I flow'  $\nu\tilde{\alpha}$ - $\mu\alpha$ . \* $bh\psi$ - $\bar{a}$ - \* $bh\psi$ - $\bar{a}$ from Vbhey- 'become, be': Lat. -bā-s -bā-mus, O.Ir. 3rd sing. bā ba (conj. and fut.), Lith. bùvo 'was' bùvo-me; variant \*bhu-ē-\*bhuy-ē-, see § 587. \*sruy-ā- from srey- 'flow': Gr. Epidaur. ¿ρρύα 'flowed', Lith. pa-srùvo 'flowed'; variant \*sruy-ē- Gr. ἐρούη § 589. \*q-ā-t \*e-q-ā-t 'went' (cp. \*g-em-, § 497 Rem. p. 57): Skr.  $\acute{a}$ - $g\bar{a}$ -t  $\acute{a}$ - $g\bar{a}$ -ma, Gr.  $\acute{\epsilon}$ - $\beta\eta$   $\ddot{\epsilon}$ - $\beta\eta$ - $\mu\epsilon\nu$ . Sometimes verbs which originally belonged to Class I, and had gradation, were absorbed into this class and lost it: see § 495 p. 55.

Examples of similar conjugation in later denominative verbs from ā-stems: 1<sup>st</sup> pl. Armen. jana-mk, Gr. Aeol. τίμα--μεν, Lat. plantā-mus, O.Ir. no chara-m, Lith. jử sto-me.

It is naturally often doubtful whether an a-verb belongs to the Primitive or the Denominative class, to use the terms

<sup>1)</sup> intrāre extrāre were clearly regarded by the Romans as derived from intrā extrā. But trāns makes it quite as probable that they are compounds of \*trāre. F. D. Allen, Am. Journ. Phil. I 143 ff., does not convince me.

in their received sense. For example, Lat. forō forōs, O.H.G. borōm borōs 'I bore', common ground-form \*bhṛr-ā-, beside O.H.G. bora f. 'borer' (cp. § 769).

§ 580. Aryan. Besides those mentioned in § 579, there are few Aryan verbs which can fairly be supposed to have original  $-\bar{a}$ -, to judge from the cognate languages. Skr.  $\dot{s}r-\bar{a}-ti$  (gramm.) beside  $\dot{s}r\dot{a}-ya-ti$  'cooks, roasts' from  $\sqrt{ker}$ - (Gr. \* $\epsilon \rho \dot{a} \sigma \sigma a$ , Skr.  $\dot{s}r-t\dot{a}-s$ ); cp. Gr.  $-\kappa i-\kappa \rho \bar{a}-\mu u$  'I mix' Class XI, perf.  $\kappa \dot{\epsilon}-\kappa \rho \bar{a}-\tau a u$ ,  $\dot{\alpha}-\kappa \rho \bar{a}\tau o -\varsigma$  'unmixt' (= Skr.  $\dot{s}r\bar{a}-t\dot{a}-s$ ). Skr.  $ml-\bar{a}-ti$  'softens, slackens, decays'  $3^{rd}$  pl.  $ml-\bar{a}-nti$  (beside  $ml\dot{a}-ya-ti$ ) from  $\sqrt{mel}$ - 'molere', cp. Gr. Dor.  $\beta \lambda \dot{a}-\xi$   $\beta \lambda \eta-\kappa \rho \dot{\sigma}-\varsigma$  'slack, flabby' (O.Ir.  $ml\bar{a}ith$   $bl\bar{a}ith$  'soft, tender' perhaps with  $\bar{l}$ , I § 306 p. 243). Skr. opt.  $mn\bar{a}-y\bar{a}-t$  'commemoret'  $3^{rd}$  pl.  $mn\bar{a}-y-ur$  from  $\sqrt{men}$ - 'think', cp. Gr. Dor. perf.  $\mu \dot{\epsilon}-\mu \nu \bar{a}-\tau a u$ . Skr.  $dhy-\bar{a}-ti$  beside  $dhy \dot{a}-ya-ti$  'thinks of' (perf.  $da-dhy \bar{a}u$ ) beside  $\dot{a}-d\bar{t}-dh\bar{e}-t$  § 537 p. 97, cp. Gr.  $\sigma \ddot{a}-\mu a$   $\sigma \ddot{\eta}-\mu a$  = Skr.  $dhy-\bar{a}-man-II$  § 117 p. 370.1)

We subjoin a few more of the forms with  $-\bar{a}$ - whose suffix may be either Idg.  $-\bar{a}$ - or Idg.  $-\bar{e}$ - or  $-\bar{o}$ -:  $ghr-\bar{a}$ -ti 'smells' (perf. ja- $ghr\bar{a}u$  partic.  $ghr\bar{a}$ - $t\acute{a}$ -s) beside ji-ghar-ti Class III (§ 540 p. 100); dr- $\bar{a}$ -ti 'sleeps' (da- $dr\bar{a}u$   $dr\bar{a}$ -na-s) beside Gr.  $\delta a \rho$ - $\vartheta a \nu \omega$  Lat. dor- $mi\bar{o}$  (cp. the Author, M. U., I 43); dhm- $\bar{a}$ -nt- 'blowing' (da- $dhm\bar{a}u$   $dhm\bar{a}$ - $t\acute{a}$ -s) beside  $dh\acute{a}m$ -a-ti Class II A; khy- $\bar{a}$ -ti 'looks, seems, makes known' (ca- $khy\bar{a}u$   $khy\bar{a}$ - $t\acute{a}$ -s beside  $\acute{a}$ -khy-a-t Class II B (see footnote).

Remark. Denominatives from  $\bar{a}$ -stems of the later stratum in Aryan form the present in  $-\bar{a}$ -ya-ti, not  $-\bar{a}$ -ti, see § 766. Forms like  $m\bar{a}l\bar{a}$ -ti 'he is like a wreath'  $(m\bar{a}l\bar{a}$ -) are an artificial product of a late period.

§ 581. Armenian. mna-m 'I remain, await' 1st pl. mna-mk (aor. mna-çi), from the root of Gr. μέν-ω 'I remain', and probably connected directly with Skr. mn-ā- Gr. μν-ā-(§ 580). kea-m 'I live' ground-form \*gii-ā-mi (Bartholomae, Stud. Idg. Spr., II 134) or \*gǐuā-mi (cp. Skr. jīvā-tu-š 'life', beside Skr. jīva-ti 'lives' Lat. vīvō, which was derived from

<sup>1)</sup> Fick, Wtb. I \* 32, connects  $\sigma \tilde{a}_{,\mu\alpha}$  with Skr.  $khy\bar{a}\text{-}ti$ , for which see below.

√ gei- by the suffix -uo-, but was regarded very early as a verb of Class II; cp. § 488 p. 47). orca-m 'I break wind, belch' for \*oruc-a-m, cp. O.C.Sl. ryga-ja 'ructo'.

Denominatives with  $-\bar{a}$ - of the newer stratum are inflected just as these are; as jana-m 'I take pains, strive'  $1^{st}$  pl. jana-mk (jan 'pains, excitement, diligence'),  $o\lambda ba-m$  'I bewail'  $1^{st}$  pl.  $o\lambda ba-mk$  ( $o\lambda b$  'lament'). xroxta-m 'I am haughty, defiant'  $1^{st}$  pl. xroxta-mk (xroxt 'haughty, defiant').

§ 582. Greek.  $\xi\delta\rho\bar{\alpha}-\nu$  'I ran' 1st pl.  $\xi-\delta\rho\bar{\alpha}-\mu\epsilon\nu$  3rd pl.  $\xi-\delta\rho\bar{\alpha}-\nu$ : Skr.  $dr\bar{\alpha}-ti$ , see § 579 p. 121.  $\xi-\tau\lambda\eta-\nu$  Dor.  $\xi-\tau\lambda\bar{\alpha}-\nu$  'I endured' 1st pl.  $\xi-\tau\lambda\eta-\mu\epsilon\nu$  3rd pl.  $\xi-\tau\lambda\bar{\alpha}-\nu$ , imper.  $\tau\lambda\bar{\eta}-\vartheta\iota$ , from  $\sqrt{tel}$ -  $(\tau \circ \lambda-\mu\dot{\eta}, \ \tau\epsilon\lambda\dot{\alpha}\sigma\sigma\alpha\iota)$ . Hom.  $\pi\lambda\bar{\eta}-\tau\circ$  'drew near' (cp. Dor.  $\dot{\alpha}-\pi\lambda\bar{\alpha}-\tau\circ-\varsigma$   $\pi\lambda\bar{\alpha}-\tau(\circ-\nu)$ , beside  $\pi\epsilon\lambda\dot{\alpha}\zeta\omega$  'I bring near'.  $\ddot{\epsilon}-\beta\eta-\nu$  Dor.  $\ddot{\epsilon}-\beta\bar{\alpha}-\nu$  'I went': Skr.  $\dot{\alpha}-g\bar{\alpha}-t$ , see § 579 p. 121. Att.  $\dot{\epsilon}-\gamma\dot{\eta}\rho\bar{\alpha}-\nu$  'I grew old' inf.  $\gamma\eta\rho\bar{\alpha}\nu\alpha\iota$  from pres.  $\gamma\eta\rho\dot{\alpha}\sigma\kappa\omega$ . Epidaur.  $\dot{\epsilon}\xi-\epsilon\rho\rho\dot{\alpha}$ : Lith.  $\rho\alpha-sr\dot{\alpha}\nu\circ$  'I flowed'. Hesych.  $\dot{\epsilon}\rho\vartheta\dot{\alpha}$ :  $\dot{\alpha}\pi\dot{\epsilon}\vartheta\alpha\nu\epsilon\nu$  (cod.  $\dot{\epsilon}\rho\vartheta\iota\bar{\alpha}$ ). Other forms of the same kind collected by Fick in the Gött. Gel. Anz. for 1881, pp. 1430 ff., and Bartholomae, Stud. Idg. Spr., II 128 f.

Denominatives with  $-\bar{a}$ - belonging to the newer stratum were conjugated in this Class in the Aeolic dialect; e. g. pl.  $\tau t \mu \bar{\alpha}$ - $\mu \epsilon \nu \tau t \mu \bar{\alpha}$ - $\tau \epsilon$  (but att.  $\tau \bar{\iota} \mu \omega \mu \epsilon \nu \tau \bar{\iota} \mu \bar{\alpha} \tau \epsilon$ ). The 1st sing. in - $\alpha \iota \mu \iota$  is a re-formation in place of - $\bar{\alpha}$ - $\mu \iota$ , and - $\iota \iota \mu \iota$  instead of - $\iota \iota$ - $\iota \iota$ . Cp. §§ 589, 775.

Forms passing from Class I to Class X:  $\tilde{\epsilon}$ - $\sigma\tau\eta$ - $\mu\epsilon\nu$  instead of  $*\tilde{\epsilon}$ - $\sigma\tau\tilde{\alpha}$ - $\mu\epsilon\nu$ ,  $\tilde{\epsilon}$ - $\varphi\vartheta\eta$ - $\mu\epsilon\nu$  instead of  $*\tilde{\epsilon}$ - $\varphi\vartheta\tilde{\alpha}$ - $\mu\epsilon\nu$  (but the middle keeps  $\varphi\vartheta\tilde{\alpha}$ -, as  $\varphi\vartheta\tilde{\alpha}$ - $\mu\epsilon\nu$ o- $\varsigma$ ). See § 495 p. 55.

Remark. Hom. πληντο instead of \*πλάντο following πλήμην etc., so άηνται ἔμπληντο instead of \*ἀενται \*-πλεντο. Similarly opt. ἔμ-πλητο and μεμνήμην χεχτήμην, see § 944. But some are regular, act. ἄεισι ἄεντες δράντες (on ἔδρᾶν ἔγνον see § 1020. 2). Compare I § 611 Rem. p. 462.

§ 583. Italic. The 1st sing. pres. in \*-ā-mi is lost; in its place Latin had always \*-ā-iō, which became -ō. Lat. trāns Umbr. traf trahaf, Lat. in-trā-s -trā-mus: Skr. trā-ti; Lat. 1st sing. in-trō beside Skr. trā-ya-tē, see § 579 p. 121. Lat.

fl-ā-s fl-ā-mus, cp. O.H.G. blāu 'I blow' for \*bhl-ē- $\dot{q}\bar{o}$  and Gr.  $q\lambda$ -v'ω 'I abound'. Lat. n-ā-s n-ā-mus: Skr. sn-ā-ti 'washes, bathes', see § 579 p. 121. Ital. \*fā- for \*fu-ā- from  $\sqrt{bheu}$ -'become, be', pret. \*-fā-m: Lat.  $am\bar{a}$ -bā-s -bā-mus, Osc. fu-fans 'erant' (§ 899), cp. Lat. conj. fu-ā-s: O.Ir. bā ba etc. (§ 579 p. 121). Lat. hi-ā-s hi-ā-mus, 1st sing.  $hi\bar{o}$  = Lith. žió-ju 'open the mouth', cp. Lat.  $h\bar{\iota}$ -scō, O.H.G. gi-nō-m gei-nō-m 'I gape'. Lat. inquam for \*en-sq-ā-m injunctive,  $\sqrt{seq}$ - 'say', cp. in-qui-t in-quiu-nt (Class XXVI § 717) Gr.  $\check{\epsilon}$ -v-σπ-ε (Class II B)  $\check{\epsilon}$ -v-σπ-v-σω.

 $d-\bar{a}$ - from  $\sqrt{d\bar{o}}$ - 'give' is found not only as a conjunctive (Lat.  $ad-d\bar{a}$ -s, Osc. da-dad 'reddat'), but as indicative too, Lat.  $d\bar{a}s$  dat. The last two are doubtless injunctive forms (dat instead of \* $d\bar{a}$ -d), and  $d-\bar{a}$ -s:  $ad-d\bar{a}$ -s =  $-b\bar{a}$ -s:  $fu\bar{a}$ -s,  $tul\bar{a}$ -s: Gr.  $\ddot{\epsilon}$ - $\tau\lambda\bar{a}$ - $\epsilon$ .

era-m erā-s is to es-t what ea-m (used for conj.) is to i-t. The use of the injunctive \*fu-ā- = Lat. -ba-m for the imperfect certainly had something to do with the use of the injunctive erā- as imperfect. Some scholars (the latest is Bartholomae, Stud. Idg. Spr. II 187 f.) connect eram with Ion.  $\ddot{\epsilon}\eta\nu$   $\ddot{\epsilon}\eta\sigma\vartheta\alpha$ ;  $\ddot{\eta}\eta\nu$  would be the augmented form; for another possible explanation see § 858. 2.

Other Verbs belonging to this class are: Lat. juvā-s (partic. -jūtu-s perf. jūvī) for \*diugū-ā-s: Lith. džiūgo-s 'he broke out into rejoicing' (pres. 1st sing. džiūngū'-s); lav-ā-s (beside lav-i-s), cp. perf. lāvī; dom-ā-s cub-ā-s mic-ā-s ē-legāns (beside ē-ligere) sec-ā-s (Umbr. pru-sekatu 'prosecato') and others, cp. perf. domuī cubuī micuī secuī. Doubtless we should also place here certain stems which have -ā- all through the verb, as arā-s perf. arāvī partic. arātu-s, cp. Gr. ἀράω 'I plough' (Hom. 3rd pl. ἀρόωσι Heracl. ἀράσοντι, Sütterlin, Zur Gesch. der Verba denom. im Altgr., 1 22), O.C.Sl. orā-'to plough' in the aor. ora-chŭ partic. pret. act. ora-vŭ inf. ora-ti.

In Latin, there are a number of verbs which have the  $\bar{a}$ -flexion when compounded, but some other when not. Examples:  $oc\text{-}cup\bar{a}re:capi\bar{o}$ ,  $suspic\bar{a}r\bar{\imath}:speci\bar{o}$ ,  $pr\bar{o}fl\bar{\imath}g\bar{a}re:fl\bar{\imath}g\bar{o}$ , com-

-pellāre: pellō, aspernārī: spernō. This difference had probably something to do with a difference of meaning; the compound as contrasted with the simple verb often had a perfect (aorist) meaning. The ā-formation gave an aoristic meaning, and occupāre stands to capiō, much in the same relation as Gr. μανῆναι το μαίνομαι, prōflīgāre to flīgō as λιπῆναι το λείπομαι. The indic. pres. occupa-t is then an aorist formation, like lic-et (Gr. ἐλίπη) beside linquō (§§ 590, 708), conj. ad-venās ē-venās (beside Osc. kúm-běned 'convenit') beside veniō, tag-i-t beside tangi-t, and the like. This ā-aorist seems to be as old as the ē-aorist: cp. Gr. Epidaur. ἐρρν'ā 'he flowed', Lith. pa-srùvo 'he flowed' kilo 'he raised himself'; perhaps to this class belongs the Armenian a-aorist, as cn-a-y 'genui, natus sum' (Bartholomae, Stud. Idg. Spr., 11 130, cp. § 573). Compare further § 708 Rem.

In the whole range of Italic dialects, the later group of denominatives with  $-\bar{a}$ - went hand in hand with the present flexion of this tenth Class. Lat. plantā-s  $-\bar{a}$ -mus 1st sing. plantō like in-trā-s etc. Umbr. furfant 'februant' imper. portatu 'portato', Osc. faamat 'habitat' sakarater 'sacratur' imper. deivatud 'iurato'. Compare §§ 738, 777.

§ 584. Keltic. Irish has only one monosyllabic present stem of the same kind as Idg.  $tr-\bar{a}$ -, to wit, \* $bhy-\bar{a}$ -. This stem is certainly attested in conjunctive and future use (cp. Lat. fu-a-m), as  $3^{rd}$  sing.  $b\bar{a}$   $ba = *bhy-\bar{a}-t$ . Whether it acted also as the preterite copula (cp. Lat. -bam), is doubtful, because its  $3^{rd}$  person singular appears after particles as -bu-bo (e. g. robu robo), which looks like original \* $bh\bar{u}$ -t (Gr.  $\tilde{\epsilon}$ - $q\bar{v}$ ). Most likely the  $1^{st}$  and  $3^{rd}$  sing. ba and  $3^{rd}$  pl. batir, which still have those forms even in Old Irish, should be derived from a preterite \* $bhy-\bar{a}$ -.

Then there are a few dissyllabic present stems, as O.Ir. scarā- 'sunder, part from' for \*skṛr-ā- (I § 298.3 p. 237), scarā-im scarā-i scarā-id scarmme scarthe scarā-it for \*scarā-mi-ā-si etc., also no scaru for \*scurā-jō like Lat. juvō. And

again, the same inflexion is used with the later group of denominative verbs, as *com-alnaim* I fill up' (§ 778). Even more clearly than in Irish we see this  $\bar{a}$ -flexion in the British dialects;  $3^{rd}$  sing. O.Brit. -ot (with  $o = \bar{a}$ ), e. g. O.Bret. cospitiot 'titubat' crihot 'vibrat'.

Remark. Remarkable forms of the verb -tau  $-t\bar{o}$  'I am' (= Idg. \* $st\bar{a}$ - $i\bar{o}$ , Class XXVI § 706) are the  $3^{rd}$  sing. at- $t\bar{a}$  and the plural -tam -tad -tat, which may correspond to Lat. sta-t and  $st\bar{a}$ -mus  $st\bar{a}$ -tis sta-nt. That at- $t\bar{a}$  comes from \*- $st\bar{a}$ (i)e-t can hardly be proved, and the unaccented -tam -tad -tat need not be shortened by e-forms of accented at-taam, ataid ataaith, at-taat, which may be secondary re-formates. Still I do not believe that we need assume, parallel to  $st\bar{a}$ -, an original stem st- $\bar{a}$ , i. e. an extension of the root by the  $\bar{a}$ -suffix of this tenth class; but I think that in Italic as in Keltic there was a tendency for verbs to pass from Class XXVI into this, caused by parallel present stems like tr- $\bar{a}$ -and tr- $\bar{a}$ -i0-. Compare § 505 pp. 71 f., §§ 706, 716, 719.

§ 585. Germanic. No monosyllabic stems of the first stratum, without -io-, are found at all; unless indeed it be represented by O.H.G. tuo-m from  $\sqrt{dh\bar{e}}$ - (see § 507 p. 74). But the said inflexion has many representatives amongst disyllabic stems (mostly denominatives of the later stratum), cp. Goth.  $mit\bar{o}$ - $\bar{o}$ - $\bar{$ 

Dissyllabic stems without -io- spread very widely in Baltic. To this class belong a very numerous group of preterites in -au, as Lith. buvaũ 'I was' buvaĩ bùvo bùvo-me bùvo-te: Lat. -b-ā-s; pa-srùvo 'flowed': Gr. Epidaur.  $\hat{\epsilon}\varrho\varrho\dot{v}\bar{a}$  (§ 582 p. 123); džiug-aũ-s 'I broke out into rejoicing': Lat. juv-ā-s (§ 583 p. 124); gij-aũ 'I revived' (cp. Avest.  $jy\bar{a}iti$ -š 'life' Gr.  $\zeta_{\tilde{u}}$  'lives' for \* $g\dot{\iota}$ -ē- $\dot{\iota}$ e-, from  $\sqrt{g}e\dot{\iota}$ -); kil-aũ 'I raised myself', vilk-aũ 'I dragged', snig-o 'it snowed'. With augment  $\dot{e}j$ -aũ 'I went'

(§ 480 p. 28): Lat.  $e\bar{a}$ - for \*- $e\dot{i}$ - $\bar{a}$ - as conjunctive. Also presents; as bij- $a\tilde{u}$ -s 'I fear', lind-au 'I am stowed away somewhere'.

These forms had originally secondary personal endings,  $-\bar{a}$ -m  $-\bar{a}$ -s  $-\bar{a}$ -t etc., like Lat. -bam  $b\bar{a}s$ . But the 1<sup>st</sup> and 2<sup>nd</sup> sing. were transformed, the ending of suk- $\hat{u}$  suk- $\hat{u}$  being added to  $-\bar{a}$ -. See on this point § 991.1.

In verbs like bij- $a\bar{u}$ -s lind-au,  $-\bar{a}$ - was carried through the whole verb (fut. bij  $\acute{o}$ -si  $\acute{u}$ -si lind o-si u etc.). Thus they were related to the  $\bar{a}$ -preterite (buv- $a\tilde{u}$  beside fut.  $b\acute{u}$ -si u,  $d\check{z}iug$ - $a\tilde{u}$ -s beside fut.  $d\check{z}iik$ -si u-si, as Lat. ar-a- to juv-a- (§ 583 pp. 124 f.).

O.C.Sl. has only one present of this sort, im-a-mi 'I have' im-a-ii -a-tii -a-tii -a-tie; parallel stem im-ie in partic. pret. act. imi-i0 etc., cp. Lith. pret.  $3^{rd}$  sing. i0 i0 i0.

Amongst the later Lithuanian denominatives those in -au with inf. -yti, as ju'stau 'I gird' (ju'styti) from ju'sta 'girdle', see § 782.4. Another group of later denominatives from stems in  $-\bar{a}$ - has -o-ju -o-ti; e. g.  $dovan\acute{o}-ju$  'I present', inf.  $dovan\acute{o}-ti$ , from  $dovan\grave{a}$ , see §§ 769, 783.

§ 587. Root  $+ -\bar{e} - \text{ or } -\bar{o} -.$ 

Pr. Idg. \*gl- $\bar{e}$ -ti from  $\sqrt{gel}$ - 'fall' (cp. Gr.  $\beta \dot{\epsilon} \lambda$ - $o_S$ 'missile'  $\beta o \lambda - \dot{\eta}$  'throw'): Skr.  $gl - \bar{a} - ti$  'falls off, loses strength' (gla-ya-ti), Gr.  $\ddot{\epsilon}-\beta\lambda\eta-\nu$  'I received a blow, I was struck',  $1^{\text{st}}$  pl.  $\ddot{\varepsilon}$ - $\beta\lambda\eta$ - $\mu\varepsilon\nu$  mid.  $\ddot{\varepsilon}$ - $\beta\lambda\eta$ - $\tau o$ , opt.  $\beta\lambda\varepsilon i\eta\nu$   $\beta\lambda\varepsilon i\mu\varepsilon\nu$ . \* $pl-\bar{e}$ - \* $pl-\bar{o}$ - from  $\sqrt{pel}$ - 'fill' (Goth, fil-u 'much' etc.): Skr.  $2^{\text{nd}}$  sing. hortative  $pr\tilde{a}$ -si aor.  $\acute{a}$ - $pr\bar{a}$ -t, Gr.  $\pi\lambda\tilde{\eta}$ - $\tau o$  $\pi\lambda\tilde{\eta}$ - $\nu\tau o$  (§ 582 Rem. p. 123), Lat. im- $pl\bar{e}$ -s - $pl\bar{e}$ -mus - $pl\bar{e}$ -tur(1st sing. pleō for \*plē-jō); parallel stem \*pll-ē- in Lith. pýlē 'he shed' instead of \*pilė (§ 593); \*pl-ō- in Lat. plōrāre Goth. flō-du-s 'flood', and doubtless in Gr. ἐπ-έπλων 'I sailed over' pres.  $\pi \lambda \omega' - \omega$  partic.  $\pi \lambda \omega - \tau o' - \varsigma$ . \*(s) $n - \bar{e} - *(s)n - \bar{o} - `weave,$ spin, sew' ((s)n-ei- in O.C.Sl. ni-ti 'thread'? cp. Per Persson, Stud. Lehr. Wurzelerw., 64): Gr. 3rd sing. E-vvn Herodian II 507 22 L.  $(\nu \dot{\epsilon} \omega \text{ from *sn\bar{e}-}\dot{\imath}\bar{o})$ , Lat.  $n\bar{e}$ -s  $n\bar{e}$ -mus (cp. O.H.G.  $n\bar{\alpha}u$  'I sew' for \*(s) $n\bar{e}$ - $i\bar{o}$ ); \*sn- $\bar{o}$ - in O.Ir. sn $\bar{\alpha}$ -the 'thread' O.H.G. snuo-r 'cord, band'; Skr. sná-van- Avest. sna-vare

'band, sinew' may be derived from  $*sn-\bar{e}$ - on the strength of Gr.  $\nu \varepsilon \tilde{v} \varrho o - \nu$  'sinew' (for \*(\sigma) \nu \eta - \frac{F}{-} \rho o - \nu' \rightarrow \frac{1}{2} \nu - \overline{\sigma} - \overline know' from  $\sqrt{\hat{g}en}$ - (Avest. ā-zainti-š 'information' Lith. pa--žinti-s 'knowing, knowledge', Skr. 2nd sing. imper. jn-a Class II B): Skr. opt.  $j\hat{n}\bar{a}-y\bar{a}-t$  and  $j\hat{n}\bar{e}y\acute{a}-t$  (§ 940), Gr. ε-γνω-ν ε-γνω-μεν opt. γνοῖ-μεν, cp. O.H.G.  $kn\bar{a}u$  for  $*\hat{g}n\bar{e}-i\bar{g}$ , O.C.Sl. znajetŭ for \*ĝnō-je-.1) \*mnn-ē- from  $\sqrt{men}$  'think' (Gr.  $\mu \dot{\epsilon} \nu$ -og 'mind' etc.): Gr.  $\dot{\epsilon}$ - $\mu \dot{\alpha} \nu \eta$   $\dot{\epsilon}$ - $\mu \dot{\alpha} \nu \eta$ - $\mu \epsilon \nu$ , Lith. min- $\dot{\epsilon}$ mìn-è-me, cp. Goth. 3rd sing. munáip for \*mun-ē-ji-đi (§§ 708, 739); also \*mn-ā- § 580 p. 122. \* $i-\bar{e}$ - \* $i-\bar{e}$ - 'go' from  $\sqrt{e}i$ -'go' (Gr. ¿Ĩ-µı): Skr. yā-ti yā-más mid. yā-mahē, Goth. 2nd sing.  $iddj\bar{e}$ -s (§ 478 p. 26), cp. Goth. j- $\bar{e}$ -r 'year' and Gr.  $\bar{\psi}$ - $\rho$ o-s 'year' ő-oā 'season' O.C.Sl. ja-rŭ 'spring'; Lith. jó-ju 'I ride' and Lat.  $j\bar{a}$ -nu-s  $j\bar{a}$ nua doubtless from \* $i\bar{a}$ -, from the same  $\sqrt{e_{\bar{e}}}$  (cp. Lat. conj.  $e-\bar{a}-s$ ). \* $bh\psi-\bar{e}-$ \* $bhu\psi-\bar{e}-$  from  $\sqrt{bhe\psi}-$ 'become, be' (Skr.  $bh\acute{a}v-a-ti$ ): Gr.  $\dot{\epsilon}-qv'\eta$   $\dot{\epsilon}-qv'\eta-\mu\epsilon v$ , O.C.Sl. 2<sup>nd</sup> and 3rd sing. imperf. bě for \*bhuē-s -t (beside běchŭ běchomů etc. like želěchů etc. beside želě, dělachů etc. beside děla and the like), the same stem in Lat.  $f\bar{e}$ -tu-s; \*bhu- $\bar{o}$ - perhaps in Gr.  $\varphi \omega - \lambda \varepsilon \delta - \varsigma$  O.Icel.  $b\bar{o} - l$  'resting-place, position'; cp. \*bhu-a-\*bhuy- $\bar{a}$ - § 579 p. 121. \* $y-\bar{e}$ - \* $y-\bar{o}$ - 'to blow' (cp. the Author, M. U. 1 27 ff., Per Persson, op. cit., 91, 225): Skr. vá-ti pl. vá-nti (vá-ya-ti), Gr. ἄη-σι mid. ἄη-ται, Lat. ventu-s Goth. vind-s 'wind' for \*uē-nt-o- like Gr. ά-εντ- for \*ά-εντ- (I § 612 p. 462, § 614 p. 464), cp. Goth. vaia for \*uē-iō O.C.Sl. vě-je-tŭ; \*μō- in Gr. ἄω-το-ς 'down, piece of wool' (Goth. perf.  $vai-v\bar{o}$  is doubtless a re-formate following  $sai-s\bar{o}$  from  $\sqrt{s\bar{e}}$ sə-, see §§ 883, 884). \*bhs-ē- \*bhs-ō- (cp. I § 552 p. 403) 'pound small, chew, grind up' beside Skr. bá-bhas-ti Class V (§ 556 p. 108): Skr. psa-ti, cp. Gr.  $\psi \tilde{\eta}$  for  $*\psi \eta - \iota \epsilon \iota$ ; \*bhs- $\bar{o}$ in Gr. ψώ-ω ψώ-χω 'I grind or rub to powder' ψω-ρό-ς 'scabby'. \* $liq-\bar{e}$ - from  $\sqrt{leiq}$ - 'leave' (Gr.  $\lambda si\pi - \omega$  etc.): Gr.

<sup>1)</sup> It is true that O.H.G.  $kn\bar{a}u$  is not an unexceptionable example for  $*\hat{g}n-\bar{e}-$ . It might be assumed that this present was formed in connexion with a perfect Goth.  $*kai-kn\bar{o}$  and on the analogy of  $*s\bar{e}-i\bar{o}$  (Goth. saia O.H.G.  $s\bar{a}u$ ):  $sai-s\bar{o}$  from  $\bigvee s\bar{e}-(s\bar{o}-)$ .

 $\dot{\varepsilon}$ - $\lambda i\pi$ - $\eta$ - $\nu$ - $\eta$ - $\mu \varepsilon \nu$ , Lat. lic-e-t.\) Lat. tac- $\bar{e}$ -s- $\bar{e}$ -mus, O.H.G. dag- $-\bar{e}$ -s 'thou art silent'. Lat. scat- $\bar{e}$ -s- $-\bar{e}$ -mus, Lith. su-skat- $-\bar{e}$  'he leapt up'.

With dissyllabic stems in  $-\bar{e}$ -, in which the root remained a separate syllable, the  $\bar{e}$ -suffix does not appear in so many different parts of the verb as with monosyllabic stems. In a number of verbs, especially intransitive verbs, of the European languages, a firm connexion sprang up between present formations with the suffix -io- and forms with  $-\bar{e}$ -, as Gr.  $\mu\alpha\ell\nu\rho\mu\alpha\ell$   $\hat{e}\mu\alpha\nu\eta\nu = \text{O.C.Sl.}$   $m\bar{e}njq$   $m\bar{e}n\bar{e}$ -ti. See § 708.

§ 588. Aryan. Almost all the Sanskrit forms which can with any kind of certainty be placed in this class have been mentioned in § 587. Beside  $y \hat{a}$ -ti we have Avest.  $y \bar{a}$ iti; beside  $v \hat{a}$ -ti, Avest.  $v \bar{a}$ iti  $3^{rd}$  pl.  $v \hat{a}$ -nti.

In this class was conjugated Ar.  $p\bar{a}$ - 'protect', whose  $-\bar{a}$ -, in view of Gr.  $\pi\bar{\omega}v$  'herd' (II § 104 p. 315, § 105 Rem. p. 318) seems to look like Idg.  $-\bar{o}$ -:  $2^{\rm nd}$  sing. Skr.  $p\bar{a}$ -si, Avest.  $p\bar{a}$ -hi, imper.  $3^{\rm rd}$  sing. Skr.  $p\bar{a}$ -tu Avest.  $p\bar{a}$ -tū O.Pers.  $p\bar{a}$ -tūv  $2^{\rm nd}$  sing. Skr.  $p\bar{a}$ -hi O.Pers.  $p\bar{a}$ -dīy  $2^{\rm nd}$  pl. Skr.  $p\bar{a}$ -tú Avest.  $p\bar{a}$ -ta, opt. Avest.  $p\bar{a}$ -yā- $p\bar{a}$ . On  $\pi\bar{\omega}v$   $\pi\omega$ - $\mu\dot{\gamma}v$ , compare now Per Persson, in the work so often cited, 118.

§ 589. Greek. Of monosyllabic stems may be further mentioned (cp. § 587):  $\varphi\varrho - \eta$ - 'bring' from  $\sqrt{bher}$ -  $(\varphi \dot{\varepsilon}\varrho - \omega)$ :  $\dot{\varepsilon}\varkappa - \varphi\varrho \eta - \tau \omega$  'is let out' partic.  $\dot{\varepsilon}\varkappa - \varepsilon \omega - \varphi\varrho \varepsilon \dot{\varepsilon} \dot{\varepsilon}$  infin.  $\varepsilon \partial \sigma - \varphi\varrho \tilde{\eta} \nu \omega \dot{\varepsilon}$  (forms like imper.  $\varphi\varrho\dot{\varepsilon}\dot{\varepsilon}$  come by analogy of  $\ddot{\iota}\eta \mu u$  and the like, see the Author, Fleckeisen's Jahrb. 1880, 217 ff.).  $\chi\varrho - \eta$ - 'wish, desire' beside Skr.  $h\acute{\alpha}r - ya - ti$  'desires':  $2^{nd}$  sing.  $\chi\varrho\tilde{\eta} - \sigma \mathcal{P}\alpha$ , cp.  $\chi\varrho\tilde{\eta}$  for  $*\chi\varrho\eta - \iota\varepsilon$  (Mekler, Beitr. zur Bildung des gr. Verb., pp. 23 f.).  $\varkappa\lambda - \eta$ - 'call' beside  $\varkappa\alpha\lambda\dot{\varepsilon}\omega$ : Cret. part.  $\dot{\alpha}\nu - \varkappa\lambda\eta - \mu\varepsilon\nu\sigma - \varepsilon$  beside  $\dot{\alpha}\nu\alpha - \varkappa\alpha\lambda\dot{\varepsilon}\omega$  (Th. Baunack, Philologus XLIX 593 f.), cp.  $\dot{\sigma}\mu - \varkappa\lambda\dot{\eta}$ 

<sup>1)</sup> Bersu (Die Gutturalen, p. 154) denies that licet and  $linqu\bar{o}$  are connected, because licet has c, and qu would be expected. I conjecture that there was once a form \*liciō (Skr. ric-ya-tē Gr.  $\lambda \iota \sigma \sigma \omega \mu \epsilon r$  § 707), which came regularly from \*licu- $\dot{q}\bar{o}$  (as farciō comes from \*farcu- $\dot{q}\bar{o}$  § 715). Hence licet. Compare § 708.

Brugmann, Elements. IV.

(Hom. ὁμοκλέομεν). σβ-η- 'quench' beside σβ-εσ- (§ 643)  $\sqrt{seg}$ -:  $\ddot{ε}-σβ-η-ν$   $\ddot{ε}-σβ-η-μεν$ . We must also mention in this place, although it is true they are not all old formations, some forms of the  $2^{rd}$  sing. aor. in  $-θη_{\varsigma} = \text{Skr.} - th\bar{a}s$  (see below), as  $\dot{ε}-βλή-θη_{\varsigma}$  beside  $\ddot{ε}-βλη-το$ ,  $\dot{ε}-νή-θη_{\varsigma}$  beside  $\ddot{ε}-ννη$ , see § 587 p. 127;  $\dot{ε}-ροή-θη_{\varsigma}$  beside Fρ-η- 'speak'  $\dot{ρ}η-τό-ν = \text{Avest. } urv\bar{a}te-m$  'determination, command' (I § 157 p. 141) from  $\sqrt{uer}$ - (Gr.  $ε\ddot{ι}ρω$  Lat. ver-bu-m); <sup>1</sup>)  $\dot{ε}-κλή-θη_{\varsigma}$  beside κλ-η- 'call'  $\dot{α}ν-κλή-μενο-ς$   $κ\dot{ε}-κλη-μαι$   $\dot{ο}μο-κλή$  (see above).

Of dissyllabic stems we have already mentioned  $\dot{\epsilon}$ - $\mu \dot{\alpha} \nu$ - $\eta$ - $\nu$ ,  $\dot{\epsilon}$ - $q \dot{\nu}$ - $\eta$ - $\nu$ , and  $\dot{\epsilon}$ - $\lambda l \pi$ - $\eta$ - $\nu$  in § 587. This  $\bar{e}$ -formation, with intransitive meaning, became fertile (this is what the grammars call the "strong aorist"); a few further examples are  $\vec{\epsilon} - \delta \vec{a} \rho - \eta - \nu$  'I was flayed'  $\sqrt{der}$ ,  $\vec{\epsilon} - \rho \rho \vec{v} - \eta$  'flowed'  $\sqrt{srey}$ , ἐ-τάοπ-η-ν ἐ-τράπ-η-ν 'I enjoyed myself, was glad'  $\sqrt{terp}$ -, ε-κλάπ-η-ν 'I let myself be deceived, was deceived' \( \sqrt{qlep-}, \)  $\hat{\epsilon} - \mu i \gamma - \eta - \nu$  'I mixed myself'  $\sqrt{mei\hat{k}}$ ,  $\hat{\epsilon} - \zeta i \gamma - \eta - \nu$  'had myself yoked, was joined  $\sqrt{jeug}$ ,  $\epsilon$ - $\sigma \acute{\alpha} \pi$ - $\eta$  rotted from  $\sigma \acute{\eta} \pi$ - $\omega$  cause to rot', ξξ-επλάγη-ν 'I was frightened' from pres. ξκ-πλήττωcp. Lith. płāk-ė 'he struck' (pres. płak-ù). There was a reason why this category should become very large. Medio-passive forms of the  $2^{nd}$  sing. in  $-9\eta\varsigma$ , as  $\dot{\epsilon}-\delta\dot{\phi}-9\eta\varsigma = \text{Skr. }\dot{\alpha}-di-th\bar{\alpha}s$ ,  $\dot{\epsilon}$ -κτά- $\vartheta\eta\varsigma = \text{Skr.}$  ά-k§a- $th\bar{a}s$  (Class I),  $\dot{\epsilon}$ - $\beta\lambda$ - $\dot{\eta}$ - $\vartheta\eta\varsigma$  beside  $\ddot{\epsilon}$ - $\beta\lambda$ --η-το (Class X),  $\vec{\epsilon}$ -σχ- $\vec{\epsilon}$ -θης beside  $\vec{\epsilon}$ -σχ- $\epsilon$ -το (Class II B); and forms from the s-aorists, as έρείσθης beside έρείσατο (έρείδ-ω 'I support, press against'),  $\dot{\epsilon}\mu\dot{\epsilon}\mu\gamma\eta\varsigma = \dot{\epsilon}-\mu\epsilon\iota x-\sigma-\eta \gamma$  beside  $\ddot{\varepsilon}$ μεικτο =  $\dot{\varepsilon}$ -μεικ-σ-το  $\mu$ ίγ-ν $\bar{v}$ - $\mu$ ι 'I mix');<sup>2</sup>) — these were all regarded as being on a par with  $i \lambda i \pi \eta - \varsigma$  etc., and then, by analogy of  $i\lambda i\pi \eta$ - $\nu$   $i\lambda i\pi \eta$  etc. we have  $i\delta \delta i\theta \eta$ - $\nu$ έδόθη and so forth, that is, from this grew the whole series of the "weak acrist passive". Compare O.Ir. 1st sing. -burt by analogy of 3rd sing. -bert, where -t is the middle personal

<sup>1)</sup>  $\hat{\epsilon}\varrho\epsilon\hat{\sigma}\eta\varsigma$   $\hat{\epsilon}l\varrho\epsilon\hat{\sigma}\eta\varsigma$  i. e. \*e- $\mu$ r-e-th $\bar{e}s$  follows Class II B (§ 527 p. 90), cp. Skr.  $\hat{a}$ -khy- $\alpha$ -t beside khy- $\bar{\alpha}$ -ti, imper.  $j\hat{n}$ - $\alpha$  beside  $j\hat{n}$ - $\bar{\alpha}$ -sya-ti, etc.

<sup>2)</sup> Compare § 836, on ε-κορέσ-θης and § 840 on ε-κρεμάσ-θης.

ending -to (§ 506 pp. 72 f.), and Lith. 1st sing. eith by analogy of 3rd sing. eitt = Gr.  $\epsilon \tilde{t}$ - $\sigma \iota$  (§ 686 Rem. 2).

Dissyllabic stems with  $-\bar{o}$ -, are rare in Attic (cp.  $\dot{\epsilon}$ - $\gamma\dot{\eta}\rho\bar{\alpha}$ - $\nu$  § 582 p. 123):  $\dot{\epsilon}\dot{\alpha}\lambda\omega$ - $\nu$  for  $^*\dot{\eta}$ - $\hbar\alpha\lambda\omega$ - $\nu$  (§ 479 p. 27) 'fell a prisoner, was captured'  $1^{\rm st}$  pl.  $\dot{\epsilon}\dot{\alpha}\lambda\omega$ - $\mu$ e $\nu$  partic.  $\dot{\alpha}\lambda\dot{o}\nu\tau$ -;  $\dot{\epsilon}$ - $\beta\dot{\iota}\omega$ - $\nu$  'I lived'  $1^{\rm st}$  pl.  $\dot{\epsilon}$ - $\beta\dot{\iota}\omega$ - $\mu$ e $\nu$ .

The Aeolic dialect inflects the whole group of newly formed denominatives in -έω and -όω, and the Causatives in -έω (Class XXXII) as though belonging to Class X; e. g. Lesb. φίλη-μι 'I love, am wont' from φίλο-ς, φόρη-μι 'I carry' (Class XXXII), στεφάνω-μι 'I crown' from στέφανο-ς (Att. φιλῶ for  $\varphi \iota \lambda \acute{\epsilon} \omega$ ,  $\varphi \circ \varrho \widetilde{\omega}$  for  $\varphi \circ \varrho \acute{\epsilon} \omega$ ,  $\sigma \tau \epsilon \varphi \alpha \nu \widetilde{\omega}$  for  $\sigma \tau \epsilon \varphi \alpha \nu \acute{\epsilon} \omega$ ),  $2^{nd}$  pl. φίλη-τε στεφάνω-τε, 3rd pl. φίλεισι στεφάνοισι for \*-ενσι \*-ονσι (Ι § 205 p. 172), mid. φίλη-μαι στεφάνω-μαι. This was a new formation entirely, which came naturally because other tenses than the present were alike in the two classes, for instance ἀήσεται : φιλήσεται, γνώ-σεται : στεφανώ-σεται, and because of the old Aeolic inflexion of a-stems (§ 578 p. 120); for verbs in  $-\eta\mu\iota$ , another factor in the change may have been reduplicated stems like n/-xn-m Class XI (§ 594), and the singular indic. pres. of verbs in -ημι or -ωμι may have been influenced by τίθη-μι δίδω-μι respectively.1) However, it must not be forgotten that φιλέετε στεφανόομεν would regularly become φίλητε στεφάνωμεν in Aeolic.

Remark. As regards η ω in forms like ἄηνται, (Lesb.) στεφάνωνται,  $\hat{\epsilon}μ-πλ\tilde{\eta}το$  etc., see § 582 Rem. p. 123; and for the 3<sup>rd</sup> pl. act. pret.  $\tilde{\epsilon}μιγεν$   $\tilde{\epsilon}γνον$  etc. see § 1020.2.

**590.** Italic. Of stems originally monosyllabic I mention a few others (cp. § 587):  $fl-\bar{e}-s$   $fl-\bar{e}-mus$ , connected with O.H.G.  $bl\bar{a}u$  'I blow' Gr.  $\varphi\lambda-\dot{\epsilon}\omega$   $\varphi\lambda-\dot{\nu}\omega$  'I overflow, trickle' and doubtless with  $fl-\bar{o}-s$ . Compare also  $spr-\bar{e}-vi$   $spr-\bar{e}-tu-s$ 

<sup>1)</sup> Compare especially 2nd 3rd sing. φίλης φίλη like τίθης τίθη, ναriants φίλεις φίλει; and στεφάνοις στεφάνοι like δίδοις δίδοι. Similarly, we have τίμαις τίμαι like ἴσταις ἴσται. Then the diphthong passes to the 1st sing., giving στεφάνοιμι τίμαιμι (cp. ἴσταιμι).

from  $sper-n\bar{o}$ ;  $qui-\bar{e}-sc\bar{o}$   $qui-\bar{e}-v\bar{\imath}$ , connected with Avest.  $\check{s}y\bar{e}iti-\check{s}$  'wellbeing, place of delight, home' (II § 100 p. 297) and Gr.  $\tau \varepsilon - \tau i \eta - \mu a \iota$  'I am frightened' (de Saussure, Mém. Soc. Ling., vii 86 f.) beside Goth. hvei-la 'while, time' O.C.Sl.  $po-koj-\check{\iota}$  'rest';  $(g)n-\bar{o}-sc\bar{o}$   $(g)n-\bar{o}-v\bar{\imath}$  beside Gr.  $\check{\varepsilon}-\gamma \nu-\omega-\nu$  (§ 587 p. 128).

Dissyllabic stems, usually with intransitive meaning (cp. the Greek "passive agrist" in  $-\eta-\nu$  § 589 p. 130). lic-e-t, Osc. líkítud licitud 'liceto': Gr. ε-λίπη, § 587 p. 129. vid-ē-s vid--ē-mus, cp. Lith. pa-vydě-ti 'invidere' O.C.Sl. vid-ě-ti 'to see'; video for \*uid-e-io like Goth. vitái-p 'looks towards something, observes'; notice Umbr. virseto 'visum'. sil-ē-s; with sileō cp. Goth. silái-þ 'silet'. rub-ē-s, cp. O.C.Sl. rud-e-ti 'redden, blush'. fav-ē-s, cp. O.C.Sl. gov-ě-ti 'religiose vereri, εὐλαβεῖσθαι, venerari, αἰδεῖσθαι' (see Ber. sächs. Ges. Wiss., 1889, p. 47); faveō like gověja. val-ē-s, cp. Lith. gal-ë-ti 'to be able' (not so Bezzenberger in his Beitr. XVI 256). tac-ē-s: O.H.G. dag-ē-s 'art silent'; tac-eo like Goth. pahái-p; observe Umbr. tašez tases tasis 'tacitus' pl. tasetur 'taciti'. hab-ē-s, Umbr. habe 'habet' habetu habitu 'habeto': O.H.G. hab-ē-s  $(\sqrt{khap}-khab- \text{ or } khabh- khab-)$ . Further, Lat.  $clu-\bar{e}-s$  $\sqrt{\hat{k}le\psi}$ ;  $torp-\bar{e}$ -s for \* $tpp-\bar{e}$ - (I § 303 p. 241);  $cand-\bar{e}$ -s doubtless for  $*q\bar{n}d$ - $\bar{e}$ - from  $\sqrt{s}$  (s)qend- (Skr.  $\dot{s}$ cand- $r\dot{a}$ - cand--rá-, cáni-ścad-a-t); liqu-ē-s and others; Osc. loufit 'libet, vel' (Bréal, Mém. Soc. Ling. IV 145 f., 404 f.) beside Lat. lubet, closely connected with Goth. lubáin-s 'hope', and, as we shall see in § 708, with Skr. pres. lúbh-ya-ti; Umbr. trebeit 'versatur' from  $\sqrt{treb}$ - 'build', which doubtless comes from \*treb-ē-ti rather than \*treb-ī-ti 1st sing. \*treb-iō (in Class XXVI, § 715). With nasal suffix, Lat. langu-ē-s from  $\sqrt{sl\bar{e}g}$ - (§ 632). On this present in -eō compare § 708.

In the same way are inflected a late group of denominative verbs in  $-e\bar{o}$ , and the Causatives in  $-e\bar{o}$  (Class XXXII), e. g. albeō albē-s etc. from albu-s, and moneō monē-s etc. See §§ 777, 802.

§ 591. Keltic. I know nothing that can be classed here. do-qniu 'I do, make, work' 3<sup>rd</sup> sing. gniith, inflected just like

biu, which comes from \*bhu- $ii\bar{o}$  (§ 719), is therefore from \*gn- $ii\bar{o}$  not \*gn- $\bar{e}$ - $i\bar{o}$ .

§ 592. Germanic. Goth. iddja 'I went' iddjē-s (pl. iddjēdum following nasidēdum): Skr. á-yā-m, see § 478 p. 26, § 587 p. 128, § 886 Rem. Goth. vind-s O.H.G. wint O.Icel. vindr 'wind': Lat. ventu-s contains the participle \*yē-nt-'blowing', see § 587 p. 128. Elsewhere, monosyllabic stems only have the io-suffix (Class XXVIII), as Goth. vaia O.H.G. wāu 'I blow' for \*yē-jō.

To this tenth class belong dissyllabic stems in  $-\bar{e}$ - as inflected in Old High German.  $dag-\bar{e}-m$  'I am silent'  $-\bar{e}-s$   $-\bar{e}-t$   $-\bar{e}m-\bar{e}s$   $-\bar{e}-t$   $-\bar{e}-nt-$ : Lat.  $tac-\bar{e}-s$  etc.,  $hab\bar{e}-m$ : Lat.  $hab-\bar{e}-s$ , see § 590 p. 132.  $dol-\bar{e}-m$  'I suffer, endure', cp. Lith.  $tyl\ddot{e}-ti$  'to be still, silent' (long i not original), common ground-form \* $tll-\bar{e}$ - from  $\sqrt{tel-}$ .  $leb-\bar{e}-m$  'I live', cp. O.C.Sl.  $pri-llp\dot{e}-ti$  'hold or cleave to' Gr.  $\dot{a}\lambda\iota\varphi\eta\bar{\nu}a\iota$  from  $\dot{a}\lambda\epsilon\iota\varphi\omega$  'anoint, smear' (for the derived meaning compare O.Icel. lifa 'be left over, live'). On these O.H.G. verbs in  $-\bar{e}m$  and their relation to Goth. verbs in  $-a-\dot{a}is$  (as  $dag\bar{e}m$ : paha) see § 708.

§ 593. Balto-Slavonic. O.C.Sl.  $b\check{e}$  'eras, erat' for \*bhu- $\bar{e}$ -s \*bhu- $\bar{e}$ -t, see § 587 p. 128. Lith. ent- 'going' perhaps for \* $\dot{i}$ - $\bar{e}$ -nt, beside Goth. iddj- $\bar{e}$ -s Skr. y- $\dot{a}$ -nt-, see § 511 p. 77.

Then comes the Lith. preterite in  $-\dot{e}$  (3rd sing.), whose high antiquity in Baltic is vouched for by Pruss.  $wedd\bar{e} = \text{Lith. } v\bar{e}d\dot{e}$  'he led'.  $p\dot{y}l\dot{e}$ ,  $m\dot{n}n\dot{e}$ ,  $su\text{-skat}\dot{e}$  were mentioned in § 587,  $pl\bar{a}k\dot{e}$  in § 590. Compare further  $v\dot{r}r\dot{e}$  from  $v\dot{e}r\text{-}du$  'I cook, boil',  $m\dot{r}r\dot{e}$  from  $m\dot{r}r\text{-}sztu$  'I die',  $g\dot{r}m\dot{e}$  from  $gem-\dot{u}$  'I am born',  $g\dot{r}n\dot{e}$  from  $gen-\dot{u}$  'I hunt, drive',  $t\bar{a}p\dot{e}$  from  $tamp-\dot{u}$  'I become' (as to  $\dot{e}$  in the root-syllable of  $v\dot{e}m\dot{e}$  from  $vemi\dot{u}$  'I vomit',  $v\dot{e}r\dot{e}$  from  $vem\dot{u}$  'I drink' and the like, see § 894). These forms had originally secondary endings, \*- $v\ddot{e}$ - $v\ddot{e}$ -

(Wiedemann, Lit. Praet., 32, 184).1) Compare § 586 p. 126 on buvaŭ buvaŭ, and § 991.1.

Lastly should be mentioned imperatives like  $min\dot{e}-k$  'think of'  $pa-vyd\dot{e}-k$  'invide'; these answer to the Greek and Latin imperatives  $\mu\dot{\alpha}v\eta$ - $\vartheta\iota$   $vid\bar{e}$  (§ 708).

## Class XI.

Reduplicated Root  $\div$  - $\bar{a}$ -, - $\bar{e}$ -, - $\bar{o}$ -, forming the Present Stem.

§ 594. Reduplicator in -i (compare Classes III and IV).

Reduplicated Root + - $\bar{a}$ -. Pr. Idg. \*gi-g- $\bar{a}$ -ti 'goes' (cp. § 497 Rem. p. 57, § 579 p. 121): Skr.  $jig\bar{a}$ -ti 2<sup>nd</sup> pl.  $jig\bar{a}$ -ta (partic. jig-at- in Class III), Gr.  $\beta i\beta \eta$ - $\sigma i$  3<sup>rd</sup> pl. Dor.  $\beta i\beta \alpha$ - $\nu \tau i$  (cp. G. Meyer, Gr. Gr.<sup>2</sup> p. 431), partic.  $\beta i\beta \bar{\alpha} \varsigma$ .

Gr.  $\varkappa l \gamma - \varkappa \rho \bar{\alpha} - \mu u$  'I mix' imper.  $\dot{\epsilon} \gamma - \varkappa l \varkappa \rho \bar{\alpha}$ , beside Skr.  $\dot{s}r - \bar{a} - ti$  Class X (§ 580 p. 122); ep. below, on  $\pi l \mu - \pi \lambda \eta - \mu u$ . Gr.  $\delta l - \zeta \eta - \mu \alpha u$  I seek, strive' for  $*\delta l - \delta \ell - \bar{\alpha} - \mu \alpha u$  beside  $\delta \ell - \zeta - \sigma - \mu \alpha u$ , Class IV B (§ 549 p. 106) and beside Skr.  $\dot{\alpha} - d\bar{\iota} - d\bar{\iota} - t$  Class III (§ 537 p. 97);  $*\delta \ell \bar{\alpha}$  we infer from Aeol.  $\zeta \dot{\alpha} \tau \eta \mu u$  (Att.  $\zeta \eta \tau \ell \omega$ ) and Dor.  $\zeta \bar{\alpha} \tau \varepsilon \dot{\nu} \omega$  from the partic.  $*d\dot{\varrho} - \bar{a} - to - \iota$ 

Possibly Idg.  $-\bar{a}$ - is contained in Germ. \*ti-tr- $\bar{o}$ -mi O.H.G.  $zittar\bar{o}m$  'I tremble' O.Icel. titra 'I tremble, shake', from  $\bigvee der$ -'burst' (cp. Skr. dar- 'push apart, lose one's head, be frightened').

Reduplicated Root + -ē-. Gr.  $-\pi i - \pi \lambda \eta - \mu \iota$  πίμ-πλη-μι imper. Hom. ἐμ-πίπληθι partic.  $-\pi \iota \pi \lambda \iota \iota \iota$ ς (Hesiod , Hippocrates) beside πλ-ῆ-το Class X § 587 p. 127.  $-\pi l - \pi \varrho \eta - \mu \iota$  πίμ-πρη-μι

<sup>1)</sup> I hold Wiedemann's explanation of -iau to be correct, nothwith-standing Streitberg to the contrary (Idg. Forsch., I 267). Streitberg has overlooked one fact: to wit, that the diphthong -ēu in these words first appeared in Baltic, and is not so old as the pre-dialect period of Balto-Slavonic.

Gr.  $\varkappa i - \chi - \eta - \mu \iota$  'I reach, find, catch up' 1st pl.  $\varkappa i - \chi \eta - \mu \varepsilon \nu$  partic.  $\varkappa \iota - \chi \eta' - \mu \varepsilon \nu \circ - \varsigma$ . Origin uncertain.

O.H.G. wi-wint 'whirlwind' beside wint (§ 592 p. 133) was perhaps reduplicated first as a substantive.

Remark. Some verbs of Classes III and IV have an  $-\bar{a}$ -suffix in Italic in non-present tenses. Umbr. an-dirsafust a-te řa-fust 'circumtulerit' for \*di-d- $\bar{a}$ - from  $\bigvee d\bar{o}$ - 'give' pres. Umbr. Osc. 1st sing. \*di-d- $\bar{o}$ ; Falisc. pipafo 'bibam' op. Skr. 3rd pl. pi-p- $at\bar{c}$  Lat. bi-b-i-t § 539 p. 100, § 553 p. 107; Volsc. sistiatiens 'statuerunt' from \* $sist\bar{a}$ -tens (Osthoff, Perf. 244) beside Lat. si-st- $\bar{o}$ . These  $\bar{a}$ -stems are identical with the  $\bar{a}$ -conjunctives of these verbs (Pelign. di-d-a 'det', Lat. bi-b- $\bar{a}$ -s, si-st- $\bar{a}$ -s) and are proofs of the wide range which the  $\bar{a}$ -suffix originally had (see § 578 pp. 118 ff.).

§ 595. Fuller Reduplication (cp. Class VII). Skr. dári-drā-ti beside dr-ā-ti 'runs', yāyā-vará-s 'walking or moving about' from a presumed \*yā-yā-ti connected with y-ā-ti 'goes'. Armen. mr-mr-a-m mr-mr-a-m 'murmuro, fremo, rugio', Lat. 2nd sing. mur-mur-ā-s, O.H.G. mur-mur-ō-s murmulō-s 'murmurest', beside Gr. μοομέρω for \*μοο-μνο-μω Class XXVII (§ 730). Lat. tin-tinn-ā-s tin-tin-ā-s beside tin-tinn-iō Class XXVII (§ 731). Lat. ul-ul-ā-s, Lith. imper. ul-ūl-ō-k

Is Thess. inf. ἐσ-κιχρέμεν (Collitz, Samml. no. 1557) an adformate of τιθέμεν, or did it come from an indic. \*κίχρω (cp. πρᾶσσέμεν)?

indic. ul- $\bar{u}l$ - $\delta$ -ju (cp. § 735). The Lat. 1<sup>st</sup> sing., murmur $\bar{v}$  tintinn $\bar{v}$  ulul $\bar{v}$  for  $-\bar{a}$ - $i\bar{v}$  (cp. Lith. ul- $\bar{u}l$ - $\delta$ -ju) in Class XXVIII (§ 741).

# D. CLASSES XII TO XVIII. NASAL PRESENT STEMS.

§ 596. Specimen types of words which belong to this section are Skr.  $mr-n\dot{a}-ti$   $r-n\dot{o}-ti$   $yun\dot{a}k-ti$  with the thematic  $mr-n\dot{a}-ti$   $r-n\dot{a}-ti$   $yun\dot{a}d-ti$ ; and Skr.  $krp-\dot{a}na-t\bar{e}$ .

A few remarks are necessary on these nasal accretions, which beyond all doubt are closely connected together.

- (1) Skr. mr- $n\acute{a}$ -ti: mr- $n\acute{a}$ -ti mr-n- $\acute{a}$ -ti: r- $nv\acute{a}$ -ti: r- $nv\acute{a}$ -ti:  $yun\acute{a}$ -ti:  $yun\acute{a}$ -ti:  $yun\acute{a}$ -ti:  $yun\acute{a}$ -ti:  $v\acute{a}$ -ti:  $v\acute{e}$ -ti:
- (2) The suffix -new--nu- is made out of -nā--nə--n-(Skr. mṛ-ṇā-mi Gr.  $\mu$ á $\rho$ -va- $\mu$ a $\iota$  Skr. mṛ-ṇ-ánti) by adding the suffix or determinative -e $\mu$ -- $\mu$ -. This - $\mu$  has been discussed, § 488 pp. 44 ff.

We often find -u- and -nu- in the same root; as \*str-u-(Goth. stráu-ja) and \*str-nu- (Skr. str-nó-ti Gr.  $\sigma r \acute{o} \varrho - \nu \bar{\nu} - \mu \iota$ ), from  $\sqrt{ster}$ - 'sternere'; \*kl-u- (Skr.  $\dot{s}r-\acute{o}-\dot{s}i$   $\dot{s}r-u$ -dhí) and \*kl-nu- (Skr.  $\dot{s}r-n\acute{o}-ti$ ) from a  $\sqrt{k}a^*l$ -, never found except with one of these extending suffixes; \* $\mu el$ -u- (Gr.  $\dot{\epsilon}\lambda$ - $\dot{\nu}\omega$   $\dot{\epsilon}\lambda$ - $\nu$ - $\nu \varrho o$ - $\nu$ -Lat. vol- $v\bar{o}$  in- $vol\bar{u}cru$ -m) and \* $\mu l$ -nu- \* $u\bar{l}$ -nu- (Skr. vr- $n\acute{o}-ti$   $\bar{u}r$ - $n\acute{o}-ti$ ) from  $\sqrt{\mu}el$ - 'turn, twist, wind'; Skr.  $\dot{a}$ -dbh-u-ta-s 'undeceitful, pure, genuine' and dabh- $n\acute{o}$ -ti from dabh- 'deceive'; \*qs-u- (Gr.  $\xi$ - $\nu\omega$ ) and \*qs-nu- (Skr.  $k\xi$ -nuv- $\bar{a}n\acute{a}$ -s) from  $\sqrt{qes}$ - (II § 8 Rem. 2 p. 20); \* $p\bar{r}$ - $\mu$ - (Skr.  $p\acute{t}$ -vas-) and \*pi-nu- (Skr. pi-nv-a-ti) from  $p\bar{\imath}$ - 'swell, abound in'. The variant stems in Skr.  $\dot{s}r$ - $\dot{o}$ - $\dot{s}i$  and  $\dot{s}r$ - $n\acute{o}$ - $\dot{s}i$  may be compared with those in Gr.  $\vartheta\varrho \alpha\sigma$ -v- $\varphi$  and Skr.  $dhr\dot{\varphi}$ - $n\acute{u}$ - $\dot{s}$  (1st pl.  $dhr\dot{\varphi}$ -nu- $m\acute{a}s$ ). Probably one of these parallel stems, say \*qs-nu-, is a contamination of the

other two, \*qs- $\eta$ - (Gr.  $\xi$ - $\alpha'\nu\omega$   $\xi$ - $\alpha'\nu$ - $\iota$ 0- $\nu$ ) and \*qs-u-, and \*st $\gamma$ -nuof \*st $\gamma$ -n- (Skr. st $\gamma$ -na-ti Lat. ste $\gamma$ -n0 etc.) and \*st $\gamma$ -u-; 1) but
this must not be taken to imply that the contaminated suffix
- $\eta$ -u- arose in just these roots and no others.

Remark. Some scholars, led by de Saussure, hold that \*stynewis \*steru- with an infix or inserted element -ne-. That is all very well on paper, but under what principle of language known to us it can come passes my comprehension. They refer, of course, to yunák-ti, from / jeug- \*jug-, as a clear instance of inserted sounds. But I cannot admit that the nasal suffix has been inserted here any more than in the stem which I began with. See (5) below, pp. 139 f.\*

(3) After a root with final consonant  $\eta n$ , en, and doubtless on are found as variants for the initial n of  $-n\bar{a}$ - -no- -ney--nyo-.

<sup>1)</sup> Compare Lat.  $p\bar{o}pulneu-s=p\bar{o}pulnu-s+p\bar{o}puleu-s$ . A large collection of such mixed forms containing formative suffixes of a similar sort, is given by Per Persson, Wurzelerw. pp. 153 f.

<sup>2)</sup> On Skr.  $tan\acute{o}ti$ , which the Indians analysed as  $tan-\acute{o}-ti$ , see §§ 639, 640.  $kar\~{o}ti$  I still hold to be a later re-formate, although Per Persson, op. cit. p. 149, opposes this view. See § 640.

<sup>3)</sup> Fick is keenest about these "infixes". Thus in one place he speaks of the "repetition of infixed s" in Greek acrists in -σσα and Sanskrit acrists in -sišam (Gött. Gel. Anz., 1881, p. 1429). Page 1460: infixion is the "oldest and most powerful agent which causes word to grow out of word". Page 1462: "Almost always, where hitherto scholars have seen suffixes, that is, defining words added to the end of another, it is far better to speak of infixes". One question I should like to ask. Where did these infixed sounds come from, and what were they before they were infixed?

For -nā- -n(ə) take the following: Avest. 1st pl. fry-an-mahī beside frī-nā-iti 'pleases, makes inclined', hv-an-mahī beside hu-nā-iti 'excites, produces'. For -no-: Skr. iš-aṇa-t let him set in motion' cp. iš-anyá-ti = Gr. laivω for \*lo-av-ιω (-nno-), Armen. lk-ane-m 'I leave' (-nno-), Gr. κυδ-άνω 'I honour, glorify' (-nno-), Goth. ga-vakna 'I awake' (-nno-, -eno-, or -ono-), Lith. kūp-inu 'I heap, hoard' (-nno-), gab-enù 'I bring' (-eno-), O.C.Sl. vrīg-na-ti 'to throw' (probably -ono-, see § 615 Rem.)

For -ney- -nu-: Skr. vánanv-at- 'liking' for \*unn-nubeside indic. vano-ti for \*un-neu-ti from \( \sqrt{uen-: Avest. 2^{nd} pl. } \) debe-naotā for \*db-anau-ta (-anau- instead of -anu- from the singular) beside Skr. dabh-nō-ti 'hurts'; Avest. partic. mid. zar--anu-mana- beside opt. zar-anae-mā and Skr. hr-nī-té 'growls, grumbles'. For -nuo-: Avest. xw-anva-inti 'they drive on' xw-ēnva-p (pr. Ar. \*su-anua-) beside hu-nao-iti hu-nā-iti: Avest. sp-enva-p 'proficiebat' doubtless the same as O.H.G. sp-innu 'I spin' for \*sp-enuō beside spannu 'I stretch' for \*spo-nuō and beside spanu 'I lure, attract' for \*spo-no (§ 654); O.H.G. tr-innu 'I separate myself from' ground-form \*dr-enuō beside Skr. dr--nά-ti. Greek examples are apparently Hom. ἰκ-άνω for \*ίκ- $-\alpha r F \omega$  beside  $i \varkappa - \nu \dot{\epsilon} o - \mu \alpha \iota$  and  $\varkappa \iota \chi \dot{\alpha} \nu \omega$  for  $* \varkappa \iota - \chi - \alpha \nu F \omega$ , whose ending doubtless comes from -nuō (see § 652), and \xi -\xi\nabla Fo-\xi\nabla \xi\nabla o-\xi ξένο-ς from the root of Lat. hos-ti-s and Goth. gas-t-s (cp. the Author, Idg. Forsch., 1 172 ff.).

Similar groups of suffixes, fuller and weaker, are found in other present classes. -eno-:-no-=-eso-:-so- (Class XX). -uno-:-no-=-iuo-:-iuo- (Class XXVI).

The only ones of these dissyllabic suffixes which were to any great extent productive were -nno- -eno- (-ono-). These we place in a class by themselves (Class XIV).

(4) In classes where the *n*-suffix comes after the root syllable, it is not always as described in (3), just above. The root often has attached to it some kind of determinative. Thus we see -i- -ī- (cp. § 498 pp. 61 f.), as in Skr. *r-i-nva-ti* Gr. Lesb. ὀρ-ί-ννω beside Skr. *γ-nvά-ti* Gr. ὄρ-ν̄-μι; Gr. πι-νύ-

- $\mu i vo - g$  for \* $\pi F - \iota - vv$ - beside  $v\eta - \pi v' - \iota vo - g$  Skr.  $pu - n \acute{a} - ti$ ; Skr.  $bhr - \bar{\iota} - n \acute{a} - ti$  (Avest.  $br \bar{o} i - pra - 'axe'$  O.C.Sl. br i - ti 'shear, shave') beside Gr.  $q \acute{a} o - o - g$  Lat.  $for - \bar{a} re$ ; Skr.  $\acute{s} r - \bar{\iota} - n \acute{a} - ti$  beside  $\acute{s} r - t \acute{a} - s$ ; Gr. Lesb.  $\kappa o - \acute{\iota} - vv \omega$  (Lat.  $dis - cr \bar{\iota} - men$ ) beside Lith.  $skir - i \acute{u}$ . -s - es - (cp. §§ 656 ff.), as Skr.  $i - \check{s} - n \acute{a} - ti$   $i - \check{s} \acute{a} - t \bar{e}$  beside  $i - n \acute{o} - ti$ ; Gr.  $\ell v = v - \ell v = v$ 

(5) Most obscure of all has hitherto remained the "nasal infix", the nasal element, that is, in such words as Skr. yunák-ti yunj-más and yunj-á-ti, and its relation to the nasal suffixes in the other Classes.

The strong form, Skr. yunaj- for example, has hitherto been found as a verb stem only in Aryan. Some other languages have been supposed to show traces of it, as Gr. xuvéw and Lat. conquiniscō frūniscor, which are said by some to be for \*xuveo-w and \*quenec-scō \*frūneg-scōr; but this in my opinion is the merest conjecture.¹) If we must compare something from European languages, the most likely forms are the adjective Goth. manag-s O.C.Sl. munogu 'multus' beside Skr. máha-tē 'is large, generous' maghá-m 'fullness, riches'.

Perhaps these nasal forms are merely a development of Class XII, by a change in the first instance of, say, \*jug-n-més \*jug-n-té (-n- the variant of -n $\partial$ -, cp. Avest.  $ver^e$ -n-t $\bar{e}$  and the like) to \*jung-més \*junq-té. Then, by analogy of Skr. anák-ti and a $\bar{n}$ j-más and other present forms with nasal in the root, we get the sing. yunák-ti. It should be remembered, however, that it is a priori impossible to say whether a in

<sup>1)</sup> See Johansson, Deriv. Verb. Contr. 108 f., Akademiske afhandlinger til prof. Bugge, 24 ff.; W. Schulze, Quaest. Hom. 15, 42; Fick, Vergl. Wb. I 4 381; Kretschmer, Kuhn's Zeitschr. XXXI 470. In discussing κυνέω έχυσσα no use can be made of O.Corn. cussin and Mid.Cymr. cussan 'kiss', which are loan-words from the Germanic.

<sup>2)</sup> With anaj- cp. Goth. anak-s 'suddenly, at once' (Skr. āñjas 'quickly, suddenly'). Skr. 2nd 3rd sing. pret. ānaţ 1st pl. conj. anašāmahāi, vy-anaš-i 'penetrate' may be compared with Gr. δι-ηνεκ-ής (§ 569 p. 113).

Skr. yunaj- comes from Idg. -a-, -e-, or -o-. This assumed change of \*jug-n- to \*jung- must have come about in the parent language; and the singular persons may have been made in the same period. If the forms did grow as I suggest from the Class with  $-n\bar{a}$ - $-n\bar{o}$ - -n-, it would at once become clear why of all the forms containg this suffix in any of its three grades, none is taken from a root with final explosive or fricative (§ 598): from these roots the parent language would then show (say) \*junq- $ta\dot{z}$  = \*jug-n- $ta\dot{z}$  (Skr. yunk- $t\hat{c}$ ), while others would have the nasal suffix in its proper place, and show the type of \*ur-n- $ta\dot{z}$  (Avest.  $ver^e$ -n- $t\bar{c}$ ).

Another view is set forth by Per Persson, Stud. Lehr. Wurz., 152 f. (cp. too Windisch, Kuhn's Zeitschr. xxi 407). He thinks that in the oldest forms which set the type for the class with Nasal Infix, the root final was a determinative, and the nasal a suffix which was added to the root before the determinative was added. Then forms with the determinative and forms with the nasal were contaminated. Thus \*limpō (Lith. limpù Skr. limpāmi) is a sort of combination of forms answering to Lat. li-nō and Lith. li-pù. There is nothing which makes this view impossible.

Yet another hypothesis, the latest, is offered by Osthoff, Anz. für idg. Sprach- and Alterthumskunde, I 83. He suggests that Skr.  $krn\acute{a}tmi$ - may he  $\sqrt{kr}$ - + present suffix -nat- (stronger form of -nt) + personal ending -mi; and by analogy  $ri\^{n}c$ -más produced  $rin\acute{a}c$ -mi. But that there ever was a simple suffix Idg. -net- -nt- is, I hold, quite unproven; see § 685, Rem. 2.

(6) Nasal Present Stems are often found as bases for Nouns. Examples are: Skr. νέ-na-ti 'longs' νē-nά-s 'longing', Avest. peš-ana-iti 'fights' beside Skr. pft-ana-m 'battle', Gr. θηγ-άνω 'I sharpen' beside θηγ-ανο-ν 'whetstone', Skr. dhγṣ-ṇō-ti 'is bold' dhṛṣ-ṇu-má-s beside dhṛṣ-nú-ṣ 'bold', Skr. pf-nva-ti 'makes to swell' beside -pi-nva-s 'making to swell', O.H.G. bannu 'regions under ban, forbidden places' for \*bhə-nuō beside ban, gen. bannes, 'command enforced by pains and penalties', cp. Gr. ξ-έν-σ-ς p. 138. Compare § 487 pp. 40 f.

We shall now discuss the classes of nasal stems one by one. Of these we distinguish seven.

#### Class XII.

Root + - $n\bar{a}$ - -n- -n- forming the Present Stem.

§ 597. The strong suffix was  $-n\bar{a}$ -, the weak form before a sonant was -n-, before a consonant either -n-- (Gr.  $\mu\dot{\alpha}\rho$ - $\nu\alpha$ -- $\tau\alpha\iota$ ) or -n- (Avest.  $ver^e$ -n- $t\bar{e}$ ).

Sanskrit, with  $-n\bar{\imath}$ - before consonants (e. g.  $m\gamma - n\bar{\imath} - m\acute{\alpha}s$ ), stands alone.  $-n\bar{\imath}$ - displaces \*-ni- = Idg.  $-n\bar{\imath}$ - on the same principle as changes \* $\dot{s}i$ - $\dot{s}i$ - $\dot{h}i$  to  $\dot{s}i$ - $\dot{s}\bar{\imath}$ -hi, so that we have  $m\gamma n\bar{\imath} - m\acute{\alpha}s : m\gamma n\acute{\alpha} - mi$  like  $\dot{s}i\dot{s}\bar{\imath} - hi$ :  $\dot{s}i\dot{s}\bar{\imath} - mi$ . See § 498 pp. 61 f.

Remark. Wiedemann's view (Lit. Praet. 49) that -ni- changed to  $-n\bar{\imath}$ - by quantitative analogy of  $-n\bar{\alpha}$ - I hold to be mistaken; and so also Bartholomae's, that  $m_i$ - $n\bar{\alpha}$ -mi:  $m_i$ - $n\bar{\imath}$ -mas contain a pr. Idg. ablaut,  $-n\bar{\alpha}$ -being for  $-n\bar{\alpha}i$ - (Stud. Idg. Spr., II 75 ff.).

In Avestic, before sonants, not only -n- but -an-, seemingly representing Idg. -en-: fry-an-mahī, see § 596.3 p. 138.

The Root Syllable has always, and always had, the weak form.

§ 598. Pr. Idg. All the forms which can be proved to be Indo-Germanic come from roots with final liquid, nasal, or vowel (cp. § 596.5 p. 139).

Skr. mṛ-ṇā-mi 'I grind, crush' 3rd sing. mṛ-ṇā-ti 1st pl. mṛ-ṇī-mās 3rd pl. mṛ-ṇ-anti, Gr. μάρ-να-μαι 'I fight', partic. Coreyr. and Att. βαρ-νά-μενο-ς for \*βρα-να- (I § 292 p. 233); μόρ-νά-μενο-ς in Hesych. is either Aeolic for μαρ-να- (I § 292 p. 234) or all dialects of Greek for Idg. \*mṛ-nə- (cp. Skr. mūr-ṇá-s). — With thematic vowel Skr. mṛ-ṇá-ti.

Gr.  $πορ-νά-μεν \cdot πωλεῖν$ ,  $πορ-νά-μεναι \cdot πωλούμεναι$  (Hesych.) are as ambiguous as μορνάμενος; Att. πέρ-νη-μι 'I sell, transfer' with changed root-grade (cp. περάω), O.Ir. re-nim 'I give away, sell' (cp. § 604).

Skr.  $j\bar{a}$ - $n\acute{a}$ -mi 'I learn, know' for  ${}^*g\bar{v}$ - $n\bar{a}$ -; compare perhaps Lith. žino 'he knows' for  ${}^*g\bar{v}$ - $n\bar{a}$ -t (whence žinaŭ žino-me etc.

by analogy of bij- $a\tilde{u}$ -s and the like.<sup>1</sup>) — With thematic vowel Skr.  $j\bar{a}$ -na-ti Avest.  $2^{nd}$  pl.  $z\bar{a}$ -na- $t\bar{a}$ , Goth. partic. kunnand-s (indic. kann).

Skr. li-nā-mi 'I stick close to, cower, disappear' vi-lināmi 'melt, disintegrate, go to pieces', Gr. λί-να-μαι τοέπομαι Hesych., O.Ir. le-nim 'adhaereo' (cp. § 604), O.Icel. li-na 'I relax, grow soft'. — With thematic vowel Lat. li-nō (cp. Gr. ἀλίνω 'ἀλείφω' for \*άλι-νιω § 611).

Skr. krī-ná-mi 'I buy', O.Ir. cre-nim 'I buy' for \*cri-na-mi (cp. O.Ir. crī-thid 'fond of buying'), cp. § 604.

Often a present stem is formed both in this twelfth class and in Class XVII, particularly in Aryan; e. g. Skr.  $k\S i-n\acute{a}-ti$  and  $k\S i-n\~{o}-ti$  'destroys'. Cp.  $\S$  605 Rem.

The likeness of the endings in the strong singular persons and those of the corresponding stems of Classes X and XI, in -ā-, caused a number of analogical changes. (1) -nā- passes into the weak persons, as O.H.G. gi-nō-mēs beside gi-nō-m, following zittarō-mēs (cp. § 594 p. 134) and salbō-mēs. (2) An extension with -io- by analogy of the variation -ā-: -ā-iō- in Classes X and XI, as Gr. δαμνάω instead of δάμνημι, A.S. hlinie 'I lean' instead of hli-nō-iō.

§ 599. Aryan. Skr.  $vr-n\bar{a}-ti$  'chooses' mid.  $vr-n\bar{\imath}-t\bar{\ell}$ , Avest. mid.  $ver^{\ell}-n-t\bar{\ell}$ ; — with thematic vowel Avest.  $3^{rd}$  sing. pret. mid.  $fraor^{\ell}nata = \text{pr. Ar. }^*pra-vr-na-ta$ . Skr.  $pr-n\bar{\alpha}-ti$  'fills'; '2) — with thematic vowel  $pr-n\bar{\alpha}-ti$  Avest. imper.  $per^{\ell}-n\bar{a}$ . Skr.  $fr-n\bar{\alpha}-ti$  'breaks up, crushes, grinds, splits up'; — with thematic vowel imper.  $fr-n\bar{\alpha}$ ; cp. O.Ir.  $fr-n\bar{\alpha}-ti$  'difficiscor, I decay, break up' § 604. Ar.  $fr-n\bar{\alpha}-ti$  'to know' for  $fr-n\bar{\alpha}-ti$  'know': Skr.  $fr-n\bar{\alpha}-ti$  O.Pers.  $fr-n\bar{\alpha}-ti$  'makes glad, Lith.  $fr-n\bar{\alpha}-ti$  'makes glad,

<sup>1)</sup>  $\check{z}in\bar{o}$ - may also be  $*\hat{g}nn-\bar{a}$ - (Class X).

<sup>2)</sup> One is tempted to identify this form with O.H.G. follow 'I fill'. This is probably at least a derivative from the adj. fol Goth. full-s, like O.Ir. com-alnaim from  $l\bar{a}n$ , see § 760.

makes inclined', Avest.  $fr\bar{\imath}-n\bar{\alpha}-\bar{p}$ . Skr.  $ji-n\hat{\alpha}-ti$  'conquers, compels',  $\sqrt{gei}$ . Avest. injunct.  $zi-n\bar{a}-\bar{p}$  'draws away' O.Pers.  $a-d\bar{\imath}-n\bar{a}$ ; — with thematic vowel O.Pers.  $a-d\bar{\imath}-na-m$ . Skr.  $pu-n\hat{a}-ti$  'purifies, clears', cp. Ir.  $u-n\bar{a}-d$  'to cleanse'? (Fick, Wtb. I<sup>4</sup> 483, according to Stokes). Skr.  $dhu-n\bar{a}-ti$  moves to and fro, shakes' beside  $dhu-n\bar{o}-ti$   $dh\bar{u}-n\bar{o}-ti$ . Skr.  $grbh-n\hat{a}-ti$  'grasps', Avest.  $ger^ew-n\bar{a}-iti$ ; — thematic Skr. grh-na-ti. Skr.  $badh-n\hat{a}-ti$  'binds' for \*bhvdh-,  $\sqrt{bhendh}$ -.

Remark. Skr.  $mu\S n\~ati$  'steals' is derived from the noun  $m\~u\S - mu\S -$  'mouse' (II § 160 p. 485). Similar words below in § 793.

§ 600. Strong stem instead of weak. Skr. imper.  $2^{nd}$  sing.  $grbh-n\bar{a}-hi$  instead of  $grbh-n\bar{\imath}-hi$ ,  $2^{nd}$  pl.  $pu-n\acute{a}-ta$  instead of  $pu-n\bar{\imath}-t\acute{a}$ . Compare Skr.  $kr-n\acute{o}-ta$  instead of  $kr-nu-t\acute{a}$  and the like, § 641.

There was naturally a close contact between thematic and non-thematic forms in Aryan, which made it easy for words to pass from one to the other. The 1<sup>st</sup> person singular and the 3<sup>rd</sup> plural present, with other forms, and the conjunctive mood, had regularly the same form in both: compare Skr. mṛnāmi mṛnānti from both mṛ-ṇā-ti and mṛ-ṇā-ti. Thematic stems are specially common in Avestic; compare 3<sup>rd</sup> sing. mid. stere-na-tā opt. stere-nae-ta beside Skr. stṛ-nā-ti 'strews', and 2<sup>nd</sup> sing. hu-na-hi beside hu-nā-iti 'begets'.

The Sanskrit  $2^{nd}$  sing. imper. active, besides  $-n\bar{\imath}-hi$   $(-n\bar{a}-hi)$ , has the ending  $-\bar{a}n\acute{a}$ , found in classical Sanskrit with all roots ending in a consonant, as  $grh-\bar{a}n\acute{a}$   $badh-\bar{a}n\acute{a}$ . Two explanations of these are possible. (1)  $-\bar{a}na$  may = Idg. -one, which may be a thematic imperative of Class XIV, where Slavonic has -ono- (see §§ 615, 624). Or (2),  $-\bar{a}na$  may be  $-\bar{a}-=-\bar{q}-+-na$ ,  $--\bar{q}-$  being a weak form of the  $n\bar{a}$ -suffix, and -na the same particle which we see with the  $2^{nd}$  pl. in -ta-na (beside -ta). The second view seems better.

Remark. Bartholomae now supports the view which analyses  $-\bar{a}na$  into  $-\bar{a}+na$ , and identifies -na with -na in -ta-na -tha-na (Stud. Idg. Spr., II 123), and cites by way of illustration the Avestic 2<sup>nd</sup> sing. imper. bara- $n\bar{a}$ , a variant for the usual  $bara = \text{Skr. } bh\dot{a}ra$ . But he explains  $g_{\bar{i}}r\bar{a}$ -as derived from \*ghṛbhāi-, where I cannot follow him.

Exceptionally the root syllable has a strong grade: partic. mid. dp-n- $\bar{a}na$ -s like  $\bar{a}p$ - $n\acute{o}$ -mi Class XVII, cp. opt. aor.  $ap\bar{e}yam$  and dpas- $ap\acute{a}s$ -. But  $\bar{a}p$ - may be preposition  $\bar{a} + ap$ -.

A few isolated forms in Sanskrit show a change from this class to -io-stems: partic.  $hrn\bar{a}-y\acute{a}-nt-hrn\bar{\imath}-y\acute{a}-m\bar{a}na-s$  beside  $a-hr-n\bar{a}-t$  mid.  $hr-n\bar{\imath}-t\acute{e}$ . With forms like Gr.  $\delta a\mu\nu\acute{a}\omega$  (§ 598 p. 142),  $hrn\bar{\imath}-y\acute{a}-nt$ - has no very close connexion.

§ 601. Armenian. barna-m 'I raise' for \*barj-na-m ground-form \*bhrgh-nā-mi, cp. aor. barj-i. darna-m 'I return' for \*darj-na-m, cp. aor. darj-ay. bana-m 'I open' ground-form \*bhə-nā-mi from \$\sim bh\bar{a}\$- (p. 56 footnote), cp. aor. ba-c-i: Gr. φαίνω for \*φα-νιω § 611, O.H.G. ba-nnu § 654. sta-na-m 'I possess, have in my power, buy', cp. aor. sta-c-ay: Gr. στά-νω 'I place' (G. Meyer, Gr. Gr.² p. 446) Lat. dē-stināre, O.C.Sl. sta-na 'I place myself'. lua-na-m 'I wash', cp. aor. lua-c-i.

These are inflected like the  $\bar{a}$ -presents mna-m and jana-m (§ 581 p. 122). But the original quantity of the a in -na-cannot be determined; and -na- may be Idg.  $-n\bar{a}$ - or Idg.  $-n\bar{a}$ -.

§ 602. Greek.  $\mu\dot{\alpha}\rho$ - $\nu\alpha$ - $\mu\alpha\iota$   $\mu\alpha\rho$ - $\nu\dot{\alpha}$ - $\mu\epsilon\nu$ o- $\varsigma$ ,  $\pi$ o $\rho$ - $\nu\dot{\alpha}$ - $\mu\epsilon\nu$   $\pi\dot{\epsilon}\rho$ - $\nu\eta$ - $\mu\iota$ ,  $\lambda\dot{t}$ - $\nu\alpha$ - $\mu\alpha\iota$  see § 598 p. 141.  $\delta\dot{\alpha}\mu$ - $\nu\eta$ - $\mu\iota$  'I tame' beside  $\delta\dot{\alpha}\mu\alpha$ - $\sigma\sigma\iota\nu$ ; for the root syllable compare  $\kappa\dot{\alpha}\mu$ - $\nu\dot{\omega}$  and Skr.  $\dot{s}am$ - $n\bar{\iota}$ - $t\bar{e}$  beside  $\kappa\dot{\alpha}\mu\alpha$ - $\tau$ o- $\varsigma$   $\dot{s}am$ - $t\dot{\alpha}$ -s,  $\ddot{o}\mu$ - $\nu\dot{\nu}$ - $\mu\iota$  beside  $\dot{o}\mu\dot{o}$ - $\tau\eta$ - $\varsigma$ .  $\delta\dot{\nu}$ - $\nu\alpha$ - $\mu\alpha\iota$  'I can' possibly connected with Lat.  $d\bar{u}$ - $\tau\iota$ -s; but Gortyn.  $\nu\dot{\nu}$ - $\nu\alpha$ - $\mu\alpha\iota$  'I can', probably belongs to some other root.\(^1)

The  $\iota$  of the root-syllabic is strange in the following stems.  $\varkappa(\varrho-\nu\eta-\mu\iota)$  'I mix' beside aor. ἐκέρασα.  $\pi \iota \lambda-\nu\alpha-\mu\alpha\iota$  'I draw near quickly' beside aor. ἐπέλασα: cp. Lat.  $pell\bar{o}$  for \* $pel-n\bar{o}$ , O.Ir. ad-ellaim 'I go to, visit' for  $-(p)el-n\bar{a}-$ .  $\varkappa(\iota\mu-\nu\eta-\mu\iota)$  'I hang' (wrongly written  $\varkappa(\iota\eta\mu\nu\eta\mu\iota)$ ) beside aor. ἐ $\varkappa(\iota\mu-\nu\eta-\mu\iota)$  'I spread 'I reach or stretch' beside  $\dot{o}\varrho\acute{e}\gamma\omega$ .  $\pi(\iota\tau-\nu\eta-\mu\iota)$  'I spread' beside aor. ἐ $\pi\acute{e}\tau\alpha\sigma\alpha$ ; thematic  $\ddot{\epsilon}-\pi\iota\tau-\nu\sigma-\nu$   $\pi(\iota\tau-\nu\omega)$ .  $\sigma\varkappa(\dot{\delta}-\nu\alpha-\mu\alpha\iota)$  'I spread or widen,

<sup>1)</sup> Can this be connected with vergo-v 'sinew, tension, strength'?

disperse' beside ἐσκέδασα. Various explanations are given: see Osthoff, M. U. 11 20; Wackernagel, Kuhn's Zeitschr. xxix 126; Moulton, Am. Journ. Phil. X 284 f., and Class. Rev. 111 45; Kretschmer, Kuhn's Zeitschr. xxxi 375 f.

With -io-flexion: δαμνάω, κιονάω, δοιγνάομαι, πιτνάω. Compare § 598 end, p. 142.

In  $\delta \dot{v}$ -να-μαι, the nasal was not confined to the present stem:  $\delta v v \ddot{\alpha} \tau \dot{\alpha} \varsigma$  έδυνησάμην έδυνήθην έδυνάσθην, like ἀγατός ἀγητός ἡγάσθη from ἄγα-μαι. Compare § 643, and τανύσσαι (from  $\tau \alpha$ -νν-μαι).

- § 603. Italic. (1) We find in Latin the non-thematic inflexion of Class XIII: ster-nō (contrast Skr. stγ-nā-ti), li-nō (contrast Skr. vi-linā-ti), pellō for \*pel-nō (contrast Gr. πίλ-να-μα), sper-nō (contrast O.H.G. spor-nō-m 'I tread, kick'), and no sound-law prevents our putting in this twelfth class ster-ni-mus -ni-tis, deriving them from \*-na-mos \*-na-tes (cp. § 505 p. 71, on red-dimus, and § 543 p. 103, on se-ri-mus).
- (2) But some compounds are inflected as verbs in -āre. cōn-sternāre, beside O.H.G. stornēm 'attonitus sum' (§ 605) Gr. πτύρω 'I make shy, put in a fright'. in-clīnāre: O.Sax. hli-nō-n 'I lean', cp. Lett. sli-nu (beside sléiju) 'I lean on, support'. dē-stināre, cp. Armen. sta-na-m 'I possess' Gr. στά-νω 'I place' and στα-νύω (§ 601 p. 144). So too com-pellāre from pellere, aspernārī from spernere. It is assumed that a similarity in the endings -nā-s(i) -nā-t(i), in this class, and -ā-s(i) -ā-t(i) in Classes X and XI caused a current to set in the direction of the last two (cp. end of § 598). But this does not explain why only compounds were carried by it; and apparently we must not separate pellere: compellāre, spernere: aspernārī from flīgere: prōflīgāre, capere: occupāre and others. The -nā- in cōn-ster-nā-s must therefore be kept quite distinct from -nā- in Skr. šŢ-nā-mi Gr. δάμ-νη-μι. See § 583 pp. 124 f.
- § 604. Keltic. O.Ir. re-nim 'I give away, sell' (perf. -rir), le-nim 'adhaereo' (perf. ro lil), cre-nim 'I buy' (perf. -ciuir)

  Mod.Cymr. prynaf, see § 598 p. 142. gle-nim 'adhaereo'

  Brugmann, Elements. IV.

(perf. ro giuil) Mod.Cymr. glynaf beside O.H.G. chli-nu 'I cleave, stick, smear' (Gr.  $\gamma\lambda_{0l}$ - $\delta$ - $\varepsilon$  'sticky dampness' O.H.G. chleimen 'plasmare'). O.Ir. be-nim 'I strike, cut' O.Brit. et-binam 'lanio' Mod.Bret. benaff 'I cut', beside Lat. perfines 'perfringas' (Festus) O.Bret. bi-tat 'resicaret' O.C.Sl. bi-ti 'to strike'. The inflexion of these presents, as Thurneysen shows (Kuhn's Zeitschr. xxxi 87), points to pr. Kelt. \*-nā-mi -nā-si -nā-ti -nā-mesi etc., i. e. the weak suffix -nā- = Idg. -nɔ-had got into the singular.

We must keep these presents distinct from O.Ir. ara-chrinim 'I decay, break up' (beside Skr.  $\dot{s}_r$ - $n\dot{a}$ -ti § 599 p. 142), -gninim 'I recognise' ( $\sqrt{gen}$ -, cp. Skr.  $j\ddot{a}$ - $n\dot{a}$ -ti with \* $g\bar{g}$ - § 598 p. 141) and ro-chluiniur 'I hear' (beside Avest. sru-nao-iti Class XVII,  $\sqrt{kleu}$ -), which have io-inflexion. Was there any connexion between the -io- of this last named present and the old -nu-inflexion? There may be the same relation between -chrinim and Skr.  $\dot{s}_r$ - $n\ddot{a}$ -mi as between Gr.  $\varphi a l \nu \omega$  for \* $\varphi a - \nu - l \omega$  and Armen. ba-na-m (§ 611), or between Lat. li-n- $i\bar{o}$  (beside li- $n\bar{o}$ ) and Skr. vi- $lin\bar{a}$ -ti (§ 598 p. 142, § 743).

§ 605. Germanic. Here, as in Latin, we have sometimes the thematic conjugation of Class XIII, and sometimes the conjugation of Classes X and XI; see § 598 end, p. 142.

O.H.G. spor-nō-m 'I tread, kick' O.Icel. spor-na 'knock against'; thematic variant stem O.H.G. spur-nu and -spirnit conj. -spirne (perf. spur-num O.Icel. perf. spar-n spur-nom) like Lat. sper-nō. O.Sax. mor-nō-n 'I trouble myself, care', A.S. thematic murne. Explanation uncertain: O.H.G. conj. wolle beside Skr. vṛ-nō-tế 'chooses' (Kluge, Paul-Braune's Beitr., viii 515). O.H.G. gi-nō-m (also gei-nō-m) A.S. zinie 'I gape'; with -no-, O.Icel. gō-n O.C.Sl. 3rd sing. zi-ne-tǔ, V ghei-O.Sax. hli-nō-n A.S. hlinie 'I lean, support myself': Lat. in-clō-na-t. O.Icel. li-na 'I soften': Skr. li-nō-ti etc., see § 598 p. 142. O.Icel. fō-na 'I rot, corrupt' (partic. fō-inn 'rotten'): thematic Lith. pū-nu 'I rot'.

We must add a group of West Germanic verbs in which -kk- -pp- -tt- are due to assimilation of the n of -nd- to an explosive root-final (I § 530 p. 388, § 534 p. 391, § 541 p. 396); as O.H.G. lecchom 'I lick' ground-form \*ligh-na-mi, zocchōm 'I pull hard, tug' ground-form \*duk-nā-mi, Mid.H.G. hopfe (Rhine-Frank. hoppe) 'I hop' ground-form \*qup-nā-mi.

Remark. Some forms of these verbs have not broken u and i in the root; as O.H.G. zucchōm, Mod.H.G. zucke beside zocchōm, Mid.H.G. rupfe heside ropfe (ground-form \*rub-n-), Mid.H.G. stutze 'I push, strike' (ground-form \*stud-n-), Mod.H.G. nicke (ground-form \*knigh-n-). I suggest as a possible explanation that there may once have heen bye-forms with the present-suffix -new- -nu-, as 1st pl. \*duk-nu-mes. Compare Goth. kunnum (\*gn-nu-mes) heside uf-kunna.

A third group of Germanic present stems is that exemplified by Goth. paha -áis. Goth. maúrnái-p O.H.G. mornēt beside O.Sax. mornon A.S. murne. O.H.G. hlinem beside O.Sax. hlinon A.S. hlinie. O.H.G. stornēm 'attonitus sum, inhio', beside Lat. con-sternare § 603 p. 145. The transformation in these verbs is due to their intransitive meaning, The case is different with Goth. uf-kunnái-þ 'recognises', as we shall see in § 646.

Balto-Slavonic. The thematic type prevails; e. g. Lett. gû-nu 'I snatch' contrasted with Skr. ju-nā-ti 'sets in quick motion, urges', O.C.Sl. zi-ne-tŭ 'yawns, gapes' contrasted with O.H.G. gi-nō-t.

Traces of -nā- are perhaps left in Lith. žino 'he knows' ground-form \* $\hat{g}\bar{p}$ - $n\bar{a}$ -t: Skr.  $j\bar{a}$ - $n\hat{a}$ -ti, see § 598 p. 141; and in Lith. ly-nó-ja 'it rains slightly' inf. ly-nó-ti (Lett. lî-ná-t) beside lỹ-na 'it rains', kilnó-ju 'I lift this way and that' beside Lat. ex-cello for \*-celno, lasz-nó-ja 'it drizzles, trickles a little'.

Remark. kilnóju may also be quite well explained as a derivative from kilna-s 'high'; and this makes it douhtful whether the "diminutive frequentatives" in -nóju ought not to he estinated quite differently and classed elsewhere. But here we must bear one point in mind - this I say with a view to Leskien (Ablaut der Wurzels. im Lit., p. 174) - to wit, that Baltic denominatives often put on the appearance of primary verhs. See § 793. Thus e. g. lynó-ja may quite well be a primary form hy analogy of which was formed kilnó-ju from kilna-s.

#### Class XIII.

Root + -no- forming the Present Stem.

§ 607. Stems of this class seem to bear much the same general relation to Class XII as Skr. ti- $\xi th$ -a-ti Lat: si-st-i-t to Gr. i- $\sigma r\eta$ - $\sigma \iota$ ; see § 491 p. 50.

But certainly not all the stems of this class are stems of Class XII which have taken to thematic inflexion. Amongst them are many whose stem is found as a noun-stem, and was probably only a noun-stem at the first. Take, for example, Skr. vé-na-ti 'longs' beside vē-ná-s 'longing'; pana-tē 'trafficks, barters, buys' beside pana-s 'wager, bargain, loan' Lith. pełna-s 'gain, profit' (I § 259 p. 211); Goth. fraihna O.Icel. fregn 'I ask' beside Skr. praśná-s 'question'. So too Class XIV (-nno--eno--ono-), closely connected with this, is denominative in its origin.

Since it is impossible to distinguish verbs like Skr. mr-n- $\dot{a}$ -ti (beside mr- $n\dot{a}$ -ti (beside mr- $n\dot{a}$ -ti (from  $v\bar{e}$ - $n\dot{a}$ -s), we shall treat them together.

Parallel variants such as Gr.  $\beta \omega \lambda \omega \omega$   $\delta \eta \lambda \omega \omega$  'I wish' (\* $g\bar{l}$ -no-: \*gel-no-), O.H.G. wallu 'I heave, toss': willu 'roll, wallow' (\* $u\bar{l}$ -no-: \*uel-no-) recal similar pairs in Class II, Skr.  $kr\bar{s}$ -a-ti:  $k\bar{a}r\bar{s}$ -a-ti: (§ 513 pp. 78 f.), and in Class XXVI, Goth.  $va\dot{u}rk$ -ja: O.H.G. wirk-(i)u (§ 705).

§ 608. First we cite no-forms which occur in more than one language.

\*str-no- from V ster- 'sternere': Avest. 3rd sing. mid. ster-na-tā, Lat. ster-nō (with the root-syllable in the strong grade), beside Skr. str-nā-ti (§ 600 p. 143). Lat. sper-nō, O.H.G. spur-nu 'I tread, step, kick', fir-spirni-t conj. -spirne (see § 614), beside Skr. sphur-ā-ti 'quickens, throbs'. Lat. li-nō, Lith. lō-na 'it rains' (cp. Gr. ἀλίνω for \*ἀλι-νιω § 611), beside Skr. li-nā-ti O.Icel. li-na § 598 p. 142, § 603 p. 145. A.S. zō-ne O.Icel. gō-n 'I gape, yawn' O.C.Sl. zi-ne-tū 'gapes, yawns' beside

O.H.G. gi- $n\bar{o}$ -m, see § 605 p. 146. Goth. kei-na O.H.G.  $ch\bar{v}$ -nu 'I bud', Lith. gy-nu (beside gyju) 'I revive, recover'. Lat.  $fall\bar{o}$ , O.H.G. fallu, both with -ll- for -ln-, possibly connected with Lith. pullu 'I fall' ground-form \* $ph\bar{o}l\bar{o}$ ; according to another derivation,  $fall\bar{o}$  is akin to Gr.  $9o\lambda\epsilon\varrho\delta$ - $\varsigma$  'troubled, impure' Goth. dval-s 'foolish' A.S. dwellan 'check, wander'; if so, the ground-form of  $fall\bar{o}$  must be \* $dhu\bar{l}$ - $n\bar{o}$ .

§ 609. Aryan. To the forms cited in §§ 598 and 599, parallel to forms in Class XII, add the following:  $2^{nd}$  pl. gr- $n\acute{a}$ -ta beside gr- $n\acute{a}$ -ti 'calls, calls upon';  $r\acute{a}na$ -ti 'indulges himself, pleases himself' instead of \* $ran\acute{a}$ -ti (cp. § 516 p. 82) ground-form \*rm- $n\acute{e}$ -ti beside ram- $n\acute{a}$ -ti, which must be explained like  $\dot{s}am$ - $n\bar{i}$ - $t\bar{e}$  § 602 p. 144 (cp. ra- $t\acute{a}$ -s for \*rm-ta-s);  $\acute{a}$ -mi-na-nta beside mi- $n\acute{a}$ -ti 'lessens, hurts'; math-na-dhvam beside math- $n\acute{a}$ -ti and  $m\acute{a}nth$ -a-ti 'twirls, moves, shakes'.

Skr. ghūrna-ti 'wavers' from ghūr-na-s 'wavering'. vė́na-ti 'longs' from vē-ná-s 'longing'. paṇa-tē 'trades' from paṇa-s 'wager'. phaṇati 'leaps, hops, is in motion' from phaṇá-s 'snake's hood, nostril' (perhaps cognate with sphurá-ti 'quickens, throbs', and if so, with Lat. sper-nō O.H.G. fir-spirnit, see § 608 p. 148). Compare § 607 p. 148.

- § 610. Armenian. air-ne-m 'I make', aor. ar-ar-i § 571 p. 113. yair-ne-m 'I raise myself, get up', cp. Skr. y-nō-mi Gr. ŏo-vv-uu Class XVII § 639. d-ne-m 'I place', V dhē-. With the middle io-extension (§ 711), li-ni-m 'I become' (aor. part. lieal), tani-m 'I lead' (aor. tar-ay).
- § 611. Greek.  $\pi\tau\acute{a}\varrho$ - $\nu\upsilon$ - $\mu\alpha\iota$  'I sneeze' (Aristotle) beside  $\pi\tau\acute{a}\varrho$ - $\nu\upsilon$ - $\mu\alpha\iota$ .  $\pi\acute{t}$ - $\nu\omega$  'I drink', beside imper.  $\pi\~{\iota}$ - $\vartheta\iota$  Aeol.  $\pi\acute{\omega}$ - $\nu\omega$  (cp. § 498 p. 61).  $\delta\acute{a}\varkappa$ - $\nu\omega$  'I bite' ground-form \* $d\~{\eta}\^{k}$ - $n\~{\varrho}$ ,  $\nu$  de $\~{n}\^{k}$  (I § 224 p. 192).  $\pi\acute{\iota}\tau$ - $\nu\omega$  beside  $\pi\acute{\iota}\tau$ - $\nu\eta$ - $\mu\iota$ , § 602 p. 144.  $\sigma\tau\acute{a}$ - $\nu\omega$  'I place', cp. Armen. sta-na-m Lat. d $\~{\varrho}$ - $stin\~{d}$ re O.C.Sl. sta-na and  $\sigma\tau\alpha$ - $\nu\acute{\nu}\omega$  § 601 p. 144, § 603 p. 145.

κάμ-νω 'I take pains, labour', cp. Skr. śam-nī-tē § 602 p. 144.

Dor. βώλεται Att. βούλεται 'I prefer, I wish' ground-form  $*g\bar{l}$ -ne-, Dor. δήλεται Delph. δείλεται (Thess. βέλλετει Boeot. βείλετη) ground-form \*gel-ne-, see I § 204 p. 170, § 428b with the Remark p. 316. Hom. Dor.  $\tau \dot{\alpha} \mu \nu \omega$  Att.  $\tau \dot{\epsilon} \mu \nu \omega$  'I cut', cp. aor.  $\tau \alpha \mu$ -εῖν. Lesb.  $\dot{\alpha} \pi$ -έλλω Dor.  $f \dot{\gamma} \dot{\lambda} \omega$  Hom. εἴλω 'I press' for  $*f \dot{\epsilon} \lambda$ -νο-.

As we find -n-io- (Gr. -αινω) parallel to -nno- (Gr. -ανω) - Class XIV, §§ 616 and 621, Class XXIX § 743 - so we have in Greek -n-io- instead of -no-. Lesb. κλίννω Hom. Att. κλίνω 'I bend, incline' for \*κλι-ν-ιω: Lat. in-clī-nā-re O.Sax. hli-nō-n Lett. sli-nu § 603 p. 145. κρίννω κρΐνω 'I separate, choose out, decide, σίννομαι σένομαι 'I rob' (cp. Kretschmer, Kuhn's Zeitschr. xxxi 420). ἀλίνω 'ἀλείφω' (aor. ἀλίναι), beside Lat. li-nō etc., see § 598 p. 142, § 608 p. 148. ὀτρύνω 'I drive on' for \*o-τρν-ν-ιω from V tuer- tur- (Skr. tvár-a-tē 'hastens' O.H.G. dwir-u 'I turn quickly round, move', Skr. turána-s 'hastening'); with tru-: tur- compare Skr. hru-nā-ti: ju-hur-a-s beside hvár-a-tē, Avest. capru- Skr. catur- beside catvarand the like. gairo 'I make appear, make visible, show' for \* $\varphi \alpha - \nu - \iota \omega$ : Armen,  $b\alpha - n\alpha - m$  O.H.G.  $b\alpha - nnu$ , see § 601 p. 144.  $\chi\alpha'\nu\omega$  'I gape' for  $\chi\alpha-\nu-\nu\omega$  with the aor.  $\xi-\chi\alpha-\nu-\nu$ , beside  $\chi\alpha'-\nu$ -σκω χή-μη χώ- $\rho\bar{\alpha}$ : cp. Skr.  $h\bar{\imath}$ -nά-s 'deserted, lacking' ji- $h\bar{\imath}$ - $t\bar{e}$ 'yields, departs' (§ 540 p. 101). By analogy of \*πτεν-ζω (κτείνω) beside aor.  $\vec{\epsilon}$ -κτεν-σα (ξκτεινα) fut. \*κτενε(σ)ω (κτεν $\tilde{\omega}$ ), there were made in pr. Greek the agrist \*ξαλινσα \*ξφανσα  $(\tilde{\epsilon} \times \lambda \bar{\iota} \nu \alpha \ \tilde{\epsilon} \varphi \eta \nu \alpha)$  and the future \* $\kappa \lambda \iota \nu \epsilon(\sigma) \omega \ * \varphi \alpha \nu \epsilon(\sigma) \omega \ (\times \lambda \iota \nu \tilde{\omega} \ \varphi \alpha \nu \tilde{\omega})$ from \*κλινιω and \*φανιω, and others in the same way.

Remark. φαίνω shews that ελίνω comes from \*ελι-νέω. Bartholomae's doubts are unfounded (Stud. Idg. Spr., 11 87 f.).

The origin of the Att. ending  $-\bar{v}v\omega$  is generally uncertain, as it may come from  $-v\omega$ ,  $-v_L\omega$ , or  $vF\omega$  (§ 655). In any case, pairs of variants such as  $\beta\acute{v}v\omega$   $\delta\acute{v}v\omega$   $\delta\acute{v}v\omega$  beside  $\beta\acute{v}\omega$   $\delta\acute{v}\omega$   $\delta\acute{v}\omega$   $\delta\acute{v}\omega$  produced  $l\partial\acute{v}v\omega$   $\mathring{a}_{Q}\tau\acute{v}v\omega$  beside  $l\partial\acute{v}\omega$   $\mathring{a}_{Q}\tau\acute{v}\omega$ , and then the analogy went further, and we have  $\mathring{\eta}\delta\acute{v}v\omega$   $\tau\alpha\chi\acute{v}v\omega$  etc. Compare Lith.  $kel\acute{a}unu$  § 615.

§ 612. Italic.  $ster-n\bar{o}$   $sper-n\bar{o}$   $li-n\bar{o}$   $fall\bar{o}$  see § 608 pp. 148 f.

Other verbs with a weak grade of root:  $toll\bar{o}$  ground-form  $^*tl_-n\bar{o} \ \sqrt{tel}$ .  $si-n\bar{o}$ , origin obscure (ep. Osthoff, M. U. iv 133 f., Perf. 612).  $d\bar{e}-g\bar{u}n\bar{o}$  for  $^*gus-n\bar{o}$ ,  $\lor geus-n\bar{o}$ .

Other verbs with strong grade of root.  $pell\bar{o}$  for \* $pel-n\bar{o}$  (Umbr. ař-peltu 'admoveto'), beside Gr.  $\pi i\lambda - \nu\alpha - \mu\alpha u$ , see § 602 p. 144. ex- $cell\bar{o}$  for \*cel- $n\bar{o}$ , cp. Lith.  $kiln\acute{o}$ -ju § 606 Rem. p. 147.

tem-no may come from Idg. \*tem- or \*tm-.

Again  $cer-n\bar{o}$ , which is connected with Gr.  $\varkappa\varrho t\nu\omega$  and Lith. skir-iu, may be explained in two ways. If it contains the unextended root, it is on a level with  $pell\bar{o}$  etc. But it may have arisen in composition from  $*crin\bar{o}$  (I § 33 p. 34), in which case it will be analysed  $*cr-i-n\bar{o}$  and be more closely akin to Gr.  $\varkappa\varrho t\nu\omega$ .

Lastly,  $pand\bar{o}$  is doubtful. It is connected with Osc. patensins (Class XIV, § 622). If it comes from \*pat-n\bar{o} (vol. II p. 161 footnote, Bartholomae, Bezz. Beitr. xvII 119), a must be derived from  $\bar{o}$  on account of Gr.  $n\epsilon\tau\dot{a}\sigma\sigma\alpha$ , and then the root had a weak grade. But  $pand\bar{o}$  may belong to Class XVI; see § 632.

- § 613. Keltic. O.Ir. ser-nim 'sero' 3<sup>rd</sup> pl. -sernat (cp. Windisch, Ir. Wörterb., p. 770 b). Perhaps sennim (sennaim) 'I drive, hunt' beside O.H.G. swimmu for \*suem-nō (§ 614 p. 152), cp. Mod. Cymr. chwyfaf 'I move, quiver' for \*suem- (Thurneysen).
- § 614. Germanic. O.H.G. spur-nu 'I step, kick', and with strong-grade root syllable fir-spirni-t conj. -spirne: Lat.  $sper-n\bar{o}$ , see § 608 p. 148. A.S. mur-ne 'I trouble, grieve', cp. O.Sax.  $mor-n\bar{o}-n$ , see § 605 p. 146.1) O.H.G. wallu

<sup>1)</sup> Forms like O.H.G. 1st pl. spurnamēs infin. spurnan partic. fir-spurnan A.S. spurnan murnan are without a-umlaut, by analogy doubtless of the 2nd and 3rd sing. pres. and the plural of the pret. O.H.G. spurnum etc., op. O.H.G. inf. durfan beside darf durfum, and others. But A.S. has spornan as well as spurnan. Or had the West Germanic originally forms of Class XVII beside those with -no-? Compare spurnum with kunnu-m § 646.

'I undulate, boil', ground-form \*ul-no and willu I roll' O.Icel. vell 'I undulate, seethe' ground-form \*wel-nō. O.H.G. fallu 'I fall' see § 608 p. 149. Goth. O.H.G. kun-nan 'to know' partic. Goth. kun-na-nd-s O.H.G. kun-na-nt-i (indic. kann § 646): Skr. jā-na-ti, see § 598 pp. 141 f. O.H.G. chli-nu 'I stick, smear': O.Ir. gle-nim, V glei-, see § 604 p. 146. A.S. zī-ne O.Icel. gī-n 'I gape, yawn': O.C.Sl. zi-ne-tŭ, see § 605 p. 146, § 608 p. 148, § 615 p. 153. Goth. kei-na (partic. kij-an-s) O.H.G. chī-nu 'I bud': Lith. gy-nu, see § 608 p. 149. O.H.G. swī-nu 'I disappear' (cp. Kretschmer, Kuhn's Zeitschr. xxxi 420), hrī-nu 'I touch, gain', grī-nu 'make a face, snarl', Goth. skei-na 'I appear'. scī-nu O.H.G. backu Upper-G. pacchu 'I bake' pr. Germ. \*bakkō for ground-form \*bhəg-nō (I § 214 p. 181, § 534 p. 391), cp. O.H.G. bahh-u 'I bake' Class II B Gr. φώγ-ω 'I roast' Class II A § 532 p. 94. O.H.G. spa-nu 'I attract, charm, drive on' (pret. spuon), ground-form \*spa-no; also spannu 'I stretch, widen, I am in eager excitement' ground-form \*spə-nu-ō Class XVIII (§ 654), beside Lat. spē-s spa-tiu-m O.H.G. spā-ti 'late'.

Besides O.H.G. fir-spirnit and willu, other words have root syllables of the strong grade. O.H.G. quillu 'I spring, well up',  $\lor$  gel-, O.H.G. swillu O.Icel. svell 'I swell, heave', O.H.G. scillu 'I resound, sound' O.Icel. skell 'I clatter', O.H.G. hillu 'I make a sound', O.H.G. gillu O.Icel. gell 'I yell, cry out'. O.H.G. sinnu 'I go, think' for \*sind-nō cp. Goth. sandja 'I send', Mid.H.G. zinne I' burn' for \*tind-nō cp. Goth. tandja 'I kindle'. I suggest that we class here verbs with -mm-, for -mn-, as O.H.G. swimmu 'I swim', cp. O.Ir. sennim § 613. Goth. fraih-na 'I ask' (perf. frah frēhum partic. fraihans) O.Icel. freg-n (frā frāgum fregenn) A.S. friz-ne (fræzn fruznon fruznen) with pr. Germ. variation of  $\chi$  and  $\chi$  (I §§ 529, 530 pp. 384 ff.), which was levelled down in different ways by different dialects: cp. Skr. praś-ná-s 'question'  $\lor$  preĥ- (§ 607 p. 148).

§ 615. Balto-Slavonic. Here this class is more creative than anywhere else.

Lith. gy-nu 'I revive, recover': Goth. kei-na, see § 608 p. 149. Lith.  $l\bar{y}$ -na 'it rains': Lat. li- $n\bar{o}$  (ibid). O.C.Sl. zi-ne- $t\bar{u}$  'gapes, yawns': A.S.  $z\bar{\imath}$ -ne (ibid). Lett. sli-nu 'I lean upon, support': cp. Gr. Lesb.  $\varkappa\lambda'$ - $\nu\nu\omega$  O.Sax. hli- $n\bar{o}$ -n Lat. in- $cl\bar{\imath}n\bar{a}re$  (§ 603 p. 145, § 611 p. 150); Lett. si-nu 'I bind': cp. Skr. si- $n\bar{a}$ -ti 'binds, surrounds'  $\checkmark$  sai-; in the two Lettic verbs i doubtless comes from the infinitive (sli-t, si-t). Lith. ry-nu 'I swallow, devour'; O.C.Sl. ri-ne- $t\bar{u}$  'knocks'  $rinet\bar{u}$  se 'starts' (cp. na- $roj\bar{\imath}$  'impetus'). Lith. ei-nu 'I go': a comparison with Lat.  $pr\bar{o}d$ - $\bar{\imath}nunt$  is unsafe (see § 1022). O.C.Sl. si-ne-tu 'shines', mi-ne- $t\bar{u}$  'goes by'.

The analogy of ráu-nu: infin. ráu-ti etc. produced Lith. denominative re-formations like keláunu instead of keláuju beside the inf. keláuti 'to travel' (from kēla-s kēle-s 'way'), karaláunu instead of karaláuju beside infin. karaláuti 'to be king' (from karāla-s 'king'). Compare Gr. λθύνω § 611 p. 150.

Slavonic gives a large number of no-presents from verbs with other finals than -i and -u; planetŭ 'blazes up' for \*pol-ne-tŭ, po-me-ne-tŭ 'thinks upon', vrig-ne-tŭ 'throws' (ν uerg-), mlŭk-ne-tŭ 'grows dumb', za-klenetŭ 'shuts' for \*-klep-ne-tŭ, bŭnetŭ 'awakes' for \*bŭd-ne-tŭ, dvig-ne-tŭ 'moves', sŭch-ne-tŭ 'dries' (intr.). Also from one root in -ā: sta-ne-tŭ 'places itself', akin to Pruss. stānintei, adverb of the pres. participle, cp. Armen. sta-na-m Gr. στά-νω Lat. dē-stināre § 611 p. 149.

In Slavonic the no-suffix is not confined to the present stem; it appears elsewhere in the system of the verb, but then in the peculiar shape -nq-. Examples are aor. mi-nq-chū partic. pres. mi-nq-vū infin. mi-nq-ti sup. mi-nq-tū from mi-nq. -nq- is regular only in the infinitive and supine (except sta-ti from sta-nq).

Remark. The following I think is not improbably the history of -nq-. Slavonic once had verbs in \*-onq (1st sing. pres.), and their aorist ended in -on-sũ -qsũ and their infinitive in -on-tũ -qtũ, parallel to Lith. gyvenử 'I dwell' (fut. -é-siu infin. -én-ti) kùpinu 'I heap' (fut. -i-siu infin. -in-ti-), see § 624. Now in the present, -no- levelled out -ono-, which was only used with consonantal roots; but -ono- remained everywhere except in the present. Hence a compromise: an infinitive \*vrǐgati, for instance, would be transformed by analogy of vrǐgna vrǐgneši etc., and become vrǐgnati. Afterwards -na- was extended to verbs from roots ending in a vowel, such as mi-na, and only sta-na kept clear of this change (infin. sta-ti). Compare with this § 624 at end, and Wiedemann, Arch. Slav. Phil. x 653 ff.

Lithuanian has no present stems with the suffix -no- from roots with a final explosive or fricative; instead of these the language has forms of Class XVI, such as bundù as against bũną in Old Church Slavonic. But there are a few in Lettic, all of them however with an interior nasal, which in most cases certainly belongs to the present suffix and not to the root: brinu 'I wade' for \*brid-nu \*brend-nu beside Lith. brendù and bredù (bridaŭ bristi), růnu 'I find' for \*růd-nu beside růdu = Lith. randù (radaŭ rásti), mi/-nu 'mingo' for \*menz-nu beside Lett. mēžù (V meißh-), lînu 'I crawl' for lid-nu beside lidu = Lett. lendù (lindaŭ listi). The origin of this kind is obvious; the class with a nasal infix (Class XVI) has been contaminated with the -no-class, like O.C.Sl. seg-ną from V seg- etc. (§ 636), and like Gr. λμμπάνω from V leiq- etc. (§ 631).

# Class XIV.

Root + -nno- -eno- -ono- forming the Present Stem.

§ 616. It is quite clear that this class is derived from nouns; see § 487 p. 41, § 596.6 p. 140, and below. It is note-

worthy that the *n*-suffix is often extended by -*io*-; as Skr.  $i\S an-y\acute{a}-ti$  beside (Ved.)  $i\S ana-t$ , Gr.  $\delta\lambda\iota\sigma\vartheta a\acute{r}\omega$  beside  $\delta\lambda\iota\sigma\vartheta \acute{a}\acute{r}\omega$ , O.H.G. givahann(i)u 'I recount'. See §§ 618 and 743. This is the same formation as Skr.  $vithury\acute{a}-ti$  from  $vithur\acute{a}-s$  'staggering, shaking', Gr.  $al\acute{o}\lambda\lambda\omega$  from  $al\acute{o}\lambda o-\varsigma$ , see § 770.

Along with -nno- -eno- we find -nnā- -enā-, inflected in the same way as denominatives from a-stems. To illustrate, take: Skr. prtanā-yá-nt- 'fighting' beside Avest. pešana-iti Skr. prtan-yá-ti beside Skr. prtana-m prtanā- 'fight', Skr. bhandanā-yá-ti 'shouts, cheers' beside bhandána-s 'shouting' bhandánā- 'shout'; Gr. ἐρῦκανάω beside ἐρῦκάνω 'I hold back, bar, stem' (cp. θηγάνω 'I sharpen, whet' beside θήγανο-ν θηγάνη 'whetstone', and δαπανάω 'I spend' beside δάπανο-ς 'extravagant' δαπάνη 'expense'); Lat. runcināre (cp. runcina 'plane') coquināre cārināre farcināre; O.Icel. vakna 'I awake' pret. vakna-đa, Goth. pret. qa-vaknō-da beside pres. ga-vakna; Lett. stiprinó-ju 'I strengthen' infin. stiprinó-ti beside stìprinu (infin. stiprin-ti), gabenó-ju 'I bring together' (infin. gabenó-ti) beside gabenù (infin. gabén-ti); and besides, the Lith. group of preterites, of which examples are 1st pl. stiprino-me gabéno-me, must be added.

Seeing how clear is the denominative character of this fourteenth class, no doubt can be felt that all these verbs are derived from feminine stems. The nearest parallel is found in the verbs which will be discussed in § 769, Skr. priyā-yá-tē Goth. frijō, O.Ir. com-alnaim O.H.G. follōm, and such like. That is to say, Skr. bhandanā-yá-ti stands to bhandánā 'shout' and bhandána-s 'shouting' exactly as O.H.G. follō-m 'I fill' to follā 'fullness' and fol 'full', or as wuntōm 'I make wounded, I wound' to wunta 'a wound' and wunt 'wounded'.

Remark. The student must not suppose that I refuse to see the parallelism between  $\partial_t \bar{\nu} \bar{\nu} a r \dot{a} \omega$ :  $\partial_t \bar{\nu} a r \dot{\nu} \omega$  and  $\pi_i \tau r \dot{\nu} \dot{\omega}$ :  $\sigma_i \tau r \dot{\nu} \omega$ ; O.Icel.  $\sigma_i a r \dot{\nu} a r$ 

pendently. For instance, Greek verbs of the type of  $iq\bar{v}x\alpha v\dot{\alpha}\omega$  may have been supported by the use of  $\pi\iota\tau v\dot{\alpha}\omega$ , or vice versa.

Skr.  $bhandan\bar{a}-y\acute{a}-t\bar{e}$  is not to be classed with  $hrn\bar{a}-y\acute{a}-nt$ -, a quite isolated stem; we see this from u variant  $hrn\bar{a}-y\acute{a}-m\bar{a}na$ -s (§ 600 p. 144). Such forms as \* $bhandan\bar{i}-y\acute{a}-ti$  do not exist.

§ 618. I cite first forms which appear in more than one language. Here, as below with forms belonging to one language only (§§ 619 ff.), the extension with -io- must be cited too (§ 743).

Lat. cruen-tu-s partic. of a present  $3^{rd}$  sing. \*cruini-t, Lith. krùvinu 'I make bloody' (partic. krùvinta-s = cruentu-s) from krù-vina-s 'bloody'.

Armen. aroganem 'I sprinkle', Lith. srāvinu 'I make flow', common ground-form \*srouṇnō, / sreu- (cp. Bugge, Idg. Forseh. 1 451).

Skr. injunctive  $i \S a n a - t$  'let him set in motion, arouse, excite, quicken' and  $i \S a n - y a - t i$ , Gr.  $i a i \nu \omega$  'quicken, hasten, warm' for  $*i \sigma - a \nu - \iota \omega$ .

Goth. af-lifna 'I remain over' (pret.  $-n\bar{o}$ -da), Lith. lipinù 'I cause to adhere'.

Goth. áukna 'I increase, grow' (pret.  $-n\bar{o}$ -da), Lith. auginù 'I make grow, rear'.

Gr. αὐαίνω 'I make dry, wither' for \*σανσ-αν-μω, Lett. saūsinu 'I make dry'. Compare Alban. Θαή 'I dry, wither', for \*saus-nįō according to G. Meyer (Alb. Wort. 85, Alb. Stud. III 43).

Gr.  $\tau \epsilon \varrho \sigma a l \nu \omega$  'I make dry, dry up', Goth.  $ga-pa \dot{u} r s n a$  'I grow dry, wither' (pret.  $-n\bar{o}-da$ ).

§ 619. Aryan. Avest. opt. 1st pl. zaranaemā and zaranye-tē (partic. zaranimna-) from zar- 'grow angry, ill', cp. partic. zaranu-mana- Skr. hṛ-nī-té § 596.3 p. 138. Avest. pešana-iti 'fights' beside Skr. pṛtana-m pṛtanā- Avest. pešana 'fight, battle' (cp. § 617 p. 155). Skr. kṛpána-tē 'he behaves pitifully, prays' beside kṛpaná-s 'pitiful, miserable' kṛpáṇa-m 'misery'. iṣ̄aṇa-t 'let him set in motion' and iṣ̄an-yá-ti: Gr. laivw, see § 618. Only with -io-: turan-yá-ti 'hastens, goes or makes

to go quickly' from  $tur\acute{a}na$ -s 'hastening' (pres.  $tv\acute{a}r$ -a- $t\bar{e}$  'hastens') cp. Gr.  $\acute{\sigma}\tau \varrho \acute{v}\nu \omega$  § 611 p. 150; bhuran- $y\acute{a}$ -ti 'he is active' from bhuran-a-s 'active', and others. Compare Skr.  $prtan\bar{a}$ - $y\acute{a}$ -ti bhuran-a- $y\acute{a}$ -ti § 617 p. 155.

There is nothing to decide whether this Aryan -anarepresentes Idg. -yno- or -eno- (those who believe that Idg. o becomes a in open syllables in Aryan will say, or -ono-either).  $i\ddot{s}any\dot{a}-ti$  as compared with Gr.  $laiv\omega$ , so far as it goes, favours -yno-.

-eno- must be the suffix in Skr.  $bh\acute{a}na-ti$  'sounds, calls out', if this be derived from  $\checkmark bh\bar{a}$ -, and analysed bh-ánati; see p. 56 footnote. Perhaps the same suffix is used in some of those forms which are cited by Per Persson, Wurzelerweiterung pp. 70 ff., such as dhvana-ti 'sounds'.

§ 620. Armenian. In this language -ano- = Idg. -nno- is a very common present suffix. lk-anem 'I leave', aor.  $3^{rd}$  sing. e-lik,  $\sqrt{leiq}$ -. gt-anem 'I find', aor.  $3^{rd}$  sing. e-git,  $\sqrt{ueid}$ -. tk-anem 'I spew, spit', aor.  $3^{rd}$  sing. e-tuk. kl-anem 'I swallow', aor.  $3^{rd}$  sing. e-tuk. hat-anem 'I cut off'. tes-anem 'I see',  $\sqrt{derk}$ - (I § 263 p. 214). liz-anem 'I lick' for \* $l\bar{e}z$ -anem,  $\sqrt{leigh}$ -.

-anem, like Greek -avw, is found in some forms which have another present suffix already. As for instance harçanem 'I ask' beside aor. harçi, stem \* $pr(\hat{k})$ -sko- (§ 672), like Gr. alvoxávw beside alví-oxw; and very near akin to harçanem is Avest. per sanyeiti 'asks', if its -s- = Skr. -ch- (cp. Skr. prachana-m 'an asking') and not Idg. - $\hat{k}$ - (cp. Goth. fraihna).

-anim (cp. § 711) is a variant of -anem as Gr. -air $\omega$  of -ar $\omega$ ; e. g.  $me\dot{r}$ -ani-m 'I die' (aor.  $me\dot{r}$ -ay) like Gr.  $\mu$ a $\varphi$ -air $\omega$  'I make wither, decay', mac-ani-m 'I cleave to, hang on to, curdle', zerc-ani-m 'I free or save myself, run away'.

§ 621. Greek. In this language too -avo- = Idg. -nno- is very common.

 $\dot{\alpha}\lambda \varphi$ - $\dot{\alpha}\nu\omega$  'I earn'.  $\varkappa \bar{\nu}\delta$ - $\dot{\alpha}\nu\omega$  'I honour, exalt'.  $\varkappa \varepsilon \nu \vartheta$ - $\dot{\alpha}\nu\omega$  'I hide'.  $\vartheta \eta \gamma$ - $\dot{\alpha}\nu\omega$  'I whet'.  $\lambda \eta \vartheta$ - $\dot{\alpha}\nu\omega$  'I escape notice'.

The suffix is often used to extend other present stems. For example take the following.  $i\sigma\tau$ - $\acute{\alpha}\nu\omega$  'I place' beside  $\"{i}$ - $\sigma\tau\eta$ - $\mu\iota$  (Class III).  $l\sigma\chi$ - $\acute{\alpha}\nu\omega$  'I hold back' beside  $\~{i}$ - $\sigma\chi$ - $\omega$  (Class IV).  $\pi\nu\nu\vartheta$ - $\acute{\alpha}\nu\omega\mu\omega$  'I learn'  $\lambda\mu\mu\pi$ - $\acute{\alpha}\nu\omega$  'I leave' from  $*\pi\nu\nu\vartheta\omega$  = Lith. -bundù  $\checkmark$  bheudh- and  $*\lambda\mu\mu\omega$  = Lat.  $linqu\bar{o}$   $\checkmark$  leiq-, and so too  $\varkappa\lambda\alpha\gamma\gamma$ - $\acute{\alpha}\nu\omega$  'I cry out' from  $*\varkappa\lambda\alpha\gamma\gamma$ - $\omega$  (cp.  $\varkappa\lambda\acute{\alpha}\zeta\omega$  for  $*\varkappa\lambda\alpha\gamma\gamma$ - $\iota\omega$ ) = Lat. clang- $\bar{o}$  beside Gr. perf.  $\varkappa\acute{\epsilon}\varkappa\lambda\eta\gamma\alpha$  (Class XVI).  $\alpha \check{\nu}$   $\xi$ - $\acute{\alpha}\nu\omega$  'I increase' beside  $\alpha \check{\nu}$   $\xi\omega$   $\omega$   $\omega$ - $\omega$  (Class XXI).  $\omega$   $\omega$   $\omega$ - $\omega$  'I miss' beside  $\omega$   $\omega$   $\omega$   $\omega$  (Class XXII).  $\omega$   $\omega$   $\omega$   $\omega$  'I sleep' beside  $\omega$   $\omega$   $\omega$   $\omega$   $\omega$  (Class XXIV).  $\omega$   $\omega$   $\omega$   $\omega$  (Class XXIV).

πιμπλάνω πιμπράνω, as compared with πί-πλη-μι πί-ποη-μι were made on the analogy of  $\lambda \iota \mu \pi \acute{\alpha} \nu \omega$ , and this served to keep safe the nasal in πίμπλημι πίμπρημι πίγκραμι πίγκραμι (§ 542 p. 102, § 594 pp. 134 f.). Perhaps there was once a form \*πλα-νω, parallel to Skr.  $p_{7}$ - $p\acute{a}$ -ti, which on the analogy of πί-πλη-μι πί-πλα-μεν was transformed to \*πιπλανω (cp. the reduplicated  $\tau ε$ - $\tau ρ$ - $\alpha \acute{\nu} \nu \omega$ , p. 159), and then came under the influence of verbs like  $\lambda \iota \mu \pi \acute{\alpha} \nu \omega$ . The Greeks themselves saw a close connexion between the ending - $\alpha \acute{\nu} \nu \omega$  and a nasal in the first syllable of the word which had it, if this syllable contained a short vowel + explosive; we can see this from the transformation of Att. \* $\kappa \iota \chi \acute{\alpha} \nu \omega$  (for \* $\kappa \iota$ - $\kappa \iota \chi \iota \nu \iota \nu \omega$ ) into  $\kappa \iota \iota \chi \iota \iota \nu \omega$  (§ 652).

With -ανάω (see § 617 p. 155): ἐρῦκανάω beside ἐρνκάνω I hold back, bar, stem', δηκανάομαι 'I welcome' beside δηκνύμενος (§ 639), ἰσχάναω beside ἰσχάνω, and others.

A large number have -αίνω. ὀλισθαίνω beside ὀλισθάνω 'I slip'. μελαίνω 'I darken' (beside μελάνω? see the commentators on Iliad 12 64), and others (cp. § 776.6 b).

Amongst these verbs in  $-\alpha l\nu\omega$  are those whose root no longer forms a separate syllable, some of which are certainly old (cp. Lett.  $t\nu$ -ln-ti tr-ln-ti  $\xi$  624).  $\xi$ - $\alpha l\nu\omega$  'I scratch, comb' ( $\xi$ - $\alpha l\nu\omega$ - $\nu$  'comb for carding wool') beside  $\xi$ - $\nu l\omega$  and  $\xi$ - $\ell l\omega$   $\xi$ - $\ell l\omega$ - $\ell l\omega$  (Class XX,  $\xi$  661) from  $\nu l\omega$   $\ell l\omega$  (II  $\xi$  8 Rem. 2 p. 20).  $\ell l\omega$ - $\ell l\omega$ - $\ell l\omega$  'I bubble up' beside  $\ell l\omega$ - $\ell l\omega$  Lat.  $\ell l$ - $\ell l\omega$ - $\ell l\omega$  O.H.G.  $\ell l$ - $\ell l\omega$ - $\ell l\omega$ 

(§ 583 p. 124). δρ-αίνω 'I do, intend to do' (δλιγο-δρανέων 'faint, weak' § 801), beside  $\delta \rho - \tilde{\omega} = \delta \rho - \tilde{\alpha} - \mu \alpha$  (§ 737).  $\delta \alpha i \nu \omega$ 'I besprinkle' for  $*\sigma_{\rho}$ -αν- $\iota_{\rho}$ ω (ὁανίς -ίδος 'drop') beside  $\dot{\varrho}$ -έ(F)ει 'flows' from V ser- 'run, flow' (§ 488 p. 47) cp. ξ-αίνω beside  $\xi$ -νω;  $\dot{\epsilon}$ οράδ-αται ὁάσσατε (\*sx-d-) belong to Class XXV (§ 695).1) χρ-αίνω 'I touch the surface gently, stroke, soil' beside χο-άω 'I seize, touch' χο-ανίω 'touch superficially, scratch' χο-ίω 'I anoint'. γοαίνειν : ἐσθίειν Hesych., beside γράω, which seems to be akin to Skr. gr-asa-ti (§ 659). κοαίνω 'I make, complete' (V qer- Skr. kr-nô-ti); this we should probably place here. The alternative is to analyse it \*xoa- $-\nu$ - $\nu$ , from \*qx-n-, and place it in § 611 (pp. 149 f.), but xo-όνο-ς makes this the more likely place (see II § 67 with the Rem., p. 112). τε-τρ-αίνω 'I bore' (τι-τραίνω is also found, see Veitch Greek Verbs s. v. τετραίνω): Lith. tr-inù 'I rub',  $\sqrt{ter}$ -.

Connected with noun stems in -ανο- (§ 487 pp. 40 f., § 596. 6 p. 140). ὀλισθάνω ὀλισθαίνω: ὀλίσθανο-ς 'slippery, smooth'. θηγάνω: θήγανο-ν θηγάνη 'whetstone'. μελάνω μελαίνω: μελανο- (μελαν-) 'black'. φασγάνεται ξίφει ἀναιρεῖται Hesych.: φάσγανο-ν 'cutting instrument, or sword'. κυαίνων 'ἔγκνος ὧν Hesych.: Samian κυανο- in Κυανοψιών (the Author, Gr. Gr.² p. 32 footnote 1). Compare λευκαίνω with Skr. rōcaná-s 'light, shining', ἀλφάνω with Skr. arhana-m arhanā 'tribute of respect'.

§ 622. Italic. Lat. cruen-tu-s beside Lith. krùvinu, see § 618 p. 156. Osc. patensíns 'aperirent' for \*patenesēnt cp. Lat. panderent (§§ 632, and 837.2).

Latin verbs in -ināre (§ 617 p. 155): coquināre beside coquere, cārināre beside cārere etc.

§ 623. Germanic. In this class fall Inchoatives formed with an n-suffix (for the term inchoatives as applied to them,

<sup>1)</sup> By this correct vol. I § 488 p. 360, § 492 p. 363, § 639 p. 479.

see Egge, Amer. Journ. Phil., vii 38 ff.); as Goth. ga-vaknan O.Icel. vakna A.S. wæcnan 'awake'. Since in these and many other words n is not assimilated to the preceding consonant, it follows that there must have been a vowel between than which has suffered syncope (cp. I § 214 p. 181, Kaufmann, P.-B. Beitr. xii 504 ff.). But whether this vowel was a, i, or u, and the suffix accordingly Idg. -ono-, -eno-, or -no-, remains a question. Furthermore, amongst form like Goth. dis-taúrna 'I tear to pieces, crush to pieces', there may be forms with Idg. -no- (cp. Skr. dīr-ná-s O.H.G. zor-n, II § 66 p. 141), which would then have to be placed in Class XIII.

The old unextended inflexion was regular Gothic only for the present; e. g. ga-vakna -is -i $\bar{p}$  etc. Elsewhere Gothic has  $-n\bar{o}$ -, as  $-vakn\bar{o}da$ . Old Icelandic carries  $-n\bar{o}$ - all through the verb, as vakna - $na\bar{d}a$ . In Old High German, on account of a certain change which will be set forth in § 781.3, most of the words in question are absorbed into the  $\bar{e}$ -conjugation (3<sup>rd</sup> weak conj.), as  $wesan\bar{e}m$ .

In addition to the words already mentioned — Goth. aflyna, áuk-na (O.Icel. aukna), ga-paúrsna (O.Icel. porna) — the following may be named: Goth. ga-staúrkna 'I become stiff, dry up' O.Icel. storkna O.H.G. gi-storchanēm (beside Lith. streg-iu 'I stiffen'). Goth. -brukna intr. 'I break, break to pieces' (beside brika 'I break'). Goth. ga-batna O.Icel. batna 'I improve myself', O.H.G. trunkanēm 'I get drunk'. Beside Goth. us-lūkna 'I open' (intr.) appears us-lūkn-s 'open' (adj.).

These inchoatives are sometimes derived from an adjective, in which case they run in parallel lines with the factitive group in (Goth.) -jan; Goth. fullnan O.Icel. fullna 'get full' beside Goth. fulljan O.Icel. fylla 'make full, fill' from Goth. full-s O.Icel. full-r 'full' (ground-form \*pl-no-s), Goth. ga-qiunan 'become alive' beside ga-qiujan 'make alive, quicken' from qiu-s (gen. qivis) 'alive', Goth. mikilnan 'grow big' beside mikiljan 'make big' from mikil-s 'big'; cp. Lith. linksminu from linksma-s and similar forms, § 624.

O.H.G. gi-wahannen 'mention' pret. gi-wuog, A.S. wæcnan 'awaken' pret. wōc, like Gr. ἀλιταίνω (aor. ἤλιτο-ν).

§ 624. Balto-Slavonic. Baltic has -ina = Idg. -nno-, and -ena- = Idg. -eno-.

Lith. krùvinu 'I make bloody' fut. krùvī-siu partic. krùvin-ta-s = Lat. cruen-tu-s, auginù 'I make grow', saūsinu 'I make dry', see § 618 p. 156. kùpinu 'I heap up' from kùpina-s 'heaped up'. trùpinu 'I erumble, break into little bits' from trupinỹ-s 'crumb'. tẽkinu 'I make run (on a grindstone), polish' from tẽkina-s running' (O.C.Sl. tečīnŭ). bùdinu 'I awake'. lipinù 'I make stick'. The form of the root is noticeable in tr-inù 'I rub' infin. tr-ìn-ti from \$\sqrt{ter}\$- (Lat. ter\(\bar{o}\)), with which compare Gr. \$\tass{\tass{vsu}}\equiv\(\omega\) I bore', and tv\(\exist{vsu}\) 'I swell out' instead of \*tv-inu, infin. tv-\(\omega\)-ti, beside Lat. tu-me\(\bar{o}\); cp. Gr. \$\xi\-\omega\)-a\(\omega\)w, and its like, § 621 pp. 158 f.

This extraordinarily fertile suffix was used to derive verbs with a factitive meaning from adjectives too (as in Gothic, fullnan etc., § 623); e. g. linksminu 'I make glad, comfort' from liñksma-s 'joyful', vēninu 'I unite' from vēna-s 'one', tvirtinu 'I make fast' from tvirta-s 'fast'; cp. Pruss. swintina 'he hallows' from swints 'holy'.

From verbs like pú-d-inu vél-d-inu svìl-d-inu was extracted a suffix -dinu, which was largely used. See §§ 700 and 701.

Only Lithuania and Prussia have -ina- (-in-) with non-present stems. For Prussian, compare infin. waidin-t 'to show' partic. pret. act. waidinn-ons from the pres. 3<sup>rd</sup> sing. waidinna; swintin-t-s 'hallowed' from 3<sup>rd</sup> sing. pres. swintina. Lettic has for these parts of the verb -inā-, as áud/inu 'I bring up, raise, rear' infin. áud/inát in contrast with Lith. auginù auginti (cp. Goth. lifna lifnōda). Lith. has also a few words with -inoju -inoti, as stiprinóju 'I strengthen' stiprinóti beside stiprinu stiprinti (Lett. stiprinu stiprinát), linksminóju 'I make glad' linksminóti (also accented linksminoju) beside linksminu.

Rarer than -ina- is -ena-: Lith. gyvenù 'I dwell' gyvénti (cp. Goth. ga-qiuna, § 623 p. 160) and graudenù 'I remind, admonish'; gabenu 'I bring', also gabenóju gabenóti.

That Slavonic once possessed verbs in \*-onq infin. \*-on-tī \*-atī may be assumed, as we have seen in § 615 Rem. p. 154, from such forms as vrīg-na-ti. With this -ono- compare zv-onŭ 'sound' beside zv-ĭnĕti 'sound', containing the suffix -nno- (beside zov-a zv-a-ti 'to call', II § 67 p. 154); further, Gr. αὐονή 'dryness' αὕονον ξύλον ξηρόν (Hesych., MS. αὕονος) beside αὐαίνω 'I dry up' (beside Lith. saŭsin-ti O.C.Sl. sŭchna-ti).

### Class XV.

Root + Nasal Suffix forming the Present Stem.

§ 625. Here fall such present stems as Skr. yunáj-mi pl. yuñj-más. This class has hitherto not been certainly proved to belong to any branch but Aryan. Its origin and relation to the other nasal classes has been discussed in § 596.5 p. 139.

§ 626. Aryan. Vleig- 'linquere': Skr. rinák-ti Avest. irinaxti (I § 260 p. 212), Skr. 1st pl. rinc-más 3rd pl. rinc-ánti pret. 1st pers. sing. á-rinac-am 2nd and 3rd sing. á-rinak, conj. rinác-a-t, opt. rinc-yá-t; — thematic Lat. lingu-ō Pruss. po--linka 'remains'. Skr. bhinád-mi 'I split', imper. bhin(d)dhí, √ bheid-; — thematic Prakrit bhind-a-di Lat. find-ō. pináš-mi 'I pound, crush' 3rd pl. piš-ánti (cp. I footnote), injunctive 2<sup>nd</sup> and 3<sup>rd</sup> sing. pinák,  $\sqrt{peis}$ ; — thematic Skr. a-piš-a-t Lat. pīns-ō. Avest. cinah-mi 'I give information', cp. 3rd sing. cōiš-t 'he informed'. Avest. cinas-ti 'he instructs' 1st pl. mid. conj. cinap-ā-maiāē. Skr. ruņádh-mi 'I stop, stem' 3rd sing. act. runáddhi mid. run(d)dhé; — thematic rundh-a-ti. vrnáj-mi 'I twist together' 3rd sing. mid. vyrok-té, vyerg-, cp. Gr. όξμβομαι § 631. trnédhi 'shatters' instead of \*trnódhi (for \*trnaž-dhi), 3<sup>rd</sup> pl. trh-ánti (see I § 404.2 p. 298); — thematic trh-a-ti. Avest. weak form merenk- merenc- from marc-'destroy'. 3rd pl. act. merenc-inti mid. merenc-aite 2nd pl. mid. merenge-duye, opt. 3rd sing. meraš-yā-p, cp. I § 448 pp. 332 f.,

§ 473. 4 p. 350, II p. vIII, I § 200 Rem. p. 168, Bartholomae, Kuhn's Zeitschr. xxix 483; — thematic Avest. merenc-a-itē.

Remark. On Skr. hinás-ti 3rd pl. hís-anti see § 667.

Strong stem instead of weak: Skr.  $2^{nd}$  pl.  $yun\acute{a}k$ -ta instead of  $yun\acute{a}k$ - $t\acute{a}$ .

#### Class XVI.

Root + Nasal Infix + Thematic Vowel forming the Present Stem.

 $\S$  627. This class stands to the preceding in the same relation as Class II B to Class I, etc., see  $\S$  491 p. 50.

As the nasal often spreads from the present to the other parts of the verb, and then to nouns it is often doubtful, where a Root does not contain i, u, a liquid or a nasal, whether the nasal which we see is not really part of the root It is an infix in Lat. pre-hendō -hendī -hēnsu-s Gr. χείσομαι 'I will seize' (for χενδ+σ-) έ-χαδ-ο-ν (χpδ-) χανδάν $\omega$ Alban. gendem 'I am found' Lett. gidu 'I understand, conjecture' (for \*gendu), which is proved by Lat. praeda (for \*prae-hedā) Goth. -gita. For Skr. spanda-tē 'throbs' spandaya-ti spanda-s 'a throbbing' pani-špadá-s 'throbbing' (spad- = \*spyd-) Gr. σφενδόνη 'sling' σφαδασμός 'throbbing, eagerness, impatience' (\*σφηδ-)1) the same is proved by Gr. σφεδ-ανό-ς 'hasty, wild' σφοδ-ρό-ς 'powerful'. But it sometimes happens that there are no kindred words which can decide the matter. And then again, to make the ground more slippery under our feet, roots whose nasal we have a right to say belongs to the root itself, make forms without any nasal by analogy. Thus Skr. mamáth-a māthaya-ti instead of mamanth-a manthaya-ti from mathná-ti mátha-ti, where math- comes from \*myth- (§ 516 p. 82, § 852); Gr. δήξομαι instead of \*δεγξομαι from δάκ-νω ε-δακο-ν, where  $\delta \alpha x$ - comes from \* $d\hat{n}\hat{k}$ - (I § 224 p. 191).

§ 628.  $\sqrt{leip}$ : Skr.  $limp-\acute{a}$ -ti 'smears', Lith.  $limp-\grave{u}$  'I cling, hold'.  $\sqrt{pei\mathring{k}}$ : Skr.  $pi\mathring{s}-\acute{a}$ -ti 'adorns, decks, arms',

<sup>1)</sup> Connect Lat. pendo pependo, pondus?

Lat. ping-ō. V ueid-: Skr. vind-á-ti 'finds', O.Ir. ro-finnadar 'gets to know' (see § 633), cp. Armen. giut 'gain, profit' for \*uind- (Hübschmann, Arm. Stud. 1 26, 63, 75; Bugge, Idg. Forsch. 1 443), Gr. λνδ-άλλομαι 'I show myself, appear'. Vseigseig- 'trickle down': Skr. sinc-á-ti 'pours out, wets', Goth. sigq-a 'I sink' (part. sagq following band etc., I § 67 Rem. 1 p. 57), Lett. siku 'I become exhausted, dry up, fall' (of water) for \*sink-u, cp. Mid.H.G. sīhte 'shallow' from \*sing-to-. V kueitkueid- 'shine' (Skr. śvit-āná-s Goth. hveit-s): Skr. śvind-a-tē 'is clear, or white' (gramm.), Lith. szvint-ù 'I become clear'. Skr. a-piš-a-t 'I crushed' (beside pi-náš-ti, § 626), Lat. pīns-ō, cp. Gr. πτίσσω πτίττω instead of prehistoric \*πτινσ-μω (§ 631). Skr. opt. chind-ē-ta beside chi-nád-mi 'I cut off, tear to pieces' (Class XV), Lat. scind-ō, cp. Gr. σχινδ-αλμό-ς 'piece of wood Prakr. bhind-a-di beside Skr. bhinád-mi split off, splinter'. 'I split' (§ 626), Lat. find-ō. \sqrt{sneigh-: Lat. ningu-i-t, Lith. sning-a 'it snows'. Vleig: Lat. lingu-ō, Pruss. po-linka 'remains' (Skr. rinák-ti § 626), cp. Gr. λιμπ-άνω § 631. Lat. string-ō, Lith. string-u 'I remain hanging' (pret. strig-au), beside Lat. striga, Goth. strik-s 'stroke, line' O.H.G. strīhhu 'I draw a line, pass along'; O.C.Sl. strig-q 'I shave, shear' for \*string- (I § 229.4 p. 195) or for \*streig-? Lat. dī-stingu-ō, Goth. stigq-a 'I strike, push' O.Icel. stokk 'I leap, push', beside Lat. īn-stīgō Skr. tējatē 'is sharp, goads on', cp. Lith. sténgiu § 637. Lat. mingō V meiĝh-, cp. Lett. mí/chu for \*minziu § 635. Skr. lump-á-ti 'breaks to pieces', Lat. rump-ō, V reup-. Skr. lunc-a-ti 'pulls, plucks' (gramm.: perf. lu-lunc-ur is found), Lith. runk-ù 'I grow wrinkled', V reug- reug- (Skr. luk- 'a falling off, disappearance', Lat.  $r\bar{u}g$ -a, Lith.  $ra\bar{u}ka$ -s 'wrinkle'), cp. Lat. runc- $\bar{a}re$ . munc-á-ti 'lets go, frees, gets free, runs away', Lat. ē-mungō, Lett. múku 'I make off, flee' for \*munk-u, V meug- meug-. Skr. yunj-a-ti (beside yunák-ti § 625), Lat. jung-ō V jeug-, cp. Lith. jùng-iu 'I yoke to'. Skr. bhunj-a-ti 'makes to eat or enjoy' (beside bhunák-ti Class XV), Lat. fung-or. Avest. bunj--a-iti lays down, frees, saves itself', cp. Gr. πεφύγγων φυγγάνω § 631. Lith. bund-ù 'I wake up', cp. Gr. πυνθ-άνομαι § 631.

V qert- 'cut': Skr. kṛnt-á-ti 'cuts, splits', Lith. krint-ù 'I fall off, drop' (of leaves, fruit and so forth), Idg. \*qṛnt-é-ti, cp. I § 285 Rem. p. 228. O.Ir. in-grennim 'I pursue' i. e. \*ghrendō? (cp. § 633), O.C.Sl. gręd-ą 'I come', originally \*ghrṇ-dh-ō V ghredh-, cp. Goth. gridi- f. 'step, grade' Lat. gradior for \*ghṛdh-io- (§ 717). V reŷ- 'stretch, extend': Skr. r̄nj-á-ti (beside 3rd pl. mid. r̄nj-atē Class XV), cp. Lith. partic. \(\bar{\text{\$\te

Formed from such roots with r we find in several languages present stems with vocalism of the strong grade. These must be regarded as new formations. Examples are: Skr. śrambh-a-tē 'entrusts', Gr.  $\acute{o}\acute{\epsilon}\mu\beta$ -o- $\mu\alpha$  'I turn myself round', Mid.Ir. dringim 'I ascend', O.H.G. spring-u 'I leap', Lith.  $dr\bar{\epsilon}s$ -ù 'I am brave'; details will be found under the separate headings.

V plāq- plāg-: Lat. plang-ō, Lett. plůku 'I become flat, fall flat down' for \*plank-u, cp. Gr. πλάζω 'I strike, knock aside, lead astray' (ἔπλαγξα πλαγκτό-ς) for \*πλαγγ-ζω § 631. Lat. clang-ō, cp. Gr. κλαγγ-άνω and κλάζω for \*κλαγγ-ζω § 631 (pf. κέκλαγγα), O.Icel. hlakka 'I cry out' (-kk- for -nk-), beside Gr. κλώζω 'I cluck, caw' for \*κλωγ-ζω.

Roots ending in a consonant, without liquid, nasal, i, or u (type peq-'coquere') show an e-vowel. Goth. Peiha O.H.G. dīhu 'I thrive' for \*Pinχ-ō, earlier \*Penχ-ō (cp. O.Sax. partic. thungan and causative thengiu 'I complete'), from which we have the re-formates Páih dēh etc. (I § 67 Rem. 2 p. 57), Lith. tenkù 'I last out, have enough' infin. tèk-ti, compare O.Ir. tocad Mod.Cymr. tynghed 'luck, happiness' (first for \*tonketo-, cp. the Latinised name Tunccetace, inscr. in Wales), which also point to a nasal present stem. Alban. ģend-em 'I am found', Lat. pre-hendō, Lett. gidu 'I understand, conjecture' for \*gend-u V ghed-, cp. Gr. χανδάνω χείσομω § 631.

Several languages give io-inflexion to this type (Class XXIX). Examples: Gr. πτίσσω πτίττω instead of \*πτινσ-μω, πλάζω for

\*πλαγγ-μω; Lat. vinc-iō, sanc-iō (ep. sacer); Lith. jùng-iu, Lett. mi/chu (beside mi/nu) 'mingo' for \*minz-iu. See § 744.

§ 629. Aryan. Skr. vind-á-ti Avest. vind-a-iti 'finds', V ueid-; Skr. sinc-á-ti Avest. hinc-a-iti 'pours out', V seig-; Skr. krnt-á-ti Avest. kerent-a-iti 'cuts', see § 628 where other examples are given. We may also mention the following: Skr. śiš-a-ti 'leaves over' beside śinás-ti; und-a-ti 'moistens, wets' beside unát-ti; umbh-a-ti 'holds together, holds in custody' beside 2nd sing. unap; trmp-á-ti 'is satisfied' V terp-; brh-a-ti 'strengthens' V bherĝh-; šrnth-a-ti from šrath- 'to become loose or soft'; Avest. merenc-a-ite from marc- 'destroy' beside 2<sup>nd</sup> pl. mid. mer pq duyē (§ 626). Sometimes in Sanskrit the accent is changed to the accent of Class II A, as śúmbh-a-ti and śumbh-á-ti 'adorns' (beside śóbh-a-tē), partic. mid. túñj-a--māna-s (3rd pl. tunj-átē Class XV, tuj-yá-tē 'is struck, knocked'), dýh-a-ti beside dyh-á-ti 'strengthens' (beside dýh-ya-ti), pýñc-a-ti mingles' (beside prnák-ti and pi-prg-dhi). With secondary strong grade vocalism (cp. § 628 p. 165): Skr. śranth-a-tē (gramm.) beside *śrnth-a-ti*, *śrambh-a-tē* 'entrusts (cp. ni-*śrmbhá-s*), anu-raniati 'cleaves truly to, loves' (cp. rāga-s 'colour, passion, love', Gr. ὁέζω ὁέγμα ὁογεύς), Avest. 3rd sing. pret. morend-a-D for \*marend-a-p (I § 94.3 p. 89) from mard- 'kill' (or does  $-ar = -\bar{r}$ ?); of the same sort may be Skr.  $vánd-a-t\bar{e}$  'praises, honours' beside vád-a-ti ud-yá-tē.

Roots of the type peq- (§ 628 p. 165). Skr. spand-a- $t\bar{e}$  'throbs', beside Gr.  $\sigma\varphi\varepsilon\delta$ - $\alpha\nu\delta$ - $\varsigma$ , § 627 p. 163. stambh-a- $t\bar{e}$  'strengthens itself, stands fast, supports itself', beside Lith. steb- $i\hat{u}$ '-s 'I wonder'  $st\dot{e}b$ - $i\hat{u}$ '-s 'I keep myself back'  $st\bar{a}ba$ -s 'apoplexy'. Sometimes the nasal is only found in non-present forms. Thus from  $\sqrt{seg}$ - 'fasten, hang' (Skr.  $sajjat\bar{e}$  for \*sa-zj-a- § 562 p. 110, Lith.  $seg\hat{u}$ ): Skr. perf. sa- $sa\hat{n}j$ -a aor. a- $sa\hat{n}j$ -i partic. -sank-tavya-s; from Ar. dabh- or dhabh- $^1$ )

<sup>1)</sup> The desiderative forms dhipsati dhipsati are late re-formates instead of Ved. dipsati, certainly not instead of pr. Ar. dhabh. Compare dhak, p. 171.

'to hurt, deceive' (cp. Skr.  $\acute{a}$ -dbh-u-ta-s § 596. 2, p. 136, desid. Skr.  $d\acute{i}psa$ -ti Avest.  $diw \check{z}a$ - $idy \bar{a}i$  § 667, Skr. perf. da- $d\acute{a}bh$ -a,  $-d\bar{a}bha$ -s 'hurting', Avest. caus.  $d\bar{a}baye$ -iti): Skr. perf. da- $d\acute{a}mbh$ -a caus.  $dambh \acute{a}ya$ -ti dambh-a-s 'deceit'. In such instances, one of two explanations is possible. (1) Either a nasal present which was the origin of these nasal forms has perished. With sanj-compare O.C.Sl. seg-na § 636; dambh- may be illustrated by Gr.  $\mathring{a}r\acute{\epsilon}\mu\beta\omega$  'I hurt, deceive', if the root is dhebh-, and if this Greek word is a contamination of  $\Im{\epsilon}(\mu)\beta$ - and  $\tau\epsilon(\mu)\varphi$ -. (2) Or the nasal came from other words; thus  $dad\acute{a}mbha$ , beside  $dabhn\acute{o}ti$ , was formed on the analogy of  $tast\acute{a}mbha$ :  $stabhn\acute{o}ti$ , and similar pairs.

§ 630. Armenian. Present stems of this kind I know none; but cp. giut 'profit, gain', which seems akin to \*uind-\(\delta\) (§ 628 p. 164).

§ 631. Greek. Only a few examples of the unextended stem can be found. λινδέσθαι άμιλλᾶσθαι beside λίζονοι παίζονοιν Hesych. for \*λινδ-ίω?), connected by Fick with λοίδορο-ς and Lat. loido-s lūdu-s. σφίγγ-ω 'I tie, fasten', compared with Armen. pirk, for \*sphig-ro-s, by Bugge (Idg. Forsch. I 453). With secondary strong-grade vowel (cp. § 628 p. 165): ἀέμβομαι 'I turn round, revolve' (ἀόμβο-ς 'bull-roarer, wheel') containing Idg. \*μχνοζ- from ν μerg-: Skr. νχνάk-ti 'twists together' infin. νχνή-άsē, Mid.H.G. runke A.S. wrincle 'wrinkle' O.H.G. rench(i)u 'I turn, pull backwards and forwards in turning'. Root of the type peq- (§ 628 p. 165): στέμβω 'I shake, misuse, handle roughly' beside στόβο-ς στοβέω στοβάζω.

Passing over to Class XXIX (§ 628 p. 165).  $\pi \tau l \sigma \sigma \omega$   $\pi \tau l \tau \tau \omega$  T crush, bruise' instead of \* $\pi \tau \iota \nu \sigma - \iota \omega$  (the Author, Gr. Gr. 2 p. 61): Skr.  $a-p_i \xi - a-t$  etc., see § 628 p. 164.  $\pi \lambda \dot{\alpha} \zeta \omega$  T strike, knock down' for \* $\pi \lambda \alpha \gamma \gamma - \iota \omega$ : Lat.  $plang - \bar{v}$  etc., see § 628 p. 165.  $\times \lambda \dot{\alpha} \zeta \omega$  T sound, cry out' for \* $\times \lambda \alpha \gamma \gamma - \iota \omega$ : Lat.  $clang - \bar{v}$  etc., see lbid. Perhaps also  $\sigma \varkappa l \mu \pi \tau \omega$  T throw hard at something' for \* $\sigma \varkappa \mu \mu \pi - \iota \omega$ , beside Skr.  $k \xi i p - \dot{a} - t i$  'throws, slings'.

Where no present formation has survived: ἴμψας · ζενίξας. Θετταλοί Hesych., beside Lat. vinc-iō Skr. vi-vyak-ti 'embraces, surrounds' 3<sup>rd</sup> dual vi-vik-tά-s, cp. γιμβάναι · ζεύγανα (Hesych.) i. e. Γιμβάναι (like τύμπανο-ν).

§ 632. Italic. Lat. ningu-i-t Umbr. ninctu 'ninguito', Lat. dī-stinguō Umbr. an-stintu 'distinguito', Lat. ping-ō, pīns-ō, scind-ō, find-ō, linqu-ō, string-ō, ming-ō, rump-ō, ē-mungō, jung-ō, fung-ōr, see § 628 p. 164. Lat. vinc-ō perf. vīc-ī, Osc. vincter 'convincitur', cp. Goth. veih-a 'I fight' Class II A O.H.G. upar-wihit Class II B, Vueig- § 532 p. 94. Lat. fing-ō beside fic-tu-s fig-ulu-s, V dheiāh-: O.Ir. dengaim 'I oppress' (so Thurneysen). ling-ō beside ling-urriō, V leiāh-. tund-ō beside tu-tud-ī. pung-ō beside pu-pug-ī. ac-cumbō beside -cubuī cubāre.

Lat. frang- $\bar{o}$  for \*bhrng- $\bar{o}$  beside frag-ili-s, Goth. brika 'I break',  $\sqrt{bhreg}$ - (cp. Osthoff, M.U. v p. 111).

Lat.  $pang-\bar{o}$  beside  $pe-pig-\bar{\imath}$  Gr.  $\pi \acute{\eta} \gamma - \nu \bar{v} - \mu$  I fix',  $\nu p \bar{a} \hat{k} - p \bar{a} \hat{g} - \hat{j}$ ; akin are doubtless Goth.  $f \bar{a} h a$  O.H.G.  $f \bar{a} h u$  'I grasp, seize' (cp. Skr.  $p \acute{a} \dot{s} a - \hat{j}$  cord, line') for pr. Germ. \* $f a n \chi - \bar{o}$ , with partic. O.H.G. gi-f ang an.  $tang-\bar{o}$  beside  $te-tig-\bar{\imath}$  in-teger (Umbr. antakres 'integris'),  $con-t \bar{a} giu-m$ .  $plang-\bar{o}$  beside

plāg-a: Lett. plūku, see § 628 p. 165. lamb-ō, beside O.H.G. laffu 'I lick' perf. luof, √lāb-. Perhaps also pandō beside pateō and beside Osc. patensíns 'aperirent', which comes from \*patựnō or \*patenō (§ 622 p. 159); cp. § 612 p. 151;¹) and of-fendō, see § 696.

pre-hendō: Alban. ġsnd-em etc., ✓ ghed-, see § 628 p. 165. The fertility of this type in Latin is made clear by fund-ō beside Goth. giuta 'I pour' for \*ĝheų-dō Class XXV § 690. Cp. Goth. standa and the like, § 634 at end.

Passing into Class XXIX (§ 628 p. 165).  $vinc-i\bar{o}$ , beside Skr. vi-vyak-ti  $vi-vik-t\acute{a}s$ , see § 631 p. 168.  $sanc-i\bar{o}$  beside sac-er.

langu- $e\bar{o}$  (langu- $\bar{e}sc\bar{o}$ ) perf. langu- $\bar{\imath}$  (beside laxu-s O.H.G. slach 'slack, lazy' and Gr.  $\lambda\eta\gamma\omega$  'I cease',  $\sqrt{sl\bar{e}g}$ -), following Class X, § 590 p. 132.

§ 633. Keltic. O.Ir. dengaim 'I oppress' from \*dhinghō (3<sup>rd</sup> pl. pass. conj. for-diassatar 3<sup>rd</sup> sing. perf. dedaig): Lat. fingō, see § 632. O.Ir. slucim 'I swallow, gulp' (secondary -io-flexion) Mod.Cymr. llyncaf llyngaf 'devoro' from \*slunkō, V sla\*uk- sla\*ug-, Gr.  $\lambda vyxaiv\omega$  and  $\lambda vyyarouau$  'I sob'.

O.Ir. in-grennim 'I pursue' with strong-grade vowel in the root: O.C.Sl. gręd-a, see § 628 p. 165; but compare the Remark. So also Mid.Ir. dringim 'I ascend' = O.Ir. \*dreng(a)im (drēimm 'clambering' subst.), akin to Skr. darh-make fast' pres. drh-á-ti drh-a-ti (cp. Lith. lipù 'I mount up with my feet, climb' beside limpù 'I remain clinging', O.H.G. chlimbu 'I climb' beside chlību 'I cling').

O.Ir. com-boing 'confringit' (perf. 3<sup>rd</sup> sing. -baig), cp. Skr. bhanák-ti perf. ba-bhañj-a Armen. bek-anem. tong(a)im 'I swear' beside co-tach 'compact'. in-dlung 'I split' beside in-dlach 'split' subst.

<sup>1)</sup> Bartholomae (Stud. Idg. Spr., II 96 f.) derives  $pang\bar{o}$   $pand\bar{o}$   $\bar{e}$ -mung $\bar{o}$  from \*pank- $n\bar{o}$  \*pant- $n\bar{o}$  \*munk- $n\bar{o}$  (op. O.C.Sl. kre(t)- $n\bar{q}$  and the like, § 636). This view seems to me unjustifiable until the general principles which govern the interchange of tenues and mediae when root-finals in Indo-Germanic have been made out (I § 469.7 p. 346).

O.Ir. ro-finnadar 'gets to know' is related to Skr. vind-á-ti § 628 p. 164, and seems to have adopted a-flexion; but compare the Remark, below.

Remark. Thurneysen writes to me: "Grenn- and finna- appear in Old Irish always with nn and never with nd. I hesitate between two explanations. (1) Either nd very early became nn before the accent (the prefix which accented is always ind-, is either inn- or in- when pretonic); or (2) the nasal stood originally after the dental:  $finna-=*vid-n\bar{a}-$  or  $*vi-n-d-n\bar{a}-$ , grenn-=\*gred-n- (\*grid-n-?) or \*gre-n-d-n-. I am still searching for evidence to decide the matter." With \* $vindn\bar{a}-*grendn-$ compare Lett. brinu for \*brendnu, O.C.Sl. segna § 615 p. 154, § 636.

§ 634. Germanic. Except  $standa: st\bar{o}\bar{p}$ , all Germanic stems of this class run the nasal right through the verb.

Goth. sigq-a O.H.G. sink-u 'I sink', Goth. stigq-a 'I strike', see § 628 p. 164. Goth. fra-slinda O.H.G. slint-u 'I swallow' (re-formed, O.H.G. slunt 'throat'): cp. Mid.H.G. slīte A.S. slīde 'I slide, slip', Lith. slid-ù-s 'slippery, smooth' Lett. slaid-s 'steep'.\(^1\)) O.Icel. slepp 'I make slide' pr. Germ. \*slimp\(\overline{o}\) (pret. slapp): cp. O.H.G. slīfu 'I slide, sink', \(\nu\) sleib-. O.H.G. climbu 'I climb, clamber, ascend': cp. O.Icel. klīf 'I climb' pret. kleif, O.H.G. chlību 'I cling, hold'. \(\nu\) gleip- (gleip- and leip- are p-extensions of \(\nu\) glei- and lei-, cp. § 797). Mod.H.G. blinke 'I glitter' a weak verb, but originally doubtless strong (re-formate O.H.G. blanch 'bright'): cp. O.H.G. blīhhu 'I gleam', Lith. blyksztù 'I turn pale' blaiksztýti-s 'to clear up'. From O.Sax. mengian (Goth. \*maggjan) 'to mingle' we must apparently infer \*mingan 'to mingle' akin to Skr. miš-rá- 'mixt'; see § 805. (Kluge in his Etym. Dict. explains differently).

Roots with -er- -el- show strong-grade vowels (cp. § 628 p. 165). O.H.G. spring-u 'I leap' instead of pr. Germ. \*spring- $\bar{o}$  ground-form \*springh- $\bar{o}$ : cp. Gr.  $\sigma\pi\dot{\epsilon}\varrho\chi\sigma\mu\alpha\iota$  'I hasten'  $\sigma\pi\dot{\epsilon}\varrho\chi-\nu\dot{o}-\dot{\epsilon}$  'hasty'. O.H.G. ring-u 'I move to and fro, writhe violently'

<sup>1)</sup> Osthoff compares fra-slinda with Gr.  $\lambda \alpha \iota_{-\mu o'-\varsigma}$   $\lambda \alpha \bar{\iota}_{-\tau \mu \alpha}$  (Zeitschr. deutsch. Phil., xxiv 215; Anz. für idg. Spr., I 82). According to this etymology, we should start with a stem sli-t- (cp.  $\iota$  in  $\lambda \alpha \bar{\iota}_{\tau \mu \alpha}$ ) which took a nasal infix. Compare below, in this section, on standa (p. 172).

A.S. wrinze 'I turn, press' (cp. Goth. vruggō f. 'knot, noose'): cp. O.H.G. wurg(i)u 'I throttle, choke' Lith. verž-iù 'I tie together, enclose', Vuergh- (I § 285 Rem. p. 228). O.H.G. scrint-u 'I burst, blow up, split, rend' (O.H.G. scrunta 'split, tear, rent'): cp. Lith. skérdžiu 'I burst, blow up, split', partic. su-skirdēs 'blown up, burst open', Vsqerdh- (i. e. sqer+dh-, § 689). Mid.H.G. schrimpfe 'I become wrinkled, shrivel': Pruss. sen-skrempūsnan acc. 'wrinkle, fold' (p, as elsewhere, wrongly written for b), cp. O.Icel. skorp-r 'shrivelled, dry' skorp-na 'I dry up' intr. Russ. skorblyj 'shrivelled', Vsqerb-. Mid.H.G. sprinza O.Icel. sprett 'I leap, burst, blow up' doubtless akin to O.C.Sl. pred-aja 'I leap, tremble', V (s)perd- (i. e. (s)per+d- § 700). O.H.G. sling-u 'I move, twist, swing to and fro, crawl' (cp. slango 'snake'), doubtless with Lith. slenkù 'I crawl' akin to Lat. sulcu-s 'furrow, snake's trail'.

Goth.  $f\bar{a}h$ -a O.H.G.  $f\bar{a}h$ -u 'I seize' pr. Germ. \* $fan\chi$ - $\bar{o}$ , connected possibly with Lat. pang- $\bar{o}$ ,  $\bigvee p\bar{a}\hat{k}$ -  $p\bar{a}g$ -, see § 632 p. 165. Compare O.Icel. banga weak verb 'I strike, knock' Mod.H.G. Swiss bang(e) 'I give a knock' (Mid.H.G. bengel 'cudgel'), beside O.H.G.  $b\bar{a}gu$  'I fight, strive', O.Ir.  $b\bar{a}gim$  'I strive',  $\bigvee bh\bar{e}gh$ -  $bh\bar{o}gh$ -.

Secondary io-flexion (§ 628 p. 165) must be assumed for O.H.G. winch(i)u 'I move sideways, fluctuate, nod, beckon' (pret. in Mid.H.G., pret. and part. in Mod.H.G. also strong—wanc, gewunken), if it, along with the Lith. ving-i-s m. 'deviation, bend' ving-ù-s 'crooked, bent (compare véngiu 'I avoid, do not want to do something' inf. vénkti), is related

to O.H.G. wīhhu 'I shrink, yield' Gr. οἴγννωι for \*ò-Γιγ- 'I open' ('make yield'). But these comparisons are doubtful (cp. Fick, Wtb., 1<sup>4</sup> 541, 547 f.; G. Meyer, Et. Wört. der alb. Spr., 463; Per Persson, Stud. Lehr. Wurzelerw., 174 f.).

Nasal present stems from roots extended by -t-; see § 685. Goth. standa 'I stand' pret. stōp O.H.G. stantu pret. -stuot (generally with intrusive nasal, stuont) for \*standō ground-form \*stɔ-n-tō from \$\sta-1\$. Goth. vinda O.H.G. wintu 'I wind, turn, wrap, enfold' (pret. vand want), beside Goth. ga-vida 'I tie up' O.H.G. witu 'I tie, bind' from \$\sue\_i-\text{Skr. vo-tá-s'}\$ folded, enclosed' Lith. \$\sue\_j-\u00ecu'\$ 'I twist a cord' (cp. § 790). O.H.G. swintu 'I vanish, disappear' A.S. swinde beside O.H.G. swo-nu § 614 p. 152. Compare above, O.H.G. scrintu from \$\sque\_i-\text{Hn-}\$ p. 171, Mid.H.G. \$\sprinze\$ from \$\spe\_i-\text{H-}\$ (ibid.), Lat. fundō from \$\sque\_i+\text{H-}\$ § 632 p. 169, and again O.H.G. chlimbu from \$\sque\_i+\text{H-}\$ (above, p. 170), O.C.Sl. \$tr\varepsilon\_i\$ 'I shake, shatter' from \$tr+\varepsilon\_i\$ and Skr. \$\sque\_i\text{Ahvasa-ti}\$ 'disperses, disappears' intr. from \$\sque\_i\text{Hu+}+\varepsilon\_i\$ (Classes XIX and XX, cp. Per Persson, Wurzelerweiterung, p. 83).

§ 635. Balto-Slavonic. In Baltic, this present formation is very productive.

Lith. limp-ù 'I cling, hold' (pret. lip-aū), Lett. sík-u 'I sink down, fall', Lith. szvint-ù 'I grow elear', sniñg-a 'it snows', Pruss. po-linka 'remains', Lith. string-u 'I remain hanging', runk-ù 'I grow winkled', Lett. múk-u 'I make off, flee', Lith. bund-ù 'I wake up' see § 628 p. 164. Lith. stimp-ù 'I grow stiff' (pret. stip-aū), tunk-ù 'I grow fat' (tuk-aū), džiung-ù 'I become glad' (džiug-aū).

Lith.  $krint-\dot{u}$  'I fall off'  $(krit-a\bar{u})$ : Skr.  $krnt-\dot{a}-ti$ ,  $\sqrt{qert}$ , see § 628 p. 165.  $drinb-\dot{u}$  'I drop in thick drops'  $(drib-a\bar{u})$ , beside  $dreb-i\dot{u}$  'I let fall in thick drops' Gr.  $\tau \varrho \dot{\iota} \varphi - \varepsilon - \tau a$  'curdles'  $\sqrt{dhrebh}$ .  $trink-\dot{u}$  'I go wrong, do not come off'  $(trik-a\bar{u})$ , beside  $tr\bar{a}k-a-s$  'foolish fellow'  $trak-\dot{u}-s$  'foolish, mad' Gr.  $\dot{a}-\tau \varrho s \iota \tau \dot{\varrho}$  'uninjured, exact, true'.  $splint-\dot{u}$  'I spread' intr.  $(split-a\bar{u})$ , beside  $spleczi\dot{u}$  'I spread', trans.

Roots of the type peq- (§ 628 p. 165). Lith. tenk- $\hat{u}$  'I suffice in some respect, have enough of something'  $(tek-a\tilde{u})$ : Goth.

peiha for pr. Germ. \*peroχ-ō, see § 628 p. 165. Lett. gidu 'I take in, conjecture', see § 628 p. 165. Lith. gend-ù 'I become damaged, split in two' (ged-aŭ).

Lett. plůku 'I become flat, fall flat down' for \*plank-u: Lat.  $plang-\bar{o}$ , see § 628 p. 165. Lith.  $kank-\hat{u}$  'I hold out, suffice'  $(kak-a\bar{u})$ .

An indication of the fertility of this type in Lithuanian is the forming of present stems of the kind from nouns (cp. § 793); e. g. rentù 'I get thinner' (retaŭ) from rēta-s 'thin, not close', lempù 'I pamper myself' (lepaū) from lepù-s 'pampered'.

Secondary io-flexion (cp. § 628, p. 165) is found only where the nasal spread beyond the present system. Lith. jùng-iu 'I yoke, put to' (inf. jùnk-ti) beside Skr. yuñj-a-ti Lat. jung-ō, Lett. mifchu 'mingo' for \*minz-iu (inf. mift) beside Lat. ming-ō, § 628 p. 164. Lett. kamp-ju 'I seize, grasp' (inf. kampt), beside Lat. cap-iō.

Under the same conditions we have stems adopting toconjugation (§ 686), where the meaning is intransitive. Lith. jùnkstu (Lett. júkstu for \*junkstu) 'I grow used' (jùnkau junkti) beside Lett. júku for (j)unk-u, akin to O.C.Sl. uča 'I instruct' Skr. uc-ya-ti 'finds pleasure in' okas- n. 'pleasure, place of pleasure, home'; cp. O.C.Sl. vyk-nq and Goth. bi-ūhts, which likewise seem to have been nasalised (§ 636). Lith. stinkstu 'I curdle, congeal, grow stiff' (stingau stinkti) beside Gr. στείβω 'I tread something hard' στιβαρό-ς 'firm, pressed, solid' (cp. Lith. sténgiu § 637). sklīstù 'I flow apart' (sklindaŭ sklīsti) beside sklid-ina-s 'full to overflowing' skleidžiù 'I spread'; a pret.  $3^{rd}$  sing. sklidu ( $sklid\bar{o}$ ) is also found, pointing to a present Lett. stringstu 'I grow tight, dry up' (stringu stringt) beside Lith. string-u 'I remain hanging' (strigau) and streg-iu 'I crystallise, stiffen' (cp. § 628 p. 164). Lith. drīstù 'I grow bold' (drīsaŭ drīsti), v dhers-. linkstù 'I bend' (linkaŭ linkti) beside Gr. λεκ-άνη 'pan, fan' λοξό-ς 'crooked'; also Lat. lanx with nasal (for \*lpag-?). The model for these presents is

seen in  $bl\bar{\imath}sta$  'it darkens' beside  $blind-\bar{o}$   $\lor$  bhlendh-,  $t\bar{\imath}stù$  'I stretch myself out' beside  $t\bar{\imath}s-a\bar{\imath}$  stem ten-s-, and the like.

§ 636. This formation is much rarer in Slavonic than it is in Baltic. O.C.Sl. strig-q 'I shear, slave' for \*string-? see § 628 p. 164. gręd-ą 'I come' (inf. gręsti) for ghṛndh- or \*ghrendh-: O.Ir. in-grennim, see § 628 p. 165. sęd-ą 'I sit' (inf. sešti), V sed-, cp. Pruss. sindats syndens 'sitting' beside sīdans sīdons = Lett. sédās. leg-a 'I lie' (inf. lešti), V legh-tręsa 'I shake, shatter' inf. tręs-ti from tr-es-, unless it comes from \*trem-so- (cp. Lith. trimù 'I tremble' Lat. tremō), see § 657. As regards gręd-ą leka 'I bend' pręd-ą 'I spin' compare § 637.

Sometimes extended by -io- (§ 628 p. 165). žęždą 'I desire, thirst' for \*žęd-ią (inf. žędati) beside Lith. pa-si-gendù 'I miss' and geidžiù 'I long for'. glęždą 'I look, gaze' for \*ględ-ią (inf. ględėti) beside Mid.H.G. glinze 'I shine' O.H.G. glīzu 'I glitter'. See § 637. With nasal confined to the present system: ob-ręštą 'I find' for \*-ręt-ią, inf. -rešti aor. -rětŭ (for the etymology of this verb see § 687).

§ 637. Side by side with Lith. drimbù (ground-form \* $dh\gamma mbh-\bar{o}$ ) and the like stand forms with e in the root syllable (cp. § 628 p. 165).  $dr\bar{e}s-\hat{u}$  'I am bold' (pret.  $dr\bar{e}s-a\tilde{u}$ ) beside  $dr\bar{e}s-t\hat{u}$   $\sqrt{dhers}$ - § 635 p. 173.  $brend\hat{u}$  (dialectic brindu for brendu) 'I wade' beside  $bred\hat{u}$  ( $brid-a\tilde{u}$ ) O.C.Sl. bred-a.  $lenk-i\hat{u}$  'I bend' ( $lenkia\tilde{u}$  lenkti) beside  $link-st\hat{u}$   $\sqrt{leq}$ - § 635 p. 173. trendu 'I am devoured by moths or worms' inf. trende-ti, with tride beside Skr. treatti tard-a-ti § 692. We may assume

that  $dr\bar{\varrho}s$ - $\hat{u}$  for \*drins- $\hat{u}$  was coined to supplement  $dr\bar{\varrho}s$ - $a\bar{u}$  on the analogy of renk- $\hat{u}$ :  $rinka\bar{u}$ ,  $kert\hat{u}$ :  $kirta\bar{u}$  etc.; lenk- $i\hat{u}$  appears beside  $linkst\hat{u}$  on the analogy of  $gr\bar{\varrho}z$ - $i\hat{u}$  'I turn, twist' beside  $gr\bar{\varrho}szt\hat{u}$  'I turn myself' etc. Slavonic verbs with  $\varrho$ ,  $gr\varrho d$ - $\varrho k$ - $\varrho$ , and \* $kr\varrho t$ - $\varrho$  which appears to be implied by  $kr\varrho$ - $n\varrho$ , may quite well correspond to Lith. drimb- $\hat{u}$  or to Lith.  $dr\bar{\varrho}s$ - $\hat{u}$ .

Baltic en Slav. e is found in present stems from roots with i-vowels both extended and unextended. Lith. senkù 'I fall, sink' (of water) O.C.Sl. sek-na 'I sink down' beside Lett. siku for \*sink-u Skr. sinc-á-ti V seig- (§ 628 p. 164). Lith. spréndžiu 'I grasp with the hand' (sprésti) O.C.Sl. preda 'I spin' (presti) beside Lith. sprindi-s m. 'span' Lett. spraid-s 'place where one stands in a narrow compass' debes-spraisli-s 'vault of heaven' O.H.G. spreiten 'stretch out, separate, part asunder'. Lith. pa--si-gendù 'I miss' O.C.Sl. žeždą 'I desire, thirst' for \*žed-ją beside Lith. geidžiù 'I desire' Goth. gáidv n. 'lack' O.H.G. gīt 'eagerness, greed, avarice'. Lith. sténg-iu 'I apply my strength to something' beside stinkstù 'I congeal, get stiff' Gr. στείβω (§ 635 p. 173). Lith.  $m\bar{e}z-\hat{u}^2$ ) 'mingo' ( $m\bar{i}za\bar{u}$   $m\bar{i}szti$ ) Lett. mif-nu for \*menz-nō beside Lett. mifchu for \*minz-jō (§ 635 p. 173) Lat. ming-ō Lith. mìžė f. 'cunnus' mìž-iu-s 'penis', V meiĝh-. O.C.Sl. gleždą (inf. gleděti) and gledają (inf. gledati) 'I look, gaze' beside Mid.H.G. glinze 'I shine, glitter' (pret. new formation glanz) O.H.G. glīzu O.Sax. glītu 'I glitter' V ghleid-. O.C.Sl. ręgną 'hisco' (rągŭ 'jest', subst.) beside Lat. ringor ric-tu-s. If the Baltic forms stood alone, the explanation would be easy; we might say that the analogy of renk-: rinketc. produced senk- menž- beside sink- minž-; compare what is said above on drēsù. But this explanation does not suit

<sup>1)</sup> The fact that we find kret- and not  $\check{cret}$ - is not sufficient to prove that the ground-form of kret- is the weak grade \*qrnt-. Such a form must have become Slav. \*krint-, as \*dhrns- becomes Lith. drins-, and \*qrnt- becomes Lith. krint- (I § 285 p. 227). There never was a form  $*k\check{rrnt}$ -, nor yet \*qrnt-, which Bartholomae suggests as the ground-form of kret- (Stud. Idg. Spr., II 97).

<sup>2)</sup> Dialectic  $min\check{z}u=*men\check{z}u$  (vol. I § 285 Rem., p. 227, is wrong).

the Slavonic forms, because in Slavonic, before consonants, Idg. in become  $\bar{\imath}$ , but Idg. n becomes e (I § 219.4 p. 186).

Remark. Wiedemann's view (Arch. Slav. Phil. x 652 f., Lit. Praet. 58, 168 f.) - that Idg. in and un before consonants become slav. e and a, except in final syllables - can hardly be maintained in this connexion, because we have isto = Lett. inkstas, lyko = Lith. linka-s Pruss. lunka-n and smrīd-e (see below). Nor is Streitberg's attempt satisfactory (Idg. Forsch., I 283 f.). Perhaps the problem may be solved thus. We may suppose that originally in and un always became  $\bar{\imath}$  and  $\bar{u}$ ; but that later, when in and un were again produced in any way before consonants, these became e and a. We may suppose that sink- first became \*sīk-, and afterwards, as the principle of Class XVI still remained active, the nasal crept into the stem anew; compare (say) Gr. Att. έννυμι for \*Γεσνύμι, which took the place of pr. Gr. \* $f_{\varepsilon\nu\nu\bar{\nu}\mu\iota}$  (= Ion.  $\varepsilon^{\prime\prime}\nu\bar{\nu}\mu\iota$ ) for orig. \* $f_{\varepsilon\sigma-\nu\bar{\nu}-\mu\iota}$ (I § 565 p. 422). Similarly bada may come from \*bhū-dhō or \*bhū-dō, and may have got its nasal only at a late stage of proethnic Slavonic; though it may equally well be derived from \*bhu- $\bar{a}$ -dh $\bar{o}$  or -d $\bar{o}$  attracted into the nasal class, or from \*bhuon-dhō or -dō regarded as an extension of a form \*bhy-onō (cp. § 701). Furthermore, for the 3rd pl. smrid-eti beside smrīd-i-mū etc. we may assume that the old ending \*-int(u) (cp. part. smrid-et- Lith. smird--int-) first lost its nasal, and then recovered it by analogy of imatu etc.

The etymologies brought up by Wiedemann in his article in the Archiv by way of support to his view are all too uncertain to base any theory upon. O.C.Sl.  $nq\bar{z}da$  'compulsion, force, necessity' I connect with Skr.  $n\bar{a}dh$ -  $n\bar{a}th$ - to be opprest, in need of help';  $tqp\bar{u}$  'blunt, dull', with stemp- stemb- in O.H.G. stumpf, Lith. stambū-s 'coarse' stamba-s 'stump';  $-dag\bar{u}$  'force, strength' is to be connected with  $deg\bar{u}$  'cord, strap, bridle' (Miklosich, Et. Wort., p. 49 a), and with O.H.G. gi-zengi 'reaching to, touching close' and Skr. dagh- 'to reach' (§ 634 p. 171).

#### Class XVII.

The Root + -new- -nu- forming the Present Stem.

§ 638. -new- is the strong form of the suffix; -nu-, -nw- and -nuw- the weak forms. -nuw- follows a root with final consonant, cp.  $3^{rd}$  pl. Skr.  $a\dot{s}$ -nuv- $\dot{a}$ nti Gr.  $\dot{a}\dot{\gamma}$ - $\nu\dot{\iota}$ - $\bar{\alpha}\sigma_i$  as contrasted with Skr. ci-nv- $\dot{a}$ nti, I § 153 p. 138.

Beside -neu- nu-, Aryan has -anau- -anu-. See § 596.3, pages 137 f.

The Root Syllable had originally the weak grade, except in Skr.  $d\vec{a}\dot{s}$ - $n\acute{o}$ -ti Gr.  $\delta\eta\varkappa$ - $v\acute{v}$ - $\mu\varepsilon vo$ - $\varsigma$ .

§ 639. Pr. Idg. \* $\bar{r}$ -ne $\bar{u}$ - \* $\bar{r}$ -ne $\bar{u}$ -,  $\sqrt{er}$ -: Skr.  $\bar{r}$ - $\bar{n}\acute{o}$ -mi 'I excite, set moving' 1st pl.  $\bar{r}$ -nu-más 3rd pl.  $\bar{r}$ - $\bar{n}v$ -ánti mid. 3rd sing.  $\bar{r}$ - $\bar{n}u$ -té, conj.  $\bar{r}$ - $\bar{n}\acute{a}v$ -a-t, opt.  $\bar{r}$ - $\bar{n}u$ -yá-t; Gr.  $\check{o}\varrho$ - $v\bar{v}$ - $\mu \iota$  'I excite, disturb, startle' 1st pl.  $\check{o}\varrho$ -vv- $\mu \epsilon \nu$  ( $\check{o}\varrho$ - =  $\bar{r}$ -). — With thematic vowel: Skr.  $\bar{r}$ - $\bar{n}v$ -á-ti.

\* $\gamma$ -ne $\mu$ -: Skr.  $\gamma$ -nō-mi 'I fall in with something, reach, attain', Armen.  $a\dot{r}$ -nu-m 'I take', Gr.  $\ddot{a}\varrho$ - $\nu\nu$ - $\mu\alpha$  'I attain, earn'. Perhaps identical with the previous verb.  $\ddot{a}\varrho$ - $\nu\nu$ - $\mu\alpha$  as regards the grade of its root vowel would stand to  $\ddot{a}\varrho$ - $\nu\bar{\nu}$ - $\mu$  as  $\tau \iota$ - $\nu\dot{\nu}$ - $\mu$ - $\nu\alpha$  to  $\tau\dot{\iota}$ - $\nu\nu$ - $\nu\tau\alpha$ , and Skr.  $st\gamma$ -nō-mi to Gr.  $\sigma\tau\dot{o}\varrho$ - $\nu\bar{\nu}$ - $\mu$  (see below').

\*sty-neu- \*stȳ-neu-, V ster- 'sternere': Skr. sty-nō-mi, Gr. στόρ-νῦ-μι.

\*pstg-new-, V pster- 'sneeze': Gr.  $\pi \tau \acute{a}\varrho$ - $\nu v$ - $\tau \alpha \iota$ , cp. Lat: thematic ster-nu- $\bar{o}$  (stern $\bar{u}t\bar{u}re$ ).

\* $t\eta$ -neu-, V ten- 'stretch, lengthen': Skr. ta- $n\acute{o}$ -mi Gr.  $\tau \acute{a}$ -vv- $\tau a\iota$ .

\*sŋ-neu-,  $\checkmark$  sen- 'reach a goal, attain, end, complete'. Skr. sa-nō-mi, Gr.  $\ddot{\alpha}$ -v $\ddot{\nu}$ - $\mu$   $\ddot{\eta}$ -vv- $\tau$ 0 (the regular spir. asp. appears in  $\dot{\alpha}$ -v $\dot{\nu}$ - $\omega$  and elsewhere). — Thematic: Gr.  $\ddot{\alpha}$ v $\omega$   $\ddot{\alpha}$ v $\omega$  for \* $\dot{\alpha}$ -vF- $\omega$ .

\*qi-neu-,  $\bigvee$  qei- 'pay a penalty' etc.: Skr. ci-nó-mi, Gr. inf.  $\tau_i$ -νύ-μεναι, also with  $\bar{\iota}$  mid.  $\tau t$ -νυ-νται. — Thematic: Skr. ci-nva-ti, Gr.  $\tau t$ 'νω  $\tau t$ νω for \* $\tau_i$ -ν-t-ω.

\*mi-neu-,  $\sqrt{mei}$ - 'lessen': Skr. mi- $n\acute{o}$ -mi, cp. Gr.  $\mu i$ - $\nu \acute{v}$ - $\Im \omega$  (§ 694), Lat. mi-nu- $\bar{o}$ .

Skr. kši-nć-mi 'I destroy', cp. Gr.  $\varphi \vartheta \iota$ - $\nu \dot{\nu}$ - $\vartheta \omega$  (§ 694), the matic  $\varphi \vartheta \dot{\tau} \nu \omega$   $\varphi \vartheta \dot{\nu} \omega$  for  $*\varphi \vartheta \iota$ - $\nu F$ - $\omega$ .

\*ghi-neu-, V ghei-: Skr. hi-nō-mi 'I set in motion, drive on', cp. thematic Skr. hi-nv-a-ti, Goth. du-ginna 'I begin'. This comparison I regard as more likely than Bugge's (P.-B. Beitr., XII 405 f.). This scholar, followed by several others, has compared the Germanic verb with O.C.Sl. na-čīna (cp. Fick, Wort. I 4 382).

\*dhu-neu- \*dhū-neu-,  $\checkmark$  dheu-: Skr. dhu-nō-mi dhū-nō-mi 'I shake, shatter', cp. Gr.  $\vartheta \dot{v} \nu \omega$  and  $\vartheta \ddot{v} \nu \dot{\epsilon} \omega$  'I move wildly, storm' (§ 652).

\*dhṛṣ-neu-,  $\vee$  dherṣ- 'be bold, dare': Skr. dhṛṣ-nō-mi 3<sup>rd</sup> pl. dhṛṣ-nuv-ánti, O.Sax. 1<sup>st</sup> pl. \*durnum (inferred from the later sing. darn conj. dürne) = Goth. \*daúrz-nu-m (§ 646).

\* $d\bar{e}k$ -ney-, V dek- (Skr.  $da\dot{s}as$ -yá-ti 'shows honour, is gracious or pleasant', Gr. Hom.  $\delta\eta$ - $\delta\dot{\epsilon}\chi$ - $\alpha\tau\alpha\iota$   $\delta\dot{\epsilon}\kappa$ -o- $\mu\alpha\iota$  § 560 p. 110, Lat. decus): Skr.  $d\bar{a}\dot{s}$ -nó-mi 'I pay homage to', Gr. Hom.  $\delta\eta\kappa$ - $\nu\dot{\nu}$ - $\mu\epsilon\nu$ o- $\varsigma$  'paying homage, greeting' (so read, with J. Wackernagel, in Il. 9. 196, Od. 4. 59). The same grade of vowel as in Skr.  $d\bar{a}\dot{s}$ -ti  $d\bar{a}\dot{s}$ - $v\dot{a}$ -ti Hom.  $\delta\eta\kappa\alpha\nu\dot{\omega}\omega\nu\tau_0$ , and other words.

\*ues-neu-, stem \*u-es- 'put on a garment' (§ 656): Armen. z-genu-m 'I dress', Gr.  $\varepsilon$ I $v\bar{v}-\mu$ ı ( $\varepsilon$ V $v\bar{v}\mu$ ı).

We often see the same root forming a present both in this class and in Class XII; as Goth. 1<sup>st</sup> pl. kun-nu-m and Skr.  $j\bar{a}-n\dot{a}-mi$   $\sqrt{gen}$ , Avest. sri-nao-iti and O.Sax.  $hli-n\bar{o}-n$ , Skr.  $str-n\dot{o}-mi$  and  $str-n\dot{a}-mi$ ,  $mi-n\dot{o}-mi$  and  $mi-n\dot{a}-mi$ .

<sup>1)</sup> For kū-, see I § 288, p. 230.

<sup>2)</sup> For Skr. karō-ti kuru-tha J. Wackernagel offers a very likely conjecture (Kuhn's Litteraturblatt, III 55 f.). He suggests that kṛṇō-kṛṇu- became in vulgar speech kaṇō- kuṇu-, and these became karō-kuru- by analogy of the other forms of the verb, which all had r.

(§ 940). Skr. i- $n\acute{o}$ -ti 'subdues, forces' Avest. i-nao-iti, doubtless akin to Gr.  $a \check{i}$ -vv- $\mu a \check{i}$  grasp, take'; — thematic Skr. i-nv-a-ti. Avest. sri-nao-iti 'bends, directs somewhere',  $\sqrt{klei}$ -. Skr. su- $n\acute{o}$ -ti 'presses out',  $3^{rd}$  sing.  $\acute{a}$ -su-nu-ta Avest. hu- $n\bar{u}$ -ta; — thematic Avest. imper. mid. hu-nv-a-nuha (= Skr. \*su-nv-a-sva). Skr.  $dhr\check{s}$ - $n\acute{o}$ -ti 'dares',  $\bigvee dhers$ -, § 639 p. 178. Skr.  $a \check{s}$ - $n\acute{o}$ -ti 'reaches' Avest.  $a \check{s}$ -nao-iti, ground-form \* $\hat{u}$ - $\hat{k}$ -neu-ti, opt. Skr.  $a \check{s}$ -nu- $y \check{a}$ -ti Avest.  $a \check{s}$ -nu- $y \bar{a}$ -ti. Skr. sak- $n\acute{o}$ -mi 'I can'.

In Skr.  $k\S-n\bar{a}\acute{u}-ti$  'whets' partic.  $k\S-nuv-\bar{a}n\acute{a}-s$  from V qes-(II  $\S$  8 Rem. 2 p. 20), the root has ceased to be a separate syllable; compare perhaps Lat.  $nov\bar{a}-cula$ , first for \*s-ne $u-\bar{a}$ -(Kretschmer, Kuhn's Zeitschr. xxxi 419, 470).  $\bar{a}u$  instead of  $\bar{o}$  arose as in  $\bar{u}rn\bar{a}u-ti$  (beside  $\bar{u}r-n\acute{o}-ti$ ) by analogy of such a present as  $st\bar{a}\acute{u}-ti$ , see  $\S$  494 p. 55. The diphthong was regarded as part of the root proper, hence  $k\S nu-t\acute{a}-(Avest. hu-x\S nu-ta-`well sharpened')$   $k\S n\acute{o}-tra-$  and  $\bar{u}rnu-tya--\bar{u}rnavana-$ (similar forms in Greek, see  $\S$  643 p. 183).

§ 641. Strong suffix instead of weak; Skr. 2<sup>nd</sup> pl. á-kṛnō-ta kṛnō-ta instead of á-kṛnu-ta kṛnu-tá, hinō-ta hinō-tam instead of hinu-tá hinu-tám, Avest. 2<sup>nd</sup> pl. srinao-ta (O.Pers. 3<sup>rd</sup> pl. a-kūnav-a a-kūnav-atā I regard as thematic, see § 649). Compare Skr. gṛbhṇā-hi instead of gṛbhṇā-hi, and like forms § 600 p. 143. Vice versa, Avest. 2<sup>rd</sup> sing. ker<sup>e</sup>nūi-ši contrasted with Skr. kṛṇō-ši.

The strong stem occurs along with the weak in thematic conjugation; e. g. Avest.  $2^{nd}$  sing. pret. act.  $ker^e$ -nav- $\bar{o}$ . On this matter, refer to §§ 648 and 649.

In the 1st plural and dual, -nu- may drop its -u- before the personal ending, unless the root ends in a consonant; kṛṇmás kṛṇwás kṛṇmáhē kṛṇváhē beside kṛṇu-más etc. sunmás beside sunu-más etc. (but only aṣ-nu-más aṣ-nu-vás etc.). The first trace of this new developement is one example in Veda, kṛṇmahē. It is possible enough that kṛṇvánti: aṣnuvánti suggested kṛṇvás (instead of kṛṇuvás) beside aṣnuvás; or that kṛṇuvás became kṛṇvás naturally (cp. Wackernagel, Kuhn's Litteraturbl. III 56), which

produced krimás by analogy. If krivás did arise by regular change, the variant krnuvás must have been restored on the analogy of krnumás, as krnmas was coined on the analogy of kṛṇvás. However, some influence must have been exerted by the relation of kurmás kurvás kurmáhē kurváhē to kuruthá kuruthás kurudhvé. kurmás is as early as the Rig-Veda, and \*kurumás \*kuruvás never seem to have existed at all. I would suggest that the forms with kur- are due to the analogy of the opt. aor. kury a-t mid.  $kur\bar{\imath}-ta$  (cp.  $vur\bar{\imath}-ta$   $mur\bar{\imath}y-a$ ); and it would be all the easier to understand how the stems kur- and kuru- = krnu- (p. 178 footnote 2) came to be confused, if the imperative kuru represents not only orig. krnu, but a form \*qqr- + the particle u (cp. the particle -na in Avest.  $2^{nd}$  sing. imper.  $bara-n\bar{a}$  § 600 Rem. p. 143). Compare the references given to explain kurmás in § 498 p. 57.

Remark. Moulton (Am. Journ. Phil., x 283) thinks that -n- in forms such as  $k_{\bar{l}}$ -n-m is the weak form of  $-n\bar{a}$ - (Class XII), and compares Avest.  $ver^{\ell}$ -n- $t\bar{\ell}$ . But if only he could point to a Sanskrit example of -n-instead of  $-n\bar{\ell}$ - in Class XII!

 $2^{\text{nd}}$  sing. Ved.  $\dot{s}r$ -nv-i- $\dot{s}\dot{e}$  (beside  $\dot{s}r$ - $n\dot{o}$ -ti 'hears') is an ad-formate of  $3^{\text{rd}}$  pl.  $\dot{s}r$ -nv-i- $r\dot{e}$ , cp. jajn-i- $\dot{s}\bar{e}$  beside jajn-i- $r\dot{e}$  (§ 574 p. 115).

On the strong root of Skr.  $\bar{a}p$ - $n\dot{o}$ -mi, see § 600 p. 144; for that of Skr.  $d\bar{a}\dot{s}$ - $n\dot{o}$ -mi, § 639 p. 178.

Reduplicated: Avest. 3<sup>rd</sup> sing. mid. *qs-aš-nu-tā* beside *aš-nao-iti* § 640 (Bartholomae, Kuhn's Zeitschr. xxxx 309).

§ 642. Armenian. Verbs in -nu-m (sing. -nu-m -nu-s -nu pl. -nu-mk -nuk -nu-n).

ar-nu-m 'I take' (aor. ar-i): Skr.  $\gamma$ -nō-mi etc., see § 639 p. 177. jer-nu-m 'I warm myself, get warm, glow' (cp. jer-m 'warm' = Gr.  $\vartheta \in \varrho$ - $\mu$ o- $\wp$ ): Skr.  $gh\gamma$ -nō-mi (gramm.). l-nu-m 'I fill', ground-form \* $pl\bar{e}$ -nu-, cp. Lat.  $pl\bar{e}$ -nu-s. ait-nu-m 'I swell', cp. Gr.  $ol\vartheta$ á $\omega$  'I swell'. tak-nu-m 'I hide myself', cp. Gr.  $n\tau$ ή $\sigma$  $\sigma$  $\omega$  'I bow, bend'.

z-genum 'I dress myself' (z- is a prefix) for \*ges-nu- (I § 561 p. 417): Gr.  $\varepsilon$ iν $\bar{\nu}$ μι ( $\varepsilon$ ν $\bar{\nu}$ μι), see § 639 p. 178.

Besides the forms mentioned in § 639 — ὄρ-νν-μα, ἄρ-νν-μα,  $\sigma \tau \acute{o} \rho - \nu \bar{v} - \mu \iota_{\iota}$ ,  $\pi \tau \acute{a} \rho - \nu v - \mu \alpha \iota$ ,  $\tau \acute{a} - \nu v - \mu \alpha \iota$ ,  $\check{a} - \nu \bar{v} - \mu \iota_{\iota}$ ,  $\tau \iota_{\iota} - \nu v' - \mu \epsilon \nu \alpha \iota$   $\tau \bar{t} - \nu v - \nu \tau \alpha \iota$ - there are yet others with weak-grade vowels in the root syllable.  $\vartheta \acute{a}\varrho$ - $\nu v$ - $\mu \alpha i$  in Hesychius (- $\alpha \varrho$ - = - $\gamma$ -) and  $\vartheta \acute{o}\varrho$ - $\nu v$ - $\mu \alpha i$  $(-00^{\circ} = -\bar{r})$  'I leap, cover (of animals)' (I § 306 p. 241).  $\kappa \dot{t}$ -νν-μαι 'I move myself'. Cret.  $3^{\rm rd}$  sing.  $\pi \iota$ -δίκ-ν $\bar{v}$ - $\tau \iota$  = Att. ἐπι-δείκνῦσι (on πι-, see the Author, Gr. Gr. 2 p. 219)  $\sqrt{dejk}$ -. οἴγν $\bar{v}$ μι 'I open' Hom.  $\vec{\omega}$ -(f)ίγ-νυ-ντο beside Lesb. inf.  $\vec{o}$ -είγ-ην, originally 'I make yield', beside O.H.G. withu 'I yield, give way'.  $\mu i \gamma - \nu \bar{\nu} - \mu i$  'I mix' beside fut.  $\mu \epsilon i \xi \omega$ ,  $\sqrt{mei k - mei \hat{g}} - i \partial \mu \delta \rho \gamma - \nu \bar{\nu} - \mu i$ 'I wipe' for \* $m\bar{r}\hat{q}$ -,  $\sqrt{mer\hat{q}}$ -.  $\alpha\chi$ - $\nu\nu$ - $\mu\alpha\iota$  'I am grieved, troubled', beside Goth. un-agands 'not fearing' og 'I fear'. An old form with strong root (third strong grade) is Hom. δημ-νύ-μενο-ς 'doing honour to, reverencing, greeting', see § 639 p. 178. Greek new formations with a strong root-form are ὀρέγ-νν-μι 'I reach, stretch out'  $\sqrt{re\hat{g}}$ -, δείκ-νν-μι 'I show' beside Cret.  $\pi_i$ -δίκ-ν $\bar{v}$ -τι, ζε $\dot{v}$ γ-ν $\bar{v}$ -μι 'I bind'  $\sqrt{jeug}$ -,  $\pi\dot{\gamma}$ γ-ν $\bar{v}$ -μι 'I fix'  $\sqrt{p}\bar{a}\bar{k}$ pāĝ- and others. Ion. δέκ-νν-μι 'I show', coming, as we may conjecture, from a V dek-, but in use finally confused with  $δείκ-ν\bar{v}-μι$  (cp. Fick, Wtb. I<sup>4</sup> 66).  $ομ-ν\bar{v}-μι$  'I swear' beside  $\dot{\sigma}$ uο-  $(\dot{\sigma}$ μό-σσαι  $\dot{\sigma}$ μό-τη-ς),  $\ddot{\sigma}$ λλ $\bar{v}$ -μι 'I destroy' for \* $\dot{\sigma}$ λ-ν $\bar{v}$ -μι (I § 204 p. 170) beside ολε- (ολέ-σσαι), like δάμ-νη-μι beside δαμα-, κάμ-νω beside καμα- (§ 602 p. 144).

The place of (Ion.) εἴνν̄μι 'I clothe' for \*f-εσ-νν̄-μι = Armen. z-genu-m (§ 639 p. 178) was in Attic taken by a new form ενν̄μι; see I § 565 pp. 422 f. The following are forms of the same kind: σβε΄νν̄μι 'I quench, stop' for earlier ζεἰν̄μι i. e. zδεἰν̄μι (Hesych.) ') from a stem \*zg-es-  $\checkmark$  seg-, cp. aor. Hom. σβε΄σ-σαι; βδε΄νννμαι (gramm.) beside βδ-ε΄ω 'pedo' aor. βδ-ε΄σαι for \*βδ-εσ-, earlier \*βzδ-εσ-,  $\checkmark$  pezd- 'pedere' (cp. § 661). Further, ζώνν̄μι 'I gird'²) beside ζωσ-τήρ Idg.  $j-\overline{o}s$ - (§ 656). On the model of these were made κορε΄νν̄μι 'I satisfy', πετάνν̄μι 'I spread', ἡωνν̄μι 'I strengthen', στρω΄νν̄μι 'I strew, spread' and others; and the analogy of ημμί-εσα -εσμαι: ἀμφι-ενν̄μι gave rise to κορε΄νν̄μι beside ἐκόρεσα κεκόρεσμαι, etc.

A present \*πί-νῦ-μι is represented by πινυμένην συνετήν Hesych., compare πι-νν-τό-ς 'enlightened, sensible' πινύσσω πίνυσι-ς. This, along with νη-πύ-τιο-ς 'senseless, under age, minor' and νήπιο-ς (same meaning) for \*νη-πΓ-ιο-ς (I § 166 p. 147), is akin to Skr. pu-nά-ti 'purifies, clears up' (for the accent cp. Goth. hug-s 'understanding, reason' beside Skr. ἑúci-ξ 'pure', § 907). But πινν- does not come from \*πν-νν- (I § 48 p. 41); the ground-form was \*pu-i-nu-, having the same determinative  $\bar{\imath}$  as we see in Ital. \*pu- $\bar{\imath}$ -io-s (Osc. piíhiúí Lat. piu-s, see Bartholomae, Stud. Idg. Spr. II 185) Skr. pav- $\bar{\imath}$ -tár-, and in Gr. πύιρ Umbr. pir O.H.G. fuir 'fire'. It follows that \*πίν $\bar{\imath}$ μι: Skr. pu-nά-mi = Skr. r-i-nνα-ti Gr. ὀρτνω: Skr. γ-ηνά-ti Gr. ὄρ-ν $\bar{\nu}$ -μι (cp. § 596. 4 p. 138).

<sup>1)</sup> Hesychius has  $\zeta \epsilon i \nu \alpha \mu \epsilon \nu$  observe which is emended to  $\zeta \epsilon i \nu \nu \nu \mu \epsilon \nu$  This emendation is not necessary. There may quite well have been parallel forms, one in Class XII and one in Class XVII, as so often happens in Sanskrit. Then the form  $\zeta \epsilon i \nu \bar{\nu} \mu \iota$  in the text should be marked with an asterisk.

<sup>2)</sup> It is quite possible that Att. ὑπο-ζωνύνα[.] C.I.A. 1 77. 9 (second half of the 5<sup>th</sup> cent. B.C.) may represent the regular form (cp. εζωμένος, Meisterhans, Gr.<sup>2</sup>, p. 148).

On thematic forms in  $-\nu F$ - $\omega$  see § 652. As regards those in  $-\nu v'\omega$ , as  $\tau \alpha \nu v'\omega$   $\delta \mu \nu v'\omega$   $\sigma \tau \rho \omega \nu \nu v'\omega$ , found in the Homeric dialect and in Attic more and more often from the 4<sup>th</sup> century B. C. onwards, it is doubtful whether they represent pr. Idg. verbs in -nuy- $\bar{o}$ , which may have been used side by side with -ny- $\bar{o}$  as in the 3<sup>rd</sup> pl. Skr.  $a\dot{s}$ -nuv-anti Gr. av-vv-av beside Skr. ci-nv-anti. They may equally well be a new formation peculiar to Greek.

For  $\mu \iota$ - $\nu \dot{\nu}$ - $\vartheta \omega$   $\varphi \vartheta \iota$ - $\nu \dot{\nu}$ - $\vartheta \omega$ , see § 694.

§ 644. Italic. Only thematic forms occur in this branch; see § 649. An undoubted relic of -new- is nov-ā-cula, if it is to be connected with Skr. kṣ-ṇāù-ti (§ 640 p. 179).

Remark. Job (Mém. Soc. Ling. VI 353 f.) offers a very doubious suggestion, that in Latin present stems in nu-came directly from those in -no-; he says \*tol-nu-mus \*tol-nu-tis lead at once to \*tolnimus \*tolnitis (tollimus tollitis), whence by complementary analogy tollō.

§ 645. Keltic. Not one of the original forms is preserved. On O.Ir. *ro-chluiniur* 'I hear' (beside Avest. *srunaoiti*), see § 604 p. 146.

§ 646. Germanic. The plural of certain verbs is of this class. Goth. O.H.G. kun-nu-m 'we learn, know' from \*gn-nu-

-mes (cp. p. 86 footnote 2) as contrasted with Skr. jā-nī-más, Class XII; the parallel weak form Goth. uf-kunna 3rd sing. -kunnái-b is a new formation from kann kunnum on the analogy of vita vitái-b to váit vitum. Low Germ. darn 'I dare' conj. dürne gives ground for assuming an O.Sax. \*durnum Goth. \*daúrz--nu-m (I § 582 p. 434) = Skr. dhr§-nu-más. O.H.G. unnum'we grant' ground-form \*n-nu-mes (cp. O.Icel. of-un-d 'ill-will' beside Goth. ans-t-s O.H.G. ans-t uns-t 'favour, grace' II § 100 p. 303), from the same root as Gr. προσ-ηνής 'inclined' ἀπ-ηνής 'disinclined'. As these plurals appeared to be of the same kind as the preterite-present, they were conjugated in the same way. Thus arose, by analogy of the singular, Goth. kann O.H.G. kan, Low Germ. darn O.H.G. an. The same principle is neatly used by Kluge (Paul's Grundr. 1 377) to explain O.H.G. durfum 'we must', which he regards as a nu-form for \*purpum with -p- for -pp- Idg. -pn- (I § 530 p. 388) = Skr. trp-nu-más; the student should compare de Saussure, Mém. Soc. Ling. vII 83 ff. Some further uncertain traces of nu-flexion in Germanic are given in § 605 Rem. p. 147, and p. 151 footnote 1.

Otherwise the Germanic branch prefers thematic conjugation (Class XVIII), as Goth. du-ginna (§ 654).

§ 647. Balto-Slavonic. For the remains of the present suffix -nu- in Slavonic see § 649 p. 185.

# Class XVIII.

Root + -new-o- or -nw-o- forming the Present Stem.

§ 648. Side by side with -nuo- we meet with -enuo- and -nuo-; see § 596 pp. 137 f.

This class, which is based upon Class XVII, falls into two divisions like Class II. O.Pers.  $a-k\bar{u}-nav-a-t\bar{a}$  stands to Skr.  $\dot{a}-kr-nv-a-ta$  as Gr.  $\dot{s}-nv\varepsilon(f)-\varepsilon$  to  $\check{a}\mu-nvv-\varepsilon$ . And just as Skr. ay-a- is at once indicative  $(\dot{a}y-a-t\bar{e}, \text{ cp. Lat. } e\bar{o})$ , and conjunctive to an indic. of Class I  $(\dot{a}y-a-t\ \dot{a}y-a-t\ \dot{a}y-a-t\ conj.$  of  $\dot{\varepsilon}-ti$ ), so Ar. kr-t

-nau-a- is also conjunctive to an indic. of Class XVII (Skr. ky-náv-a-t conj. of ky-nó-ti). Here, as before, there was originally no distinction between the original form of the two moods.

# § 649. Class XVIII A: Suffix -ney-o-.

Aryan. Avest.  $2^{nd}$  sing. pret. act.  $ker^e$ -nav- $\bar{o}$  imper.  $ker^e$ -nav-a, O.Pers. pret.  $3^{rd}$  sing. act. a- $k\bar{u}$ -nav-a  $3^{rd}$  pl. mid. a- $k\bar{u}$ -nav- $at\bar{a}$  (i. e. -a- $nt\bar{a}$ ), cp. indic. Skr. kr- $n\acute{o}$ -mi 'I make'; conj. Skr. kr- $n\acute{a}v$ - $\bar{a}$ -t kr-nav- $\bar{a}$ -tha Avest.  $ker^e$ -nav- $\bar{a}$ - $\bar{b}$  O.Pers.  $2^{nd}$  sing.  $k\bar{u}$ -nav- $\bar{a}$ -hy. O.Pers.  $3^{rd}$  sing. imper. var-nav-a- $t\bar{a}m$  conj. var-nav- $\bar{a}$ -tiy beside Avest.  $ver^e$ -nv-a- $it\bar{e}$  'believes' (B). Compare the conj. Skr.  $a\acute{s}$ -nav- $\bar{a}$ -tha Avest.  $a\acute{s}$ -nav- $\bar{a}$ - $\bar{b}$  beside Skr.  $a\acute{s}$ - $n\acute{o}$ -mi 'I reach', Avest. sri-nav- $\bar{a}$ -hi beside sri-nao-mi 'I bend, guide in some direction'.

Greek. It has been usual to class here forms like  $\vartheta \bar{v} - \nu \ell \omega$  'I move wildly, storm' beside Skr.  $dh \bar{u} - n \dot{v} - t \dot{t}$ ,  $\varkappa \bar{\iota} - \nu \ell \omega$  'I move from its place' beside  $\varkappa \dot{\iota} - \nu \nu - \mu \omega u$ ,  $-\nu \varepsilon \omega$  being taken to be for \*- $\nu \varepsilon \mathcal{F} - \omega$ . But since in all the verbs in question the future, aorist etc. have never  $-\nu \varepsilon \nu$ , as one might expect from  $\pi \lambda \dot{\epsilon} \omega$   $\ddot{\epsilon} \pi \lambda \dot{\epsilon} \nu \sigma \alpha$  and  $\nu \dot{\epsilon} \omega$   $\ddot{\epsilon} \nu \dot{\epsilon} \nu \varepsilon \nu \sigma \alpha$ , but  $-\eta$ - always, and since Lesbian makes the present of them end in  $-\eta \mu u$  (imper.  $\varkappa \dot{t} \nu \eta$  like  $\varphi \dot{\iota} \lambda \eta$ ), this explanation is at least improbable. I derive  $-\varepsilon \omega$  from  $\varepsilon \iota \omega$  in every case. See § 801.

Italic. Lat. minuō and sternuō, which are connected with Skr. mi-nō-mi Gr. μι-νύ-θω and Gr. πτάρ-νυ-μωι (§ 639 p. 177), can by rule be derived from \*-neu-ō (I § 172.1 p. 152). But Osc. menvum 'minuere' makes it at least likely that minuō comes from \*minuō as tenuis from \*tenui-s (I § 170 p. 149). The perfect minuō sternuō and the participle minūtu-s are adformates of statuō statūtu-s: statuō.

Slavonic. O.C.Sl. mi-nują beside mi-ną 'I go past, pass by, flow by', and partic. pret. pass. kos-novenŭ 'touched' from pres. kos-ną, point to an older present inflexion -novą -noveši etc. (-nov- for -neu-, I § 68 p. 59). Compare Wiedemann, Arch. slav. Phil., x 653.

§ 650. Class XVIII B: Suffix -ny-o-.

With -enw-o- for the suffix (§ 596.3 pp. 137 f.), \*sp-enw-e-ti from  $\sqrt{sp\bar{e}}$ - spo- 'bring onwards, stretch' (Lat. sp\bar{e}s spatium etc.): Avest.  $sp\bar{e}nva$ -\$\bar{e}\$ 'proficiebat' = pr. Ar. \*spanua-t, O.H.G. spinnu 'I spin' (cp. O.H.G. spannu = \*spo-nu-\bar{e}\$ § 654).

§ 651. Aryan. Skr. r-nvá-ti ci-nva-ti hí-nva-ti á-kr-nva-ta i-nva-ti ri-nva-ti, Avest. ver-nva-iti hu-nva-nuha see §§ 639, 640, 641, and 650. Skr. pí-nva-ti 'swells, makes abound' beside partic. mid. pi-nv-āná-s Avest. fra-pinao-iti 'swells, spreads' (intr.). Skr. jí-nva-ti 'sets in motion, pushes on, hastens' beside ji-nó-mi. Skr. imper. mid. du-nva-sva beside du-nó-mi 'I burn'.

Sometimes Sanskrit, like Germanic, has a verb which carries the suffix of the present through the whole verbal system; as pinva-ti: pipinva pinvayati, jinvati: jinvišya-ti jinvi-tá-s.

Observe the different accent of  $3^{\rm rd}$  pl. hinva-nti, and hinv-anti in Class XVII.

Containing the suffix -enwo-. Avest. spēnva-p 'proficiebat': O.H.G. spinnu, see § 650; Avest. xwanva-inti 'they drive on' xwēnva-p pr. Ar. \*su-anua-, beside hu-nao-iti hu-nā-iti.

§ 652. Greek. On the treatment of  $-\nu F$ - in the following words, see I § 166 p. 146.  $\stackrel{?}{\alpha}\nu\omega$   $\stackrel{?}{\alpha}\nu\omega$  for  $*\dot{\alpha}-\nu F\omega$ ,  $\tau \dot{t}\nu\omega$   $\tau \dot{t}\nu\omega$  for  $*\tau \iota-\nu F\omega$ ,  $\varphi \vartheta \dot{t}\nu\omega$   $\varphi \vartheta \dot{t}\nu\omega$  for  $*\varphi \vartheta \iota-\nu F\omega$ ,  $\delta \varrho \dot{t}\nu\omega$   $\delta \varrho \dot{t}\nu\omega$  for  $*\dot{\delta}\varrho \iota-\nu F\omega$ , see §§ 639, 650.  $\varphi \vartheta \dot{\alpha}\nu\omega$   $\varphi \vartheta \dot{\alpha}\nu\omega$  'I anticipate' for

Hom. κιχάνω Att. κιγχάνω T reach, overtake for \*-αν Fω beside κί-χη-μι (§ 594 p. 135). κιγχάνω has the first syllable nasalised because, after F had gone, the analogy of verbs like θιγγάνω could act upon it (§ 621 p. 158, § 631 p. 168). Hom. ἰκάνω T arrive, reach for \*ἱκαν Fω, bye-form ἰκνέομαι (§ 801). Both of these present stems may be regarded as ad-formates of \*φθαν Fω (φθάνω φθάνω), because they all had something of the same meaning: on the analogy of φθήσομαι to φθάνω, κιχάνω was formed working backwards from κιχήσομαι, and afterwards ἰκάνω. But there was another suffix -ψμō before Greek became a separate language; and this would become regularly pr. Gr. -αν Fω (the Author, Gr. Gr. 2 § 21. 3 p. 41), see § 596. 3 p. 138.

The suffix is -enwo- in Coreyr.  $\xi$ - $\acute{\epsilon}\nu Fo$ - $\varsigma$ , whence Lesb.  $\xi \acute{\epsilon}\nu \nu o$ - $\varsigma$  Ion.  $\xi \acute{\epsilon} i\nu o$ - $\varsigma$  Att.  $\xi \acute{\epsilon}\nu o$ - $\varsigma$  (I § 166 p. 146), since this word seems to have the same root as Lat. hos-ti-s and Goth. gas-t-s; see § 596.3 and 6, pp. 138 and 140.

§ 653. Italic. Lat. mi-nu-ō, Osc. menvum 'minvere', see § 649 p. 185.

§ 654. Germanic. Goth. du-ginna O.H.G. bi-ginnu 'I begin', see § 639 p. 177, § 650 p. 186. Goth. af-linna

'I go away, cease', O.H.G. bi-linnu 'I cease', beside Skr. vi-lināti 'goes to pieces, dissolves, melts' etc. § 598 p. 142. Goth. vi-nna 'I suffer, feel pain, worry', O.H.G. gi-winnu 'I reach something with trouble, win' (cp. O.H.G. winna 'strife'), beside Skr. vē-ti 'presses on in hostile fashion, conquers, seeks eagerly, tries to win'. All these verbs came under the influence of such others as Goth. binda; hence forms like du-ginna -gann -gunnum -gunnans.

O.H.G. ba-nnu 'I order, command on pain and penalty, summon' (cp. O.H.G. ban, gen. bannes 'command enforced by pains and penalties' A.S. bann ban, banns, proclamation'), ground-form \*bhə-nuō,  $\sqrt{bh\bar{a}}$ - bhə-, cp. Armen. ba-na-m § 601 p. 144, Gr.  $\varphi$ airw for \* $\varphi$ a- $\nu_{\ell}$ w § 611 p. 150. O.H.G. spa-nnu 'I stretch, widen, spread, I am anxious and excited', ground-form \*spə-nu-ō,  $\sqrt{s}$ pē- spə-, cp. O.H.G. spa-nu 'I entice, charm' (§ 614 p. 152) and O.H.G. sp-innu (see below). The preterites bian spian follow hialt: haltu and such like forms.

Containing the suffix -enuo- (§ 596.3 p. 138). O.H.G. sp-innu 'I spin': Avest.  $sp\bar{e}nva$ -p, see § 650 p. 186; a variant form is  $spannu = *spa-nu\bar{o}$ , for which see just above. O.H.G. tr-innu 'I separate from, part, depart from' groundform \*dr-enu $\bar{o}$ ,  $\sqrt{der}$ - 'split' (Skr. dr- $n\bar{a}$ -ti).

The existence of the two variants -nuo- and -enuo- in Germanic raises a question as to how Goth. rinna 'I run' and brinna O.H.G. brinnu are to be disposed of. Instead of deriving rinna from \*r-i-nuō, and identifying it with Skr. rinva-ti (§ 650 p. 186), we may assume \*r-enuō for its original form, which would bring it closer to Skr. r-nv-á-ti. brinna may come from \*bhr-enuō, as it is akin to Lat. fer-mentu-m ferveō O.Ir. ber-baim 'I cook, boil'; but it may be for \*bhr-i-nuō with an i-determinative, cp. O.Icel. br-ī-me 'fire' A.S. br-ī-w O.H.G. br-ō-o 'broth'. The first derivation, from \*r-enuō \*bhr-enuō, is supported by Goth. r-un-s 'a run, course' A.S. br-yne 'fire, conflagration'.

### E. CLASSES XIX TO XXI.

## PRESENT STEMS WITH -s-.1)

§ 655. A large number of verb classes have an s suffixed to the root. These are both thematic and non-thematic. (1) Non-Thematic Stems: Skr. dvé-š-ti 'hates' (cp. Avest. dvae-ba 'terror' Gr. Hom.  $\delta \dot{\epsilon} - \delta \delta \iota - \mu \epsilon \nu$  or  $\delta \dot{\epsilon} - \delta \mathcal{F}_{\iota} - \mu \epsilon \nu$  'we fear'), Skr. aor. 1st pl. á-ta-s-mahi ( $\sqrt{ten}$ - 'stretch'), Skr. v-ás- $t\bar{e}$ 'dresses' ( $\sqrt{eu}$ -, Lat. ex- $u\bar{o}$ ), Gr.  $\eta'\delta\epsilon\alpha$  i. e.  $\eta'$ - $F\epsilon\iota\delta$ - $\epsilon\sigma$ - $\alpha$  Idg. \*es-m, Skr. á-vēd-iš-am. (2) Thematic Stems: O.H.G. din-su 'I pull, tear', Skr. á-ta-ta-sa-t 'he tore, set in motion by force'  $(\sqrt{ten-})$ , Skr. desid.  $ji-g\bar{q}-sa-ti$   $(\sqrt{gem-go})$ , Skr.  $tr-\acute{a}sa-ti$ 'trembles' (cp. tar-alá-s 'trembling, moving to and fro' Lat.  $tr-em\bar{o}$ ), Skr. desid.  $ji-qam-i\check{s}a-ti$  ( $\bigvee gem$ -). From these develope extensions of the -s- suffix, which themselves run through large groups: -s-io- -as-io-, fut. Skr. ta-syá-tē gam- $-i\check{s}y\acute{a}-ti$ ; -s-ko-, Lat.  $(q)n\bar{o}-sc\bar{o}$  Gr.  $\gamma\iota-\gamma\nu\omega'-\sigma\varkappa\omega$  (cp. Skr. desid. ji-jnā-sa-tē); and others more isolated, as Armen. z-genum Gr. είννιμι (εννύμι) for \*u-es-neu- (§ 639 p. 178, § 643 p. 182).

It cannot be definitely proved that in all these forms s has really the same origin. But the negative cannot even be made probable. The clearest indication of the identity of s in the aorist with s in verbs of Classes XIX and XX is given by Skr. ά-kγ-ṣ-i as compared with kγ-ṣ-ē, āk-ṣ-i compared with ak-ṣa-tē, ά-mγk-ṣa-t compared with mγk-ṣa-ti, see §§ 656, 659; compare too Lat. vīs-ī beside pres. vīsō (§ 662), Lat. aux-ī Lith. 1st and 2nd pl. injunct. (fut.) áuks-me -te beside Gr. αὐξω (§ 657). It should further be noticed that a close connexion is often formed with the noun suffix -es-, as in Skr. bhy-ása-ti

<sup>1)</sup> Compare Per Persson's new work (Wurzelerweiterung, etc.) pp. 77 ff., where the suffix or determinative s in assumed for other forms besides those which will here be cited. Amongst these are some in which we have regarded the s as part of the root itself; e. g. Skr. várša-ti 'it rains', which he derives from the root of Skr. vári 'water, wetness'.

In this section we take count only of present stems with s final, and those which have a thematic vowel after the s. The compound suffix -s-ko- fills Classes XXII and XXIII; and -s-io- (the future suffix) will be found in the io-class, §§ 747 ff. Stems like \*u-es-neu- (ɛ̃ivvu) are discussed under the heading -neu-, in §§ 639, 642, and 643.

Since the s-aorist in its common form adds the personal endings directly to s, its proper place is here, in Class XIX. It may, hewever, if preferred, be treated separately in the traditional way, for the reasons given above in § 485, pp. 38 f. See §§ 810 ff.

### Class XIX.

Root + -s-, -es-, or -as- forming the Present Stem.

§ 656. Very few additional forms belong to this class besides the preterites which will be discussed in §§ 810 ff.; such, I mean, as Skr.  $\acute{a}$ -tq-s-mahi Gr.  $\H{\eta}\delta$ - $\epsilon$ - $\alpha$  Skr.  $\acute{a}$ - $v\bar{\epsilon}d$ - $i\bar{s}$ -am. Some of them carry the s-element right through the verb system.

Skr.  $dv\acute{e}-\check{s}-\acute{t}i$  'hates'  $3^{\rm rd}$  pl.  $dvi-\check{s}-\acute{a}nti$ , Avest.  $d^abi\check{s}-ent\bar{i}$ , beside Avest. dvae-pa 'terror' Gr.  $\delta f\varepsilon i$ - 'to fear'; — thematic,

Skr. dvi- $\S a$ -ti. Skr.  $3^{rd}$  pl.  $\acute{a}$ -tvi- $\S$ -ur 'they were excited, amazed' beside Avest. pwyant- 'terrifying'  $pwy\bar{a}$ - 'terror'; — thematic, Skr.  $\acute{a}$ -tvi- $\S a$ -ta, Gr. partic.  $\sigma\iota\dot{\omega}v$  for \* $\sigma\iota$ - $\sigma\omega\nu$  pres.  $\sigma\iota\dot{\omega}\omega$  instead of \* $\sigma\iota$ - $\sigma\omega$  (cp.  $\sigma\dot{\varepsilon}$ - $\sigma\iota$ - $\sigma\iota$  etc.), see § 657.

Skr. v-ás- $t\bar{e}$  'dresses, clothes himself' Avest. vas- $t\bar{e}$ , Gr.  $\hat{\epsilon}nl$ - $\epsilon\sigma$ - $\tau\alpha\iota$  2<sup>nd</sup> sing.  $\hat{\epsilon}\sigma$ - $\sigma\alpha\iota$  from  $\sqrt{e_{\psi}}$ - Lat. ex- $u\bar{o}$  Lith. au- $n\hat{u}$ .

Avest. y- $\bar{a}s$ -ti 'girds' Lith. j- $\hat{u}$ 's-mi 'I gird' (Att.  $\zeta \omega' v v \bar{\nu} \mu \iota$  instead of \* $\zeta \omega \sigma v \bar{\nu} - \mu \iota$ , § 643 p. 182), Idg. \*j- $\bar{o}s$ -ti, beside Skr. y- $\bar{a}\dot{u}$ -ti 'binds up', like Skr. r- $\bar{a}sa$ -ti 'bellows, howls' beside r- $\bar{a}u$ -ti r- $uv\acute{a}$ -ti.

Here come a certain number of Vedic middle forms with -s- in the present, those which Grassmann has called "double stems":  $1^{\text{st}}$  and  $3^{\text{rd}}$  sing.  $-s-\bar{e}$  partic.  $-s-\bar{a}na$ .  $1^{\text{st}}$  sing.  $k_f$ - $\bar{s}$ - $\bar{e}$  from  $k\acute{a}r$ -ti 'makes'.  $1^{\text{st}}$  sing. hi- $\bar{s}$ - $\bar{e}$  from hi- $n\acute{o}$ -ti 'drives on' partic. hiy- $\bar{a}n\acute{a}$ -s.  $1^{\text{st}}$  and  $3^{\text{rd}}$  sing. stu- $\bar{s}$ - $\bar{e}$  from  $st\bar{a}\acute{u}$ -ti 'praises' mid. stu- $t\bar{e}$ .  $1^{\text{st}}$  sing. arcas- $\bar{e}$  from  $\acute{a}rca$ -ti 'praises'.  $1^{\text{st}}$  sing. yajas- $\bar{e}$  from  $y\acute{a}ja$ -ti 'honours, offers'.  $1^{\text{st}}$  sing.  $y\acute{n}jas$ - $\bar{e}$  partic.  $y\acute{n}jas$ - $\bar{a}n\acute{a}$ -s from  $y\acute{n}j\acute{a}$ -ti 'honours, offers'.  $1^{\text{st}}$  sing.  $y\acute{n}jas$ - $\bar{e}$  partic.  $y\acute{n}jas$ - $an\acute{a}$ -as from  $y\acute{n}j\acute{a}$ -ti, y-y-y-s-e from yu-y-a-ti 'purifies' mid. yu-yi- $t\bar{e}$ .  $1^{\text{st}}$  sing.  $y\ddot{a}$ -yi-s-e from  $y\ddot{a}$ -ya-ti 'sings'. A similar Avestic form is  $1^{\text{st}}$  sing.  $r\mathring{a}nhanh$ - $o\bar{i}$  from  $r\bar{a}s$ - 'to grant'.

# Class XX.

Root + -so- or -eso- forming the Present Stem.

§ 657. The s-suffix mostly runs through all parts of the verb.

Pr. Idg. From  $\sqrt{ten}$  'stretch, lengthen out': Skr. tq-sa-ti 'tears, sets moving by force' (not actually found), aor.  $\acute{a}$ -ta-sa-t for \* $t\eta$ -se- (redupl.  $\acute{a}$ -ta-ta-sa-t), Goth. at-pinsa 'I draw towards me', cp. Lith.  $t\bar{e}$ s- $i\dot{u}$  'I lengthen, stretch' (infin.  $t\bar{e}$ s-ti),  $u\check{z}$ - $t\bar{e}$ sa-s 'a shroud', Lat.  $t\bar{o}$ n-sa; cp. aor. Skr.  $\acute{a}$ - $t\bar{a}$ -s-am 3<sup>rd</sup> sing.  $\acute{a}$ - $t\bar{a}$ n, Gr.  $\check{e}$ \tau \text{to} a for \* $\check{e}$ -\tau \text{to} a. From  $\sqrt{bhel}$ - 'shriek, cry, bellow, bleat, low' (O.C.Sl.  $bl\check{e}$ -ja): Skr.  $bh\acute{a}$ \text{s}a-ti 'bellows' (I § 259 p. 211), O.H.G. billu 'I bellow' (-ll- = -lz-, I § 582 p. 436),

cp. Lith.  $ba\tilde{t}$ -sa-s 'voice, tone'. From  $\sqrt{tuei}$ - (Avest. pwyant-): Skr.  $tv\bar{e}$ -ša-ti 'is in violent motion, is amazed' (not actually found), pret. ά-tvi-š-ata, Gr. σείω 'I shake, shatter, agitate, molest' for \*σει-σω (cp. Solmsen, Kuhn's Zeitschr. xxix 98), σιών for \*σι-σών; cp. Skr. ά-tvi-<br/>
ξ-ur § 656. From  $\sqrt{pre}$ υ-(Lat. pruīna): Skr. plō-ša-ti 'burns, singes', O.H.G. friu-su 'I freeze, am cold', cp. Lat. prūr-iō. From  $\sqrt{leq}$ - (Gr. άλ--αλκ-εῖν 'ward off'): Skr.  $r\acute{a}k$ -ṣੱa-ti 'guards, saves', Gr. ἀλέξω 'I ward off, help'. Connected with Skr. vajáya-ti 'strengthens' ójas- 'strength, power, might' Lat. augeō: Skr. úk-ša-ti 'grows strong, increases' partic. uk-šá-māṇa-s (perf. vavákša) Avest. vax-ša-iti 'makes grow', Gr. ἀ(F) έξω αΰξω 'I make grow, increase', cp. Lat. aux-iliu-m, 1) Gall. Uxello-dūnu-m 'High-town' O.Ir. ōs uas 'above' (I § 517 p. 377), O.H.G. wah-su Goth. vah-s-ja 'I grow' (pret. vōhs), Lith, áuksz-ta-s 'high'.2) Gr. έψω 'I boil', which, along with Armen. epem 'I boil' (I § 561 p. 417), we may assign to the root of  $\xi \pi \omega$  T see about, make right, arrange' (Il. 11. 776 άμφὶ βοὸς ἕπετον κοέα) Skr. sáp-a-ti 'makes a fuss about, carries on, sees about something'.

From  $\sqrt{ter}$  (Skr. tar-alá-s 'moving to and fro, trembling' Gr.  $\tau \rho$ - $\acute{\epsilon}\mu \omega$  Lat. tr- $em\bar{o}$  § 488 p. 45): Skr. tr-ása-ti 'trembles' (also tar-ása-ti § 659), Gr.  $\tau \rho$ - $\acute{\epsilon}(\sigma)\omega$  'I tremble, flee', O.C.Sl. tresa 'I shake, shatter' perhaps a re-formate instead of \*tresa (§ 636 p. 174); with -s-, Lat. terre $\bar{o}$  for \*ter-s- (cp. Gr.  $\check{\epsilon}\tau \epsilon \rho \sigma \epsilon \nu$  ' $\check{\epsilon}\rho \acute{o}\beta \eta \sigma \epsilon \nu$  Hesych.). Compare Skr. gr-asa-ti hr-asa-ti bhy-ása-ti Avest. v-anha- $it\bar{\epsilon}$  § 659, Gr.  $\check{\epsilon}$ - $\acute{\epsilon}(\sigma)\omega$   $\beta \delta$ - $\acute{\epsilon}(\sigma)\omega$  § 661, Lat. qu-ero-r § 662.

<sup>1)</sup> According to Bréal's convincing explanation, Umbr. orer ose 'his (donis) macte' will fall in this place too. ose = pr. Ital. \*aukse may be a vocative, which would make it necessary to start from an adj. \*aukso-s meaning 'auctus'; it may also be an imperative like Gr.  $\alpha \bar{\nu} \xi \varepsilon$  (cp. Lat. auxim). The first view is supported by Lat. macte, a vocative (F. D. Allen, Am. Journ. Phil., I 135 ff.). Pauli's explanation of ose (Alt. Stud. v 123) does not seem right to me.

On the relation between ueg- aug- aueg-, see Per Persson, Wurz.,
 228.

§ 658. In § 655 it was pointed out that these s-suffixes are probably connected with the noun suffixes -es- -es- -s-(§§ 131 ff.). A few more examples of this may be given:

Skr. ta-sa-ti: Skr. tánas- Lat. tenor. Skr. úk-ša-ti Gr. αὖξω: Skr. όjas-. Skr. śró-ṣa-māṇa-s O.C.Sl. slu-chŭ (§ 659): Skr. šrávas- Gr. κλέ(F)ος. Skr. bhú-ša-ti (§ 659): Skr. bhavas- bhúvas-. Skr. dák-ša-ti (§ 659): Skr. dašas-ya-ti Lat. decus. Skr. sák-ša-nt- (§ 659): Skr. sáhas-, O.Pers. patiy--axšaiy (§ 659), Skr. īk-ša-tē (§ 667): O.C.Sl. oko gen. očes-e. Avest. vax-ša-itē (§ 659): Skr. vácas-. Armen. luci (§ 660): Skr. -rōcas- rōciṣ- ruciṣ-ya-s. Lat. vīsō (§ 662): Skr. vēdas-Gr. είδος ΓίσΓος ἴσο-ς for Γιτσ-Γο-ς (p. XIII). O.Icel. inf. hrjosa (§ 664): Skr. kravíš- Gr. κρέ(F)ας. Compare also Skr. bhartsa-ti (beside bhartsaya-ti) 'attacks sharply, rates, scolds', akin to Lat. fer-io, Lith. bar-iù 'I scold', and so doubtless derived from some such stem as \*bhar-tas- (cp. srő-tas- 'stream') or \*bhar-dhas- (cp. rá-dhas- 'grace, gift'). The nouns -tasadakšá- sakša- vax-ša- which are connected with tasa-ti dákša-ti sákša-nt- vaxša-itē were therefore related to tánas-\*dášas- (dašas-ya-ti) sáhas- vácas- in the same way as vat-sá- to Gr. Γέτος, Skr. šīr-šá- to šíras-, hō-šá- to havíš-, and so forth (II § 132 p. 190).

Skr. bhása-ti (§ 659): bhás- Lat. fas.

Skr. hr-asa-ti (§ 659): háras-. Skr. yaj-as-ē (§ 656): Skr. yajás-. These are like bhy-ása-ti beside bhyás- bhiyás-(already mentioned in § 655, page 190).

§ 659. Aryan. Skr. ta-sa-ti á-ta-sa-t, bháša-ti, tvē-ša-ti á-tvi-ša-ta (tvē-šá-s 'boisterous' Avest. þwae-ša- 'terror'), plō--ša-ti, rák-ša-ti, úk-ša-ti uk-šá-māna-s, Avest. vax-ša-iti see § 657. Skr. ár-ša-ti r-šá-ti moves quickly, flows quickly, from ar- 'begin to move' (r-nō-ti). Skr. i-ša-tē 'sets in motion, sends forth' Avest, aešemna- išaiti, from i- 'to send' (i-nô-ti). Skr.  $\dot{s}r\bar{e}-\dot{s}a-ti$  'hangs to something, clasps'  $\dot{a}-\dot{s}li-\dot{s}a-t$ , Avest. sraęšemna-, v klej- 'lean' (Lat. -clī-nō). Skr. śró-ša-ti 'hears' (redupl. šú-šrū-ša-tē § 667) Avest. sraošemna-, V kley- (2nd sing.

 $\dot{s}r\dot{o}$ - $\dot{s}i$ ), cp. O.Ir. cluas 'ear' (I § 516 p. 377) O.Sax. hlus-t 'hearing' O.C.Sl. sluchu 'hearing, faculty of hearing'. Skr. ghó--ša-ti 'cries out, proclaims aloud' (ghóša-s 'confused noise, roar of a storm, cry of woe'), beside Goth. gáu-nōn 'to cry for woe'. Skr. bhú-ša-ti 'applies himself to, takes trouble about',  $\sqrt{bheu}$ -(Skr. bháva-ti). Skr. sūrk-ša-ti 'is anxious about something, takes thought for it, or account of it, beside Goth. saurg-a 'care', which must be connected with O.Ir. serc 'love' or with Lith. sérg-iu 'I protect'. Skr. mrak-ša-ti mrk-ša-ti 'rubs, strokes', beside márš-ti 3rd pl. mrj-ánti. Skr. akša-tē ground-form \* $\hat{n}\hat{k}$ -se-taj beside as-no-ti 'reaches' (§ 640 p. 179); from the same root,  $n\acute{a}k$ - $\mathring{s}a$ -ti 'reaches' beside  $n\acute{a}\mathring{s}$ -a-ti Lith. nesz- $\mathring{u}$ ; with these must also be connected Goth. bi-niuhs-ja 'I search out niuhs-ein-s 'visitation, affliction', which come from \*nux-s-Idg. \* $\hat{n}\hat{k}$ -s- (cp. gi-naúhan 'to suffice'). Skr.  $m\delta k$ - $\check{s}a$ - $t\bar{e}$  'gets free from something' (redupl. mú-muk-ša-ti § 667), beside muc-á-ti munc-á-ti. Skr. bhak-ša-ti 'enjoys, eats, devours', Avest. bax--ša-iti 'divides, receives for share', beside Skr. bháj-a-ti. Skr. dák-ša-ti 'acts so as to suit or satisfy somebody' mid. 'plunges, dips, ducks, is dexterous' (dakšá-s 'dexterous') beside dašas-va-ti 'is at one's service, shows respect'. Skr. lak-ša-tē 'marks', from lag- 'fasten on'. Skr. sák-ša-nt- 'overpowering', from sah- 'to overpower'. Skr. injunct. ap-sa-nta 'they sought to get, beside ap-nó-ti (§ 600 p. 144), cp. the reduplicated tpsa-ti (§ 667). O.Pers. patiy-axšaiy 'I inspect', beside Skr. ák-š-i 'eye' O.C.Sl. oko (gen. očes-e) 'eye', cp. the reduplicated Skr. ik-ik-ie (§ 667) and the Gr. imper. aor.  $i\psi\varepsilon\sigma\vartheta\varepsilon$ . Avest. vax-ša-itē 'speaks', from vac- 'speak'. Avest, tax-ša-iti 'makes run' beside tac-a-iti 'runs' Skr. ták-a-ti. Avest. sax-ša--iti 'learns', beside sācaye-iti 'teaches' Skr. śak-nō-ti 'is able', cp. the reduplicated Skr. šíkša-tē Avest. a-sixša-nt- (§ 667).

The preterite type belonging to this class is productive in Sanskrit, where, with roots which made final  $k\check{s}$  when s was added to them, it was used for the aorist; specially frequent when the root had r, i, or u. Examples:  $\acute{a}$ - $m_rk$ - $\acute{s}a$ -t cp. above,  $m_rk$ - $\acute{s}a$ -t from marj-,  $\acute{a}$ - $sp_rk$ - $\acute{s}a$ -t from  $spar\acute{s}$ - 'touch',  $\acute{a}$ - $v_rk$ - $\acute{s}a$ -t

from varh- 'tear, tear out', á-dik-ṣa-t from diś- 'show',  $\acute{a}$ -lik- $\check{s}a$ -t from lih- 'lick',  $\acute{a}$ -dhuk- $\check{s}at$  and  $\acute{a}$ -duk- $\check{s}at$  (the latter an ad-formate of the type áduhat, cp. Gr. ἔπεισα instead of \* $\varepsilon \varphi \varepsilon \sigma \alpha$  following  $\pi \varepsilon \ell \vartheta \omega$  etc., I § 496 p. 364) from duh- 'milk'. The forms dhukšá-n dhukšá-nta, and others like them, are remarkable as having the accent upon the thematic vowel. The aor.  $\acute{a}$ -mrk- $\acute{s}a$ -t it related to the pres.  $m_{\vec{r}}k-\check{s}\alpha-ti$  not otherwise than the aor.  $\acute{a}-k_{\vec{r}}-\check{s}-i$  to the pres.  $k_{\vec{r}}-\check{s}-\bar{e}$ (§ 656 p. 191). O.Pers. niy-apišam 'I wrote', with  $\check{s} = \hat{k}s$ , √ peik- (I § 401 p. 297), seems to belong to the same class; as no other persons are preserved, it is possible to assume that this is non-thematic, but the root-vowel is in favour of believing it to be thematic. The agrist use in all these forms is due to the weak grade of root syllable, just as with á-sic-a-t and the like (§ 513 pp. 78 f.). But the imperfect meaning was not excluded either with this type without s or with the s-preterite which we are now dealing with: ádhukša-t is imperfect as well as agrist (Whitney, Am. Journ. Phil. vi 281). On this agrist type in general see § 833.

Skr.  $bh\acute{a}sa$ -ti 'appears, shines', beside  $bh\acute{a}$ -ti. Skr.  $r\acute{a}sa$ - $t\bar{e}$  'bestows, affords', Avest. 1st sing.  $r\mathring{a}nh\bar{e}$  beside Skr.  $r\bar{a}$ - $t\acute{e}$ . Skr.  $h\acute{a}sa$ - $t\acute{e}$  'runs in a match', from  $h\bar{a}$ - 'go' ud  $h\bar{a}$ - 'to start up'.  $r\bar{a}sa$ -ti 'roars, bellows' beside  $r\acute{a}ya$ -ti; as regards  $r\bar{a}sa$ -ti compare further § 656 p. 191.

Skr. tr-ása-ti 'trembles', also tar-ása-ti (partic. tarásantī Rig-V.): Gr.  $\tau \varrho$ - $\acute{\epsilon}(\sigma)\omega$ , see § 657 p. 192. Skr. gr-asa-ti 'swallows, devours', beside gir-á-ti (Class II, § 523 p. 86)  $\checkmark$  ger-; akin to Gr.  $\gamma \varrho$ á $\omega$  'esse', perhaps for \*gr-s $\bar{\varrho}$ ? Skr. hr-asa-ti 'takes away, diminishes, grows less', beside hár-a-ti 'takes, takes away'. Skr. bhy-ása-ti 'fears' (caus.  $bh\bar{\iota}$ -šaya-t $\bar{\imath}$ ) beside bi-bh $\bar{\imath}$ -ti, cp. § 655 p. 190. Avest. v-a $\bar{\imath}$ ha-it $\bar{\imath}$  beside v-as-t $\bar{\imath}$  'dresses' § 656 p. 191. We should doubtless add vasa-ti 'bellows' beside r $\bar{\imath}$ sa-ti and r $\bar{\imath}$ u-ti, see § 656 p. 191.

§ 660. Armenian. Besides epem 'I boil' (see § 657 p. 192) may be named the aor. luçi 'I kindled' for \*leuk-so-(pres. luçanem),  $\sqrt{leuq}$ - 'lucere', cp. Skr. ruk-šá-s 'shining',

Lat. illūstri-s for \*in-louc-s-tri-, A.S.  $l\bar{\imath}xan$   $l\bar{\jmath}xan$  'shine' = Goth. \*liuhs-ja-n (cp. II § 66 p. 140).

§ 661. Greek.  $\sigma si\omega$ ,  $\mathring{a}\lambda \mathring{c}\xi\omega$   $\mathring{a}\mathring{c}\xi\omega$ ,  $\mathring{c}\psi\omega$ ,  $\mathring{c}\psi\omega$  see § 657 p. 192.  $\varkappa \lambda \mathring{a}\omega$  'I break, break off' for  $\ast \varkappa \lambda \alpha - \sigma \omega$  ground-form  $\ast \mathring{k}\mathring{l} - s\bar{o}$ , cp.  $\varkappa \acute{c} - \varkappa \lambda \alpha \sigma - \tau \alpha \iota$ , Skr.  $\mathring{s}\gamma - n\check{\alpha} - ti$  'breaks to pieces'; parallel stems  $\varkappa \lambda - \tilde{a}$ — in partic.  $\mathring{a}\pi \sigma - \varkappa \lambda \mathring{a}\varsigma$  (Class X, § 582 p. 123), and  $\varkappa \lambda \alpha - \mathring{\sigma}$ —  $\gamma \varrho \mathring{a}\omega$  'esse' for  $\ast \varrho g - s\bar{o}$  connected with Skr. gr - asa - ti? see § 659 p. 195.  $\mathring{o}\mathring{o}\mathring{a}\xi\omega$   $\mathring{o}\mathring{o}\mathring{a}\xi\varrho \iota \omega$  'I bite, itch, sting', beside  $\mathring{o}\mathring{a}\varkappa - \nu\omega$ ,  $\bigvee \mathring{d}e\mathring{n}\mathring{k}$ —, cp.  $\mathring{o}\mathring{o}\mathring{a}'\zeta\omega$   $\mathring{o}\mathring{o}\mathring{a}\gamma \mu \mathring{o} - \varsigma$ .  $\mathring{o}\mathring{c}\psi\omega$  beside  $\mathring{o}\mathring{c}\varphi\omega$  'I knead, soften' (Lat.  $deps\bar{o}$  is a loan word).  $\sigma n\mathring{a}\omega$  'I pull' for  $\ast \sigma n\alpha - \sigma \omega$  (cp.  $\mathring{e} - \sigma \pi \alpha \sigma - \tau \alpha \iota$ ), possibly  $= \ast sp - s\bar{o}$ , cp. O.H.G. spa - nu spa - nnu § 614 p. 152, § 654 p. 188.

τρ-έ(σ)ω 'I tremble, flee': Skr. tr-ása-ti, see § 657 p. 192. ξ-έ(σ)ω 'I shave, smooth' beside ξ-tiω from  $\sqrt{qes}$ - O.C.Sl. čes-ti 'to comb, curry' Lith. ti 'to scratch' (cp. II § 8 Rem. 2 p. 20). ti 'ti 'pedo' for \*ti 'ti 'ti from ti 'ti 'ti

That some of the trisyllabic presents in -εω making a orist in -εσσα etc., such as καλέω (κάλεσσα) ἀλέω (ἄλεσσαν) στερέω (στερέσα), had originally the ending -εσω (cp. Skr. tarása-ti § 659 p. 195,  $arcas-\bar{e}$  § 656 p. 191), is not improbable; καλέ(σ)ω : κάλεσσα = τρέ(σ)ω : τρέσσα. Compare § 842.

In Greek this -s- is not only found with  $\tilde{\epsilon}\delta\iota\iota\xi\alpha$  and like aorists, but elsewhere too it is a favourite tense suffix. Compare  $\tilde{\epsilon}$ - $\sigma\kappa\epsilon\delta\alpha$ - $\sigma$ - $\vartheta\eta\nu$   $\tilde{\epsilon}$ - $\sigma\kappa\epsilon\delta\alpha$ - $\sigma$ - $\sigma\alpha$ ,  $\kappa\epsilon$ - $\kappa\epsilon\rho\alpha$ - $\sigma$ - $\tau\alpha\iota$   $\tilde{\epsilon}$ - $\kappa\epsilon\rho\alpha$ - $\sigma$ - $\sigma\alpha$ ,  $\delta\mu$ - $\omega\mu$ 0- $\sigma$ - $\tau\alpha\iota$   $\omega\mu$ 0- $\sigma$ - $\sigma\alpha$ ,  $\xi\nu$ - $\sigma$ - $\tau$ 0- $\xi$   $\tilde{\epsilon}$ - $\xi$ 0- $\tau$ 0- $\xi$ 0  $\tilde{\epsilon}$ 0

§ 662. Italic. Lat.  $v\bar{\imath}s\bar{o}$  (perf.  $v\bar{\imath}s\bar{\imath}$ ), near kin to Goth.  $ga\text{-}veis\bar{o}$  'I look after some one, I visit', doubtless for \* $ueid + s\bar{o}$  (not \* $u\bar{\imath}d+t\bar{o}$ , Class XXIV, as Osthoff will have it, Morph. Unt. IV 77), cp. Skr. vi-vit-sa-ti § 667.  $quaes\bar{o}$  (perf.  $quaes\bar{\imath}v\bar{\imath}$ ) for \* $quais\text{-}s\bar{o}$ , beside  $quaer\text{-}\bar{o}$ .  $in\text{-}cess\bar{o}$   $ar\text{-}cess\bar{o}$  (perf.  $-cess\bar{\imath}v\bar{\imath}$ ) from  $c\bar{e}d\text{-}\bar{o}$   $cess\bar{\imath}$ .  $ac\text{-}cers\bar{o}$  for \* $-cess\bar{o}$  doubtless connected with  $curr\bar{o}$  for \* $-cess\bar{o}$   $ar\text{-}cess\bar{o}$ .

queror ques-tu-s) for \*qu-esō(-r) beside Gr. ×ω-×ύω 'I bewail, cry, shriek' Mid.H.G. hiuweln 'to howl, lament, cry' O.H.G. hūwila hiuwila 'owl'. Compare § 657 p. 192.

§ 663. Keltic. No s-presents seem to occur. The forms which Windisch (Wtb., p. 593 b) assign to a first person gessim 'I beg' are more probably conjunctive of the s-aorist of guidim (§ 826). On seiss 'placed itself, sat' and 'sits', see § 833.

§ 664. Germanic. O.H.G. billu 'I bellow', Goth. at-pinsa 'I draw towards me' O.H.G. dinsu 'I pull, tear', O.H.G. friusu 'I freeze', see § 657 p. 191. Goth. fra-liusa O.H.G. vir-liusu 'I lose' (vir-lus-t 'loss'), beside Goth. lū-n-s f. 'ransom' Gr. λύ-ω Lat. so-lvō etc. O.Icel. hrÿs 'I shudder' inf. hrjōsa, from ν qreu- Skr. krū-rá-s 'coarse, horrible, gruesome, bloody', cp. Gr. κου-σ-ταίνω 'I cause to freeze' Lat. cru-s-ta and Osc. krustatar ('cruentetur' according to Bücheler). O.H.G. wīsu 'I avoid, eschew, shun' beside Lat. vītō, doubtless for \*μεit-sō (\*μīt-sō), not for \*μεit+tō (\*μīt+tō) Class XXIV.

Goth. uf-blēsa 'I inflate, blow out' O.H.G. blāsu 'I blow', beside O.H.G. blāu i. e. \*bhlē-iō, cp. Mid.H.G. bluo-s-t A.S. blō-s-tma beside Germ. \*blō-iō 'I bloom' and Lat. flōs flōreō.

§ 665. Balto-Slavonic. Lith.  $t\bar{\epsilon}s-i\hat{u}$  'I lengthen' containing  $*t\bar{\epsilon}s-u$  = Skr. tq-sa-ti etc., see § 657 p. 191. Lith.  $tres-i\hat{u}$  'I am in heat', said of bitches, derived from \*tr-es-e-ti = Skr.  $tr-\acute{a}sa-ti$  'trembles' etc., see § 657 p. 192;

<sup>1)</sup> If Germ. \* $\chi russa$ - 'horse' (O.Sax. O.Icel. hross) is connected with  $curr\bar{o}$ , it stands to ac-cers $\bar{o}$  as Skr.  $m_{\bar{i}}k$ -s' (comb, currycomb' to mrak-sa-ti.

add Slav.  $treset\tilde{u}$  'shakes, shatters' with a nasal infix, unless it is really \* $trem + s\bar{o}$ - (cp. Lith. trimu Lat.  $trem\bar{o}$ ), see § 636 p. 174.

The same s is sometimes found also with transformed and derivative verbs, and in nouns; as O.C.Sl. a-cha-ti 'to smell' (cp. Lat. (h) $\bar{a}l\bar{o}$  for \*an-s-lo-, I § 208 pp. 175 f., § 588 Rem. 2 p. 444), ja-cha-ti 'vehi' (cp. ja-da 'vehor' § 701), Lith.  $ba\bar{t}$ -sa-s 'voice, sound, tone' (cp. § 657 p. 192), O.C.Sl. slu-chu 'hearing, faculty of hearing' (cp. § 659 p. 194), O.C.Sl. gla-su 'sound, voice' (I § 585 p. 441).

#### Class XXI.

Root + -so- -sso-, with reduplication ending in - $\tilde{\imath}$  (- $\tilde{\imath}$ ) forming the Present Stem.

§ 666. This class is represented by the Aryan Desideratives, many of which have little or nothing of the desiderative in their meaning (e. g. Skr.  $t\bar{k}\bar{s}a-t\bar{e}$  'sees' from  $\sqrt{oq}$ , from which a desiderative stem  $\bar{v}c-ik\bar{s}-i\bar{s}a$ — is made anew), and by an Irish future series. The Homeric future  $\delta\iota\delta\omega'-\sigma\omega$  and Attic conjunctive aorist and future  $\delta\iota\delta\dot{a}\bar{s}\omega$  can hardly have a direct connexion with these formations.

Very rare indeed are non-thematic forms with reduplication, such as Skr. partic. mid. di-dhi§- $\bar{a}$ na-s beside di-dhi§a-ti from V  $dh\bar{e}$ - 'set, lay'.

§ 667. Aryan. The Desiderative type is very prolific in Sanskrit.

 $\sqrt{ster}$  'sternere' Skr. ti-star-sa- $t\bar{e}$ .  $\sqrt{uen}$  'win, like' Skr. vi- $v\bar{a}$ -sa-ti, where  $-v\bar{a}$ - = \*- $v\bar{v}$ -; in ji- $gh\bar{q}$ -sa-ti ( $\vee$  ghen-'strike')  $m\bar{v}$ - $m\bar{q}$ -sa- $t\bar{e}$  ( $\vee$  men-'to think') and some other words the nasal came in afterwards by analogy, as it did in  $v\bar{a}\bar{n}cha$ -ti instead of \* $v\bar{a}cha$ -ti § 671.  $\sqrt{ge}$ -'compel, subdue' Skr. ji- $g\bar{v}$ - $s\bar{u}$ - $s\bar{v}$ 

Skr. di-drk- $\check{s}a$ - $t\bar{e}$ .  $\checkmark$   $ue\check{i}d$ - 'see, know' Skr. vi-vit-sa-ti, cp. Lat.  $v\bar{i}s\bar{o}$  § 662 p. 197.  $\checkmark$  meuq- 'loose, set free' Skr.  $m\acute{u}$ -muk- $\check{s}a$ -ti, cp.  $m\acute{o}k$ - $\check{s}a$ - $t\bar{e}$  § 659 p. 194.  $\checkmark$  dhegh-'burn Skr. di-dhak- $\check{s}a$ -ti.  $b\bar{u}dh$ - 'press' Skr.  $b\bar{\imath}$ -bhat-sa- $t\bar{e}$ .  $\checkmark$   $d\bar{o}$ -'give' Skr. di-t-sa-ti di- $d\bar{a}$ -sa-nt-.  $\checkmark$   $dh\bar{e}$ - 'place, lay' Skr.  $dh\acute{e}$ -sa-ti  $d\acute{i}$ -dhi- $\check{s}a$ -ti. From  $\hat{g}n\bar{e}$ -  $\hat{g}n\bar{o}$ - 'noscere'  $\checkmark$   $\hat{g}en$ - (§ 587 p. 128) Skr. ji- $j\hat{n}\bar{a}$ -sa-te Avest.  $z\bar{\imath}$ - $\check{s}n\mathring{a}vhemna$ - (as regards - $\check{s}n$ -see I § 403 p. 298).

Roots beginning and ending in a consonant, and containing no i, u, liquid, or nasal, drop the initial consonant after the reduplicator if the root does not form a syllable by itself (cp. Lat. discō for \*di-tc-scō § 678). Skr. štkṣatē 'learns' Avest. a-sixṣant- 'not learning' for pr. Ar. \*śi-śk-ṣa- beside Skr. śak-nō-ti 'is able'; for the loss of the sibilant cp. aor. vṛkṣi for \*vṛṣk-ṣi and the fut. vṛakṣyá-nt- for \*vṛask-ṣya-nt-(beside vṛṣċá-ti 'tears to pieces' pṛa-vṛask-a-s 'slice, cut' O.C.Sl. vṛaska 'wṛinkle'). Similarly dipsa-ti dhīpsa-ti Avest. diwĕa-idyāi beside Skr. dábh-a-ti 'injures', Skr. bhikṣa-tē 'begs' beside Skr. bháj-a-ti, lipsa-tē līpsa-tē beside labh-a-tē 'seizes, gṛasps' and others of the same sort. Some of these forms are certainly irregular. Instead of Skr. pitsa-ti, for example (from pat- 'fly, fall') we should expect \*pipsa-ti, to judge from Avest. nafšu for \*naptsu (I § 471 p. 348).

On the analogy of the forms here mentioned arose Skr.

<sup>1)</sup> The i- of i-yakṣ̃a-ti is different from that of i-yāja, see § 851.

hisa-ti 'injures, hurts' from han- (ghen-), whose  $3^{rd}$  pl. hisanti caused the coining of a sing. hinás-ti following Class XV (the  $3^{rd}$  sing. his-tē is perhaps like didhiṣ-āna-s  $\S$  660), and further perf. ji-his-a etc.

Instead of -sa- after roots with final consonant, the Sanskrit has often -i $\hat{s}a$ - (- $\partial so$ -). V qel- 'to move' ci- $cari<math>\hat{s}a$ -ti (beside  $cicar \hat{s}a$ -ti). V gen- 'gignere' ji- $jani<math>\hat{s}a$ - $t\bar{e}$ . V meld- 'crush' mi- $mardi<math>\hat{s}a$ -ti. vi- $vidi<math>\hat{s}a$ -ti beside vivitsa-ti (see above). bi- $b\bar{a}dhi\hat{s}a$ - $t\bar{e}$  beside  $b\bar{v}$ - $bhat\hat{s}a$ - $t\bar{e}$  (see above).

The productive power of this desiderative type in Sanskrit is especially clear in forms like ti-tarpayiṣ̃a-ti pi-pāyayiṣ̃a-ti from the causals tarpáya-ti (from trp- $n\acute{o}$ -ti 'satisfies itself')  $p\bar{a}$ -yáya-ti (from  $p\bar{a}$ -ti 'drinks').

The desiderative formation was itself often the foundation for a comprehensive verb structure; thus from  $bhik\S a-t\bar{e}$  were formed perf.  $bi-bhik\S \bar{e}$  fut.  $bhik\S -i\S ya-t\bar{e}$  caus.  $bhik\S -aya-ti$ , and from  $m\bar{\imath}-m\bar{\alpha}-sa-t\bar{e}$  were formed aor.  $\acute{a}-m\bar{\imath}m\bar{\alpha}s-i\S ta$  pass  $m\bar{\imath}m\bar{\alpha}s-y\acute{a}-t\bar{e}$ .

§ 668. Keltic. O.Ir.  $n\bar{o}$ -gigius 'I will pray or ask' for \*gi-get-s $\bar{o}$  beside gess- from -guidiu, § 663 p. 197. fo-lilus-[s]a from fo-long- 'bear, endure'. Compare Zimmer, Kuhn's Zeitschr. xxx 128.

## F. CLASSES XXII AND XXIII.

#### PRESENT STEMS WITH -sko-.

§ 669. The -s- of -sko- I regard as the same element which we have discussed under Classes XIX—XXI; and -s-ko- I believe to be an extension like -s-io-. Compare \*meik-sk- Lat. misceō and \*meik-s- Skr. mēkṣaya-ti perf. mi-mikṣé from  $\sqrt{meik}$ - 'mix'; Lat. dis-pescō for \*-perc-scō and Skr. prk-š- (see Grassmann, Wtb., s. v.); Gr.  $\delta\iota$ - $\delta\acute{a}(x)$ - $\sigma\varkappa\omega$  'I teach' and Avest. dax-ša-t 'he taught'; Skr. r-chá-ti 'reaches, hits, attains', and r-ṣá-ti ár-ṣੱx-ti 'moves quickly'

Avest.  $y\bar{a}$ -sa-iti 'goes, goes on' and O.C.Sl. ja-cha-ti 'vehi'; Mid.H.G. lū-sche 'I lurk, watch for' (O.H.G. \*hlū-skē-n)1) and O.H.G. lū-s-trē-n 'I listen, obey' hlo-sē-n 'I attend, listen to' Skr.  $\dot{s}r\dot{o}$ - $\dot{s}a$ -ti  $\dot{s}\dot{u}$ - $\dot{s}r\bar{u}$ - $\dot{s}a$ - $t\bar{e}$  from  $\sqrt{k}$ leu- 'hear'; Armen. ba-ci'I opened' Gr. φά-σκω 'I make known, say' and Skr. bhása-ti; Gr. γνώ-σκω γι-γνώ-σκω Lat. (q)nō-scō and Lat. gnō-ri-tur 'cognitum sive compertum est' (Stolz, Lat. Gr. 2 p. 375) Skr. ji $i\hat{n}\bar{a}$ -sa-tē from  $\hat{q}n\bar{e}$ -  $\hat{q}n\bar{o}$ - 'learn', and others. In view of these, we may derive Lat. mix-tu-s mis-tu-s beside misceo, dis-pes--tu-s beside dis-pescō, pos-tulō Osc. pes-tlú-m 'templum' beside poscō poposcī and doubtless Skr. pṛṣṣ-ṭá-s práṣ-ṭum beside prchá-ti papracha from stems with no other extending suffix but -s-, \*meik-s- and so forth; and we need not regard Avest. ter sa-iti 'is afraid' Lith. triszu 'I tremble, shudder' as being \*ty-s + sko- (cp. Skr. tr-ása-ti etc., § 657 p. 192), but must regard it as \*tx-s-ko-. The compound suffix -esko- in O.Pers. a-r-asa-m 'I came, arrived at' beside Skr. r-chá-ti, in Avest. iš-asa-iti 'wishes' beside Skr. ichá-ti, in Gr. ἀρέσκω 'I please' φεύγεσκο-ν 'I fled' corresponds to -eso- in Skr. tr-ása-ti tar-ása-ti and others (§ 655 p. 189, § 657 p. 192, § 659 p. 195).

-k- or -kh- (see below), without -s- preceding, seems often to occur in Greek words. The parallel diminutive suffixes Boeot. -ιχο-ς and Att. -ισχο-ς, and a comparison of  $\pi\tau\omega$ -ξ  $\pi\tau\omega$ -χ-ό-ς,  $\pi\tau\omega$ -χό-ς ( $\pi\tau\omega$ όσω), with  $\pi\tau\omega$ -σχ-άζω²), and of γλί-χο-μαι 'I stick, adhere' with γλί-σχ-ρο-ς, justifies our assuming -kho- to be the suffix of γλί-χο-μαι, of  $\nu\eta$ -χω 'I swim', of  $\sigma\mu\eta$ -χω 'I rub, stroke, wipe off', and  $\sigma\mu\omega$ -χω 'I rub or grind to powder', for  $\psi\eta$ -χω 'I stroke, curry' and  $\psi\omega$ -χω 'I grind to powder', for  $\tau\rho\tau$ -χω 'I rub away, wear out', and for  $\sigma\tau$ -εν-άχω 'I groan' (cp.  $\pi$ ελάθω and such like words, § 694). In the

<sup>1)</sup> Connected, as it would seem, with Armen. lsem 'I hear' for  $*\hat{k}lu-\hat{s}\hat{k}o-$ . See Hübschmann, Arm. Stud. I 33; Bartholomae, Stud. Idg. Spr., II 41.

<sup>2)</sup> Compare Bugge, Kuhn's Zeitschr. XXXII 39 f., on Armen. fall-nu-m 'I hide myself', which is in any case a cognate word.

parallel group come verbs in -σσω such as πτή-σσω ἐγρή-σσω ὀνειρώ-σσω; see § 763 Rem.

It appears that -sko- and -skho- were used as variants in the parent language. Sanskrit has only -skho- (unless perhaps -sko- is the suffix of  $vr\dot{s}c\dot{a}$ -ti 'tears to pieces'), but both of them seen to occur in Armenian and Greek. Armenian has -sko- in lsem 'I hear' (see p. 201 footnote), -skho- in harcanem; Greek has -sko- in  $\beta\dot{a}$ - $\sigma x$ , and -skho- perhaps in  $\pi\dot{a}\sigma\chi\omega$  (see § 673),  $\gamma\lambda\dot{l}\sigma\chi$ - $\varphi o$ - $\varsigma$  (cp.  $\gamma\lambda\dot{l}$ - $\chi o$ - $\mu a e$  etc., above).

The k-sound was sometimes palatal and sometimes velar in the original language. -sk(h)o- is pointed to by Avest. teresa-iti, Lith. triszu, Armen. lsem harçanem; and -sq(h)o- by Skr. mūrkhá-s (beside mūrcha-ti) Avest. pereska (beside peresa-iti, cp. Bartholomae, Stud. idg. Spr. 11 49 f.), Armen. aλačem, Lith. jēszkó-ti O.C.Sl. iska-ti, Lith. treszkù O.C.Sl. trěskū troska; cp. Lith. tvìska 'it lightens' beside Skr. tvíš- 'beam, light' Avest. pwis-ra- 'sparkling'. The variation of guttural in -ko- and -qo- has already been touched upon in our discussion of Noun Morphology, II § 90 pp. 274 f. Compare however vol. I § 414 pp. 303 f., § 587 Rem. 2 p. 442, and Bartholomae, op. cit. 48 f.

On the difficult question of the original shape of the sk-suffix we have a new paper by Zubatý, in Kuhn's Zeitschr., xxxi 9 ff.

# Class XXII.

Root + -sko- -esko- forming the Present Stem.

§ 670. Pr. Idg. In the following sections, I write the original forms always with -sko-, without distinguishing the variants -sko- -sqo- -skho- -sqho- (see § 669).

Roots that are capable of vowel gradation generally have the weak grade before -sko-.

√ ter- 'move to and fro, tremble' (§ 657 p. 192). \*tr-ske-ti: Avest. ter'sa-iti O.Pers. tarsa-tiy 'is frightened', Lith. triszu

'I tremble, shudder', cp. § 669 p. 201.  $\sqrt{gem}$  'go' \*gm-ske-ti: Skr. gácha-ti, Gr. imper. βάσκε.  $\sqrt{prek}$  'precari' \*pṛk-ske-ti: Skr. pṛchá-ti, Armen. aor. harçi, Lat. poscō for \*porc-scō, cp. O.H.G. forsca 'question'.  $\sqrt{ais}$  'desire, wish': Skr. ichá-ti, Umbr. eiscurent 'poposcerint, arcessierint', O.C.Sl. iską 'I seek, try', cp. Skr. ichá 'a desire, wish' Armen. aiç 'attempt' O.H.G. eisca 'a demand, request' Lith. jëszkó-ti 'seek, try'.  $\sqrt{es}$  'be': Gr. ĕσκε 'was', O.Lat. escō.  $\sqrt{bh\bar{a}}$  'show, make appear' (p. 56 footnote): Armen. ba-çi 'I opened', Gr. φά-σκω 'I make known, say, affirm'.

From \* $gn-\bar{e}-gn-\bar{o}-$  'noscere'  $\sqrt{gen}-$  (§ 587 p. 128): O.Pers.  $x \dot{s} n \bar{a} - s \bar{a} - t i y$  conj. 'noscat' (I § 403 p. 298), Gr. Epir.  $\gamma \nu \omega' \sigma \kappa \omega$  (cp. Att.  $\gamma \iota - \gamma \nu \omega' \sigma \kappa \omega$ ), Lat.  $gn \bar{o} s c \bar{o}$   $n \bar{o} s c \bar{o}$ .

Of -esko- there no example in more than one language.

§ 671. Aryan. Skr. r-chá-ti ar-cha-ti 'hits, reaches, injures' (pluperf. ānarcha-t § 854) Ver-. Avest. tere-sa-iti O.Pers. tarsa-tiy 'is afraid': Lith. triszu, see § 670. Skr. mūrcha-ti 'congeals, stiffens' (perf. mumūrcha etc.), beside partic. mūrtá-s. Skr. hūr-cha-ti 'slides, glides, falls' (caus. hūrchaya-ti), probably from hvar- 'lead astray, disturb' (2nd sing. mid. ju-hūr-thās). Skr. gá-cha-ti Avest. jasa-iti (j- instead of g-, see I § 451 Rem. p. 334): Gr. βά-σκε, V gem- 'go', see § 670; Skr. yá-cha-ti beside yam-a-ti 'holds, directs', Avest. yasaiti ) and yāsaitē (the latter for \*im-); as regards the change of accent in gácha-ti yácha-ti (instead of \*gachá-ti \*yachá-ti) see I § 672 p. 537, IV § 516 p. 82. Skr. vāncha-ti 'wishes' (pass. vānch-ya-tē etc.), which should regularly be \*vā-cha-ti, ground-form \*u\bar{u}-ske-ti (cp. desid. vi-v\bar{a}-sa-ti),2) \( \nu\) uen- Skr. v\bar{a}a-ti, ep. O.H.G. wun-sc m. 'wish' (II § 90 p. 276). Skr. yú-cha-ti 'keeps afar, wards off' (with irregular accent, which should be

<sup>1)</sup> Connected perhaps with O.Pers.  $3^{rd}$  sing. mid.  $ayasat\bar{a}$ , see Bartholomae, Bezz. Beitr. xiv 246 f.

<sup>2)</sup> The same analogical intrusive nasal in ji- $gh\bar{q}$ -sa-ti, see § 667 p. 198.

compared with that of girāmi beside girāmi, and its like, § 516 p. 82) beside yu-yō-ti. Avest. šu-sa-iti šū-sa-iti 'goes, hastens, rushes' ground-form \*qiŭ-ske-ti beside Skr. cyáv-a-tē (cp. I § 448 p. 333, § 473, 4 p. 350). Skr. prchá-ti (perf. papracha and so forth) Avest. per esaiti 'asks' O.Pers. imper. parsā: Lat. poscō, see § 670. Avest. neref-sa-iti 'wanes, decreases' (of the moon). Skr. ichá-ti Avest. isaiti 'desires, wishes',  $\sqrt{ais}$ , see § 670. Skr. uchá-ti Avest. usaiti 'shines, flashes up' from Ar. uas-'shine', cp. Lith. aŭszo 'it dawned' where  $sz = s\hat{k}$ . Avest. xwafsa--iti;  $\sqrt{suep}$ - sup- 'sleep'; tafsa-iti  $\sqrt{tep}$ - 'to warm', cp. Lat. tepēscō; for the fs in these two present stems cp. Bartholomae, Bezz. Beitr. XIII 74 f. Avest. yāsa-iti 'goes, begins' beside Skr. yá-ti. O.Pers. xšnāsā-tiy conj. 'noscat': Gr. γνώ-σκω etc., see § 670. Avest. xwīsaiti 'sweats' for \*xwītsa- (I § 473.2 p. 349) from  $\sqrt{sueid}$ - may be one of the same class of forms, or it may contain -so- like vax-ša-iti, § 659, p. 194.

-esko- (§ 669 pp. 200 f.) only în Iranian. O.Pers. a-r-asa-m I came, reached' conj. ni- $ras\bar{a}tiy$  beside Skr. r- $ch\acute{a}$ -ti  $\sqrt{er}$ -. Avest.  $i\check{s}$ -asa-iti 'wishes' beside isa-iti 'Skr. ic $h\acute{a}$ -ti  $\sqrt{a}$ is-; cp. acc.  $i\check{s}$ ase-m 'a wish'. Avest.  $h\bar{\imath}$ s̄-asa-iti 'has authority over, arranges, understands',  $\sqrt{ar}$ .  $sa\underline{i}$ s̄-.

§ 672. Armenian. Here it seems that Idg. \*- $s\hat{k}h(o)$ - has become -c-, - $s\hat{k}(o)$ - has become -s-, and -sq(o)- or -sqh(o)- has become -c- (cp. § 669 p. 201).

 (pres. gitem), and -eçi (3<sup>rd</sup> sing. -eaç), as lizeçi 'I licked' (pres. lizem) seem to be of the same character as Lat. verbs in -āscō -ēscō -īscō and Greek in -ασκω -εσκω.

But it must be admitted that an explanation is to seek why this present suffix came to be used with the aorist, and as an aorist suffix became productive. Something of the same sort happened in Greek with the to-suffix; for harçi: harçane- $m = \ddot{\epsilon} - \beta \lambda \alpha \sigma - \tau o - \nu : \beta \lambda \alpha \sigma \tau - \dot{\alpha} \nu \omega$ , see § 682. It would follow that first harçi as compared with harçanem got the aorist use; and afterwards baçi and others like it were used in the same way. But the problem must remain unsolved so long as the history of the Idg. s-aorist in Armenian has not been traced.

- (2). *lsem* 'I hear' doubtless for \**klu-sko-* cp. Mid.H.G. *lūsche* 'I lurk, listen, play eavesdropper', § 669 p. 201.
- (3) -č- for -sq- or -sqh- in present stems with -ače-m, as αλαčem 'I beg, pray', and in other compound suffixes (Hübschmann, Arm. Stud. 194).

φά-σxω 'I make known, assert, say': Armen. bα-ci,  $\sqrt{bha}$ -, see § 670 p. 203. χά-σxω 'I gape, yawn', beside ε-χαν-ο-ν χή-μη, see § 611 p. 150. βό-σxω 'I feed, pasture' beside βω-τωρ.

Epir.  $\gamma v \cdot \omega \cdot \sigma z \omega$  (Att.  $\gamma \iota - \gamma v \omega \cdot \sigma z \omega$ ) 'I get to know, learn': O.Pers.  $x \check{s} n \bar{a} - s \bar{a} - t i y$  etc., see § 670 p. 203.  $\dot{\varrho} \dot{\eta} - \sigma z \varrho - u \omega$  'I say' stem  $u r \bar{e} - , \quad \gamma u e r - .$   $\vartheta \varrho - \dot{\eta} - \sigma z \omega \cdot v \varrho \bar{\omega}$ ,  $\vartheta \varrho \dot{\alpha} - \sigma z \varepsilon \iota v \cdot \dot{\alpha} v \alpha \mu \mu \nu \dot{\eta} \sigma z \varepsilon \iota v$  Hesych., cp. Curtius Gr. Etym. 5 257. In  $\vartheta v \dot{\eta} - \sigma z \omega$  Dor.  $\vartheta v \dot{\alpha} - \sigma z \omega$  'I die' there is doubtless not really an  $\bar{\alpha}$ -suffix, as it may come from  $\nu g h e n$ - by way of  $*g h \bar{\eta} - s k \bar{\sigma} = *\varphi \bar{\alpha} - \sigma z \omega$  (Osthoff, op. cit. 366 f.).

Att. Θρώσεω, Θρήσεω Aeol. Θναίσεω Ion. χρηΐσεομαι have altered slightly in form by analogy of -ισεω (εύρ-ίσεω etc.), from which they get ι; the same may be said of Att. μιμνήσεω Aeol. μιμναίσεω (§ 678).

ἀρέσκω 'I please'. κορέσκω 'I satisfy'. γηράσκω 'I grow old'. γενειάσκω 'I grow a beard'. μεθύσκω 'I make drunk'.

The origin of  $\iota \omega \omega$  in forms like  $\varepsilon i \varrho l \omega \omega$  'I find'  $\dot{\alpha} \lambda l \omega \omega \omega \omega$  'I am caught' is not quite clear; compare the reduplicated  $\dot{\alpha} \varrho - \alpha \varrho - l \omega \omega$  'I join'. I now offer a new conjecture, and give up that which was suggested in vol. II § 90 p. 275. My present view is that  $\iota$  is the same in this suffix as in  $\dot{\varrho} \varrho l - \nu \nu \omega$   $\dot{\varrho} \varrho t \nu \omega$   $\dot{\alpha} \gamma t \nu \omega$  (§§ 650, 652 p. 186), that is to say, it is the "root determinative"  $\dot{\iota}$ . Then we analyse  $\dot{\alpha} \varrho \alpha \varrho l \omega \omega$  as  $\dot{\alpha} \varrho - \alpha \varrho l - \omega \omega$ , and connect it directly with  $\dot{\alpha} \varrho \iota - \vartheta \mu \dot{\sigma} - \varepsilon \nu \dot{\eta} - \varrho \iota - \tau \sigma - \varepsilon$  O.H.G.  $r - \bar{\iota} - m$  'row, series, number'. See further in § 841, on  $\dot{\alpha} l \omega \partial \omega$  'I breathe', for  $\dot{\alpha} \ell - \iota - \sigma - \vartheta \omega$ , and others of the same kind.

§ 674. Italic. Lat.  $h\bar{\imath}$ -sc $\bar{o}$  (beside  $hi\bar{a}$ -sc $\bar{o}$ ), beside hi- $\bar{a}$ -re O.H.G.  $gi-n\bar{o}-m$  O.Icel.  $g\bar{\imath}-n$  (§ 605 p. 146, § 608 p. 147). għ-scō, beside Skr. jráy-a-ti (I § 402 p. 297). scī-scō, beside  $sci\bar{o}$ .  $n\bar{a}scor$  for \* $gn\bar{a}$ - $sc\bar{o}(r)$ , ground-form \* $\hat{g}\bar{v}$ - $sc\bar{o}$ ,  $\sqrt{\hat{g}}en$ -(I § 253 p. 206). poscō for \*porc-scō: Skr. prchá-ti etc., see § 670 p. 203. com-pescō dis-pescō for \*perc-scō or \*parc-scō, Osc. com-parascuster 'consultus erit' beside O.Lat. comperce 'compesce' (Paul. D.) Osc. kú m-parakineís 'consilii' or 'convocatae contionis', doubtless connected with Skr. parc- 'mix, blend, unite, give in fullness' (sam-parc- 'communicare quid cum quo').1) misceo is doubtless derived from \*misco (§ 802) Gr. μίσγω, see § 673 p. 205. Umbr. eiscurent 'poposcerint, arcessierint': Skr. ichá-ti etc., see § 670 p. 203. vescor for \* $v\bar{e}$ - $\bar{e}sc\bar{o}r$  i. e.  $\bar{e}d+sc\bar{o}(r)$ ,  $\sqrt{e}d$ -, cp.  $v\bar{e}scu$ -s and  $\bar{e}sca$  (II § 90 pp. 275 f., G. Meyer in the Lit. Centralbl. 1890, col. 1513). pō-scō 'I drink' Cic. Verr. II 1.66 (Stowasser, Wiener Stud. XII 326 f.), cp.  $p\bar{o}$ -sca.  $p\bar{a}$ -sc $\bar{o}$ , perf.  $p\bar{a}$ - $v\bar{i}$ .

In pos-tulāre Osc. pes-tlúm 'templum' Umbr. pes-klum 'supplicationem, sacrum' (-klo- for -tlo-, I § 367 p. 278),²) dis-pes-tu-s, mix-tu-s mis-tu-s, and pās-tu-s, the group -st- need not be derived from -sk-t-. Compare O.H.G. lū-s-trē-n as compared with Mid.H.G. lū-sche etc., § 669 p. 201. This guides us in our view of Umbr. persnimu imper. 'supplicato', derived from an abstract \*persni- (§ 777) made with the suffix -ni- (II § 95 p. 286).

 $gn-\bar{o}-sc\bar{o}$   $n\bar{o}-sc\bar{o}$ , pf.  $(g)n\bar{o}-v\bar{\imath}:$  O.Pers.  $x\check{s}n\bar{a}-s\bar{a}-tiy$  etc., see § 670 p. 203.  $cr-\bar{c}-sc\bar{o}$ , pf.  $cr\bar{e}-v\bar{\imath}$ .  $qui-\bar{e}-sc\bar{o}$ , pf.  $qui\bar{e}-v\bar{\imath}$ , cp. Avest.  $\check{s}y\bar{e}-iti-\check{s}$  O.Pers.  $\check{s}iy\bar{a}-ti-\check{s}$  II § 100 p. 297.  $vi-\bar{e}-sc\bar{o}$ , part.  $vi\bar{e}-tu-s$ , cp. Skr.  $jy\bar{a}-ni-\check{s}$  frailty, frailness, weakness of old age' (not so Per Persson, Stud. Lehr. Wurzelerw., 79).

<sup>1)</sup>  $dis\text{-}pesc\bar{o}$  was merely coined to express the opposite of  $com\text{-}pesc\bar{o}$ , as  $dis\text{-}jung\bar{o}$  as the opposite of  $con\text{-}jung\bar{o}$ . Compare the Author, Idg. Forsch. I 175. — Is Osc. parak- for \*prak- = \*prk- or for \* $pr\bar{a}k$ - \* $pr\bar{b}k$ - ? See a new treatment by Buck, Der Vocalismus der osk. Spr., 140.

<sup>2)</sup> Umbr.-Osc. perk- is a contamination of pork- and prek- (Lat.  $po(r)sc\bar{o}$  and  $prec\bar{a}r\bar{i}$ ).

 $rub-\bar{e}-sc\bar{o}$  beside  $rub-\bar{e}-s$  O.C.Sl.  $r\bar{u}d-\bar{e}-ti$ ,  $con-tic-\bar{e}-sc\bar{o}$  beside  $tac-\bar{e}-s$  O.H.G.  $dag-\bar{e}-s$ , and others, see § 590 p. 132.  $hi-\bar{a}-sc\bar{o}$  beside  $hi-\bar{a}-s$   $hi-\bar{a}-tu-s$  Lith.  $\check{z}i-\acute{o}-ju$  'I open my mouth', cp.  $h\bar{\imath}-sc\bar{o}$  above.

A large number of new forms, the Inchoative or Inceptive Verbs, were produced by the analogy of scī-scō: sciō, rubē-scō: rubeō, hiā-scō: hiō and similar parallel stems from one root. Examples of these are obdormīscō from dormiō, flāvēscō from flāveō, amāscō from amō. By degrees the endings -īscō -ēscō  $-\bar{a}sc\bar{o}$  grew quite independent of the character of the stem to which they were affixed, and we get such forms as conticisco The inceptive meaning was probably not due to anything in the suffix -sco-, but arose from the fact that certain verbs which had it, crēscō ad-olēscō to wit, of necessity implied an inceptive meaning. These verbs suggested a distinction, which was carried on into others, and the inceptive type arose; hence caelum rubēscit was distinguished from caelum rubet, and so forth. In late Latin these verbs had a causal meaning, e.g. innotēscō 'I become known', later 'I make known'. On this see Sittl, Arch. Lat. Lexicogr., 1 516 ff.

Remark. It is very doubtful whether the Italic branch had forms with Idg.  $-esk\bar{o}$  or forms like Gr.  $\epsilon\hat{v}\varrho i\sigma x\omega$ . See Sittl, op. cit., pp. 490 ff., Osthoff, Perf. 157, 257 f.

§ 675. Keltic. Only a few present stems have -sko-. O.Ir. nascim 'I bind' perf. ro nenasc-sa, beside nasc 'ring' O.H.G. nuscia 'clasp, buckle, brooch', \( \sigma nedh-\), ground-form \*\( pdh+sko-\) (see Osthoff, M. U. v p. vi). faiscim (which has adopted io-flexion) Mod.Cymr. gwasgaf 'I press, squeeze', possibly akin to Skr. vāh-a-tē 'presses, squeezes'. With ā-flexion con-mescatur 'miscentur' (inf. do mescad), beside Gr. \( \mu log\warpi \sigma mesk-\), § 673 p. 205.

§ 676. Germanic. Only a few present stems have -sko-. O.H.G. ir-lisku 'I am extinguished', originally probably 'I lay

myself down', ground-form \*legh+skō, beside Goth. ligu 'I lie'.') Mid.H.G. krīsche 'I shriek' pr. Germ. \*krīt-skō, beside Mid.H.G. krīze 'I shriek'. O.H.G. wascu 'I wash' probably pr. Germ. \*uat-skō, beside Skr. unád-mi 'I wet' Goth. vatō O.Ir. usce 'water'. Less certain is Goth. priska O.H.G. driscu 'I thresh, thrash', which is compared sometimes with Lith. treszkû 'I crackle, crack, crash' O.C.Sl. trěsků 'noise, crash' troska 'thunder-clap', and sometimes with Gr. τρίβω 'I rub' (Idg. \*trzgō according to Thurneysen, Kuhn's Zeitschr. xxx 352). If we connect priska with Lat. terō (Benfey, Gr. Wurzel-lex., и 263), it might be derived from \*tr-eskō and compared with O.Pers. a-r-asa-m Gr. ἀρ-έ-σκω etc. (§ 669 p. 201). Lastly, it seems we must place here Goth. ga-vrisqa 'I bear fruit, τελεσφορώ, which Diefenbach connects with A.S. wrīdan to grow' and Skr. vardh- 'to grow' (Vergl. Wörterb. der Got. Spr., 1 241).

Many present stems with -sko- have weak inflexion, and apparently were derived from sko-nouns. O.H.G. wunsc(i)u 'I wish' from wunsc 'a wish': Skr. vāncha-ti, see § 671 p. 203. O.H.G. zusci)u Mid.H.G. züsche 'exuro, oburo', beside Skr. du--nō-ti 'burns'. Mid.H.G. lūsche 'I lurk, play eavesdropper' beside O.H.G.  $l\bar{u}$ -s-tr $\bar{e}$ -n 'I listen, obey',  $\sqrt{\hat{k}leu}$ - 'hear' (cp. § 669 p. 201). O.H.G. forsco-n 'I ask' beside forsca 'enquiry, question': Skr. prchá-ti etc., see § 670 p. 203. O.H.G. eiscō-n 'I ask, demand' beside eisca 'request, demand': Skr. ichá-ti etc., see § 670 p. 203. Mid.H.G. rūsche 'I rush, roar', beside A.S. hrūte 'I rush, roar, snore'. Mod.H.G. haschen 'to snatch' = Goth. \*haf-skon from haf- 'capere'. Very uncertain is the comparison of Goth. and--hruska 'I investigate, attempt, essay' 3rd sing. -hruskái-p with Lat. scrūtārī; see I § 527 p. 383, and Fick, Bezz. Beitr. vii 95 (Thurneysen, Kuhn's Zeitschr. xxx 352 f.).

§ 677. Balto-Slavonic. Here too this class of present stems has quite fallen into the background. We find sometimes

<sup>1)</sup> According to Osthoff (Wiener Stud. x 174) for \*les-skō, akin to Mid.H.G. er-leswen 'to grow weak'.

Brugmann, Elements. IV.

Lith. -sz- O.C.Sl. -s- = Idg.  $-s\hat{k}$ -, and sometimes Lith. -sk- (-szk-) O.C.Sl. -sk- = Idg. -sq-, see § 669 pp. 201 f.

Lith. tvìska 'flickers, lightens', cp. Avest. pwisra- 'gleaming, shining'. Lith. treszkù 'I crackle', cp. § 676. O.C.Sl. iska 'I try': Skr. ichá-ti etc., see § 670 p. 203, cp. Lith. jëszkaŭ 'I try' inf. jëszkó-ti (like O.H.G. eiscōn) and O.C.Sl. išta 'I try' for \*īsk-ja (I § 147 pp. 133 f.).

In addition, compare Lith.  $a\tilde{u}szo$  'it dawned' (pres.  $a\tilde{u}sz$ -ta), beside Skr.  $uch\acute{a}-ti$ , § 671 p. 204;  $gaisza\tilde{u}$  'I loitered, tarried' (pres.  $gaisz-t\grave{u}$ ), beside Lat.  $haere\bar{o}$ ;  $driska\tilde{u}$  'I am torn in pieces' possibly from the  $\sqrt{der}$ - whence nu-dirta-s 'flayed' Gr.  $\delta\acute{e}\rho\omega$ .

It is impossible to decide whether the sibilant in Lith. su- $misza\tilde{u}$  'I meddled, mixed myself with, got into confusion' (pres. su- $miszt\dot{u}$ ),  $maisz\dot{y}$ -ti O.C.Sl.  $m\check{e}si$ -ti 'to mix') from  $\sqrt{mei}\hat{k}$ -) represents Idg.  $-\hat{k}$ - or  $-\hat{k}$ -s- (cp. Skr.  $m\bar{e}k\check{s}aya$ -ti) or  $-\hat{k}$ - $s\hat{k}$ - (cp. Lat.  $misce\bar{o}$  etc.).

## Class XXIII.

Reduplicated Root + -sko- forming the Present Stem.

§ 678. This type is demonstrable only in Greek and Italic. Gr.  $\delta\iota\delta\acute{\alpha}\sigma\iota\omega$  'I teach' for  $*\delta\iota-\delta\alpha\iota-\sigma\iota\omega$  cp. perf.  $\delta\varepsilon-\delta\iota\delta\alpha\chi-\alpha\delta\varepsilon-\delta\iota\delta\alpha\gamma-\mu\alpha\iota$ , Lat.  $disc\bar{\sigma}$  for  $*di-tc-sc\bar{\sigma}$  cp. perf.  $didic-\bar{\iota}$ , cp. Avest.  $dax-\check{s}a-t$  'I taught' § 669 p. 201. In  $disc\bar{\sigma}$  the root syllable is treated exactly as it is in Sanskrit desideratives of the type  $\acute{s}ik\check{s}at\bar{e}$ , see § 667 p. 199. For the  $\alpha$  of  $\delta\iota\delta\acute{\alpha}\sigma\iota\omega$  cp. Bartholomae, Bezz. Beitr. xvii 121.

Lat.  $disc\bar{o}$  is isolated in Italic; but Greek gives a number of reduplicated forms besides  $\delta\iota\delta\acute{a}\sigma\varkappa\omega$ .

With i as the reduplicating vowel:  $\tau\iota$ - $\tau\dot{\nu}$ σκομαι 'I make, prepare' ( $\tau\varepsilon$ - $\tau\dot{\nu}$ σκετο Hesych.) for \* $\tau\iota$ - $\tau\nu$ -σκο-, beside  $\tau\dot{\nu}$ κ-ο-ς 'hammer, pick' Skr.  $t\dot{o}$ k-man- 'shoot, sprout'.  $\beta\iota$ - $\beta\varrho\dot{\omega}$ -σκ $\dot{\omega}$  'I eat, swallow', cp.  $\beta\varrho\dot{\omega}$ -σκ $\dot{\omega}$  for \* $g\bar{g}$ - $sc\bar{o}$  § 673 p. 205.  $\gamma\iota$ - $\gamma\nu\dot{\omega}$ -σκ $\dot{\omega}$  'nosco', cp. Epir.  $\gamma\nu\dot{\omega}$ -σκ $\dot{\omega}$  § 673 p. 206.  $\mu\iota$ - $\mu\nu\dot{\eta}$ -σκ $\dot{\omega}$  'I remind,

mention' beside Armen. mna-çi § 672 p. 204. δι-δοά-σκω Ion. δι-δοή-σκω 'I run'. On the iota of Att. μιμνήσκω Aeol. μιμναίσκω see § 673 p. 206.

Reduplicated with  $\varepsilon$ :  $\tau \varepsilon - \tau v' \sigma \varkappa \varepsilon \tau \sigma$  beside  $\tau \iota - \tau v' \sigma \varkappa \omega \mu \omega \iota$ , see above.  $\dot{\varepsilon} - \dot{\iota} \sigma \varkappa \omega \omega'$  make like for  $^*F \varepsilon - F \iota(\varkappa) - \sigma \varkappa \omega$  beside  $\dot{\iota} \sigma \varkappa \omega$  § 673 p. 205.  $\delta \dot{\varepsilon} - \delta \dot{\iota} - \sigma \varkappa \omega \mu \omega \omega'$  [ fear, am terrified from  $\sqrt{due\dot{\iota}}$  (cp. Osthoff, Perf. 388 ff.).

αρ-αρ-ίσκω 'I join', like εύρ-ίσκω § 673 p. 206.

## G. CLASS XXIV.

ROOT + -to- (-t-) FORMING THE PRESENT STEM.

§ 679. The suffix -to- in verbs is often just as clearly the same as the noun suffix (II §§ 79 ff. pp. 218 ff.) as we found to be the case with -no-, -so-, and -sko-. Compare Gr.  $\ddot{\varepsilon}$ - $\beta\lambda\alpha\sigma$ - $\tau$ 0- $\nu$  with  $\beta\lambda\alpha\sigma$ - $\tau$ 0- $\zeta$ 5  $\beta\lambda\alpha\sigma$ - $\tau$ 7.

-to- is confined to the present stem only in Greek, Italic, and Baltic, and there not always.

§ 680. Pr. Idg. 1) \* $sp(h)\bar{l}$ -tó \* $sp(h)\bar{l}$ -tó from  $\sqrt{sp(h)el}$ -'burst, split' (Skr. phál-a-ti 'bursts, splits in two'): Skr. sphuta-ti (secondary form sphóta-ti) 'bursts' (cp. sphatita-s partic. 'split, burst'), O.H.G. spaltu 'I split' (cp. Goth. spilda 'writing tablet'

<sup>1)</sup> In Per Persson's work on Wurzelerweiterung, pp. 28 ff., the determinative t is assumed for many instances not here given; amongst others, for those in which we have held that t is part of the root proper: e. g. Skr. karta-ti 'cuts' Lith. kerti 'I hew, cut', which are derived from the root of Gr.  $x \in lq \omega$ ; and Skr.  $v arta-t \bar{e}$  'vertitur' Lat.  $vert \bar{o}$ , which are derived from the root of Lat. ver-mi-s.

Mid.H.G. spelte 'lance splinter'). From V gei- (Skr. ci-no-ti 'ranges side by side, puts in layers, directs one's notice towards'): Skr. cé-ta-ti 'takes note of, observes', O.C.Sl. či-te-tu 'counts, reads, honours', cp. Skr. ci-t-āna-s § 679. Lat. plec-tō 'I twist, twine' beside plico, O.H.G. flih-tu 'I twist' (cp. Goth. flah-ta 'a braid, twist'), cp. Gr. πλεκ-τό-ς 'woven, twisted' πλεκ-τή 'rope, net'; the stem plek- which runs through these is itself an extension of a  $\vee pa^{x}l$ -, see below. From  $\vee pe\hat{k}$ -(Gr. πέκ-ω 'I comb' Lith. pesz-ù 'I pluck off, tear off, pull out'): Gr. πέκτω (and πεκτέω § 801) 'I comb, shear, pluck, pull', Lat. pec-tō 'I comb, hackle, hack the ground with a mattock', O.H.G. fih-tu 'I fight, do battle' (fehta 'a fight').1) O.H.G. bristu O.Icel. brest 'I break, tear, burst' is very nearly akin to the O.Ir. weak verb brissim 'I break' (-ss- for -st-, I § 516 p. 376), and both must be connected either with Gr.  $\pi i \rho \theta \omega$  or with Goth. brika (cp. Stokes, Mém. Soc. Ling., v 419 ff., Per Persson. Wurzelerweiterung 19, 38, and 45); whether brissim originally belonged to the first conjugation and then passed into the third, or whether it was originally denominative, is a doubtful point.

In a few words, -e- is interposed between the root and -to-; cp. Gr.  $-\sigma\chi$ - $\varepsilon$ - $\tau$ o- $\varepsilon$   $\varepsilon$ o $\pi$ - $\varepsilon$ - $\tau$ o- $\tau$ 0 Skr.  $dar\dot{s}$ -a- $t\acute{a}$ -s and the like, II § 79 p. 199; further, Gr.  $\ddot{a}(F)$ - $\varepsilon$ - $\tau$ - $\mu a$   $\ddot{a}(F)$ - $\varepsilon$ - $\tau$ - $\mu$ o- $\tau$ 0 from \* $\mu$ - $\bar{e}$ -\* $\mu$ - $\bar{e}$ - 'blow'. \*m-e- $t\bar{o}$  (beside Gr.  $\ddot{a}\mu \dot{a}\omega$  'I mow, gather'  $\ddot{a}\nu$ - $\tau\lambda$ o- $\nu$  'bilge-water', O.H.G.  $m\bar{a}$ -t 'math, mowing', Skr.  $\dot{a}m$ -a-tra-m 'vessel, jug'): Lat.  $met\bar{o}$  ( $messu\bar{\imath}$  messum), O.C.Sl. mete- $t\bar{\iota}$  'turns, verrit' (inf. mesti,  $s\bar{\iota}$ - $met\bar{\iota}$  'dung, manure, ordure'), cp. Mod.Cymr. Mod.Bret.  $med\bar{\iota}$  'to reap' Mid.Ir. methel 'a party of reapers' O.Corn. midil 'messor'. O.C.Sl. pl-e-te- $t\bar{\iota}$  'twines,

<sup>1)</sup> For the meaning 'fight' compare O.H.G. roufen 'pull, pluck', reflex. 'wrestle, fight, cut one's way'. Kluge's view, given in his Dictionary, that fittu is connected with Lat. pūg-nus pūg-nūre, that from the pl. pret. fuhtum, which was regarded as a similar form to fluhtum, \*fuhtu was changed to fittu by analogy of flihtu, does not convince my judgement. On the contrary, I regard fuhtum as an adformate of fluhtum. On O.H.G. fūst, cited by Kluge, see II § 101 p. 306, III § 164 p. 3.

plaits, braids' (inf. plesti) beside Goth. fal-pa 'I fold' groundform \* $p\bar{l}$ - $t\bar{o}$ , beside Gr.  $\delta l$ - $\pi \alpha \lambda$ - $\tau o$ - $\varsigma$  Skr. puta-m 'a fold' and Gr.  $\dot{\alpha}$ - $\pi \lambda \dot{o}$ - $\varsigma$  (III § 182 p. 50), from the same root as plek-Lat. plicō plectō (see above). If this view of pleta is not accepted we must take refuge in the explanation suggested in vol. I § 545 p. 399. For it is impossible, in my opinion, to derive pleta from \*plekta, notwithstanding the arguments of Jagić and Miklosich to the contrary (Jagić, Arch. slav. Phil. x 196, and Miklosich, Festgruss an Böhtlingk, 88); compare Kluge, Etym. Wört. 5 s. v. falten, and Wiedemann, Lit. Prät. 193.

§ 681. Aryan. Skr. sphuta-ti, cé-ta-ti, see § 680. nața-ti 'dances, plays' Ved. nr-tá-māna-s (compare nrtya-ti), beside nar-má-s nar-man- n. 'joke, sport'. kuta-ti 'curls, twists itself', akin to Lat. cur-vo-s. yá-ta-tē 'unites with, strives', beside ya--tá-s part. of. yam-a-ti, cp. yátāna-s § 679 p. 211. dyő-ta-tē 'shines' á-dyu-ta-t, from dyu- div-, cp. dyutāná-s § 679 p. 211. vēš-ta-tē 'wraps itself up, clothes or shrouds itself' (vēštaya-ti vištitá-s) beside veš-ta-s 'band, cord, covering', which doubtless has nothing to do with vis- 'enter', but is connected with Lith. výs-ta-s 'woman's bodice, stays' výstau 'I swaddle or swathe' a child, from uei- 'to wind'. céš-ta-ti 'is in motion' (perf.  $cic\bar{e}$ šta) beside  $c\bar{e}$ š-ta-m 'motion'.  $l\delta$ š-ta- $t\bar{e}$  'heaps up' beside lōš-tá-s lōš-tu-š 'clod or lump of earth'; if the same root is contained in another -to-form, Lith. lusz-tu 'I break' intr. 'tear, break off' — lőštatē must be a derivative from the noun, or at least must have modified its meaning in association with (cp. § 794, on Skr. mānáya-ti).

§ 682. Greek. There are numerous forms in  $-\pi$ - $\tau\omega$ , and a few which have  $-\tau\omega$  preceded by some other sound than  $\pi$ . We begin with the latter.  $\pi \dot{\epsilon}\varkappa - \tau\omega$  has been mentioned already, § 680 p. 212.  $\ddot{\epsilon}\mu o \rho \tau \dot{\epsilon} v \cdot \dot{\alpha} \pi \dot{\epsilon} \vartheta a v \epsilon$  Hesych., cp.  $\mu o \rho - \tau \dot{\epsilon} - \varsigma$  'mortal'.  $\varphi \dot{\alpha} \rho \varkappa - \tau o - \mu \alpha \iota$  beside  $\varphi \rho \dot{\alpha} \sigma \sigma o \mu \alpha \iota$  (= \* $\varphi \rho \alpha \varkappa - \iota o - \mu \alpha \iota$ ) 'I shut myself in, fortify myself'.  $\ddot{\epsilon} - \beta \lambda \alpha \sigma - \tau o - \nu$ , pres.  $\beta \lambda \alpha \sigma - \tau \dot{\alpha} \nu \omega$  'I spring up, arise' ( $\beta \lambda \alpha \sigma - \tau \dot{\epsilon} - \varsigma$  'shoot, bud'), orig. probably 'I get high' (used

of buds and shoots), beside βλωθ-ρό-ς 'springing high, grown high' (I § 306 p. 242); ημαρ-το-ν Lesb. inf. αμβρότην (for \*αμβρατην, I § 292 p. 233), pres. αμαρτάνω 'I miss, err', probably from α-μαρ-το- α-μβρα-το- having no share' (from the root of <math>μέρ-ος μόρ-ο-ς), ep. αμαρεῖν · αμαρτάνειν Hesych. (Curtius, Verb  $π^2$  10 ff., and the Author, Sprachwiss. Abhandl. 160); on the present stems βλαστάνω άμαρτάνω see § 621 p. 158. Att. ανίνω beside α-νίω α-ννίω α-ννίω (§ 639 p. 177) and partic. αν-ηνν-το-ς 'that cannot be completed', and similarly Att. αρίνω beside αρίω (Γ) Create'. 1)

Of the numerous Verbs in  $-\pi$ - $\tau\omega$  (Curtius mentions 48 of them), as  $\tau\dot{\nu}\pi$ - $\tau\omega$  'I strike'  $\sigma \kappa\dot{\alpha}\pi$ - $\tau\omega$  'I dig'  $\pi\dot{\epsilon}\pi$ - $\tau\omega$  'coquo', those whose root originally ended in a velar have the first claim to a place in our group; such stems are  $\kappa\dot{\epsilon}\pi\tau\omega$  from  $\sqrt{peq}$ -,  $\beta\lambda\dot{\alpha}\pi\tau\omega$  beside Skr. marc-. However, it is possible to see the suffix - $\dot{\epsilon}c$ -(Class XXVI) in every single one; and indeed the denominatives  $\chi\alpha\lambda\dot{\epsilon}\pi\tau\omega$  (from  $\chi\alpha\lambda\epsilon\pi\dot{\epsilon}-\varsigma$ ) and  $\dot{\alpha}\sigma\tau\rho\dot{\alpha}\pi\tau\omega$  (from  $\dot{\alpha}\sigma\tau\rho\alpha\pi\eta$ ) in all probability come from \* $\chi\alpha\lambda\epsilon\pi$ - $\zeta\omega$  and \* $\dot{\alpha}\sigma\tau\rho\alpha\pi$ - $\zeta\omega$  (I § 131 p. 119).

Remark. I see no cogent reason for denying that ng may become πτ (cp. Kretschmer, Kuhn's Zeitschr. XXXI 436 f.). All that can be said against deriving  $\tau \dot{\nu} \pi - \tau \omega$  (ep.  $\tau \dot{\nu} \pi - \upsilon - \varsigma$ ) from  $\tau \upsilon \pi - \iota \omega$  is that it may just as well contain the present suffix -to-. But we cannot derive from forms in  $-i\omega$  those whose root ended in  $\varphi$ , as  $\varkappa_{\varrho} \vec{\upsilon} \pi \tau \omega$ , which comes from the root of  $\kappa \varrho v' \varphi \alpha$ ; nor those whose root ended in q or q, as  $\pi \epsilon \pi \tau \omega$  beside older πέσσω (ν peq-), νίπτομαι beside older νίζω (ν neig-). forms as  $\kappa \rho v' \pi \tau \omega$  can easily be due to the analogy of  $\tau v' \pi \tau \omega$ , the point of contact between the stems being κρύψω τύψω etc. (cp. new forms like σφάττω instead of σφάζω, following φράττω, § 714); and thus again, in view of πέψω etc., we have no proof that πέπτω νίπτομαι and all the rest are not simply adformates of  $\tau \dot{v} \pi \tau \omega$ . It is also quite possible (in spite of Kretschmer's arguments, as cited, p. 437) that Hom. ἐνίπτω beside ἐνίσσω (ἐντσσω?), and beside ηντπαπον ἐνέντπον, was also an adformate of τύπτω, although in this verb there is no ἐντψω (for ἐντψω in Il. 2 137 etc. is not from this stem), and this as far as it goes is in favour of a stem with orig. - To -.

§ 683. Italic. Lat. plec-tō, pec-tō, me-tō, see § 680 p. 212. oitor ūtor (cp. Osc. úíttiuf 'usio, usus', Pelig. oisa

<sup>1)</sup> τίπτω does not come in this group; see § 552, page 107.

abl. 'usa, consumpta') perhaps akin to Gr.  $o\overline{t}$ - $\tau o \cdot c \cdot g$  'fate, lot' from  $V \cdot e\overline{t}$ - 'go' (Danielsson, Pauli's Alt. Stud. III 198 f.). flec- $t\overline{o}$  perhaps from the root of falx. plec-to-r 'I am struck, punished', either to be set beside plāga plangō, in which case we must assume that it came from \*plactor when used in compounds, without an accent (cp. plicō, I § 65 Rem. 2 p. 53); or akin to Lith. plész-iu 'I tear, snatch' (cp. Gr.  $\delta \cdot e \cdot g \cdot \omega$  'I flay' and 'cudgel'), in which case it must be pronounced plēctor. nectō belongs to  $\sqrt{nedh}$ - 'bind', and in its ending probably imitated plectō; see Ber. sächs. Ges. der Wiss., 1890, p. 236 foot-note 2. With plexu-s i. e. \*plect+to-, and  $\overline{u}sus$  i. e. \* $o\underline{t}$ -t-to-, we naturally compare fassu-s i. e. \*fa-t-to-, from fa-teor Gr.  $-\varphi a$ - $\tau o$ -g 'said'. Uncertain: Osc. krustatar conj. 'cruentetur' according to Bücheler, akin to Gr.  $n \cdot g \cdot v \cdot c - \tau \cdot a \cdot t \cdot c \cdot g$ . § 664 p. 197.

§ 684. Keltic. It is doubtful whether *brissim* 'I break' originally belongs to this class, see § 680 p. 212.

Remark. The so-called t-preterite, which came out of the  $3^{rd}$  sing. mid. in -to, does not belong to this class. See § 516, page 82.

§ 685. Germanic. O.H.G. spal-tu, flih-tu, fih-tu, bris-tu, Goth. falpa O.H.G. faltu see § 680 pp. 212 f. Goth. ga-vida 'I bind up' O.H.G. witu 'I bind' doubtless for \*ui-to, cp. O.H.G. wi-d 'line, cord'  $w\bar{\imath}-da$  'withe, willow' [Eng. withy] Skr.  $v\bar{\imath}$ --tá-s 'enfolded, enveloped' Lith. vej-ù 'I twist a string'; as the present got into the company of giba -gita and suchlike, there were formed Goth. ga-vap O.H.G. wat; cp. below, Goth. vinda. O.H.G. līdu 'I suffer' (O.H.G. leid O.Icel leid-r 'painful, paining, hated') probably orig. (pr. Germ.) \*lī-þō and connected with O.H.G. lewes 'alas' (stem \*lai-wa-). Goth. hal-da 'I protect, guard' O.H.G. haltu 'I hold, guard' ground-form \*k\bar{l}-t\bar{o}, cp. Gr. βου-πόλο-ς 'cowherd'. Goth. fra-gilda 'I repay' O.H.G. giltu 'I pay back, give equivalent, offer', pr. Germ. \*zel-þō (if we follow the indications given by O.Swed. gialla as compared with O.Icel. gjalda, we must accent the root), akin to Gr.  $\vec{\omega}$ - $\varphi \epsilon \lambda_0 - \nu$   $\vec{o}$ - $\varphi \lambda \epsilon \vec{\imath} \nu$ ,  $\sqrt{ghel}$ -. Goth. us-alpan-s 'obsolete' and O.Icel. aldenn 'grown old' point to al-pa- as the verbal stem, cp. O.H.G. al-t 'old', beside Goth. a-la 'I grow up'. The ending of a few onomatopoeic verbs, as Goth. kriusta 'I crunch' (krust-s 'a crunching'), O.Icel. gnest 'I crack', seems to be of the same sort as that of O.H.G. bristu O.Icel. brest (O.H.G. brastōn 'to crack, crackle'); compare the Mid.H.G. weak verb krīsten 'groan with pain or exertion' beside krīzen Mid.Dutch crīten 'groan, shriek' (-st- is not for -tt-).

Remark 1. O.H.G.  $w\bar{\imath}su$  'I shun', which is connected with Lat.  $v\bar{\imath}t\bar{o}$ , and which Kluge assign to this class (Paul-Braune's Beitr. IX 152), seems more likely to be of the so-class. See § 664 p. 197.

Extended by an *i*-suffix: Goth. faúrh-tja O.H.G. furiht(i)u 'I fear' (pret. forah-ta), whence the adj., originally participle, faúrh-t-s O.H.G. foraht 'afeared, afraid'.

The suffixal ending -ntō is common in Germanic: Goth. standa O.H.G. stantu 'I stand' \sqrt{stā-}, Goth. vinda O.H.G. wintu 'I wind or twist' \sqrt{uei-}, O.H.G. swintu 'I disappear' beside O.H.G. swī-nu. The forms pret. stōp and pres. gavida make it probable that the nasal is due to the analogy of Class XVI. For the word swintu, but for no others, we have some ground for assuming that a no-present (Class XIII) has been extended by -to-. See § 634 p. 172, and compare Lith. siuncziù § 686, O.C.Sl. ob-reštą § 687.

Remark 2. Osthoff's view is that the Idg. had a *simple* suffix -net--nt-, which is preserved in the above named Germanic words and in others. This to my mind carries no conviction with it. (See, for Osthoff's arguments, Zeitschr. deutsch. Phil., xxiv 215 ff., and Anzeiger für idg. Spr. und Altertumskunde, I 83.)

§ 686.¹) Balto-Slavonic. In Lithuanian (and Lettic) are numerous present stems in -stu and -sztu with intransitive and inchoative meaning. -stu arose in roots or stems ending in a

<sup>1)</sup> The Lithuanian and Lettic verbs in -tu are very neatly explained by Johansson (Kuhn's Zeitschr. XXXII 507 ff.) as derived from middle forms of the 3rd sing. in -s-to; e. g. 3rd sing. rlmsta for \*rm-s-to, cp. Skr. s-aor. a-ra-s-ta; perhaps also forms with no s, as  $vi\tilde{r}sta = *urt + to$ , cp. Skr. a-vrt-ran. When the injunctive rlmsta  $vi\tilde{r}sta$  had come to be looked on as parallel to  $b\tilde{e}ga$  suka (see § 999. 2), the forms rlmstu virstu were coined on the analogy of  $b\tilde{e}gu$  suku, and so forth.

dental explosive or s, and -sztu in roots with final palatal explosive. virs-tu 'I fall down', pret. virt-au.  $bl\bar{\imath}s-ta$  'evening draws on', pret. blind-o. girs-tu 'I get to hear' pret. gird-au. ges-tu 'I am quenched, go out', pret. ges-au.')  $t\bar{\imath}s-tu$  'I stretch, lengthen myself', pret.  $t\bar{\imath}s-au$  (cp.  $t\bar{\imath}s-s-iu$  § 657 p. 191, § 665 p. 197). tus-tu 'I break' intr., pret.  $tu\bar{\imath}s-au$ . -sztu may also come from -stu by the influence of preceding r, as in mirsztu 'I forget' pret. mirsz-au, beside Skr.  $mar\bar{\imath}s$ - (I § 587.1 p. 442).

Verbs in -stu were the starting point for many new formations, as kit-stu 'I raise myself', pret. kit-aũ; styr-stù 'I stiffen', pret. styr-aũ; pa-ži-stu 'I know', pret. pa-žinaũ; rúk-stu 'I grow sour, ferment', pret. rúg-au; džiú-stu 'I grow dry, wither', pret. džiúv-au inf. džiú-ti. New forms in -sztu; mìr-sztu 'I die', pret. mir-iaũ, cp. Gr. š-μος-τεν § 682 p. 213.

Often the stems which serve as groundwork for these words already have present formative suffixes; e. g. tvi-stu 'I swell out' (pret. tvin- $a\tilde{u}$ ) derived from \*tv-inu, see § 624 p. 161; junk-stu 'I grow accustomed' (pret. junkau) from \*junku akin to Skr. uc-ya-ti,  $v\bar{s}$ -tu 'I increase, grow larger' from \*vinsu cp. pret. vis- $a\tilde{u}$ , see § 635 p. 173;  $a\tilde{u}sz$ -ta 'day dawns' from a  $s\bar{k}o$ -present \*ausza connected with Skr.  $uch\acute{a}$ -ti, see § 677 p. 210.

Denominatives too were formed in this class. gelstù 'I grow yellow' pret. geltaŭ from gelta-s 'yellow', karstù 'I grow bitter' pret. kartaŭ from kartù-s 'bitter', brankstù 'I grow dear' pret. brangaŭ from brangù-s 'dear', žūstu 'I fish' pret. žuvaŭ from žuv-l-s 'a fish'. Compare § 793.

Remark 1. Bezzenberger (Beitr. IX 336) and Wiedemann (Lit. Prät., 60) deny that the Lithuanian to-present series is connected with those of the other Idg. languages. It certainly is queer that only one Lith. to-present has cognates in other languages, namely mirsztu 'I die', which comes from the same root as Gr.  $\tilde{\epsilon}$ - $\mu o \rho \tau \epsilon - \nu$ ; and this comparison is a very precarious foundation for any theory.

<sup>1)</sup> Parallel stem, dial. gistu. The i in this and similar forms (see Wiedemann, Lit. Prät., 8) I regard as a re-formation on the analogy of Lith. roots such as gris- glib- (beside gres- gleb-) with ri li = r l. Similarly O.C.Sl.  $t\check{v}ci$  etc. following  $r\check{v}ci$ , § 534 p. 96.

siuncziù 'I send' (inf.  $si\~usti$ ) doubtless instead of \*siuntu like  $j\`ung-iu$  instead of \*jung-u etc.; and if this word be connected with Skr. s'av-a-ti suv-'a-ti 'sets in motion, drives, sends' (Wiedemann, Lit. Prät., 84) we should have in \* $su-n-t\~o$  a present like Goth. vi-n-da § 685 p. 216.

Remark 2. The 3<sup>rd</sup> sing.  $e\tilde{\imath}$ -t(i) 'goes'  $l\tilde{e}kt$ -(i) 'remains'  $m\tilde{e}k$ -t(i) 'sleeps'  $s\tilde{e}s$ -t(i) 'sits' (§ 511, pp. 76 f.), gave rise to the dialectic forms Lith.  $eit\hat{\imath}$   $eit\hat{\imath}$   $e\tilde{\imath}$ tam  $e\tilde{\imath}$ tat,  $l\tilde{e}kt\hat{\imath}$   $m\tilde{e}kt\hat{\imath}$   $s\tilde{e}stu$ , and so forth, and similarly, in Lettic, 1<sup>st</sup> pl. itam follows i-t 'goes' (Bezzenberger in his Beitr. IX 334 ff.). This re-formation, which has an exact parallel in Keltic (§ 506 p. 72), was in some degree due to the to-present stems: -t(i) and -t(a) were regarded as the same in structure.

§ 687. O.C.Sl.  $\check{c}i$ -tq, m-e-tq, pl-e-tq, see § 680 p. 212. rastq 'I grow' inf. rasti ( $rast\check{u}$  'growth',  $rast\check{i}$  'usury, interest') for \* $r\bar{a}d$  + tq, cp.  $rod\check{u}$  'birth'. Mention should also be made of ob- $r\check{e}t\check{u}$  'I found', if this is to be connected with  $r\check{e}jq$  'I knock'; to this the present - $r\check{e}stq$  (§ 636 p. 174) would have just the same kind of relation as Goth. sta-n-da to  $st\bar{o}p$  (§ 685 p. 216).

### H. CLASS XXV.

Root + -dho- and -do- forming the Present Stem.

§ 688. Although under certain circumstances dh could become d in the parent language (I § 469. 8 p. ), that is not the reason why I class -dho- and -do- together now. It is not that I regard them as being always variants of the same suffix; but simply because in some languages dh and d ran together and became indistinguishable, which makes it often quite impossible to say which of the two is used with a given form.

The dh-suffix which we see in forms like Gr.  $\beta \varrho t - \vartheta \omega \pi v - \vartheta \omega \pi \lambda \eta' - \vartheta \omega \varphi \lambda \varepsilon \gamma \varepsilon' - \vartheta \omega$  has often been derived from  $\sqrt{dh\bar{e}}$ - 'place, do' (Skr.  $d\acute{a}dh\bar{a}$ -ti etc.), this being deduced from other compounds of this root, both old and new, about which there can be no doubt, as \*sue-dh\bar{e}- \*su\bar{e}-dh\bar{e}- \*su\bar{e}-dh\bar{e}- `make one's own' in Skr. sva-dh\bar{a} `custom, wont' Gr. \bar{e}-\beta-\omega \cho \nu \cho \cho \cho \sigma \bar{\eta}-\beta-\cho \cho \bar{\eta}-\beta-\cho \sigma \bar{\eta}-\bar{

§§ 688,689.

-og  $\epsilon i\omega$ -9- $\alpha$ , Skr. śrád-dadhāmi 'I believe, trust' Lat.  $cr\bar{e}d\bar{o}$  O.Ir. cretim (II § 4 p. 9, § 160.1 p. 479), Avest.  $yao\check{z}$ -dāiti  $yao\check{z}$ -daātii 'makes something right, purifies' from  $yao\check{s}$  = Skr.  $y\check{o}\check{s}$  'weal, luck, happiness'. This may indeed be the real origin of all such stems. The consonant which began the second part of the compound stem became practically the 'root-ending' in  $\beta \varrho t \vartheta \omega$   $\beta \dot{\epsilon} \beta \varrho \bar{\iota} \vartheta \alpha$ , very much in the same way as the p in  $g\bar{o}p$ -a-ti ju- $g\bar{o}p$ -a  $g\bar{o}p$ -sya-ti etc. from  $g\bar{o}$ - $p\check{a}$ -  $g\bar{o}$ -p-a-.

Just so the suffix -d- may sometimes be the  $\sqrt{d\bar{o}}$ -, which in addition to its meaning 'give' had other meanings like those of  $dh\bar{e}$ - (Osthoff, Perf. p. 237), cp. I § 404 pp. 298 f., on Skr.  $mr\dot{q}\dot{a}$ -ti pr. Ar. \* $mr\dot{z}$ -da-ti.

The thematic stems in -o- (-dho-, -do-) were originally not the only ones which contained these additional suffixes. But although not the only stems, thematic stems were commonest of all in this connexion, and without doubt this was generally true in the original language. We shall have occasion to point this out when we find other stems parallel to those in -o-.

<sup>1)</sup> Per Persson, in his Wurzelerw., pages 35 ff., sees the determinative dh and d in many instances besides those for which they are here assumed. Some of these are words in which dh or d is taken in this book to be part of the root proper; e. g. Skr.  $g_i^*dh$ -ya-ti, which he derives from the root of O.H.G. yer 'desiring', and Gr.  $\mu \epsilon \delta \omega$  Goth. mita, which he derives from  $\nu$  mē- 'measure'. For a new discussion of forms with determinative d see Johansson, Idg. Forsch. II 42 ff., and 46 ff.

2nd sing.  $y\delta t-si$ ), Lith. ju-du 'I move trembling', jundu 'I get into a trembling movement, into uproar' (pret. judau inf. justi) by transfer to Class XVI (§ 635 p. 172), compare Gr.  $v\sigma_{\mu}uv-v$  'battle' i. e.  $v\sigma_{\mu}v-v$  (II § 115 p. 359), Lat. juba  $jube\bar{\sigma}$  (Bugge, Bezz. Beitr. xiv 58 f.).\(^1) From  $r\bar{e}$ - (Lat.  $reor\ r\bar{e}-r\bar{\imath}$ ): Skr.  $\sigma_{\mu}v-v\bar{\nu}=v\bar$ 

Two other forms, which others with less reason regard as reduplicated, will also come in here: Skr. partic.  $d\delta dhat$ - 'shaking, violent, storming' ( $d\acute{u}dh$ -i- $\check{s}$  'violent') and Gr.  $\vartheta \acute{v}\sigma\sigma o\mu\alpha\iota$  (for  $^*\vartheta v\vartheta$ - $_{\iota}o$ - $_{\mu}\alpha\iota$ ) 'I shake or stir myself', both connected with Skr.  $dh\bar{u}$ - 'to shake'.

§ 690. Pr. Idg.  $-d\bar{o}$ .  $\sqrt{(s)qer}$ - (Gr.  $\sigma \kappa a l \rho \omega$  'I leap, jump, dance'): Skr.  $k\bar{u}r$ -da-ti 'jumps, leaps', cp. Gr.  $\kappa \rho \alpha \delta$ - $a \omega$  'I swing, brandish'  $\kappa \delta \rho \delta$ - $a \bar{\varsigma}$  a kind of dance, Mid.H.G. scherze schirze (weak verb) 'I jump in a lively way'.  $\sqrt{mel}$ - (Lat.  $mol\bar{o}$ , Skr.  $ml\bar{a}$ -ti 'grows soft, slackens' O.Ir.  $ml\bar{a}ith$  'soft, slack', see § 580 p. 122): Skr. vi-mrada-ti 'softens', A.S. mel-te 'I melt, grow soft' (Goth. ga-maltein-s 'loosening, solution'), cp. Skr. mrdu- $\dot{s}$  'soft' compar.  $mr\dot{a}d\bar{\imath}yas$ -, Gr.  $\dot{a}\mu\alpha\lambda\delta\dot{\imath}\nu\omega$  'I soften, weaken'  $\beta\lambda\alpha\delta$ - $\alpha\rho\dot{o}$ - $\varsigma$  'slack, loose, loosened', Lat. molli-s for \*mold-u-i-s; Skr. mrad-=\*ml-e-d- with the same intermediate vowel e which is seen in Gr.  $\ddot{\epsilon}$ - $\sigma\chi$ - $\epsilon$ - $\vartheta$ - $\sigma\nu$ - $\varphi$  694 Lat. m-e- $t\bar{o}$  § 680 p. 212; from the same root we have a stem \*mel-dh-Skr.  $m\dot{\alpha}rdha$ -ti 'slackens, gets lazy or sluggish' Gr.  $\mu\alpha\lambda\vartheta\alpha\kappa\dot{o}$ - $\varsigma$  'soft, tender' (beside  $\mu\alpha\lambda\alpha\kappa\dot{o}$ - $\varsigma$ )  $\mu\dot{\alpha}\lambda\vartheta\omega\nu$  (gen.  $-\omega\nu$ - $o\varsigma$ ) 'weakling'

<sup>1)</sup> Another, but hardly better explanation of *jubeo* may be seen in Bezzenberger's Beiträge, XVI 216 (Froehde).

O.Sax. mildi 'mild, gracious, gentle', so that it is impossible to decide whether -dh- or -d- is contained in O.Ir. meldach 'acceptus, gratus', Lith. meldžiù 'I beg', O.C.Sl. mladŭ 'tender'. Connected with Lat. sāl sal-is: Lat. sallō for \*sal-dō (I § 369 p. 280), Goth. sal-ta 'I salt'.  $\bigvee \hat{g}hey$ - 'pour' (Gr.  $\chi \epsilon' \omega \chi v' - \tau \rho \bar{\alpha}$ ): Lat. fundō (perf. fūdī) conjugated in Class XVI (§ 632 p. 169),1) Goth. giuta O.H.G. giuzu 'I pour'. \(\sigma\) pley- 'float, swim' (Gr.  $\pi \lambda \dot{\epsilon}(f)\omega$ ): O.H.G. fliuzu O.Icel. flyt 'I flow', Lith. płaudžiu 'I wash, purify' (inf. płausti), płudžiu 'I chatter' (inf. plusti), plustu 'I begin to swim, get swimming' (pret. plidau), cp. O.Ir. do-lod-sa 'ivi' 3rd sing. do-luid § 697. V spreu- (Lett. sprau-ju-s 'I rise, spring up', of seed): Mid.H.G. spriuze A.S. sprūte 'I sprout' (A.S. spreót 'stalk, shaft' O.H.G. spriuza 'prop, pillar' O.H.G. sprozzo 'sprout'), Lith. spráudžiu 'I push forcibly into a narrow space, press' (inf. spráusti) sprústu 'I push my way out of a holdfast or fix, get out (pret. sprúdau). With Lat. clāv-i-s: clau-dō, compare O.Fris. slūte (for \*sklūt-) 'I close' (O.H.G. sliuzu is doubtless \*slūzu transformed by analogy).

Following the same lines of reasoming, I derive Skr. sváda-tē Gr. ήδε-ται from \*suā-de-tai 'enjoys with gusto', and Skr. sváda-ti Gr. έδανό-ς 'suavis' from \*sy-e-de-ti (cp. Skr. mr-a-da-ti above); these forms are obviously akin, and I can see no other way of bringing them together.

§ 691. Aryan. (1.) -dho-. Skr. yō-dha-ti, á-rā-dha-t, dő-dhat-, see § 689. Skr. á-kru-dha-t 'got angry' (krúdh-ya-tî), Avest. xrao-da-itī 'is anxious', V greu- Skr. krū-rá-s 'coarse, rough, terrible, gruesome'. Avest. a-rao-đa-p 'flowed' (raođaye--iti) from srey- Skr. sráv-a-ti (r- = \*sr-, cp. O.Pers. rauta-I § 558.3 p. 414), cp. Skr. vi-srúh- 'stream, body of water' (-h- = -dh-, I § 480 p. 354), Gr. ὁυθ-μό-ς. Skr. srế-dha-ti 'he goes wrong', beside a-srēmán- 'without error, faultless'. Skr. sádha-ti 'gets to the goal, puts in order' may be derived from V sē- (Skr. sā- 'to bring to an end, conclude' vy-ava-sāmi

<sup>1)</sup> For f in fundo, see Buck, Am. Journ. Phil. XI 215 f.

 $a-s\bar{a}-t$ , Lat.  $s\bar{e}-ru-s$ , O.Ir.  $s\bar{i}-r$  'lasting long or for ever' Umbr. sevom Osc. sivom 'omnino' =  $*s\bar{e}$ -uo-m).

§ 692. (2.) -do-. Skr.  $k\bar{u}r$ -da-ti, mr-a-da-ti,  $sv\acute{a}$ -da-t2 $sv-\acute{a}-da-ti$ , see § 690 p. 220. Skr. tar-da-ti (gramm.) 'pierces, splits, opens' (trnát-ti), akin to tár-a-ti 'traverses', cp. Lith. tréndu 'I am eaten of worms or moths' § 637 p. 174 and trì de 'diarrhoea' pra-trýstu 'I fall ill of diarrhoea' (pret. -trýdau).1) Skr. khá-da-ti 'bites to pieces, chews' beside khán--a-ti 'digs, grubs'. Skr. mṛḍá-ti 'is gracious, pardons' for \*mṛž-ḍa-,2) cp. Avest. mereždika- n. 'grace, pardon', either from the root of merĝ- 'wipe off' Skr. mrjá-ti 'wipes off, purifies of guilt', or from that of Skr. míš-ya-tē 'forgets' Lith. miřsz-ti 'to forget' (cp. Lith. už-mirsz-dinu -mirždinu 'I cause to forget'). Skr.  $\bar{\imath}da$ - $t\bar{e}$  'honours, praises, prays to' ( $\hat{\imath}t$ - $t\bar{e}$ ) for \* $i\dot{z}$ -da- $ta\dot{i}$ , either connected with ydj-a-ti 'honours, reverences, offers' partic. iṣ-ṭd-s Gr. άγ-ιο-ς 'honourable, sacred', or with Lat. aes-tumāre Goth. áis-tan weak verb 'to revere, observe, have regard for' O.H.G. ēr-a 'honour'; it should be remarked that the Gothic verb may be derived from Idg. \*aiz-d- or from Idg. \*ais-t-, either one or the other. Avest. xraož-da-iti 'hardens' (xružd-ra- 'hard') beside Gr. ×ρνσ-ταίνω 'I make to freeze', in which s is itself an extension (§ 664 p. 197); perhaps from the same root, Skr. krūdaya-ti 'makes thick' krōdá-s 'breast, boar'. Lastly, we are doubtless right to add Skr. hēda-māna-s hīda-māna-s 'being angry with some one, hostile' Avest. zōiżda- 'ugly, disagreable, αἰσχρός'.3)

§ 693. 3. -dho- or -do-, uncertain which. To this place belong Avestic verbs. syaz-da-iti 'gives place, disappears', cp.

<sup>1)</sup> y in -trýstu is not original. By analogy of i-roots were formed trêdžiu 'I have diarrhoea' traidinù 'I excite diarrhoea'.

<sup>2)</sup> More exactly  $m\bar{r}da-ti$ , answering to  $l\bar{t}dha$ - for \*lizdha- (I § 404 pp. 298 f.). The long  $\bar{r}$  is certain from the metre; see Benfey, Vedica und Verwandtes, pp. 1 ff., Oldenberg, Die Hymnen des Rig-Veda, 1 477.

<sup>3)</sup> The unextended root is not really contained in Lith. pa-žeida 'insult, wound' (cp. Zubatý, Bezz. Beitr. xvn 327); this is against the known laws, see I § 476 p. 351 f., and Burg in Kuhn's Zeitschr. xxix 363.

siždye-iti sīždye-iti 'drives away', seems to be akin to Skr. šiš- 'to be over, left behind' (šinás-ti šēš-aya-ti). vōiž-da-iti 'hurls, throws against something', perhaps connected with O.C.Sl. vich-rū 'whirlwind' Russ. vichatī 'shatter, agitate'.') avanuhab-da-itē 'falls asleep', from Ar. suap- 'to sleep' (I § 159 pp. 141 f.). snā-āa-iti 'washes', beside Skr. snā-ti.

§ 694. Greek. (1.) -dho.  $\hat{\epsilon}$ - $\delta \rho \alpha$ - $\vartheta o$ - $\vartheta$   $\hat{\epsilon}$ - $\delta \alpha \rho$ - $\vartheta o$ - $\vartheta$  'I slept' (pres.  $\delta \alpha \rho$ - $\vartheta$ - $\alpha \dot{\nu} \omega$  § 621 p. 158), beside Lat. dor- $mi\bar{o}$  Skr. dr- $\bar{a}$ -ti. Hom. opt.  $\beta \varepsilon$ - $\beta \rho \alpha' \vartheta o$ - $\varepsilon$  'comedas' (Od. 4. 35) from  $\beta \iota$ - $\beta \rho \omega'$ - $\sigma \kappa \omega$  / ger-: cp. Lith. gr-d-inu ger-d-inu I give to drink' (ger-iu 'I drink').  $\eta \lambda \nu$ - $\vartheta o$ - $\nu$  'I came', beside  $\pi \rho o \sigma$ - $\eta \lambda \nu$ - $\tau o$ - $\varepsilon$  perf.  $2^{nd}$  pl.  $\hat{\epsilon}\lambda\dot{\eta}\lambda\nu$ - $\tau \varepsilon$ .  $\hat{\epsilon}\rho\dot{\epsilon}\chi$ - $\vartheta \omega$  'I pull to and fro, tear, hurl', doubtless akin to O.H.G. ruc 'jerk, jolt, sudden change of place'.  $\tilde{\epsilon}\sigma\vartheta \omega$  'esse' ( $\hat{\epsilon}\sigma\vartheta$ - $\iota \omega$  §§ 713, 765) beside  $\tilde{\epsilon}\delta$ - $\omega$ .  $\tilde{\alpha}\chi$ - $\vartheta o$ - $\iota \omega$  'I am galled or wearied by burdens', beside  $\tilde{\alpha}\chi$ - $\nu \nu$ - $\iota \omega$ .  $\pi \lambda \dot{\eta}$ - $\vartheta \omega$  'I am full', beside  $\pi \iota \mu$ - $\pi \lambda \eta$ - $\iota \omega$ .  $\pi \nu \dot{\eta}$ - $\vartheta \omega$  'I shave, rub, scratch', beside  $\pi \dot{\nu}$  (§ 737).  $\pi \dot{\nu}$ - $\vartheta \omega$  'I make rot' (perf.  $\pi \dot{\epsilon}\pi \bar{\nu}\vartheta \alpha$ ), beside  $\pi \dot{\nu}$  o- $\nu$  'pus': Lith.  $p\dot{\iota}$ -d-inu  $p\dot{\iota}$ -d-au 'I make rot' Lett. pa- $p\dot{\iota}$ -d-e 'fallow field' beside  $p\bar{u}\nu$ - $\dot{u}$  'I make rotten'.  $\beta \rho \dot{\iota}$ - $\vartheta \omega$  'I weigh, press hard upon' (perf.  $\beta \dot{\epsilon}\beta \rho \bar{\iota}\vartheta \alpha$ ), beside  $\beta \rho \iota \alpha \dot{\varrho}$ - $\varepsilon$ - $\varepsilon$ 

ἕ-σχ-ε-θο-ν Ἱ held', beside ἔ-σχ-ε-ς  $\sqrt{segh}$ -. κατα-βλ-έ-θει καταπίνει Hesych., beside O.Ir. gelid 'consumit' O.H.G. chela 'throat'.  $\varphi$ λεγ-έ-θω 'I burn', beside  $\varphi$ λέγ-ω. νεμ-έ-θο-μαι 'I pasture', beside νέμ-ο-μαι. τελ-έ-θω 'I am', beside τέλλω.

-α-θω = \*- $\vartheta$ -dhō. πελ-ά-θω 'I draw near', beside πέλα-ς πελά-σσαι. διων-ά-θω 'I pursue', beside διών-ω. ἀμῦνά-θω 'I ward off', beside ἀμύνω. μετα-νι-ά-θω 'I go after, pursue', beside νίω 'I go'. Here perhaps should come γήθομαι Dor. γάθομαι (perf. γέγηθα γέγαθα) and γηθέω 'I enjoy, am pleased', for \*γᾱ-α-θ-, beside γαίω 'I take pleasure' for \*γᾱ-μω and γαῦ-ρο-ς 'proud': Lat. gaudeō for \*gāvideō (I § 612 p. 462), — observe that gāvīsus seems to imitate vīsu-s, which would show

<sup>1)</sup> Still more uncertain is Bartholomae's comparison of the word with Skr.  $v\bar{v}du$ - in  $v\bar{v}du$ -pátman- (Bezz. Beitr. XIII 87).

it to have been formed at some time when there was a present  $*g\bar{a}vide\bar{o}$  still in use; as regards the ending  $-\epsilon\omega$   $-e\bar{o}$ , see § 801.

 $\mu$ ι-νύ-θω 'minuo' beside Skr. mi-n $\acute{\sigma}$ -mi, φθν-νύ-θω 'I destroy' beside φθ $\acute{\iota}$ νω φθ $\acute{\iota}$ νω for \*φθ $\iota$ -νF-ω Skr. k $\mathring{s}$ i-n $\acute{\sigma}$ -mi, see § 639 p. 177, § 652 p. 186.

βαρύ-θω 'I am weighted' beside βαρύνω βαρύ-ς, cp. end of § 611.

§ 695. (2.) -do-.  $\tilde{\epsilon}\lambda$ - $\delta o$ - $\mu a \iota$  Hom.  $\tilde{\epsilon} \tilde{\epsilon}\lambda \delta o \mu a \iota$  'I wish, desire' for \* $F \epsilon \lambda$ - $\delta o$ -, beside Lat. vel-le; cp. Goth. val-da O.C.Sl. vla-da Lith. vel-du with -dho- § 689 p. 219.  $\tilde{\epsilon}$ - $\varphi \lambda a$ - $\delta o$ -v 'I popped, burst', beside Skr. phal-a-ti 'bursts' or beside  $\varphi \lambda$ - $a \iota v \omega$  § 621 p. 158.  $\tilde{\epsilon}$ - $\varphi \lambda \iota$ - $\delta \varepsilon$ -v ·  $\delta \iota \dot{\epsilon} \varrho \varrho \varepsilon \varepsilon v$  Hesych. ( $\varphi \lambda \iota \delta$ - $\dot{\alpha} v \varepsilon \iota$  Hesych.,  $\varphi \lambda \iota \delta \dot{\eta}$  'superfluity, abundance') beside  $\Phi \lambda \dot{\iota} a \varsigma$  (Curtius, Gr. Etym. 5 301).  $\tau \dot{\epsilon} v \delta \omega$  'I gnaw', doubtless for \* $\tau \varepsilon \mu$ - $\delta \omega$  and connected with  $\tau \dot{\epsilon} \mu$ - $v \omega$ ; cp. Lat.  $ton d e \bar{o}$ .

-δ- is very common in other formations, both in verbs and nouns. We may mention further  $\varkappa \rho \alpha - \delta - \tilde{\alpha} \omega$   $\varkappa \delta \rho - \delta - \bar{\alpha} \xi$  and  $\mathring{\alpha} \mu \alpha \lambda - \delta - \mathring{\alpha} \nu \omega$   $\beta \lambda \alpha - \delta - \alpha \rho \delta - \varsigma$  § 690 p. 220. Other examples:  $\varkappa \lambda \alpha - \delta - \mathring{\alpha} \sigma \omega$  σεῖσω Hesych., beside  $\mathring{\alpha} \pi \sigma - \varkappa \lambda \mathring{\alpha} \varsigma$   $\varkappa \lambda \mathring{\eta} - \rho \sigma - \varsigma$  'lot' (a chip or piece of wood, or other substance, broken off): Lat. per-cellō for \*-cel-d-ō § 696.  $\mathring{\varepsilon} - \rho \rho \mathring{\alpha} - \delta - \alpha \tau \omega$ ,  $\mathring{\rho} \mathring{\alpha} \sigma \sigma \omega \tau \varepsilon$  for \* $\mathring{\rho} \mathring{\alpha} \mathring{\delta} + \sigma \alpha - \tau \varepsilon$ , beside  $\mathring{\rho} \mathring{\alpha} \mathring{\nu} \nu \omega$  'I sprinkle' § 621 p. 159.  $\varkappa \varepsilon - \chi \lambda \iota \partial - \mathring{\sigma} \tau - \alpha - \mathring{\alpha} \nu \vartheta \sigma \mathring{\nu} \nu \tau \omega$  Hesych.,  $\chi \lambda \iota \mathring{\sigma} \mathring{\eta}$  'softness, luxuriance, wantonness',  $\delta \iota \alpha - \varkappa \varepsilon \chi \lambda \iota \partial \mathring{\omega} \mathring{\varsigma}$  '  $\delta \iota \alpha \rho \varrho \varepsilon \omega \nu \mathring{\nu} \pi \mathring{\sigma} \tau \varrho \nu \varrho \mathring{\eta} \varsigma$ , from  $\chi \lambda \mathring{\iota} \omega$  'I am soft, effeminate'.  $\mu \varepsilon \iota - \delta - \mathring{\alpha} \omega$  'I smile'  $\varrho \iota \lambda \sigma - \mu \iota \varepsilon \iota \partial \mathring{\eta} \mathring{\varsigma}$ , akin to Skr.  $s m \mathring{\alpha} y - \alpha - t \overline{\varepsilon}$ : cp. Lett.  $s m \mathring{\alpha} \iota - d \mathring{\alpha}$  'a smile'  $s m \mathring{\imath} - d \imath \mathring{\alpha} \mathring{\varsigma} + s m \mathring{\imath} - d \imath \mathring{\alpha} \mathring{\varsigma} + s m \mathring{\imath} - d \imath \mathring{\alpha} \mathring{\varsigma} + s m \mathring{\imath} - d \imath \mathring{\alpha} \mathring{\varsigma} + s m \mathring{\imath} - d \imath \mathring{\alpha} \mathring{\varsigma} + s m \mathring{\imath} - d \imath \mathring{\alpha} \mathring{\varsigma} + s m \mathring{\imath} - d \imath \mathring{\alpha} \mathring{\varsigma} + s m \mathring{\imath} - d \imath \mathring{\alpha} \mathring{\varsigma} + s m \mathring{\imath} - d \imath \mathring{\alpha} \mathring{\varsigma} + s m \mathring{\imath} - d \imath \mathring{\alpha} \mathring{\varsigma} + s m \mathring{\imath} - d \imath \mathring{\alpha} \mathring{\varsigma} + s m \mathring{\imath} - d \imath \mathring{\alpha} \mathring{\varsigma} + s m \mathring{\jmath} - d \imath \mathring{\jmath} + s m \mathring{\jmath} - s m$ 

- § 696. Italic. (1.) -dh- in Lat. ju-b- $e\bar{o}$ , see § 689 p. 220, and probably  $gaude\bar{o}$  for  $*g\bar{a}vide\bar{o}$ , see § 694 p. 223.
- (2.) -d- in sallō for \*sal-dō, fundō fūdō, clau-dō, see § 690 p. 221. per-cellō for \*-cel-dō from the same root as  $cl\bar{a}d$ - $\bar{e}s$  (I § 306 p. 243), and connected with Gr.  $\varkappa\lambda\alpha$ - $\delta$   $\varkappa\lambda\bar{a}$ -, see § 695.

- $c\bar{u}$ - $d\bar{o}$ , once also \*cau- $d\bar{o}$  (Conway, Verner's Law in Italy, p. 72), connected with Lith.  $k\acute{a}u$ -ju 'I strike, forge, fight' O.C.Sl. kov-a 'I forge'.
- (3.) -dho- or -do- (doubtful). frendō beside fremō (cf. Osthoff, M. U. v 94 f.), perhaps for \*fremidō. caedō, according to Holthausen, P.-B. Beitr. xi 554 f., connected with Mid.Dutch heie 'hammering block' heien 'to strike, ram, stamp' Mid.H.G. heie f. 'mallet, wooden hammer'. Other possible forms are tendō from √ten-, see § 564 p. 111, and dē-fendō of-fendō, which may be connected with Gr. θείνω, and come from √ghen- (is fēnu-m 'hay' for \*fen-sno- or \*fend+sno-, meaning 'something cut'?) ')
- § 697. Keltic. -d- is perhaps the suffix of do-lod-sa 'ivi' beside luath luad 'quick, fleeting', beside O.H.G. fliuz-u § 690 p. 221 (so Zimmer, Kuhn's Zeitschr. xxx 215 f.).
- § 698. Germanic. (1.) -dho-. Goth. val-da O.H.G. waltu 'I rule, hold sway', O.H.G. scrintu 'I burst, blow up', Goth. ga-rēda 'I reflect upon, meditate' O.H.G. rā-tu 'I advise', A.S. hla-de 'I load', see § 689 p. 220. O.Icel. bregā 'I set moving quickly, I swing' A.S. brezde 'I swing, throb' O.H.G. brittu 'I swing, throb' (for -tt- see Braune, Ahd. Gr.² § 164 Anm. 2 p. 135) doubtless for \*bhreĝ- -dhō, beside O.C.Sl. brīz-ŭ 'quick' brīz-ati 'to run quickly'; in Kluge's view of the treatment of pr. Idg. med. asp. + tenuis (Paul-Braune's Beitr. ix 152 f., Paul's Grundr. i 327), another possible ground-form would be \*bhreĝh+to (Class XXIV).
- § 699. (2.) -do-. Mid.H.G. scherze 'I jump quickly about', A.S. mel-te 'I grow soft', Goth. sal-ta O.H.G. salzu 'I salt', Goth. giu-ta O.H.G. giuzu 'I pour', O.H.G. fliu-zu 'I flow', Mid.H.G. spriu-ze A.S. sprū-te 'I sprout', O.Fris. slū-te O.H.G.

<sup>1)</sup> If  $-fend\bar{o}$  should be connected with  $Skr.b\bar{a}dha-t\bar{e}$  'compels, oppresses', the latter must be kept distinct from Skr. vadh- Avest.  $va\bar{d}$ - (Gr.  $\omega^0 \dot{\epsilon}\omega$ ).  $-fend\bar{o}$ , which may have once been \*-fand $\bar{o}$ , would then belong to Class XVI § 632. Yet another explanation is given by Fick, Wtb. I\* 463, who compares O.Ioel. detta 'to fall down'. Conway, Class. Review v 297, explains tendo - $fend\bar{o}$  as being for \* $ten-\dot{t}\bar{o}$  \* $ghen-\dot{t}\bar{o}$  = Gr.  $\tau\dot{\epsilon}tr\omega$   $\mathcal{F}\dot{\epsilon}tr\omega$ .

sliuzu 'I shut', see § 690 pp. 220 f. O.Sax. wrītu O.H.G. rīzu 'I tear, wound, write', cp. Gr.  $\dot{\varrho}\bar{\iota}$ -νη 'file, rasp'  $\dot{\varrho}\bar{\iota}$ -νό-ς 'hide still on the body' (but δέρμα from δέρω). O.Icel. vel-t 'I roll' trans. O.H.G. walzu 'I roll, turn myself', the latter for \*u\bar{l}-d\bar{o}, beside Lith. vél-ti 'to full, mill' Lett. we'l-t 'to roll, full, mill', compare Lith. vél-d-inu 'I have something fulled or milled'. Goth. svil--ta 'I die slowly away', O.H.G. swilzu 'I am devoured by fire, I spend myself in coitu, pine away', O.Icel. svelt 'I hunger', beside A.S. swelan 'to smoulder, burn slowly and glow': cp. Lith. svìl-d-inu 'I get something singed'. O.H.G. sciu-zu O.Icel. skyt 'I shoot': Lith. szau-d-ỹ-klė 'shuttle' száu-d-au 'I shoot or move again and again' száu-d-inu (causal of the last) Lett. schau-d-e--kli-s 'spoolor bobbin' schau-d-r-s 'hasty, hot', beside Lith. száu-ju 'I shoot'. O.H.G. glī-zu O.Sax. glītu 'I gleam, shine', akin to O.Sax. glī-mo 'a gleam or sheen, a brightness'. O.H.G. wā-zu 'I blow' ground-form \*uē-dō, connected with O.H.G. wā-u 'I blow' Skr. vá-ti: cp. Lith. vė-d-inù 'I expose to the air, I air'. According Fick Wtb. 14 539 f., O.H.G. lāzu Goth. lēta 'I let', with which we have connected Gr. ληδεῖν (§ 521 p. 85), would come from  $\sqrt{l\bar{e}}$ .

- § 700. Balto-Slavonic. When Balto-Slavonic -do- comes from Idg. -dh-o, and when from Idg. -do-, can only be made out by help of the cognate languages.
- (1.) -dho. Lith. vel-du 'I rule' O.C.Sl. vla-da 'I rule, hold sway', Lith. skérdžiu 'I burst' instead of earlier \*sker-du, Lith. ju-dù 'I move trembling' jundù 'I begin to move all a-tremble', O.C.Sl. ra-d-iti 'to meditate or reflect upon', see § 689 p. 219. Lith. gir-d-inu gér-d-inu gìr-d-au 'I give to drink', pú-d-inu pú-d-au 'I cause to rot' Lett. pa-púde 'fallow land', see § 694 p. 223. With Lith. \(\bar{\epsilon}\)-stó-d-in-ti 'to give admittance to' Lett. stá-d-i-t 'to set, place, plant' stá-d-s 'a plant' we may compare Gr. \(\sigma\alpha\)-s\(\epsilon\)-s\(\epsi
- (2.) -do-. Lith. plau-d-žiu 'I wash, purify' plu-d-žiu 'I chatter' plústu 'I begin to swim' pláu-d-in-ti 'I cause to be

rinsed' Lett. plú-d-iná-t 'I make overflow', Lith. spráu-d-žiu 'I compel' sprústu 'I rush out of a narrow place', see § 690 p. 221. Lett. smai-da 'a smile' smi-d-iná-t 'to make laugh', see § 695 p. 224. Lith. vél-d-inu 'I cause to be milled or fulled', svìl-dinu 'I cause to be singed', szau-d-y-kle 'shuttle' Lett. schau-d-r-s 'hot, hasty', Lith. vė-d-inù 'I air', see § 699 p. 226.

Some of these distinctions between orig. -dh- and -d-, made by help of other languages, are naturally very little to be trusted. As -d-ina- was a very fertile suffix in both Lettic and Lithuanian, there need be no very real connexion between such endings as those of svil-dinu and Goth. svil-ta.

§ 701. (3.) In many instances it is quite impossible to distinguish between orig. -dho- and -do-.

On the doubtful points in the explanation of Lith. mel-d-žiù 'I beg' O.C.Sl. mla-dŭ 'tender', see § 690, p. 220.

Lith. vér-du 'I boil' pret. vir-iaū inf. vir-ti. mér-d-žiu and mér-d-mi 'I lie a-dying' (inf. mér-d-ē-ti), from mir-ti 'to die' (Lat. morbu-s for \*mor-dho-s?). Lett. e'rſchu 'I separate' for \*er-d-iu (pret. e'rdu inf. e'rst), beside Lith. yr-ù 'I separate, myself, set myself free'. Lith. skél-du and skél-d-žiu 'I split, burst' intrans. (inf. skél-d-ē-ti), skél-d-in-ti 'to make or cause to be split', from skelù, i. e. \*skel-iù 'I split' (inf. skél-ti).¹) Lith. grimstù 'I sink' pret. grimzdaŭ inf. grimsti, beside Lett. grimstu grimu grimt, points to a pres. \*grem-du or \*grim-du; and Lett. gi'nstu 'I perish' pret. gi'ndu inf. gi'n-t to a present \*gin-du. Lith. sru-d-žiu 'I make bloody' (inf. srusti) beside pa-srùv-o 3rd sing. 'flowed'. Lith. gë-du 'I sing' and gë-d-mi (3rd sing. gësti), cp. gaïda-s 'singer' gaidỹ-s 'cock', akin to Skr. gáya-ti 'sings' gē-ṣṇù-ṣ gē-ṣṇa-s 'singer' (cp. Per Persson, op. cit., 117, 197).

From the series containing -dho- and -do- were formed a large class of Lith.-Lett. Causals and Frequentatives, ending in (Lith.) -d-inu inf. -d-inti, and in (Lith.) -d-au inf. -d-y-ti. Many

<sup>1)</sup> Per Persson (Wurzelerweiterung, 38) connects skéldéti with Gr.  $\kappa \lambda a \delta \dot{a} \sigma a a$ , Lat.  $per\text{-}cell\bar{o}$  (§ 695 p. 224). If so, its d would come from Idg. d.

of these howe been cited already. With -d-inu compare Gr.  $\delta\alpha\varrho$ - $\vartheta$ - $\dot{\alpha}\nu\omega$  beside  $\dot{\epsilon}$ - $\delta\alpha\varrho$ - $\vartheta$ - $\upsilon$ - $\upsilon$  (§ 694 p. 223),  $\varphi\lambda\iota$ - $\vartheta$ - $\dot{\alpha}\nu\epsilon\iota$  beside  $\dot{\epsilon}$ - $\varphi\lambda\iota$ - $\vartheta$ - $\varepsilon$ - $\upsilon$  (§ 695 p. 224). The verbs in -d-au -d-y-ti, with frequentative meaning, often show a root syllable of the second strong grade (see § 790), as  $sk\acute{a}l$ -dyti 'to split again and again' from  $sk\acute{e}l$ -du 'I split myself'  $sk\acute{e}l$ -dinu 'I cause to be split'.

To the same dental group belongs the partic. II. pres. act. in -dama-s; here the m-suffix is the same as in vēža-ma-s fut. vèszi-ma-s etc. (II § 72 p. 166), and had the original middle meaning. Therefore the form skél-dama-s, for example, which is now attached to the verb skelù, originally belonged to skél-du skél-džiu just as skél-dinu did.

O.C.Sl. ja-da 'I ride, vehor' 1) beside inf. ja-ch-a-ti (§ 665 p. 198). 2) bada 'fio' may be derived from  $\sqrt{bheu}$ , by assuming \* $bhu-\bar{a}-dh\bar{o}$  \* $bhu-\bar{a}-d\bar{o}$  (cp. Lat. -bam for \* $bhu-\bar{a}-m$ ) or \* $bh\bar{u}-dh\bar{o}$  \* $bh\bar{u}-d\bar{o}$ , which got a nasal in Class XVI (§ 637 Rem., p. 176); or even if we suppose that a present \*bona for \* $bhu-on\bar{o}$  (Class XIV, § 624 p. 162) was extended by  $-dh\bar{o}$  or  $-d\bar{o}$  (cp. Lith.  $ka\bar{i}tin-drinu$  'to cause to be heated' derived from  $ka\bar{i}t-inu$  'I heat').

#### I. CLASSES XXVI TO XXXI.

## PRESENT STEMS WITH -io-.

§ 702. This suffix appears in the forms -io- -ie- or -iio-iie-. Examples of -io- are Skr. hár-ya-ti, Gr. χαίρω for
\*χαρ-ιω, Goth. vaúrk-ja, Lith. spir-iù sĕ-ju O.C.Sl. sĕ-ja. Of
-iio-: Skr. mr-iyá-tē Gr. ἐσθ-ίω, Lat. suf-fio (for \*dhμ-iiō)
farc-iō, O.Ir. b-iu (for \*bhμ-iiō), A.S. beó (also for \*bhμ-iiō).
We are reminded of -no-: -nņo- (§ 596 p. 138); and the
same double forms reappear in the noun-suffix -io- (I § 117
pp. 109 f., § 120 pp. 111 ff., II § 63 pp. 122 ff., III § 194 p. 74)

<sup>1)</sup> For the initial, cp. Zubatý, Archiv für slav. Phil., xm 623.

which must be the same suffix as this of the verbs (compare such stems as Skr. pú-ya-ti 'stinks' pú-ya-m 'ill-smelling discharge, matter', § 487 pp. 41 f.).

Another point in common between the two suffixes is this. In some forms of the verb-system we find a weak grade, -i-, or -ī-. Examples are: -i-, Lat. 2<sup>nd</sup> sing. cap-i-s ¹) from cap-iō, O.H.G. 2<sup>nd</sup> sing. hev-i-s from heffu (= Goth. haf-ja), Lith. 2<sup>nd</sup> pl. tik-i-te from tik-iù; examples of -ī-, Lat. 2<sup>nd</sup> sing. farc-ī-s from farc-iō, O.C.Sl. 2<sup>nd</sup> sing. vel-i-ši from vel-ja.²) This -ī- is not found in the present system of Aryan or Greek; and it is more than chance that these very languages have discarded the weak forms of the same sort from their declension of noun stems with -io-.

Details as to the Indicative Present will now be given.

Aryan and Greek as a rule have only -io- and -ie- interchanged, as in the other thematic classes. E. g. Skr.  $h\acute{a}r$ - $y\bar{a}$ -mi  $h\acute{a}r$ -ya-si  $h\acute{a}r$ -ya-ti etc., like  $bh\acute{a}r$ -a-mi  $bh\acute{a}r$ -a-si  $bh\acute{a}r$ -a-ti; 3) Gr.  $\chi al\varrho \omega \chi al\varrho \omega \chi al\varrho \omega \omega etc$ . like  $\varphi \acute{e}\varrho \omega \varphi \acute{e}\varrho \omega c$ , and so forth.

Latin keeps only -io- and - $\bar{i}$ -; e. g. cap- $i\bar{o}$  -i-s -i-t -i-mus -i-tis -iu-nt, farc- $i\bar{o}$  - $\bar{\imath}$ -s -i-t (for - $\bar{\imath}$ -t); parallel to  $farc\bar{\imath}s$  is Umbr. heris 'vis'.

In Keltic the inflexions are not all quite clear. With -io- we have nothing but the 1st sing. (O.Ir. -lēciu) for certain; and -i- can be shown in one or two persons (besides the isolated forms Mod.Cymr. imper. bit bint, see § 719); thus no doubt can be felt that there once existed a series of forms with -io-:-i-. We see -i- or -i- in 2nd sing. imper. O.Ir. lēic, 3rd pl. O.Cymr. scamnhegint levant nertheint 'they strengthen' (= O.Ir. \*nertaigit), cp. 3rd sing. istlinnit 'he makes known'

<sup>1)</sup> The view that cap-i-t comes from \*cap-ie-ti (I § 135 p. 122) must be given up.

<sup>2)</sup> Goth. vairkeis (1st sing. vairkja) can hardly be compared with such forms as Lat. farcīs O.C.Sl. veliši; it is formed on the analogy of fra-vardeis = Skr. vartaya-si and the like (§ 781.2).

<sup>3)</sup> Forms like Avest. *irišinti* as contrasted with Skr.  $ri\tilde{s}$ -ya-nti prove nothing for Idg. -i- in Avestic. See Bartholomae, Handb. § 95  $\alpha$  Anm. 1 p. 41, and § 290 p. 126.

(O.Ir. sluindid) Mid.Cymr. chwareid 'plays'. Also O.Ir. 3<sup>rd</sup> pl. -lēcet may be \*-ĭnt- (-\*ĭnto), and the 1<sup>st</sup> pl. -lēcem may be \*-ĭmo(s); the 3<sup>rd</sup> sing. -lēci may be derived from \*-ī-t or \*-iie-t. The 1<sup>st</sup> sing. lēicim is a re-formate, like O.C.Sl. bimī Serv. hvalim (cp. scaraim caraim).

The same variation, -io-:-i- (see above), is seen in Germanic. But here not only the 1st sing. and 3rd pl. have -io-, but the 1st pl. as well (O.H.G. heffe-mēs Goth. hafja-m). We should therefore assume as the proethnic scheme in this branch, -iō -i-zi -i-dī -ia-m -i-dī -ia-ndī. The Gothic forms haf-ji-s haf-ji-p are in all probability instead of \*haf-i-s \*haf-i-p, on the analogy of hafja hafjam hafjand on the one hand, and satja satjis etc. on other; this view is supported by liga ligis etc. found instead of \*lig-ja \*lig-i-s (cp. O.H.G. liggu ligis).¹) Thus it cannot be shewn that Germanic once had the same inflexion as Aryan and Greek.

This variation is found again in Balto-Slavonic; Lith. lėž-iù lėž-i lėž-ia lėž-ia-me lėž-ia-te like sukù sukì sùka sùka-me sùka-te, O.C.Sl. bor-ją bor-je-ši bor-je-tu bor-je-mu bor-je-te bor-jątu like berą bere-ši bere-tu bere-mu etc. Also the variation i, and here Lith. has regularly -i- while Slavonic has regularly i; Lith. smìrd-žiu smìrd-i smìrd-(i) smìrd-i-me smìrd-i-te O.C.Sl. smrždą smržd-i-ši smržd-i-tu smržd-i-mu smržd-i-te smržd-etu (§ 637 Rem. p. 176).

Lastly, in Armenian -i- (= Idg. -i- or - $\bar{\imath}$ -) runs through all the persons, as xaus-i-m 'loquor' -i-s -i pl. -i-mk -ik -i-n.

In view of these facts it is likely that the parent speech had a twofold inflexion. Some of the io-presents had -io-: -ie-analogous to the variation between -o-: -e-, and others had -io-: -i-. The latter was found, if we may trust the evidence of the Balto-Slavonic group, in such io-verbs as had an e-stem as well as a io-stem, as O.C.Sl. minja mine-ti; and if this be

<sup>1)</sup> The same levelling in late Old High German, ligu instead of liggu following ligis, bitu instead of bittu (Goth. bidja) following bitis (cp. Goth. us-bida).

so, -io-: -i- must be assumed for Greek stems like  $\mu a \ell v o$ - $\mu a \ell$  (aor.  $\dot{\epsilon} \mu \dot{\alpha} \nu \eta \nu$ ), cp. §§ 708, 727. As regards the question, which persons took -io- and which took -i-, two points may be considered certain. (1) The 1<sup>st</sup> sing. had -io or -iio, and the 3<sup>rd</sup> pl. -io-nt(i) or -iio-nt(i).\(\frac{1}{2}\) (2) -i-\(\text{was used with the 2<sup>nd</sup> and 3<sup>rd</sup> sing. and the 2<sup>nd</sup> pl., as also in the 2<sup>nd</sup> sing. imperative (Lat. cape for \*capi, farci, O.Ir. lieic, O.H.G. ligi). The 1<sup>st</sup> plural seems to have had -io-. Further details may be sought below.

§ 703. There is none of the formative suffixes of the present stem which is added so often as -io- to stems which have some other suffix already. Compare Skr. sn-ā-ya-tē Lat.  $n\bar{o}$  (for \* $sn\bar{a}$ -(i) $\bar{o}$ ) beside Skr. sn- $\hat{a}$ -ti Lat. n- $\bar{a}$ -s, Skr.  $j\hat{n}$ - $\bar{a}$ - $y\acute{a}$ - $t\bar{e}$  O.H.G. kn- $\bar{a}u$  (ground-form \* $\hat{g}$ n- $\bar{e}$ - $i\bar{o}$ ) O.C.Sl. zn-a- $-ie-t\check{u}$  (ground-form  $*\hat{g}n-\bar{o}-\underline{i}e-t(u)$ ) beside Gr.  $\ddot{\varepsilon}-\gamma v-\omega-v$ , Lat.  $tace\bar{o}$ (for  $*tac-\bar{e}-i\bar{e}$ ) Goth.  $bah\acute{a}i-b$  (for  $*tak-\bar{e}-ie-ti$ ) beside Lat. tac-ē-s O.H.G. dag-ē-s (Class X §§ 578 ff.); Lesb. κλίννω (for \*κλι-ν-ιω) beside O.Sax. hli-nō-n etc. (Classes XII, XIII § 611); Skr.  $i \xi$ -an-yá-ti, Gr.  $laiv\omega$  (for  $*l(\sigma)$ -av- $\iota\omega$ ) beside Skr.  $i \xi$ -ana-t, Gr. ολισθ-αίνω beside ολισθ-άνω, O.H.G. qi-wah-annu beside Goth. af-lif-na (Class XIV §§ 616 ff.); Greek πτίσσω (instead of \* $\pi\tau\iota\nu\sigma\cdot\iota\omega$ ) Lat.  $p\bar{\imath}ns-i\bar{o}$  beside Lat.  $p\bar{\imath}ns-\bar{o}$ , Lith.  $j\grave{u}ng-iu$ beside Lat. jung-ō (Class XVI §§ 627 ff.); Skr. í-ṣ-ya-ti beside i- $\S a$ -ti, Goth. vah-s-ja beside Avest. vax- $\S a$ -iti, Lith.  $t\bar{e}$ -s-iubeside Skr. ta-sa-ti Goth. -pin-sa, Skr. tr-as-ya-ti Lith. tr-es-iù beside Skr. tr-ása-ti Gr. το-έ(σ)ω (Class XX §§ 657 ff.), with which is associated the future of which we have examples in Skr.  $d\bar{a}$ -s- $-y\dot{a}$ -ti and Lith.  $d\dot{u}'$ -s-iu (§§ 747 ff.); O.C.Sl. išta (for \* $\bar{\imath}$ sk-ia) beside iską (Class XXIII § 677), O.C.Sl. ob-ręstą beside -rē-tŭ? (Class XXIV § 687); Skr. yú-dh-ya-tē beside yō-dha-ti Lith. ju-du, Skr.  $r\dot{a}$ -dh-ya- $t\bar{e}$  beside  $\dot{a}$ - $r\bar{a}$ -dha-t, Gr.  $\dot{\epsilon}\sigma$ - $\vartheta$ - $i\omega$  beside  $\ddot{\varepsilon}\sigma$ - $\vartheta\omega$ ,  $\varkappa\lambda\dot{v}$ - $\zeta\omega$  for  $\ast\varkappa\lambda v$ - $\vartheta$ - $\zeta\omega$  as contrasted with  $\ddot{\varepsilon}$ - $\varphi\lambda\iota$ - $\vartheta$ 0-v, Lith. spráu-d-žiu beside Mid.H.G. sprie-ze, Lith. skél-d-žiu beside skél-du (Class XXV §§ 688 ff.).

<sup>1)</sup> I consider Lat. fīunt to represent the old inflexion, and not Osc. fiiet fi[ii] et. The Oscan form took the ending of verbs in -mi, as did censazet. Cp. § 1022.

This puts in the right light the present formation of later denominatives, which generally have -io-, and that too with its original chief accent; e. g. Skr. namas-yá-ti arāti-yá-ti pṛtanā-yá-ti gōpā-yá-ti Gr.  $\tau \epsilon \lambda \acute{\epsilon} \omega$  for  $*\tau \epsilon \lambda \epsilon \sigma_{-k} \omega$  etc. We thus see that denominatives had originally no special set of inflexions; their present system was the same as that of the Primary classes. Forms like 1st pl. Armen. jana-mk Gr. Aeol.  $\tau \acute{t} \mu \bar{\alpha} - \mu \epsilon \nu$  Lat. plantā-mus O.Ir. no chara-m Goth. salbō-m Lith. jử/sto-me were originally on the same level as Skr. dr-ā-mas Gr.  $\acute{\epsilon}$ - $\delta \rho$ -ā- $\mu \epsilon \nu$  Lat. in-trā-mus; and presents like Skr. jīva-ti Lat. vīvi-t O.C.Sl. žive-tŭ (from jī-vá-s etc.) were the same in principle as Skr. ája-ti Lat. agi-t. And to these such io-forms as Skr. pṛtanā-yá-ti dēva-yá-ti Gr.  $\tau \bar{\iota} \mu \acute{a} \omega$   $\omega$   $\omega$  bore the same relation as Skr.  $\omega$ -tā-tē to  $\omega$ -tē to  $\omega$ -tē etc.

§ 704. So involved and so intricate are these questions, that it is practically impossible to present the history of the verbal io-suffix in such a way that it shall be clear in every point, and all the needs of the student be met at once. Such an attempt would make it necessary to treat the same material again and again from different sides; and for this we have not the space. Be it then expressly understood that the classification here given has been made with a view to giving a general grip of the subject; and many important principles have not been made so prominent as might be wished.

We classify Present Stems + secondary suffix -io- (§ 703) according to the original stems; and we count as separate Present Classes (viz. nos. XXVII to XXX) those in which the io-suffix, together with the particular kind of stem it may be attacht to, has become a type for forms of some particular

kind. This is not the case with the -io- extension of present stems in -sko-, -to-, or -dho- -do-; wherefore the said stems are only mentioned in an excursus (§§ 762 ff.).

### Class XXVI.

Root + -io- -iio- forming the Present Stem.

§ 705. This Class falls into two divisions, in one of which the root-syllable, and in the other the thematic vowel carries the word accent. The root-syllable when accented has a strong grade of vowel (1st strong grade in the e-series), when unaccented is weak. (A) Accent on Root-Syllable: \* $\hat{g}h\hat{e}r$ - $\hat{i}o$ -(Skr.  $h\hat{a}r$ -ya-ti Umbr. fut. heriest); (B) Accent on Thematic Vowel: \* $\hat{g}h\hat{e}r$ - $\hat{i}o$ -(Gr.  $\chi\alpha\hat{i}\rho\omega$ ). Further examples of (A) are Skr.  $t\hat{a}n$ -ya-ti = Gr.  $\sigma\tau\hat{e}l\nu\omega$ ,  $p\hat{a}c$ -ya- $t\bar{e}$ ,  $m\hat{a}d$ -ya-ti (also Goth. hafja O.H.G. heffu 'I lift' pr. Germ. \* $\chi\hat{a}f$ - $\hat{i}\bar{o}$  = Lat. cap- $i\bar{o}$ ?); and of (B), Skr. mr- $iy\hat{a}$ - $t\bar{e}$   $dr\hat{s}$ - $y\hat{a}$ - $t\bar{e}$  tud- $y\hat{a}$ - $t\bar{e}$   $\hat{s}$ - $y\hat{a}$ -ti (on the obliteration of this orig. difference of accent in Sanskrit, see § 710). A similar double series is seen in Class II, as Skr.  $k\hat{a}r\hat{s}$ -a-ti and  $kr\hat{s}$ - $\hat{a}$ -ti, and in Class XIII, as O.H.G. willu and wallu (§ 513 pp. 78 f., § 607 p. 148).

§ 706. Proethnic Idg. -- Type A., \*ghér-io-.

V ĝher-: Skr. hár-ya-ti 'takes pleasurc in, desires', Umbr. heris 'vis' heriest fut. 'volet' Osc. heriiad 'velit' (like fakiiad 'faciat'); cp. Gr. χαίρω 'I rejoice', type B. νμεν- 'hide, cover': Lat. op-(v)eriō ap-(v)eriō (v dropt after the labial as in piu-s for \*pu-īio-s, suf-fīo-bō-bam, see I § 170 pp. 149 f.),') Lith. už-veriu 'I close, shut' àt-veriu 'I open' (cp. Osc. vcru 'portam' Umbr. verof-e 'in portam' and Lith. vaī-tai pl. 'door'). ν stenten-: Gr. στείνω (beside στένω) 'I groan' Aeol. τέννει στένει, βρύχεται Hesych., O.C.Sl. sten-ja 'I groan, lament' (inf. stena-ti); the Skr. tán-ya-ti 'groans, roars' (cp. stanayitnú- beside tanayitnú- 'roaring, thundering') may come from \*ten-io- or

<sup>1)</sup> Another but less probable derivation of these Latin verbs is given in vol. I § 499 p. 366.

\*tn-io-.  $\sqrt{\mu er\hat{g}}$ - work': Gr.  $\epsilon \rho \delta \omega$  for \* $F \epsilon \rho \gamma - \mu \omega$  (the Author, Gr. Gr. 2 § 59 p. 71), O.H.G. wirk-(i)u; parallel stem Idg. \*wrg--iό-, see § 707. V leuq- 'lucere': Gr. λεύσσω 'I see' for \*λευχ--ιω, Lith. táuk-iu 'I wait, wait for'. V reg- 'colour, dye': Skr. raj-ya-ti 'grows coloured, reddens', Gr. ὁέζω 'I colour' for V ghedh-: Avest. jaidyeiti 'prays' O.Pers. jadīyāmīy Ί pray', Gr. θέσσεσθαι αἰτεῖν, ἱκετεύειν (Hesych.) for θεθ-με-(I § 429 b p. 317). V peq- 'cook': Skr. pác-ya-tē intr. 'cooks, ripens' pass. pac-yά-tē (see § 710), Gr. πέσσω 'I cook, soften' V spek- 'spy, see': Skr. páś-ya-ti Avest. spasfor  $\pi \varepsilon x^{u} - \iota \omega$ . - $y\dot{e}$ -iti, Lat. spec- $i\bar{o}$   $c\bar{o}n$ - $spici\bar{o}$ .  $\sqrt{i}a\hat{g}$ - 'honour': Avest. pass. part. yezimna- (= Skr. \*yajyamāna-), Gr. mid. άζομαι for \*άγ-μο-; cp. Skr. pass. ij-ya- $t\bar{e}$ , type B.  $\bigvee pl\bar{u}q$ -: Gr.  $\pi\lambda \eta'\sigma\sigma\omega$ 'I strike, smite', O.C.Sl. plačą 'I cry, lament' for \*plāk-ją. Gr. κρώζω 'I caw' for \*κρωγ-μω, Lat. crōc-iō, Lith. krok-iù krog-iù 'I rattle in the throat, grunt' Lett. krázu 'I snore. eroak, groan' (for  $*kr\bar{a}k-iu$ ).\(^1\)  $\lor sp\bar{e}$ - (sp\)-, Lat. spa-tiu-m): Skr. sphā-ya-tē 'grows, increases' (not actually found), Lith. spë-ju 'I have leisure, room, space' O.C.Sl. spë-ja 'I have  $\bigvee s\bar{e}$ - (sə-, Lat. sa-tu-s): Goth. saia successful issue'. O.H.G. sāu 'I sow' pr. Germ. \*sē-jō (I § 142 p. 126), Lith. sĕ-ju O.C.Sl. sě-ja 'I sow'. V dō- (də-, Lat. da-tu-s) 'give': Skr. mid. ā-dāya-māna-s, O.C.Sl. da-ja; variant stem Skr. pass. dī-yá-tē, V stā- (st∂-, Lat. sta-tiō) 'stare': Avest. ā-stāyā 'I place myself' O.Pers. niy-aštāya 'he commanded', Lat. stō for \*stā-iō Umbr. stahu 'sto', O.Ir. -tau -tō 'I am' 2nd sing. -tai, Lith. stó--jů-s 'I place myself, take my place' O.C.Sl. sta-ją 'I place myself'; following type B we have the parallel stems Skr. pass. sthī-ya-tē, O.C.Sl. sto-ja 'I stand', and probably O.H.G. stēt (§ 708); cp. § 505 p. 71, § 584 Rem. p. 126.  $\sqrt{bh\bar{a}}$ - (bhə-, Gr. φα-μέν) 'cause to appear, make public, make known': Lat. for for  $fa-(i)\bar{o}-r$ , Lith.  $b\dot{o}-ju$  'I ask after, consider' O.C.Sl. ba-ja 'fabulor'; still, these verbs may he derived from \*bh-ā-iō

<sup>1)</sup> Why, Idg.  $\sigma$  in Lith.-Lett. becomes sometimes  $\mathring{u}$  and sometimes  $\bar{a}$  (Lith.  $\bar{\sigma}$ ) is unknown.

(cp. Skr. pass.  $bh\bar{a}-ya-t\bar{e}$ , not found in our texts), and their structure be the same as \*tr- $\bar{a}-\dot{z}\bar{o}$  (§ 735), compare § 495 p. 55.

§ 707. Type B: \*ghr-ió-.

V mer- 'die' \*mr-ijo- and \*mr-ijo-: Skr. mr-iyá-tē Avest. mere-ye-iti, Lat. mor-ior (I § 120 p. 112), cp. below \*bhu-ijo-\*bhu-io-.  $\vee$  der- 'tear, flay: Skr.  $d\bar{\imath}r$ - $y\acute{a}$ - $t\bar{e}$  for \* $d\bar{r}$ -ie-, Lith.  $dir-i\dot{u}$ ; type A, Gr.  $\delta\epsilon'\varrho\omega$  Lesb.  $\delta\epsilon'\varrho\varrho\omega$ .  $\sqrt{sper-}$ : Gr.  $\sigma\pi\omega'\varrho\omega$ 'I pant, struggle', Lith. spir-iù 'I strike with my foot, kick'. V sqel-: Gr. σκάλλω 'I scrape, hack' for \*σκαλ-μω, Lith. skilù (for \*skil-iù) 'I strike a light, kindle'. 

✓ men- 'think of, meditate': Gr. μαίνομαι 'I am wild, enravished, mad', O.Ir. do muiniur 'I think or believe' (for \*man-jo- \*mn-jo-), O.C.Sl. mĭn-ja 'I think'; to either (A) or (B) may belong Skr. mánya-tē 'thinks' Avest. 1st sing. man-ya O.Pers. 2nd sing. conj. maniyāhy (I § 125 p. 116). V ghen-: Skr. han-yá-tē 'is struck' instead of \*qhan-yá-tē (I § 454 Rem. p. 335), O.C.Sl. žĭn-ją 'I cut off, reap'; of type A from this root we have Gr. Isiva. V gem- 'go': Skr. -gam-yá-tē, Gr. βαίνω, Lat. ven-iō (I § 204 p. 170, § 208 p. 174); veniō might also if we wished be classed as an example of type A. V bheu- 'become, be' \*bhu-ijo- and \*bhŭ-jo- (so above we had \*mr-ijo- and \*mr-io-): Gr. \* $\varphi(F)$ -i $\omega$  implied by  $\varphi\tilde{\imath}$ - $\tau v$  (§ 713), Lat.  $f\bar{\imath}\bar{o}$  instead of \*f(u)- $i\bar{o}$  with  $\bar{i}$  following  $f\bar{i}s$  etc. (§ 717), O.Ir. b-iu, A.S. b- $e\acute{o}$ (cp. § 722), 1) Skr. pass.  $-bh\bar{u}$ -ya- $t\bar{e}$ , Gr. Lesb.  $\varphi v i \omega$  (on Ion. Att.  $\varphi \dot{v}\omega \varphi \dot{v}\omega$  see § 523 p. 87, § 527 Rem. 2 pp. 90 f.); from the same root come Lat. fī-liu-s and Alban. bin 'I bud' (see G. Meyer, Alban. Stud. III 33, who however, as I think wrongly, assumes  $bh\bar{\imath}$  as a variant 'root' as well as  $bh\bar{\imath}$ .  $\vee$  dhe $\bar{\imath}$  'shake, stir

<sup>1)</sup> A different explanation of these verbs is given by Bartholomae, Stud. idg. Spr., II 189 ff., where we see \*bhyīżo \*bhyīso \*bhyīto 3rd pl. \*bhyījonti given as the proethnic forms. This does not agree either with the i of A.S. and O.H.G. bis (§ 722), nor with the i of Lith. bi-ti -bi-me etc. (§ 727); obviously the relation of Lith. -bi-me and O.C.Sl. bi-mū is the same as that of smìrdi-me and smridi-mū.

up': Lat. suf-fiō for \*-fu-iō, Skr. pass. dhū-yá-tē 'is shaken', Gr. Lesb.  $\vartheta v i \omega$  'I storm, roar'  $(\vartheta \dot{v} \omega \ \vartheta \dot{v} \omega \ \text{like} \ \varphi \dot{v} \omega \ \varphi \dot{v} \omega$ , see above), O.Icel.  $d\bar{y}$  'I shake' (inf.  $d\bar{y}$ -ja). V  $qe\bar{q}$ -: Skr.  $c\bar{\imath}$ -ya- $t\bar{e}$ 'is tried, respected', connected probably with Gr. τίω 'I pay' (parallel form τίω, cp. § 527 Rem. 2 pp. 90 f.); Arcad. τείω either for  $*\tau_{\mathcal{E}\iota^{-}k}\omega$  (A), or more probably an ad-formate of τείσω ετεισα. Skr. kṣ̄ī-yá-tē 'is destroyed' kṣ̄t-ya-tē 'exhausts itself, disappears'; from the same root is probably Gr. Hom. φθίω 'I am destroyed'. Skr. pí-ya-ti 'abuses, thinks little of', partic. Goth. fijands O.H.G. fient (foe'). V yer g-'work': Avest. verez-ye-iti, Gr. ὁέζω instead of \*Fράζω \*Fραγ-ιω (I § 299 p. 238), Goth. vaúrk-ja; Gr. ἔοδω Ο.Η.G. wirk(i)u are of type A, § 706 p. 234.  $\lor$  gherd- (Lith. gerda-s 'cry, message, news', Pruss. po-gerdaut 'to say'): Gr. φοάζω 'I give to understand, announce', Lith. gird-žiù 'I apprehend, hear', ground-form \*qhrd-iō.  $\sqrt{ghredh}$ - (Goth. gridi- 'step, grade'): Skr. grdh-ya-ti 'steps swiftly towards something', Lat. grad-io-r (cp. Osthoff, M. U. v p. III). V leig- 'linquere': Skr. ríc-ya-tē and pass. ric-yá-tē, Gr. λίσσωμεν εάσσωμεν Hesych.; cp. p. 129 with the footnote about Latin licet. Skr. chid-yá-tē 'is cut off', Gr. σχίζω 'I split' for \*σχιδ-μω. Skr. kup-ya-ti 'gets in motion, gets excited', Lat. cup-iō, O.C.Sl. kyplją 'I flow in waves, boil' for \*kyp-ją. Gr. \*φύζω 'I fice', implied by Hom. πεφυζότες (Curt. Verb 12 327), Lat.  $fug-i\bar{o}$ . Skr.  $\dot{s}\dot{u}\dot{s}-ya-ti$  'dries up, withers' (tr.), O.C.Sl. sŭša 'I dry' (intr.) for \*sŭch-ia (inf. sŭcha-ti); of type A we have Lith. saus-iù 'I dry' (intr.).

Gr.  $\varkappa \alpha \sigma \sigma v \tilde{v} \omega$  'I patch' for  $\ast \varkappa \alpha \tau - \sigma_k \bar{v} - \iota \omega$ , Goth. siu-ja 'I sew', Lett. schu-ja O.C.Sl.  $\check{s}ija$  for  $\ast s \check{\iota} \bar{y} - \check{\iota} a$  'I sew' (I § 60 p. 47, § 131 p. 118, § 143 p. 128, § 147 p. 132), Skr.  $s \check{\iota} v - v - v \dot{v}$  'I spit, spew' for  $\ast (s)p \check{\iota} a - \check{\iota} \bar{\sigma}$  (I § 131 p. 119), O.Icel.  $sp\bar{y}$  'I spit, spew' (inf.  $sp\bar{y} - ja$ ) for  $\ast sp\bar{u} - \check{\iota} \bar{\sigma}$ , Skr.  $\check{s}th\bar{v}v - v - t \dot{v}$  'spits, spews', not actually found (partic.  $\check{s}th\bar{v} - v - t \dot{a} - s$ ), instead of  $\ast sth\bar{v}v - v - t \dot{v}$  ( $\check{s}$  came from forms like  $t i \check{s}th\bar{v}v a - t \dot{a} - s$ ), instead of  $\ast sth\bar{v}v - v - t \dot{v}$  ( $\check{s}$  came from forms like  $t i \dot{s}th\bar{v}v a - t \dot{a} - s$ , and then spread all over the verb; Bartholomae,

Ar. Forsch. III 34); ¹) of type A, Lith. spiáu-ju O.C.Sl. plju-ją (I § 147 p. 132); Goth. speiva is either for \*spīuō parallel to Skr. šthīv-a-ti, or for \*spieu-ō parallel to Lith. spiáu-ju (so Streitberg, Idg. Forsch. I 513 f.).

Remark. On these roots with the variants  $i\bar{u}$  and  $i\bar{u}$ , see Bartholomae loc. cit., Kretschmer in Kuhn's Ztschr. XXXI 386, Per Persson's Wurzelerweiterung 154 ff. As regards the variants  $*s_i\bar{u}$ - $i\bar{o}$  and  $*s_i\bar{u}$ - $i\bar{o}$ ,  $*sp_i\bar{u}$ - $i\bar{o}$  and  $*sp_i\bar{u}$ - $i\bar{o}$ , it seems most likely that the ending  $-i\bar{u}$ - $i\bar{o}$  is due to the analogy of those forms where  $-i\bar{u}$ - preceded some sonant; to take an example, Skr.  $i\bar{s}$ th $i\bar{v}$ u- $i\bar{o}$  being modelled after the fashion of  $i\bar{s}$ th $i\bar{v}$ u- $i\bar{o}$   $i\bar{s}$ th $i\bar{v}$ u- $i\bar{o}$  so also  $i\bar{u}$ u- $i\bar{o}$ u- $i\bar{o$ 

V dhē- (dhə-, cp. Lat. ad-fa-tim) 'suck' \*dhə- $i\bar{o}$ : Skr. dhá-ya-ti 'sucks' (I § 109 p. 161), Goth. da-ddja 'I suckle' (I § 142 p. 127), O.C.Sl. do-ją 'I suckle'; parallel forms of type A are O.H.G.  $t\bar{a}u$  'I suckle' Lett.  $d\dot{e}$ -ju 'I suck' common ground-form \*dhē- $i\bar{o}$ , cp. Skr.  $dh\bar{a}$ -yú-i 'thirsty'.  $\sqrt{d\bar{e}}$ - (də-) 'bind': Skr. d-ya-ti, Gr.  $\delta\dot{\epsilon}\omega$  for \* $\delta\epsilon$ - $\iota\omega$  instead of \* $\delta\alpha$ - $\iota\omega$ , as  $\delta\epsilon$ - $\tau\dot{o}$ - $\varsigma$  for \* $\delta\alpha$ - $\tau o$ - $\varsigma$  = Skr. di-tá-s.  $\sqrt{st\bar{a}}$ - (stə-) 'stare': Skr. pass.  $sth\bar{\iota}$ -ya-tē instead of \*stha-ya-tē (§ 498 p. 61), O.C.Sl. sto-ją 'I stand', probably also O.H.G.  $st\bar{e}t$  (§ 708 p. 240); parallel A-forms, Avest.  $\bar{a}$ - $st\bar{a}$ -yā etc., § 706 p. 234.

With some roots ending in a vowel, the i of the present stem, being regarded as the root-final, was allowed to spread through other tenses. Side by side with Skr.  $d-y\acute{a}-ti$  'divides' (fut.  $d\bar{a}-sya-ti$  etc.) is the bye-form  $d\acute{a}-ya-t\bar{e}$ , i. e. \* $da-ie-(I\ \S\ 109\ a.\ p.\ 101)$ , whence by analogy  $dayi-ta-s\ day-aya-ti$ ; so too we notice  $cha-ya-ti\ chayi-tv\bar{a}\ ch\bar{a}y-aya-ti\ beside\ ch-ya-ti$  'cuts up' (partic.  $ch\bar{a}-ta-s$ ). The pr. Greek form which answered to  $d\acute{a}-ya-t\bar{e}$ , to wit, \* $\delta a-i\omega$ , regarded as made up thus \* $\delta a_i-\omega$ , served as the starting point for  $\delta ai-\sigma\omega\ \delta ai-v\varrho\acute{o}-\varsigma\ \delta ai-v\bar{v}-\mu$ , and from these again we get  $\delta ai-\omega ai$ , which became associated in

<sup>1)</sup> Why Sanskrit has -t-, and not -p- like the rest, is unknown. This may be one of those pairs of doublets, such as Skr. skambh- and stambh- 'support', which cannot be regularly derived from a single original form.

one group with δάσσομαι δάσσασθαι. δα-ί-ο-μαι may be compared with the Lith. gu-i- $j\hat{u}$  'I hunt': from gu- $j\hat{u}$  ( $guja\tilde{u}$ ) = Lett. gu-ju (bye-forms Lett.  $g\hat{u}$ -nu Lith.  $g\hat{\alpha}u$ -nu, § 615 p. 153) sprang gui-siu gui-ti; from these again come the presents gui-jù and gui-nù. Similarly we find Lith. part. pret. séj-ēs jój-ēs from sé-ju jó-ju (séjau jójau). The principle here exemplified throws light on such forms as Skr. dhē-nú-š 'milking' beside Skr. dhá-ya-ti O.H.G. tāu. Compare Per Persson's further remarks on this matter, Wurzelerweiterung pp. 115 ff.

Pairs of forms like Skr.  $d-y\acute{a}-ti:d\acute{a}-y\acute{a}-t\bar{e}$  recal the two forms of the *ie*-optative, seen for example in Idg. \*dh-ie-t and \*dhə-<u>i</u>ē-t, § 939.

§ 708. A special class of verbs comprises those which have  $-\bar{e}$ - as parallel suffix to -io-. Sometimes the  $-\bar{e}$ - is found only outside the present stem; sometimes both -ē- and -io- are found in the present, in which case -ē-jo- occasionally takes the place of -ē-. The -io- in Balto-Slavonic has regularly the ablaut -i-; and I have already conjectured (§ 702 p. 230) that this ablaut is proethnic in this very class.

-io- in the present with  $-\bar{e}$ - outside the present stem is seen in Greek and Balto-Slavonic. Take as examples: Gr. μαίνομαι, ε-μάνη-ν μεμανη-ώς μεμάνη-μαι μανή-σομαι, O.C.Sl. mīnją, mīně mīně-vũ mīně-chũ (Lith. mìnė mině-siu, on the pres. menù see below). χαίοω, έ-χάρη-ν κεχαρη-ώς κεχαρή-σω. καίω (\*καΓ-μω) έ-κάη-ν. Lith. smìrdžiu smirdě-ti O.C.Sl. smržžda smrīdē-ti 'to stink'. In Slavonic, beside govlją govē-ti 'venerari, vereri' (: Lat. favēre) we see also govėją, a later re-formate.

In Germanic we have the much discussed class of which one is Gothic haban 'to have' (the 3rd Weak Conjugation).1)

<sup>1)</sup> See Sievers, P.-B. Beitr. viii 90 ff.; Mahlow, Lang. Voc. A, E, O, pp. 12 f., 19 ff., and 148 f.; Kögel in P.-B. B. IX 504 ff.; Bremer, ibid. XI 46 ff.; Kluge, in Paul's Grundriss 1 379 f.; Streitberg, Germ. Comp. auf -oz-, in the University Calendar of Freiburg in Switzerland, 1890,

Its connexion with the Balt.-Slav.  $\underline{io}: \overline{e}$ -class is shown by such forms as O.H.G.  $dol\overline{e}m$ : Lith.  $tyl\acute{e}ti$ , O.H.G.  $leb\overline{e}m$ : O.C.Sl.  $-lip\check{e}ti$  (Gr.  $a\lambda\iota\varphi\widetilde{\eta}-\nu\alpha\iota$ ), Goth. muna  $mun\acute{a}is$ : Lith.  $min\acute{e}-ti$  O.C.Sl.  $m\check{i}n\check{e}-ti$  (Gr.  $\mu\alpha\nu\widetilde{\eta}-\nu\alpha\iota$ ), Goth. vita  $vit\acute{a}is$ : Lith.  $pa-vyd\check{e}ti$  O.C.Sl.  $vid\check{e}-ti$ . io-structure is seen in forms like O.Sax.  $1^{st}$  sing. hebbiu libbiu pl. hebbiad libbiad A.S. habbe libbe; libbiu = O.C.Sl. -liplja. Then we find  $-\bar{e}-$  in such as O.H.G.  $hab\bar{e}-m$   $hab\bar{e}$ -s etc., and  $-\bar{e}-$  + -io- in Goth.  $2^{nd}$  sing.  $hab\acute{a}i$ -s  $3^{rd}$  sing.  $2^{nd}$  pl.  $-\acute{a}i$ - $\bar{p}$  (I § 142 p. 126).

Besides these, we find in Germanic other forms which an impartial critic cannot but regard as forms of our Class II; such, for example, are Goth. 1st sing. haba 1st pl. habam 3rd pl. haband, O.H.G. habu A.S. hafu.1) It is true that the West-Germanic forms could easily be explained as due to the analogy of other verbal forms; but the Gothic ones are incomprehensible if so regarded.2) Now in Balto-Slavonic and Greek, forms of Class II are found associated with  $\bar{e}$ -forms, as Lith. menù minëti as contrasted with O.C.Sl. minja minëti, O.C.Sl. part. vidomŭ beside vidimŭ from viděti, Gr. ἐθέλω έθελήσω (§ 727) — compare Umbr. neiřhabas 'ne adhibeant' beside habe 'habet' habetu 'habeto'. Another explanation is therefore possible, and to my mind more likely to be true. It is possible that in Germanic as well, some of the verbs in question had this form of the present stem, and that this o-type was made the rule for all verbs in Gothic. In that case, the relation of Goth. haba (O.H.G. habu) and O.Sax.

pp. 15 f., 18 ff., and 32; Sievers, in Paul Braune and Sievers' Beitr. XVI 257 ff.; Bartholomae, Stud. idg. Spr. II 143 ff. Hirt, Idg. Forsch. I 204; Streitberg, Zur Germ. Sprachgesohichte, pp. 73 ff.

<sup>1)</sup> The 2<sup>nd</sup> and 3<sup>rd</sup> sing. O.H.G. hebis hebit may be examples either of o-flexion or of io-flexion. It is quite certain that hebita and ge-hebit are the latter.

<sup>2)</sup> O.H.G. habu A.S. hafu may be instead of (O.Sax.) hebbiu, as O.H.G. ligu instead of ligg(i)u following ligis etc. On the other hand, we have no right at all to put Goth. haba on the same level as liga instead of \*ligja following ligis etc.

hebbiu might be compared with O.C.Sl. vidomü and vidimü, or with Lith. 3<sup>rd</sup> sing. smìrda and smìrdi. There is yet another possibility. With Streitberg, we may derive hab-and from \*-ēndi,¹) and assume that haba habam were formed on the analogy of baira bairam: bairand. There is nothing at all to be said for Hirt's conjecture that 1<sup>st</sup> sing. haba comes from \*-ē-m, with secondary personal ending.

That pr. Germanic also knew the inflexion with  $-\bar{e}-+-jo$ -seems to follow from O.H.G.  $r\bar{e}r\bar{e}m$  'I bellow, bleat, roar'; this word is akin to Lith.  $r\bar{e}-ju$ , and points to pr. Germ. \* $raj-r\bar{e}-i\bar{o}$  (§ 741). Compare further § 548 p. 105, on Goth. rei-ra 'I tremble, quake'  $2^{\rm nd}$  sing. rei-rai-s, which is connected with Skr.  $l\bar{e}-lay-a-ti$ .

In this group falls also O.H.G. stēm stām 'I stand', which varies between  $\bar{a}$  and  $\bar{e}$  in all its persons. This must be due to an original series in which some persons had only  $\bar{e}$ and others only  $\bar{a}$ .  $\bar{a}$  comes from pr. Germ.  $\bar{e}$ , but  $\bar{e}$ , as the A.S. and O.Fris. ā shows, comes from pr. Germ. ai. The verb is intimately connected with O.C.Sl. stoja stoja-ti (for \*stojě-ti), in whose present stem stoji- (2nd sing. stoji-ši etc.) = Idg. sto-- $i\bar{i}$ -, the i is as regular as in ladi-ji Lith.  $m\tilde{o}-ji$ -s and the like (vol. II p. 122 footnote 2); compare Skr. pass, sthī-ya-tē instead of \*stha-ya-tē (§ 707 p. 237, § 709). The \*stojě- of the infinitive stem cannot be original, because this suffix -ēwhich we are now treating was added to the Root (in its weak grade), not to the present stem. \*stojě- is then doubtless a contamination of \*st-e- and \*sto-jī- (similarly la-ja la-ja-ti 'to bark, give tongue' as constrasted with orig. Lith. 16-ju 16-ti, and Gr. χαιρήσω έχαίρησα as contrasted with χαίρω, instead of \*χαρ-μω, ἐχάρην, χαρησοῦμαι, and κεχάρημαι). The two stems, \*stə-io- and \*st-ē-, are combined in the West Germanic present scheme, which before levelling ran something like stām stēs stēt stāmēs stēt stānt (see Bremer, as cited, p. 43), i. e. \*st-ē-mi

<sup>1)</sup> In view of vind-s for \* $u\bar{e}$ -nto-s, Streitberg assumes that  $\bar{e}$  becomes a only in syllables not bearing the chief accent (p. 18).

\*sta-ii-zi etc. stām stāmēs stānt run parallel to habēm habēmēs habēnt, and stēs stēt to hevis hevit (1st sing. heffu).

The verb  $g\bar{a}m$   $g\bar{e}m$  'I go' is the exact counterpart of  $st\bar{a}m$   $st\bar{e}m$  in every respect. As to the origin of this verb many different theories have been set forth. If our explanation of  $st\bar{a}m$   $st\bar{e}m$  is right, it is advisable to link  $g\bar{a}m$   $g\bar{e}m$  with Skr.  $ja-h\bar{a}-ti$  'deserts, gives up' pl. ja-hi-mas aor.  $a-h\bar{a}-t$ ,  $ji-h\bar{\iota}-t\bar{e}$  'goes, yields', in which case we must assume the stems  $*\bar{g}h\bar{\partial}-j\bar{o}-*\bar{g}h\bar{\partial}-i\bar{\iota}-$  and  $*\bar{g}h-\bar{e}-$ . The latter stem reappears in Gr.  $\varkappa i-\chi-\eta-\mu\iota$   $\varkappa i-\chi-\eta-\mu\iota$   $\imath$ , if this verb belongs to the same root (§ 594 p. 135).

In Latin, the whole present scheme has  $\bar{e}$ -, and the 1<sup>st</sup> sing., but this person only, has -io- in addition:  $vide\bar{o}$  for \*- $\bar{e}$ - $i\bar{o}$ , 2<sup>nd</sup> sing.  $vid\bar{e}$ -s etc.: Lith. pa- $výd\check{e}iu$  - $vyd\check{e}$ -ti Goth. vita  $vit\acute{a}i$ - $\bar{p}$ . Compare further  $rube\bar{o}$ : O.C.Sl.  $r\check{u}\check{e}da$   $r\check{u}d\check{e}$ -ti, and  $vale\bar{o}$ : Lith.  $gal\grave{u}$   $gal\check{e}ti$ , and so forth, § 590 p. 132. Italic likewise had at one time forms with -io- (and without - $\bar{e}$ -) in this group of verbs; this we see from Osc. staít 'stat' stahínt 'stant' Umbr. stahitu 'stato'. These imply a stem \*sta- $\bar{e}$ -1), which must be regarded as for \* $sta\dot{i}$ - $\bar{e}$ - and compared with O.C.Sl. stoja-ti; that is, it is a contamination of \*sta-i0- and \*st- $\bar{e}$ -. Again, the c of licet beside linqu $\bar{o}$  may perhaps justify our assuming an earlier \* $lici\bar{o}$  for \*licu- $i\bar{o}$  (Skr. ricya- $t\bar{e}$  Gr.  $\lambda losowuev$ ); see p. 129 footnote. The o-present Umbr. -habas 'habeas' beside habe 'habet' has been spoken of already (pages 239 f.).

What conclusion is to be drawn from a comparison of the Greek and Balto-Slavonic with Germanic and Italic? It is natural to suppose that the two former divide -io- and -ē-amongst their forms more nearly as the original language did; and that the latter came to have ē-forms in their present on account of their final confusion of Imperfect-Present with Aorist-Present, and the loss of the augmented preterite as an independent tense. Lat. vidē-s vidē-tis may be called injunctive,

<sup>1)</sup> For the proof that Osc. i must be orig.  $\bar{e}$ , and not orig.  $\bar{\imath}$ , I have to thank my pupil G. Bronisch.

and compared immediately with Lith. minė minė-te Gr.  $(\tilde{\epsilon})\mu\dot{\alpha}\nu\eta$ - $\varsigma$   $(\tilde{\epsilon})\mu\dot{\alpha}\nu\eta$ - $\tau\epsilon$ , the imperative  $vid\bar{e}$  may be compared immediately with minė-k, which stood to minė just as dů'-k to Skr. á-dā-t; and the only difference between O.H.G. habēm habes etc., or Lat. videt vident, and these Lithuanian and Greek preterites is that they have the primary personal endings. Compare too Lat. tagit beside tangit, and others of the kind (§ 583 p. 125); compare too dat with preterite sense (Veg. Aen. 1 79, IX 266, XI 172) like -bat (§ 505 p. 71 with footnote 2). This state of things was partly due to the analogy of  $\bar{e}$ -verbs with non-syllabic root; these carried the  $\bar{e}$ -suffix right through the verb; for example, Lat. -pleō for \*pl-ē-jō -plēs (Skr. prá-si á-prā-t Gr. πλη-το), Goth. vaia for \*μ-ē-jō (O.C.Sl.  $v\check{e}$ -jq, Skr.  $v\check{a}$ -ti Gr.  $a\eta$ - $\sigma \iota$ ). If in these the present and preterite both had originally  $\bar{e}$ , the connexion of the two would be very close when the preterite ceased to form a distinct category; it would then be quite natural for  $\bar{e}$ -verbs with syllabic root to run the  $\bar{e}$  right through the present, and, given Lat. vidērem (cp. O.C.Sl. viděchŭ Lith. pa-vidésiu Gr. Dor.  $l\delta\eta\sigma\tilde{\omega}$ , § 813) and Lat.  $vid\bar{e}$ -bam  $vid\bar{e}$ -b $\bar{o}$ , to form a present video vides etc. on the analogy of -pleo beside -plerem ple- $-bam -b\bar{o}$ ; or suppose we say, quite natural for existing injunctive forms such as vidēs vidētis to be treated as if they were the same in character as -ples -pletis, and used for the present, soon to be followed up by video videt etc. which filled the gaps in the system. This levelling and filling up of the gaps was completed in Latin by the beginning of the historical period; but in Germanic it never was completed at all. In Germanic all monosyllabic ē-stems, except two which crystallised, were absorbed by the jo-conjugation (§ 592); so the action of this principle can be clearly seen only with forms which contain  $-\bar{e}-+-io$ , as Goth. vitáis vitáib. The reason why Gothic chose to replace \*vitaia \*vitaiam \*vitaiand by vita vitam vitand to complete the tense lay in the number of syllables in these words.

Thus O.Sax. libbiu libda is a verb like Goth. vaúrkja

vairhta (§ 722). The reason why we find in parallel use O.H.G. lebēt and Goth. libáip etc. is simply that in these languages there once was a non-present stem \*lip-ē-, but no such  $\bar{e}$ -stem was ever connected with vairkjan.

We need not be surprised that it was *io*-stems that became joined with  $\bar{e}$ -stems in one verbal system. Both these suffixes have at all periods been used by preference in making forms with intransitive meaning. Observe how *io* is so used in the Aryan ya-passive (§ 710), and  $\bar{e}$  in the Greek agrist passive with  $\eta$  (§ 589 p. 130).

Remark. In § 583, page 125, we assumed an  $\bar{\alpha}$ -aorist beside the  $\bar{e}$ -aorist, and explained  $-\bar{\alpha}$ - in Lat.  $occup\bar{\alpha}re$  on the same principle as  $-\bar{e}$ -in  $vid\bar{e}re$ . It is particularly easy to see resemblance between  $vid\bar{e}re$  and  $\alpha r\bar{\alpha}re$ .  $ar\bar{o}$   $ar\bar{\alpha}s$ ,  $ar\bar{\alpha}rem$ : O.C.Sl.  $orj\alpha$   $orach\check{u}=vide\bar{o}$   $vid\bar{e}s$ ,  $vid\bar{e}rem$ : O.C.Sl.  $vižd\alpha$   $vid\acute{e}h\check{u}$ .

§ 709. Aryan. Type A. Skr. hár-ya-ti, raj-ya-ti pác-ya-tē, sphā-ya-tē, ā-dāya-māna-s, Avest. jaiāye-iti O.Pers. jadīyā-mīy, Avest. yezimna-, Avest. ā-stāyā O.Pers. niy-aštāya, Skr. páš-ya-ti Avest. spas-ye-iti, see § 706 pp. 233 f. Avest. urvaes-ye-iti 'moves, proceeds' (urv- for vr-, I § 157 p. 141), parallel B-stem urvis-ye-iti. Skr. náh-ya-ti 'binds'  $\sqrt{nedh}$ -(part. naddhá-s). Skr. náš-ya-ti Avest. nas-ye-iti 'disappears, is destroyed'  $\sqrt{nek}$ -. Skr. pád-ya-tē 'goes, falls', Avest. paā-16\*

-ye-iti 'goes, gets somewhere'  $\bigvee ped$ -. Skr. måd-ya-ti 'enjoys itself, carouses' beside 2<sup>nd</sup> sing. måt-si Class I.

Type B. Skr.  $mr-iy\dot{a}-t\bar{c}$  Avest.  $mer^e-ye-iti$  (it is uncertain how we should read the O.Pers.  $3^{rd}$  sing. pret., whether as  $amariyat\bar{a}=\mathrm{Idg.}$  \*e-mr-ie-to or as  $amriyat\bar{a}=\mathrm{Idg.}$  \*e-mr-ie-to, see I § 289 p. 231), Skr.  $d\bar{r}r-y\dot{a}-t\bar{c}$ ,  $han-y\dot{a}-t\bar{c}$ ,  $-gam-y\dot{a}-t\bar{c}$ ,  $-bh\bar{a}-ya-t\bar{c}$ ,  $dh\bar{u}-y\dot{a}-t\bar{c}$ ,  $c\bar{c}-ya-t\bar{c}$ ,  $k\bar{s}\bar{i}-y\dot{a}-t\bar{c}$   $k\bar{s}\bar{t}-ya-t\bar{c}$ ,  $p\bar{t}-ya-ti$ , Avest.  $ver^ez-ye-iti$ , Skr. gfdh-ya-ti,  $ric-y\dot{a}-t\bar{c}$   $ric-ya-t\bar{c}$ ,  $chid-y\dot{a}-t\bar{c}$ , kup-ya-ti,  $\dot{s}\dot{u}\dot{s}-ya-ti$ ,  $s\dot{v}v-ya-ti$ ,  $\dot{s}th\bar{v}v-ya-ti$ ,  $dh\dot{a}-ya-ti$ , d-ya-ti 'divides'  $d\dot{a}-ya-t\bar{c}$ , see § 707 pp. 235 ff.

Other, forms which have not the passive meaning. Skr. jīr-ya-ti jūr-ya-ti 'falls into decay' beside jūr-a-ti Class II A and jur-ā-ti Class II B. dām-ya-ti 'tames, conquers' for \*dīm-ie-ti. tām-ya-ti 'grows stupefied, faint' for \*tīm-ie-ti. mī-ya-tē 'grows less'. pū-ya-ti 'stinks'. Ţj-ya-ti 'rushes on'. hīs-ya-ti 'is excited, or happy'. Avest. pešyeinti 'they fight' pr. Ar. \*pṛt-ia-nti (I § 260 p. 212). Skr. drūh-ya-ti 'tries to hurt', Avest. part. drujint- 'lying, deceiving' O.Pers. adūrūjīya (read adurujya) 'lied'. Skr. pra-dišya-ti 'points to', Avest. dis-ye-iti 'shows, teaches'. Skr. š-yā-ti 'whets', Avest. s-ye-iti 'cuts', Vāō-.

Passive. Skr.  $kr-iy\acute{a}-t\bar{e}$  Avest.  $ker^e-ye-t\bar{e}$  'is made'. Skr.  $str-iy\acute{a}-t\bar{e}$  sternitur', Avest. strya-mna- i. e. striya-mna-. Skr.  $s\bar{i}r-ya-t\bar{e}$  is broken to pieces', O.Pers.  $asariyat\bar{a}$  'was killed', common ground-form  $*\bar{k}\bar{r}$ -ie-. Skr.  $bhr-iya-t\bar{e}$  Avest.  $bairyet\bar{e}$  'fertur', the Avestic form being for  $*bh\bar{r}$ -ie-. Skr.  $yam-y\acute{a}-t\bar{e}$  'is held or inclined'. Skr.  $sr\bar{u}-y\acute{a}-t\bar{e}$  'is heard', Avest. sru-ye- $t\bar{e}$  'is heard, heard of': cp. O.C.Sl. po-slu-ja, type A. Skr.  $n\bar{\iota}-y\acute{a}-t\bar{e}$  'is led, brought'. Skr.  $dr\dot{s}-y\acute{a}-t\bar{e}$  'is seen'. Skr.  $sas-y\acute{a}-t\bar{e}$  'is praised', O.Pers.  $1^{st}$  pl.  $pah-y\bar{u}-mahy$  'we are mentioned',  $\sqrt{kens}$ -. Skr.  $yuj-y\acute{a}-t\bar{e}$  'is yoked or harnessed'.  $uc-y\acute{a}-t\bar{e}$  'is spoken',  $\sqrt{ueq}$ -.  $bhid-y\acute{a}-t\bar{e}$  'is split'  $(bhid-ya-t\bar{e}$  'splits, goes in two').  $idh-y\acute{a}-t\bar{e}$  'is kindled',  $\sqrt{uidh}-ui-y\acute{a}-t\bar{e}}$  'is anointed' from  $-a\bar{n}j$ -. Avest. da-ye- $t\bar{e}$  'is set, placed' ground-form \*dhs-ie-tai,  $\sqrt{dh\bar{e}}$ -; Skr.  $dh\bar{\iota}-y\acute{a}-t\bar{e}$  like  $sth\bar{\iota}-ya-t\bar{e}$  (§ 707 p. 237) with the determinative  $-\bar{\iota}$ -.

§ 710. As a general rule, passive forms in Sanskrit accent -io-, and non-passive forms the root. But this difference in accent had originally nothing to do with active or passive. It depended upon the grade of the root, strong or weak as the case might be. A few forms which are not passive still accent the suffix, as \$\frac{s}{2}-y\frac{a}{2}-ti \ mr-iy\frac{a}{2}-t\bar{e}\$, which is a relic of the former state of things. The retraction of accent in \$dh\hat{a}-ya-ti\$ (earlier \*dh\hat{a}-i\bar{e}-ti) \$d\hat{a}-ya-t\bar{e}\$ (instead of \*d\hat{a}-i\bar{e}-tai, \ \ 707 \ p. 237) \$gfdh-ya-ti ric-ya-t\bar{e}\$ etc., which seems proved for proethnic Aryan by the evidence of Avest. \$pe\symbol{e}yeinti, \ \ 709 (I \ \ 260 \ pp. 212 f.), may be compared with the retraction in \$d\hat{s}-ya-ti gir-a-ti \$hi-nva-ti g\hat{a}-cha-ti\$ and the like (\ \ 516 \ p. 82).

The reason why the Middle of this particular present class became a Passive system in Aryan, is that the greater number of the verbs in it were intransitive; so in Greek a passive system grew out of an intransitive, I mean the passive agrist in  $-\eta\nu$ , § 589 pp. 129 f. But not all the forms of the group can be called passive. To  $mr-iy\dot{a}-t\bar{e}$  'dies', for instance, the term cannot be applied; nor can it to all agrists in  $-\eta\nu$ ,  $\dot{\epsilon}\varrho\varrho\dot{\nu}\eta$  'flowed' for example.

So constant a mark of the passive did an accentuated  $-y\acute{a}$ -become, that the intransitive  $p\acute{a}c-ya-t\bar{e}$   $r\acute{i}c-ya-t\bar{e}$  were turned into passives by accenting them  $pac-y\acute{a}-t\bar{e}$   $ric-y\acute{a}-t\bar{e}$ , and the language even tolerated  $smar-y\acute{a}-t\bar{e}$ , despite its strong root (cp.  $h\acute{a}r-ya-t\acute{i}$ ).

In Sanskrit, as in the two Iranian languages, passive forms occur with active personal endings, as well as middle; e. g. Skr. epic  $dr\dot{s}-ya\cdot ti$  'is seen' (Holtzmann, Gramm. aus dem MBh., 25 f.), Avest. xwar-ye-iti 'is eaten'. It is impossible to understand the forms till we know their accentuation.

Remark. It is sometimes said that the intr. active  $d\acute{a}hyati$  'burns up' as compared with the pass.  $dahy\acute{a}t\bar{e}$  'is burnt', since both practically mean the same thing, was the origin of the active forms with passive meaning,  $dq^*\dot{s}yati$  and the like. This we could only venture to say if we knew for certain that the word was accented  $dq^*\dot{s}yati$ .

§ 711. Armenian. Verbs in -im, which originally had middle or passive meaning: xausim 'loquor', erevim 'I appear'. This i-suffix was put to the same use as -yά- in Sanskrit, for making the passive conjugation. Each active verb in -em became middle or passive by the simple change of e to i. This often resulted in i being added to stems which had already some other present sign: e. g. arni-m 'I am made, I become' from ar-ne-m 'I make'. The endings -anim and -anem are used side by side, as in Greek -aνω beside -aνω; thus mer-ani-m 'I die' (aor. mer-ay) like Gr. μαραίνω 'I wear away, destroy'.

§ 712. Greek. Type A.  $\sigma \tau \epsilon l \nu \omega$ ,  $\tilde{\epsilon} \rho \delta \omega$ ,  $\lambda \epsilon v' \sigma \sigma \omega$ ,  $\tilde{\rho} \epsilon' \zeta \omega$  'I colour',  $\vartheta \epsilon' \sigma \sigma \sigma \omega$ ,  $\pi \epsilon' \sigma \sigma \omega$ ,  $\tilde{\alpha} \zeta' \sigma \mu \omega$ ,  $\pi \lambda \eta' \sigma \sigma \omega$ ,  $\chi \rho \omega' \zeta \omega$ , see § 706 pp. 233 f.,  $\vartheta \epsilon l \rho \omega$ ,  $\tau \epsilon l \omega$ , see § 707 p. 236. Att.  $\varphi \vartheta \epsilon l \rho \omega$  Arcad.  $\varphi \vartheta \eta' \rho \omega$  Lesb.  $\varphi \vartheta \epsilon \varrho \rho \omega$  'I destroy', pr. Gr. \* $\varphi \vartheta \epsilon \varrho - \iota \omega$  (akin to Skr.  $k \tilde{s} \dot{\alpha} r - a - t i$  'flows, dissolves'); parallel B-stem, Dor.  $\varphi \vartheta \alpha l \rho \omega$ . Ion.  $\tilde{\alpha} \epsilon i \ell \omega$  Lesb.  $\tilde{\alpha} \epsilon \varrho \rho \omega$  ( $\alpha v' \epsilon \varrho \rho \omega$ ?) 'I raise' for \* $\tilde{\alpha} - F \epsilon \varrho - \iota \omega$ ; parallel B-stem Hom. Att.  $\alpha l \varrho \omega$ .  $\pi \epsilon l \varrho \omega$  'I pierce'; cp. O.C.Sl.  $por j \epsilon t u'$  'cuts to pieces' (inf. prati) for \* $p \bar{r} - i e - ,$  type B.  $\sigma \tau \epsilon \lambda \lambda \omega$  'I arrange, equip' for \* $\sigma \tau \epsilon \lambda - \iota \omega$ .  $\sigma \kappa \epsilon \lambda \lambda \omega$  'I dry'.  $\kappa \tau \epsilon l \nu \omega$  Lesb.  $\kappa \tau \epsilon \nu \nu \omega$  'I slay'; parallel in type B, Lesb.  $\kappa \tau \alpha \iota \nu \omega$ .  $\chi \epsilon \iota \zeta \omega$  'caco' for \* $\chi \epsilon \epsilon \vartheta - \iota \omega$  (perf.  $\kappa \epsilon \iota \rho \omega \omega$ ).  $\vartheta \alpha \iota \omega$  'I kindle' for \* $\vartheta \alpha F - \iota \omega$  (perf.  $\vartheta \epsilon \delta \eta \epsilon$ ): cp. Skr. pass.  $\vartheta \epsilon \iota \omega$  'I burn' and  $\kappa \iota \omega$  'I weep'; see I § 131 pp. 118 f.

Remark.  $\pi \lambda \epsilon l \omega \chi \epsilon l \omega$  and the like, found in the text of Homer and Hesiod (Curtius, Verb I <sup>2</sup> 304 f.), can be explained  ${}^*\pi \lambda \epsilon \mathcal{F}_{-k}\omega$  (Lith.  $pl\acute{a}\acute{u}$ -ju) and so forth. But there is practically no objection to regarding them, as many scholars do, as corruptions for Aeolic forms of Class II,  $\pi \lambda \epsilon \dot{\nu} \omega = {}^*\pi \lambda \epsilon \mathcal{F}_{-\omega}$ .

§ 713. Τγρε B. χαίρω, σπαίρω, σκάλλω, μαίνομαι, βαίνω, θνίω, τίω, φθίω, \*ξάζω Τ do', φράζω, λίσσωμεν, σχίζω, πεφυζότες, κασσύω, πτύω, δέω, δαίω Τ divide', see §§ 706 f. pp. 233 ff. φθαίρω, αἴρω, κταίνω, see § 712. βάλλω Τ throw' for \*βαλ-μω \*gl-iō,  $\sqrt{gel}$ -. καίνω Τ kill' probably for \*καμ-μω, compare καμόντες 'the dead' (then εκανον got v from the present): Skr.

 $\dot{s}\dot{a}m$ -ya-ti 'becomes still, is extinguisht' for \* $k\bar{m}$ -ie-ti (zaív $\omega$ differently explained by Kretschmer, Kuhn's Zeitschr. xxxI 428, 432; Fick, 14 43). πτύρω 'I make shy', cp. Lat. con--ster-nā-re, σύρω 'I drag' cp. σαίρω 'I sweep' (with ri), σκύλλω 'I tear to pieces, towse, worry' cp. Lith. skelù (\*skel-jù) 'I split'; the v of this form needs explanation. δίω 'I beseech, fly, fear' doubtless for  $*\delta_{\iota-\iota}\omega$ : Skr.  $d\vec{\imath}$ -ya-ti 'flies'; of type A, Lett. dei-ju 'I dance' (inf. di-t); the forms δίετε δίεται and such like were associated with "ere "era", and this caused the formation of εν-δίεσαν δίεμαι and others by analogy of the parts of εημι.  $\varphi \rho \alpha' \sigma \sigma \omega$  'I enclose' for \* $\varphi \rho \alpha \varkappa - \iota \omega$ : Lat.  $farc - i\bar{\sigma}$  with  $ar = \bar{r}$ , connected with frequ-ens. μάσσω 'I press, knead' ground-form \*mpq-io \( \sqrt{menq-}, \) cp. the forms, belonging to Class XXXII, O.C.Sl. męčą (2<sup>nd</sup> sing. męči-ši) 'I soften' (inf. męči-ti) Lith. minkau 'I knead' inf. minky-ti). σκάζω 'I limp' ground-form \*sqrag-iō, akin to Skr. khánj-a-ti 'limps'. νίζω 'I wash' groundform \*nig-įō: Skr. pass. nij-ya-tē. στίζω 'I prick, pierce' for \*στιγ-ιω: O.H.G. sticch(i)u 'I stitch' (§ 722). λίσσομαι 'I pray' for  $\lambda \iota \tau - \iota \sigma - \mu \alpha \iota$ , cp.  $\lambda \iota \tau - \dot{\epsilon} - \sigma \vartheta \alpha \iota$ , Class II B.  $\varkappa \iota \iota' \zeta \omega$  'I scratch, prick, stir up' for \*κνιδ-μω, beside O.Icel. hnīt 'I knock against, hurt with a knock Class II A. δρύσσω 'I dig' for \*δρυν-ζω: Lith. rauk-iù 'I wrinkle', (A). απο-μύττω 'I blow my nose' for \*μνκ-ιω: Skr. pass. muc-yá-tē 'is set free'; Lith. mauk-iù 'I scratch slightly, touch softly', type A.

The theory that  $\delta\zeta\omega$  'I swell', for  $*\delta\delta$ - $\iota\omega$ , does not belong to type A, is doubtful, in spite of an appeal to Lith.  $\delta'd$ - $\delta iu$  'I smell'; it is also uncertain to which section belongs  $\delta\sigma\sigma\sigma\mu\omega$  'I see', for  $*\sigma q$ - $\iota\sigma$ - (cp. I § 319 p. 258). It is risky to connect  $\delta\sigma\sigma\sigma\mu\omega$  with Goth. ah- $i\sigma$  'I believe, surmise'.

Forms with Idg. -iio.  $t\delta$ - $t\omega$  'I sweat' is usually connected directly with Skr. svid-ya-ti O.H.G. swizzu. If that is so,  $\xi\xi$ - $t\delta\bar{\iota}\sigma \omega$  is due to the analogy of denominatives in -i- $i\bar{\iota}o$ - and  $t\delta\bar{\iota}\omega$  (Aristoph.) is a reformate like  $sovt\omega$  (§ 775).  $\dot{\epsilon}\sigma \vartheta$ - $t\omega$  beside  $\dot{\epsilon}\sigma \vartheta \omega$  'esse' for \*ed +  $dh\bar{o}$ , cp. § 694 p. 223, § 765. A form \* $\varphi \iota \omega$  = Idg. \* $bh \iota \omega$ - $i\bar{\iota}o$  follows from  $\varphi \iota$ - $\iota \omega$  'sprout, shoot, scion'  $\varphi \iota$ - $\iota \omega$ - $\varepsilon$  'begetter', which must have been derived from it

as though the verbal stem were  $\varphi\iota$ - (§ 707 p. 235); a similar origin must be supposed for Lat.  $f\bar{\imath}$ -tu-m cup $\bar{\imath}$ -tu-s and others (§§ 715 ff.).

§ 714. The identity of ending in  $\sigma\varphi\dot{\alpha}\xi\omega$   $\check{s}\sigma\varphi\alpha\xi\alpha$  ( $\sigma\varphi\alpha\gamma$ -'slay') and forms like  $\varphi\varphi\dot{\alpha}\xi\omega$   $\check{s}\varphi\varphi\alpha\xi\alpha$  ( $\varphi\varphi\alpha\kappa$ - 'enclose') produced  $\sigma\varphi\dot{\alpha}\tau\tau\omega$  as a bye-form to  $\sigma\varphi\dot{\alpha}\zeta\omega$ , by analogy with  $\varphi\varphi\dot{\alpha}\tau\tau\omega$ . Vice versa, we have  $\beta\varphi\dot{\alpha}\zeta\omega$  in late Greek instead of  $\beta\varphi\dot{\alpha}\tau\tau\omega$  ( $\beta\varphi\alpha\tau$ - 'seethe. bluster, roar') by analogy of such words as  $\varphi\varphi\dot{\alpha}\zeta\omega$  ( $\varphi\varphi\alpha\delta$ -'give to understand'), because almost all the forms of verbs in  $\tau$ -,  $\tau$ -, and  $\tau$ - are alike except in the present stem,  $\check{s}\beta\varphi\alpha\sigma(\sigma)\alpha$  like  $\check{s}\varphi\varphi\alpha\sigma(\sigma)\alpha$ , and so forth. See Mucke, De Consonarum in Greca lingua geminatione, I (1883) pp. 17 ff.; Osthoff, Perfect 296 ff. and 322 f.

As regards the relation of μαίνομαι to εμάνην μεμάνημαι μεμανηώς μανήσομαι, or of χαίρω to εχάρην κεχαρηώς κεχαρήσω, see § 708 pp. 238 ff.

§ 715. Italic. In Latin, post-consonantal -iō became -iō, just as \*mediu-s became mediu-s (I § 135 p. 122); thus morior for \*moriō(r) \*mṛiō. In Oscan, -iio- is seen in heriiad 'velit', and other words.

Lat. in-ciēns for \*-cu-ie- (as sociu-s for \*socu-io-s, vol. I loc. cit.) beside qu-e $\bar{o} = \text{Skr.} \dot{s}v$ -áyāmi (§ 790). So also  $farci\bar{o}$  for \*farcu- $i\bar{o}$  beside frequ-ēns.

Why we have now -i- and now -ī-, as in cap-i-s farc-ī-s, no rule has so far been discovered to show. Often enough the same verb has both quantities, as morī-mur and morī-mur; so that we find in Latin both the peculiarities which we saw divided between Baltic and Slavonic (Lith. smìrdi-me O.C.Sl. smrĭdi-mũ). In Umbrian and Oscan all the recorded forms have -ī- — doubtless an accident: Umbr. heris hereitu heritu beside heriest 'volet' cp. Skr. hár-ya-ti, an-ovihimu 'induimino' (ihi ==  $\bar{\imath}$ ) beside Lith. aviù 'I wear something on my feet' (1st pl.  $\tilde{a}vi$ -me).

As the present stems of which Lat. farciō is one were inflected just like denominatives in -i-jo- (§ 777), it cannot be

wondered at that the analogy of these denominatives caused non-present forms with  $-\bar{\imath}$  to be coined, such as  $farc\bar{\imath}$ -tus beside fartu-s from  $farci\bar{o}$ ; cp. § 713 on Gr.  $\xi\xi$ - $t\delta\bar{\imath}\sigma\alpha$ , and  $\varphi\bar{\imath}$ - $\tau v$ .

In the lists which follow below, i or  $\bar{\imath}$  is added in brackets to show the quantity of the weak-grade vowel in the  $2^{\rm nd}$  singular etc.; and it is stated whether  $\bar{\imath}$  is ever found outside the present stem.

§ 716. Type A. Lat.  $ap-(v)eri\bar{o}$   $op-(v)eri\bar{o}$  ( $\bar{\imath}$ ,  $aper-u\bar{\imath}$  aper-tu-s  $oper\bar{\imath}-mentu-m$ ): Lith.  $u\bar{\imath}-veriu$ , see § 706 p. 233.  $fer-i\bar{o}$  ( $\bar{\imath}$ ,  $feri\bar{\imath}$   $feri-t\bar{u}ru-s$ ): Lith.  $bar-i\bar{u}$  'I scold' O.C.Sl.  $bor-j\bar{a}$  'I fight' and probably O.Icel. ber 'I strike' (inf.  $berj\bar{a}$ ) from the ground-form \* $bh\bar{\jmath}-i\bar{o}$ , type B. Ital.  $her-i\bar{o}-her-i\bar{\jmath}o-her-i\bar{\jmath}o-her-i\bar{\imath}o$  in Umbr. heris heriest hereitu Osc. heriiad, see § 706 p. 233, § 715. Lat.  $spec-i\bar{o}$  (i, spec-tu-s): Skr.  $pa\dot{s}-ya-ti$ , see § 706 p. 234. Umbr. an-ovihimu 'induimino': Lith.  $av-i\bar{u}$  'I wear something on my feet (1st pl.  $\bar{a}v-i-me$  inf.  $av\dot{e}-ti$ ) and Lett. au-ju 'I put something on my feet' (1st pl. au-ja-m inf. au-t) O.C.Sl. (ob-)u-ja, same meaning (1st pl.  $-u-je-m\bar{u}$  inf. -u-ti). Lat.  $pav-i\bar{o}$  ( $\bar{\imath}$ ,  $pav\bar{\imath}-v\bar{\imath}$   $pav\bar{\imath}-tus$ ): Lith.  $pi\dot{a}u-ju$  'I cut, mow, slay' ( $pi\bar{u}-ti-s$  'slice, harvest').  $haur-i\bar{o}$  ( $\bar{\imath}$ , haus-tu-s  $haur\bar{\imath}-tu-s$ ).  $jac-i\bar{o}$  (i, jac-tu-s).  $cr\bar{o}c-i\bar{o}$  ( $\bar{\imath}$ , subst.  $cr\bar{o}c\bar{\imath}-tu-s$ ), see § 706 p. 234.

To the same group must belong Lat.  $n\bar{o}l\bar{\imath}$   $n\bar{o}l\bar{\imath}te$ , from a lost verb \*veli $\bar{o}$ ; cp. O.C.Sl.  $velj\bar{a}$   $vel\bar{e}$ -ti 'to command', O.H.G. 1<sup>st</sup> sing. willu 'I wish' Goth. viljan viljands, see § 505 p. 69.

 $st\bar{o}$  (Idg. \* $st\bar{a}$ - $i\bar{o}$ ) came under the influence of presents like in- $tr\bar{o}$  for \*-tr- $\bar{a}$ - $i\bar{o}$ ; hence  $st\bar{a}s$  etc. See § 584 Rem. p. 126. A similar explanation may be given of for  $f\bar{a}tur$ , see § 495 p. 56 and § 706 p. 234.

§ 717. Type B. Lat. mor-ior (i or  $\bar{\imath}$ , mor-tuo-s mori-tūru-s), Avest. mer<sup>e</sup>-ye-iti, see § 707 p. 235. or-ior (i or  $\bar{\imath}$ , or-tu-s ori-tūrus), ground-form \* $\gamma$ -io-, akin to Skr.  $\gamma$ -nō-mi § 639 p. 177. par-iō (i, peper $\bar{\imath}$  par-tu-s pari-tūru-s, parīret) for \* $p\bar{\gamma}$ -iō (I § 306 p. 242), re-periō 'I bring to light again, find'

(ĩ, -pertu-s): Lith. per-iù (1st pl. per-i-me) type A. fīō fī-s fiere fierī (fī-tu-m, cp. Gr.  $\varphi$ ī- $\tau v$  § 713 p. 247): O.Ir. b-iu etc., Idg. \*bhy- $ij\bar{o}$ , see § 707 p. 235; f- $\bar{\imath}\bar{o}$  f- $\bar{\imath}unt$  (instead of \*f- $i\bar{o}$ \*f-iunt) took  $\bar{i}$  from  $f\bar{i}s$  etc., a peculiarity which is explained by the unique character of this verb - it is the only one in which the suffix -io carried the chief accent; Osc. filet 'fiunt' with the ending -ent instead of -ont (p. 231 footnote). suf-fiō  $(\bar{\imath}, -f\bar{\imath}-v\bar{\imath} -f\bar{\imath}-tu-s)$  ground-form \*-dhu-i $\bar{\imath}\bar{o}$ : cp. Skr.  $dh\bar{u}-y\acute{a}-t\bar{e}$  etc., see § 707 p. 236. in-ciēns for \*-cu-ie-, cp. Gr. έγ-κύω 'I am pregnant' and Lat. qu-eō (§ 715 p. 248); probably -ciēns: -κύω =  $f\bar{\imath}\bar{o}$  (pr. Ital.\*fu- $i\bar{\imath}\bar{o}$ ):  $qv\omega$  Lesb.  $qv\omega$ .  $cli\bar{e}ns$ , from  $\sqrt{klei}$ -'-clinare' (Leo Meyer, Bezz. Beitr. v 182 f.), probably for \*cli-ie-: cp. Skr. pass. śrī-ya-tē. grad-ior (i, gressu-s; aggredior with i or \(\bar{i}\)): Skr. grdh-ya-ti, see \(\Sigma\) 707 p. 236. lac-i\(\bar{o}\) (i, -lectu-s) for \*lk-, beside O.H.G. locchon 'to entice' (Osthoff, M. U. v p. III). farc-iō (ī, fartu-s farcī-tu-s). cup-iō (i, cuperet cupīret cupī-vī cupī-tu-s): Skr. kup-ya-ti etc., see § 707 p. 236. fug-iō (i, fūgī fugi-tūru-s): Gr. πεφυζότες, see § 707 p. 236. in-quiō in-quiunt (i) for \*sq-ijō, cp. in--qu-a-m (Class X § 583 p. 124) Gr.  $\ell\nu$ 1- $\sigma\pi$ - $\ell$  'said',  $\sqrt{seq}$ -.

suō (sū-tu-s) and spuō (spū-tu-s) probably for \*sū-( $\underline{i}$ )ō \*spū-( $\underline{i}$ )ō as neō for \*nē-( $\underline{i}$ )ō: Gr. κασσύω πτύω etc., see § 707 p. 236.

§ 718. It is often doubtful to which type, (A) or (B), a word belongs.  $ven-i\bar{o}$  ( $\bar{\imath}$ ,  $v\bar{e}n\bar{\imath}$  in-ventu-s), beside Skr. -gam-yá-tē etc., see § 707 p. 235.  $cap-i\bar{o}$  (i,  $c\bar{e}p\bar{\imath}$  cap-tu-s): Goth. haf-ja O.H.G. heff(i)u 'I lift up'.  $sap-i\bar{o}$  (i,  $sap-u\bar{\imath}$   $sap\bar{\imath}-v\bar{\imath}$ ): O.H.G. int-seff(i)u 'I mark'.  $ap-i\bar{o}$   $coepi\bar{o}$  (i, aptu-s); cp. § 600 p. 144 on Skr.  $\bar{a}p-n\bar{o}-mi$ .  $sal-i\bar{o}$  ( $\bar{\imath}$ ,  $sal-u\bar{\imath}$   $sali\bar{\imath}$ ): Gr.  $\bar{a}\lambda\lambda o\mu au$  'I leap' for  $a\lambda-\mu o$ -.  $fod-i\bar{o}$  (i, fossu-s,  $fod\bar{\imath}-r\bar{\imath}$ ).

§ 719. Keltic. It is difficult to understand the Keltic inflexions, because the Third Conjugation in Irish has absorbed all Denominatives in  $-i\bar{o}$   $-e-i\bar{o}$  and  $-i-i\bar{o}$ , and all Causals in  $-ei\bar{o}$ . General remarks on the io-conjugations in § 702 pp. 229 f.

An account of the confusion in Irish between the First and Third Conjugations is given in § 520 p. 84.

Type A. O.Ir.  $-l\bar{e}ciu$  'I leave, let' for  $*leiku-i\bar{o}$  (I § 436 Rem. p. 325): Skr.  $ric-ya-t\bar{e}$  etc., type B, see § 707 p. 236. midiur 'I give judgement or opinion', beside Gr.  $\mu\acute{\epsilon}\deltao\mu\alpha\iota$  'I meditate upon'. -ciu 'I see' for  $*ces-i\bar{o}$ .

-tau - $t\bar{o}$  'I am' for \* $st\bar{a}$ - $i\bar{o}$ : Avest.  $\bar{a}$ - $st\bar{a}$ - $y\bar{a}$  etc., see § 706 p. 234. For the inflexion of this present stem see § 584 Rem. p. 126.

Type B. O.Ir. do muiniur 'I think, believe' for \*man-io-Idg. \*mn-io-: Gr.  $\mu$ aivo $\mu$ ai etc., see § 707 p. 235. -gainedar 'is born' from  $\sqrt{\hat{g}}$ en-: ep. Gr.  $\gamma$ eivo $\mu$ ai, type A. biu 'I am' for \*bhu-iiō: Lat.  $f\bar{\imath}$ ō etc., see § 707 p. 235; the stem \*bhu-ī-must be contained in Mid.Cymr. imper.  $3^{\rm rd}$  sing. bit  $3^{\rm rd}$  pl. bint (but Mod.Cymr. bydd- for \*bij-), while -iie- -iio- is the suffix in Ir.  $3^{\rm rd}$  sing. biid bīth bīd  $3^{\rm rd}$  pl. biit bīt and  $1^{\rm st}$  pl. -biam  $3^{\rm rd}$  pl. -biat. -gniu 'I make 'for \* $\hat{g}$ n-iiō  $\sqrt{\hat{g}}$ en- 'gignere', goes like biu.

Belonging to either (A) or (B): Mid.Ir. airim 'I plough': Goth. ar-ja Lith. ar-iù.

§ 720. Germanic. On the *io*-suffix here, see § 702 p. 230. There was a confusion between some persons of the present in this class and those of Denominatives in  $-e-i\bar{o}$  or  $-i-i\bar{o}$ , and Causals in  $-ei\bar{o}$ . This caused a general commingling of the forms, reaching to non-present stems; the course of which it is very difficult to trace.

Verner's Law (I § 529 pp. 384 ff.) proves that some verbs were accented on the root in proethnic Germanic: Goth. haf-ja O.H.G. heff(i)u Goth.  $ska\bar{p}$ -ja (pret.  $sk\bar{o}\bar{p}$ ), beside O.H.G. int-seff(i)u. See § 705 p. 233. In  $ska\bar{p}$ -ja the accent seems to have been shifted, as in Skr. jj-ya-ti etc. (§ 710 p. 245); for Gr.  $a^2$ -ong $\vartheta i$ 's 'scatheless', which must be connected with  $ska\bar{p}$ -ja (pret.  $sk\bar{o}\bar{p}$ ), points to a  $\bigvee sk\bar{a}th$ -. That Germanic inherited forms with an accented suffix, type B (cp. mr- $iy\acute{a}$ - $t\bar{e}$  tud- $y\acute{a}$ - $t\bar{e}$ ) seems to follow from O.Sax. thiggian A.S. diczean

'to receive, assume' from  $\sqrt{teq}$  (Lith. t 
eq k - ti 'to reach') and A.S. friczean 'to experience' from  $\sqrt{prek}$  (Lat. precari).

On present stems with -io- as bye-forms of the ē-present, such as O.Sax. hebbiu beside O.H.G. habē-m (Goth. haba habái-s), see § 708 pp. 238 ff.

Type A. O.H.G. wirk(i)u 'I work' (pret. worhtu worahta): Gr.  $\tilde{\epsilon} \rho \delta \omega$ , see § 706 p. 234; parallel B-stems O.H.G. wurk(i)u Goth. vaúrkja. O.H.G. liggh(i)u 'I lie' (pret. lag), O.Icel. ligg (inf. liggja) from V legh-; Goth. liga instead of \*liqja follows liqis etc., as in later O.H.G. we get liqu instead of liqq(i)u following liqus etc. (§ 702 p. 230). O.H.G. sizzu 'I sit' (pret. sag), O.Icel. sit (inf. sitja): compare probably  $\pi\iota\dot{\epsilon}\zeta\omega$  'I press' (lit. 'I sit upon') for  $*\pi\iota-\sigma\epsilon\delta-\iota\omega$  (cp. Skr. pass. pīdyatē for \*pi-zd-je-), perhaps also εζομαι (see § 563 p. 111); Goth. sita like liga. Goth. ga-hvatja 'I incite' (part. hvassa 'whetted, sharp') O.H.G. wezzu 'I whet, sharpen' (pret. wazta), beside Skr. cud- (pres. coda-ti) 'to inflame, incite'. Goth. hlah-ja 'I laugh' (prep. hlōh). Goth. saia O.H.G.  $s\bar{a}u$  'I sow', pr. Germ.  $*s\bar{e}$ - $i\bar{o}$ : Lith.  $s\acute{e}$ -ju, see § 706 p. 234. O.H.G. tāu 'I suckle' ground-form \*dhē-jō beside Goth. da-ddja (B), see § 707 p. 237.

§ 722. Type B. O.Icel. ber 'I strike' (inf. berja, pret. barđa) pr. Germ. \*bar- $i\bar{o}$  ground-form \*bh $\bar{q}$ - $i\bar{o}$ : Lith. bar- $i\dot{u}$ , see § 716 p. 249. Goth. hul-ja (pret. hulida) O.H.G. hull(i)u (pret. hulta) 'I cover, hide' ground-form \*k $\bar{l}$ - $i\bar{o}$ , beside O.H.G. hilu 'I conceal'. O.Icel. symja 'to swim' beside svima, pret. svam, pr. Germ. \*s(u)um- $i\alpha$ -. A.S. beó 'I am' ground-form \*bh(u)- $i\bar{i}\bar{o}$ , 2nd and 3rd sing. bis biđ 3rd pl. beóđ (part. beónde), O.H.G. 2nd sing. bis bist (for its 1st sing. we have bim, see § 507 pp. 73 f.): Lat.  $f\bar{i}\bar{o}$  etc., see § 707 p. 235. O.Icel.  $d\bar{y}$  'I shake' (inf.  $d\bar{y}$ -ja, pret.  $d\bar{u}$ -da): Skr.  $dh\bar{u}$ - $y\dot{a}$ - $t\bar{e}$  etc., see § 707 p. 236. O.Icel.  $l\bar{y}$  'I destroy, shatter, crush' (inf.  $l\bar{y}$ -ja, pret.  $l\bar{u}$ -da): Gr.  $\lambda \dot{v}\omega$  (cp. § 527 Rem. 2 pp. 90 f.). Goth.  $va\dot{u}rk$ -ja (pret.  $va\dot{u}rhta$ ) O.H.G. wurk(i)u (pret. worhta) 'I work' beside O.H.G. wirk(i)u, type A: Avest.  $ver^e z$ -ve-iti etc., see § 707 p. 236,

§ 721. Goth. paurseip mik 'I thirst', lit. 'it thirsts me' (pret. paúrsida): Skr. tŕš-ya-ti 'thirsts'. O.H.G. gurt-(i)u 'I gird' (pret. gurta), beside Goth. gairda Class II A. O.H.G. wurg(i)u 'I throttle' (pret. wurcta): Lett. wir/chu 'I jerk' (inf. wirst): parallel we have Lett. werschu (we'rschu and wérschu) 'I turn, twist' Lith. verž-iù 'I tie', type A. Goth. bugk-ja 'I think' (pret.  $p\bar{u}h$ -ta); parallel pagk-ja, which may answer to Lat. tongeo, see § 894. Goth. bug-ja 'I buy' (pret. baúhta). Goth. bidja O.H.G. bitt(i)u 'I beg, pray', ground-form \*bhidh-iō  $\sqrt{bheidh}$ , whose pret. is bab bat following words like sat (I § 67 Rem. 3 p. 57); Goth. us-bida O.H.G. bitu a re-formate like liga, see § 702 p. 230. O.H.G. int-rihhit 'revelat', later -rīhhit (part. int-rigan). O.H.G. sticch(i)u 'I embroider, stitch' (part. ki-stickit): Gr.  $\sigma \tau i \zeta \omega$ , see § 713 p. 247. O.H.G. swizzu 'I sweat' (pret. swizta): Skr. svid-ya-ti 'sweats': the suffix -ijo- is perhaps seen in Gr.  $t\delta$ -i $\omega$  (§ 713 p. 247). Goth. skab-ja 'I hurt' (pret.  $sk\bar{o}b$ ), cp. Gr.  $\vec{a}-\sigma \times \eta \vartheta \eta \varsigma$  'unscathed', § 720 p. 251. O.H.G. ita-ruch(i)u 'rumino': Lith. rúg-iu 'I gulp, belch'. O.H.G. scutt(i)u 'I shake, shatter' (pret. scutta): ep. Lat. quat-iō -cutiō.

Goth. siu-ja 'I sew': Gr.  $\varkappa \alpha \sigma \sigma t \omega$  etc., O.Icel.  $sp\bar{y}$  'I spew' (pret.  $spj\bar{o}$  and  $sp\bar{u}\bar{d}a$ ): Gr.  $\pi \tau t \omega$  etc. See § 707 p. 236. Goth. da-ddja 'I give suck': Skr.  $dh \alpha$ -ya-ti etc., see § 707 p. 237.

§ 723. We are often in doubt whether forms belong to (A) or (B). Goth. haf-ja O.H.G. heff(i)u 'I lift up' (pret. hōf, huob): Lat. cap-iō. O.H.G. int-seff(i)u 'I mark' (pret. -suab): Lat. sap-iō. Goth. ar-ja O.H.G. er-iu 'I plough' (pret. O.H.G. iar ier): Mid.Ir. airim Lith. ar-iù O.C.Sl. or-ja 'I plough'. O.H.G. swer-iu 'I swear' (pret. swuor).

In quite a large number of the above named verbs with weak preterites it is doubtful whether the original ending of the present ought not rather to be assumed as  $-\dot{e}io$  (Class XXXII). Thus, for example, Goth. hulja may be derived from  $*kll-\dot{e}i\bar{o}$ , with the same weak root-syllable as is found in Skr.  $tur\acute{a}ya-ti$  and elsewhere (§ 790).

§ 724. Balto-Slavonic. We first deal with forms of which the type is seen in Lith. lež-iù lež-ia-me O.C.Sl. bor-ja bor-je-mŭ. Next, the type Lith. smìrd-žiù smìrd-i-me O.C.Sl. smržda smržd-i-mž (see § 702 pp. 230 f.). These are combined with a different formation in the infinitive stem, for which reason we add the infinitive in each case.

§ 725. 1. Forms with -io- -ie- running right though.

Type A. Lith. ùž-veriu 'I close, shut' (-ver-ti): Lat. op--(v)eriō, see § 706 p. 233. ger-iù 'I drink' (gér-ti). kelù (\*kel-iù) 'I lift, raise' (kél-ti). želù (\*žel-iù) 'I grow green' (žėl-ti). O.C.Sl. mel-ją 'I grind' (mlěti for \*mel-tī). 'I stretch out, spread' (stīla-ti). sten-ja 'I sigh' (stena-ti): Gr. στείνω, see § 706 p. 233. vem-iù 'I vomit' (vém-ti).

Lith. płáu-ju 'I wash, lave, rinse' (płáu-ti), O.C.Sl. plu-ja 'I swim, sail on board ship' (plu-ti, parallel plova plu-ti), groundform \*pleu- $i\bar{o}$ . Lett.  $\acute{a}u$ -ju ( $\acute{a}u$ -t) O.C.Sl. (ob-)u-ja (-u-ti) 'put on covering to the feet' (Lith. aunù instead of older \*au-ju), ground-form \*eu-iō, cp. Lith. intrans. av-iù av-ĕ-ti § 727. Lith. száu-ja 'I shoot' (száu-ti), O.C.Sl. su-ją 'I throw, sling' (sov-a-ti), ground-form \*s $keu-i\bar{o}$ .

Lett. léi-ju (li-t) Lith. lë-ju (lë-ti) 'I pour' for \*lei-jō, compare perhaps with O.C.Sl. li-ją 'I pour'. Lett. sléi-ju (sli-t) Lith. szlë-jù (szlë-ti) 'I lean against, support', cp. Lith. szlei-vi-s szlei--va-s 'bandy-legged',  $\sqrt{\hat{k}lei}$ -. Lett. sméi-ju 'I laugh' (smi-t), √ smei-. Lith. lë-ju szlë-jù, possibly for the regular \*lei-ju \*szlei-ju by analogy of lë-ti lë-tu etc., cp. I § 68 Rem. 2 p. 61.1) O.C.Sl. li-jq may be placed under Type B (§ 726) along with Lith. ly-jù 'I rain' pa-szly-ju 'stumble'. Parallel are lija and lėja, also smėja se 'I laugh' zėja 'hio'. These latter forms, analysed as lėj-ą smėj-ą zėj-ą, belong with sėk-ą I hew, cut' to Class II A (cp. Gr. μήδομαι etc. § 514 p. 81), and

<sup>1)</sup> Unsatisfactory as this hypothesis seems, I think it better than the one set forth by Hirt in Idg. Forsch. 1 33 ff.

we must connect with them the Lettic preterites  $l\acute{e}j$ -u  $sn\acute{e}j$ -u  $sl\acute{e}j$ -u.

Lith. vercziù 'I turn' (vers-ti). verk-iù 'I cry' (verk-ti). szelp-iù 'I help, support' (szelp-ti). sreb-iù 'I sip, lap' srep-ti; also sreb-iù (by levelling with srebiaŭ srepti) and srob-iù (srop-ti). O.C.Sl. čreplja 'I make, create' for \*kerp-ja (črepa-ti). pleža 'I erawl' for \*pelz-ja (pleza-ti).

Lith. blend-žiŭ-s 'I grow dark', said of the sun (pret. blendžiaŭ-s).

Lith. láuk-iu 'I wait for, expect' (láuk-ti): Gr. λεύσσω, see § 706 p. 234. rauk-iù 'I wrinkle' raŭk-ti √reuq-, cp. Gr. ὀούσσω (B) § 713 p. 247. mauk-iù 'I rub smooth' (maŭk-ti) √ meuq-, cp. Skr. muc-yá-tē etc., see § 713 p. 247. praus-iù 'I wash my face' (praŭs-ti), cp. Skr. vi-prušya-ti 'spurts out, trickles'.

Lith.  $l\ddot{e}z-iù$  ( $l\ddot{e}sz-ti$ ) O.C.Sl.  $l\dot{z}a$  (liza-ti) 'I lick', ground-form \* $le\dot{i}gh-\dot{i}o$ , cp. Skr. par.  $lih-ya-t\bar{e}$ , (B). Lith.  $p\ddot{e}sz-iu$  ( $p\ddot{e}sz-ti$ ) O.C.Sl.  $pi\dot{s}a$  ( $p\ddot{s}sa-ti$  pisa-ti) 'I write', ground-form \* $pe\dot{i}k-\dot{i}o$ , cp. Skr.  $pi\dot{s}-y\dot{a}-t\bar{e}$  'is made ready, fitted up', (B). Lith.  $z\ddot{e}d-z\ddot{e}u$  'I form, shape' ( $z\ddot{e}sti$ ), O.C.Sl.  $zi\dot{z}da$  'I form, build' ( $z\ddot{u}da-ti$ ).

Lett. ded/u 'I burn' trans. for \* $deg-\underline{i}u$  (deg-t): Skr. dah-ya-ti, pass.  $dah-ya-t\overline{e}$ ,  $\sqrt{dhegh}$ . O.C.Sl.  $\check{c}e\check{s}a$  'I strip off, comb' ( $\check{c}esa-ti$ ),  $\sqrt{q}es$ -.

Lith.  $r\check{e}\check{z}$ -iu 'I cut, tear'  $(r\check{e}sz$ -ti), O.C.Sl.  $r\check{e}\check{z}\check{a}$  'I cut'  $(r\check{e}za$ -ti). Lith.  $j\dot{e}g$ - $i\grave{u}$  'I have power, I can'  $(j\check{e}k$ -ti), beside Gr.  $\eta\check{\beta}\eta$ . Lith.  $\mathring{u}'d$ - $\check{z}iu$  'I smell'  $(\mathring{u}'sti)$ , cp. Gr.  $\check{o}\zeta\omega$  § 713 p. 247. O.C.Sl.  $pla\check{c}a$  'I cry, lament' (plaka-ti): Gr.  $\pi\lambda\dot{\eta}\sigma\sigma\omega$ , see § 706 p. 234. Lith. krok- $i\grave{u}$  krog- $i\grave{u}$  'I give the death rattle, grunt'  $(kr\check{o}k$ -ti): Gr.  $z\varrho\omega\zeta\omega$  etc., see § 706 p. 234.

Lith.  $sp\ddot{e}-ju$  'I have leisure or space' ( $sp\acute{e}-ti$ ), O.C.Sl.  $sp\acute{e}-ja$  'I succeed' ( $sp\acute{e}-ti$ ): Skr.  $sph\bar{a}-ya-t\bar{e}$ , see § 706 p. 234. Lith.  $s\acute{e}-ju$  ( $s\acute{e}-ti$ ) O.C.Sl.  $s\acute{e}-ja$  ( $s\acute{e}-ti$ ) 'I sow': Goth. saia, see § 706 p. 234. Lett.  $d\acute{e}-ju$  'I lay eggs' ( $d\acute{e}-t$ ), O.C.Sl.  $d\acute{e}-ja$  'I lay,

<sup>1)</sup> Zubatý's derivation of zėją from \*zįā-ją (Lith. žió-ju) is wild in the extreme (Archiv slav. Phil. XIII 623).

set, place' (dě-ti): Skr. 3rd sing. mid. a-dhā-ya-ta 'he placed for himself'. Lith. stó-jù-s 'I place myself, take my stand' (stó-ti-s), O.C.Sl. sta-ja 'I place myself' (inf. sta-ja-ti): Avest.  $\bar{a}$ -st $\bar{a}$ -y $\bar{a}$  etc., see § 706 p. 234.

Lith. spiáu-ju (spiáu-ti) O.C.Sl. plju-ja (pljīva-ti) I vomiť, cp. Gr. πτέω etc., (B); see § 707 p. 236. O.C.Sl. žu-ją 'I chew', a bye-form of žīv-a, Class II B, § 534 p. 95.

§ 726. Type B. Lith. dir-iù 'I flay' (dir-ti): Skr. dīr- $-y\acute{a}$ - $t\bar{e}$ , see § 707 p. 235. spir- $i\grave{u}$  'I kick' (spìr-ti): Gr.  $\sigma\pi\alpha i\rho\omega$ , see ibid. skir-iù 'I part, cut' (skìr-ti) \sqrt{sqer-. gir-iù 'I praise'} (qìr-ti), beside ger-as 'good'. Lith. bar-iù 'I scold' beside bar-ù (bár-ti), O.C.Sl. bor-ja 'I fight' (brati for \*bor-tī), ground-form \*bhr-iō: O.Icel. ber 'I strike' (inf. berja) for pr. Germ. \*bar-iō, which probably comes from a form \* $bh\bar{r}$ - $i\bar{o}$ ; on the other hand, we have Lat. fer-iō following type A (§ 716 p. 249). Lith. skilù (\*skil-iù) 'I strike fire, kindle' (skìl-ti): Gr. σκάλλω, see § 707 p. 235. Lith. kalù (\*kal-iù) 'I strike, forge' beside kal-ù (kál-ti), O.C.Sl. kol-jq 'I slaughter' (klati for  $*kol-t\bar{\imath}$ ), ground-form  $*q\bar{l}-\dot{\imath}\bar{o}$ .

O.C.Sl. žin-jq 'I cut off, reap' (ie-ti): Skr. han- $y\acute{a}$ - $t\bar{e}$ , see § 707 p. 235.

O.C.Sl. ry-ją 'I grub up, dig' (ry-ti) beside rŭv-ą 'I tear out', Class II B, O.H.G. riu-ti 'land made fruitful by digging'; Lith.  $r\acute{a}u$ -ju 'I pull out of the earth, pull up'  $(r\acute{a}u$ -ti), (A). Lith. ly-jù 'I rain' (lý-ti) with which O.C.Sl. li-ja is perhaps connected; parallel Lith.  $l\ddot{e}$ -ju, (A), § 725 p. 254. Lith. qy- $j\dot{u}$ 'I get well, revive' (gý-ti).

Lith. rúg-iu 'I gulp, belch' (rúk-ti): O.H.G. ita-ruch(i)u 'rumino'. grúd-žiu 'I stamp' (grús-ti). O.C.Sl. sŭša 'I dry' for \*such-įą (sŭcha-ti): Skr. śúš-ya-ti, see § 707 p. 236. lŭža 'I lie' for \*lŭg-ja (lŭga-ti). pĭša 'I strike, rub' (pĭcha-ti): Skr. piš-yá-tē 'is broken or crushed to bits'.

Lett. schu-ju for \*siu-iu (pret. schuw-u inf. schû-t), O.C.Sl. šija for \*siȳ-ia (ši-ti) 'I sew': Gr. κασσύω etc., see § 707 p. 236.

§ 727. (2) Forms with -io-:-i-. There is no evidence that -io- was originally dissyllabic. This cannot be inferred from the Lithuanian av-iù srav-iù (1st pl. āv-i-me srāv-i-me) as contrasted with pláu-ju (1st pl. pláu-ja-me); these may have been influenced by persons with the stem av-i- srav-i-. The weak grade is regularly -i- in Lithuanian (compare future with -s-i-, § 761) and in Slavonic regularly -i-. It appears also in the 3rd plural and the participle, Lith. smirdint- O.C.Sl. smrīdet-, while here the original form was most likely -io-; on O.C.Sl. smrīd-et- for -int-, see § 637 Rem. p. 176.

Idg. \*bhu-ijo- \*bhu-i- from √bheu- 'become, be' (§ 707 p. 235) has many descendants in Balto-Slavonic. Lith. 3rd sing. bi-ti bi-t 'erat' (erant)', which is irregular in having a primary personal ending; plural 1st pers. sùktum-bime 2nd -bite dual 1st -biva 2nd -bita, old injunctives, first used with preterite meaning, now in clauses expressing a wish.1) With the pr. Lith. present \*bijù is closely parallel the Lettic preterite biju 'eram' biji bija pl. bijám biját, which is related to Lat. fīam (instead of \*fiam) as Lith. buvaū to Lat. fuam. Along with these goes the Slavonic conditional (impossible condition), originally a preterite injunctive formation, made up with bi-mī bi bi bi-mü; 2) the 1st sing. has got a primary personal ending, like Lith. 3rd sing. biti. For the 2nd pl. they used biste, a form of the s-aorist; to fill up gaps, the 1st pl. bichomu and 3rd pl. bišę were coined by analogy (cp. O.C.Sl. běchomů from bě § 587 p. 128, and Lat. fitum Gr. qîtv). For 3rd pl. was used ba (beside biše), also injunctive in origin, Class II B (§ 523 p. 87).

Remark. The view of these forms set forth by Wiedemann, Lit. Prät. 136 ff., is untenable. O.C.Sl. bi-mü cannot be separated from Lith. -bi-me; and to regard this Lith. form as an optative with orig. -i- is

<sup>1)</sup> The 2<sup>nd</sup> sing. -bei admits of several explanations. It probably is akin to O.C.Sl. 2<sup>nd</sup> and 3<sup>rd</sup> sing. be Gr.  $\frac{2}{3}$  $\frac{1}{3}$  $\frac{$ 

<sup>2)</sup> In the same way were used the aorist forms by chi by by by chom $\breve{u}$  etc.

Brugmann, Elements. IV.

opposed to phonetic law as completely as the assumption that Lith.  $d\mathring{u}'sim(e)$  'dabimus' is optative of the s- aorist (cp. § 761).

With the remaining Balto-Slavonic verbs of this class we find regularly an infinitive stem in -ē, as Lith. smirdē-ti O.C.Sl. smrīdē-ti beside smirdžiu smrīžda (cp. O.C.Sl. bě běchŭ běachŭ beside bi-mŭ, like smrīdě smrīdēchŭ smrīděachŭ beside smrĭdi-mŭ). This, as we saw in § 708 pp. 238 ff., has a parallel in Greek; for instance, μαίνομα: ἐμάνην μεμανηώς μεμάνημαι μανήσομαι = O.C.Sl. mĭnją: mīně mīněvŭ mĭněchŭ (Lith. mìnė minësiu). In Italic and Germanic, there are only some parallel io-presents, as Lat. nōlī O.H.G. willu Goth. viljan: O.C.Sl. velją; O.Sax. pl. libbiad partic. libbiandi: O.C.Sl. -līplją. Here we usually find presents in ē, as Lat. valeō: Lith. galù, O.H.G. lebēm: O.C.Sl. -līplją.

Lith,  $tyl\dot{u}$  (i. e. \*tyl- $i\dot{u}$ )  $tyl\dot{e}$ -ti 'to be still' (long  $\bar{\imath}$ -sound not original): O.H.G. dolē-m 'I suffer, endure', \( \sqrt{tel-} \) 'carry, bear'. O.C.Sl. mĭnja mĭně-ti 'to think': Skr. mán-ya-tē, Gr. μαίνομαι, O.Ir. do muiniur Goth. muna 'I bethink me, think of, wish' 2<sup>nd</sup> sing. munáis, see § 707 p. 235. Lith. girdžiù girdě-ti 'I apprehend, hear': Gr. φράζω, see § 707 p. 236. O.C.Sl. držžą driža-ti 'contain, possess': Skr. drh-ya-ti 'makes fast'. O.C.Sl. -līplja -līpē-ti 'to cling to': Skr. pass. lip-ya-tē 'is smeared or anointed', O.Sax. libbiu O.H.G. lebē-m 'I live' (the O.Icel. lifa 'to be over, remain, live' helps to make clear how one meaning came out of the other). Lith. pa-výdžiu -vyděti 'invidere' O.C.Sl. vižda vidě-ti 'to see': Skr. vid-yá-tē 'is known, recognised, found', Lat. video, Goth. vita 'to look at a thing, 2<sup>nd</sup> sing. vitái-s. O.C.Sl. būžda būdě-ti 'to wake, watch': Skr. búdh-ya-tē 'awakes, perceives' pass. budh-yá-tē. O.C.Sl. ruždą rudė-ti 'to blush': Lat. rubeō. O.C.Sl. kyplją kypě-ti 'to boil, seethe': Skr. kup-ya-ti, Lat. cupiō, see § 707 p. 236. O.C.Sl. stoja stoja-ti 'to stand': Skr. pass. sthī-ya-tē instead of \*stha-ya-tē, O.H.G. 2nd sing. stēs for \*sta-ji-zi, see § 706 p. 234, § 708 p. 240.

O.C.Sl. govlja gově-ti 'venerari, vereri', pres. also gověja:

Lat. faveō. Lith. galù (i. e. \*gal-iu) galĕ-ti 'to be able': Lat. valeō (otherwise Bezzenberger, in his Beitr. xvi 256).

O.C.Sl. velją velě-ti 'to command': Lat.  $n\bar{o}l\bar{\imath}$ , O.H.G. willu 'I wish' Goth. viljan 'to wish', see § 505 p. 69, § 716 p. 249. Lith. aviù avě-ti 'to be shod': Umbr. an-ovihimu  $\sqrt{eu}$ -, see § 716 p. 249.

Lastly it should be mentioned that in Balto-Slavonic the non-present ē-forms are found along with other than io-present stems: e. g. Lith. menù miněti 'to think of', gélbu gélbéti 'to help', gedù geděti 'to lament, mourn', bundù buděti 'to watch', sědmi séděti 'to sit, O.C.Sl. part. pres. gorat- beside goret-burning' from inf. gorěti, partic. vidomǔ 'oρώμενος' beside vidimǔ from inf. viděti. The same thing is seen in Greek, as ἐθέλω: ἐθελήσω, νέμω: νενέμημαι etc. (Curt. Verb. I² 384 ff.), and doubtless in Germanic, as Goth. haba habam haband may well belong to Class II (§ 708 pp. 239 f.).

# Class XXVII.

Reduplicated Root + -io- -iio- forming the Present Stem.

§ 728. (A). Pr. Idg. There was a <u>io-Class</u> with complete reduplication, closely connected with Classes VII and VIII. As regards the type of the reduplicating syllable see §§ 465—467, 470, and 474. Compare, for instance, Skr. dē-diš-yá-tē beside dé-diš-te, varī-vrt-yá-tē beside várī-vart-ti. Probably the mode of conjugation with -<u>io-</u> was occasioned by that of Class VII; cp. § 703 pp. 231 f.

Skr.  $v\bar{e}$ -vij- $y\acute{a}$ - $t\bar{e}$  'makes for, rushes against anything' and Gr.  $\ddot{e}$  true Hom.  $\dot{e}$  true for 'I rush towards' for \*fal-fur-tw, apparently from  $\sqrt{ua^{x}iq}$ - $ua^{x}iq$ - (§ 465 p. 12).

§ 729. Aryan. Only a few examples in Vedic, but later this type of Intensive spread very widely. car- $c\bar{u}r$ - $y\acute{a}$ - $t\bar{e}$  from car- 'to move'. nan-nam- $y\acute{a}$ - $t\bar{e}$  from nam- 'to bow, incline'.

 $n\bar{e}-n\bar{i}-y\acute{a}-t\bar{e}$  from  $n\bar{i}$ - 'to lead'.  $c\bar{o}-\dot{s}k\bar{u}-y\acute{a}-t\bar{e}$  from sku- 'to cover'.  $mar-m\gamma j-y\acute{a}-t\bar{e}$   $mar\bar{i}-m\gamma j-ya-t\bar{e}$  from marj- 'to sweep off, wipe away'.  $kani-krad-y\acute{a}-t\bar{e}$  from krand- 'to roar'.  $v\bar{e}-vi\dot{s}-ya-t\bar{e}$  from  $vi\dot{s}$ - 'to be active'.  $n\bar{o}-nud-ya-t\bar{e}$  from nud- 'to knock away'.  $c\bar{a}-ka\dot{s}-ya-t\bar{e}$  from  $k\bar{a}\dot{s}$ - 'to appear'. In Avestic there seems to be only one example,  $r\bar{a}-ri\dot{s}-ye-iti$  'hurts, wounds', cp. Skr.  $ri\dot{s}-ya-ti$  'injures'.

§ 730. Greek. ἄττω for \*Fαι-Fικ-ξω; see § 728 p. 259. γαρ-γαίρω (for \*-γαρ-ξω) 'I swarm'; μαρ-μαίρω 'I shimmer, glitter'. With πορ-φύρω 'I well up, heave, change colour' μορ-μύρω 'I roar, murmur' cp. πτύρω § 713 p. 247. παμ-φαίνω ( $\checkmark$  bhā-) shows a nasal suffix like φαίνω for \*φα-ν-ξω; parallel Hom. παμφανόωσα. On παι-φάσσω, παι-πάλλω, ποι-φύσσω and the like, see § 465 Rem. p. 12.

§ 731. Italic. Lat. tin-tinnio (î) beside tinniō. gin-griō (ī) beside garriō (cp. § 466 p. 13).

Of Keltic forms may be placed here the isolated Mid.Ir. der-drethar 'sounds, cries out' with the s-preterite derdrestar (§ 465 p. 12).

§ 732. Slavonic. O.C.Sl. glagolja 'I speak' for \*golgolja,  $2^{nd}$  sing. -je- $\check{s}i$  etc. (glagola-ti), with the same reduplication as  $glagol\check{u}$  'word'.  $mr\check{u}-m\check{u}r-j\check{a}$  'I gnaw',  $2^{nd}$  sing. -je- $\check{s}i$  etc.  $(mr\check{u}-m\check{u}ra-ti)$ .

§ 733. (B) It is rare in the Idg. languages to find the io-suffix with presents reduplicated in any other way; and in no language has this class become a large one. All the examples appear to be new formations. Skr. pass. dad-yá-tē 'datur' (beside dī-yá-tē) by analogy of dádā-mi dad-más, cp. partic. dat-tā-s, § 541 p. 102. Skr. pass. nind-ya-tē 'is scolded or blamed', if ninda-ti is to be analysed \*ni-nd-e-ti, see § 550 p. 106. Avest. yaṣṣ-ye-iti 'seethes, boils', which looks like a contamination of Skr. yēṣa-ti i. e. \*ia-iṣ-ati (§ 562 p. 110) and yás-ya-ti. Gr. Att. δειδίττομαι Hom. δειδίσσομαι i. e. δεδfίσσομαι 'I frighten, or am frightened' for \*δε-δFικ-yo-μαι, beside

 $\delta \acute{\epsilon}$ -δοιχα (cp. Johansson, Beitr. gr. Spr., 80 f.).  $v\acute{t}$ σομαι 'I go back, return' for  $*v_i-v_{\bar{\tau}}$ - $\nu_i$ αι from  $\sqrt{nes}$ - seems to presuppose \*ni-nes-mi, which is represented by the Skr.  $3^{rd}$  pl. mid.  $n\acute{t}$ s- $at\bar{e}$  (§ 539 p. 99).  $\lambda i\lambda \alpha i \rho \mu \alpha$  'I desire, long for' for  $*\lambda i - \lambda \alpha \sigma$ - $\iota \rho - \mu \alpha i$ , cp. Skr.  $la \check{s} ati$  for  $*la - l\check{s} a - ti$  § 562 p. 110.  $\tau \iota \tau \alpha i \nu \alpha$  'I put to, yoke' ground-form  $*ti - t \eta - i \bar{o}$ , cp. Lat.  $tend\bar{o}$ , if this is for  $*te - t n - \bar{o}$  (§ 564 p. 111). O.Ir. -airissiur 'I remain standing' for  $*(pari) - sist \dot{\iota}\bar{o}(r)$  (I § 109 e p. 103, § 516 p. 377), beside Gr.  $i - \sigma \tau \eta - \mu u$  Skr.  $ti - \check{s} t h - a - ti$  Lat.  $si - st - \bar{o}$  § 539 p. 100. O.C.Sl.  $de\check{s} da$  'I lay' for  $*de - d - i \bar{a}$   $2^{nd}$  sing.  $de\check{s} de\check{s} i$  etc. (inf.  $d\check{e} - ti$ ) beside Lith.  $d\grave{e}(d) - mi$   $ded - \grave{u}$  § 546 pp. 103 f.

A peculiar reduplication is shown by certain Greek verbs.  $\pi\alpha$ - $\varphi$ λάζω 'I bubble' beside  $\varphi$ λέδων 'gossip',  $\kappa\alpha$ - $\chi$ λάζω 'I gurgle',  $\beta\alpha$ - $\beta$  $\varphi$ άζω 'I chirp'. They are Intensives or Iteratives to the verbs named in § 730.

## Class XXVIII.

Root + - $\bar{a}$ -, - $\bar{e}$ -, - $\bar{o}$ -, + - $\hat{i}$ o- forming the Present Stem.

 $\S$  734. The forms now to be noticed are closely connected with Classes X and XI ( $\S\S$  578 ff.), under which heads much has already been said of the io-stems.

I believe that the original accentuation of this class is preserved in those Sanskrit verbs which have dissyllabic stems before -ya-, such as  $grbh\bar{a}-y\acute{a}-ti$ , and by Sanskrit passives like  $tr\bar{a}-y\acute{a}-t\bar{e}$  (§ 703 p. 232).  $tr\acute{a}-ya-t\bar{e}$  has followed the lead of  $p\acute{a}c-ya-t\bar{e}$  etc., and  $tr\bar{a}-y\acute{a}-t\bar{e}:tr\acute{a}-ya-t\bar{e}=ric-y\acute{a}-t\bar{e}:ric-ya-t\bar{e}$  (§ 710 p. 245).

§ 735. Unreduplicated Forms.

Pr. Idg. \* $tr\bar{a}$ -io-: Skr.  $tr\bar{a}$ -ya- $t\bar{e}$  'protects, saves' pass.  $tr\bar{a}$ -ya- $t\bar{e}$ , Lat. in- $tr\bar{o}$  for \*- $tr\bar{a}$ - $i\bar{o}$ , with which is doubtless connected O.C.Sl. tra-ja 'I last, endure' (inf. traja-ti). Skr. sn-a-ya- $t\bar{e}$  'bathes himself', Lat.  $n\bar{o}$  for \*sn-a- $i\bar{o}$ . Lat.  $hi\bar{o}$  for

\*hiā-iō, Lith. žió-ju 'I open my mouth' (inf. žió-ti), cp. Lat. hī-scō O.H.G. gi-nō-m gei-nō-m 'I gape'. Compare § 579. Lat.  $ar\bar{o}$  for \* $ar\bar{a}$ - $i\bar{o}$ , Gr.  $a\hat{o}$  'I plough' pr. Gr. \* $a\hat{o}$ - $a\hat{o}$ -( $a\hat{o}$ ) (§ 583 p. 124, § 775). With these primary verbs should be classed several very wide-spread onomatopoetic or imitative verbs, as Gr.  $i\lambda a\hat{o}$  - $a\hat{o}$  'I roar' Lith.  $ul\hat{o}$ - $i\hat{o}$  'I call, shout for joy, cheer' (also reduplicated  $ul\bar{u}l\hat{o}$ - $i\hat{u}$  = Lat.  $ulul\bar{o}$ ): Gr.  $a\hat{o}$ - $a\hat{o}$ 

\* $sn-\bar{e}-io-:$  Gr.  $v\tilde{\eta}$  'spins' for \* $\sigma v\eta$ - $\iota \varepsilon$  (Mekler, Beitr. zur Bild. des gr. Verb., p. 18), Lat.  $ne\bar{o}$ , O.H.G.  $n\bar{a}u$  'I sew'. \* $\hat{g}n-\bar{e}-io-$  \* $\hat{g}n-\bar{o}-io-:$  Skr. pass.  $j\bar{n}\bar{a}y\acute{a}-t\bar{e}$  'noscitur' ( $-\bar{e}-$  or  $-\bar{o}-\bar{e}-$ ), O.H.G.  $kn\bar{a}u$  'I know' ( $-\bar{e}-$ , but cp. p. 128 footnote), O.C.Sl. zna-ja 'I know' ( $-\bar{o}-$ , inf. zna-ti). Lat.  $fl-e\bar{o}$ , O.H.G.  $bl\bar{a}u$  'I blow' pr. Germ. \* $bl-\bar{e}-i\bar{o}$ , perhaps too O.C.Sl.  $bl-\bar{e}-i\bar{o}$  'I bleat' (inf.  $bl\check{e}ja-ti$ ). Skr.  $v-\bar{a}-ya-ti$  'blows', Goth. v-aia O.H.G.  $w-\bar{a}u$  'I blow', O.C.Sl.  $v-\bar{e}-ja$  'I blow' (inf.  $v\check{e}ja-ti$ ). Lat.  $tace\bar{o}$  for \* $tac-\bar{e}-i\bar{o}$ , Goth.  $pah\acute{a}i\bar{p}$  for \* $pah\bar{e}-ii-\bar{d}i$ . Lat.  $fav-e\bar{o}$ , O.C.Sl.  $yov-\check{e}ja$  'veneror, vereor' (§ 590 p. 132). Compare §§ 587, 708.

§ 736. Aryan. Skr.  $tr-\acute{a}-ya-t\bar{e}$  'protects' pass.  $tr\bar{a}-y\acute{a}-t\bar{e}$ , Avest.  $pr\bar{a}-ye-iti$  'protects': Lat.  $-tr\bar{o}$ , see § 735. Skr.  $\acute{s}r-\acute{a}-ya-ti$  'boils, cooks', cp. Gr.  $\varkappa\acute{e}-\varkappa\varrho\bar{a}-\tau\alpha\iota$ . Pass.  $mn-\bar{a}-ya-t\bar{e}$  'commemoratur', cp. Gr. Dor.  $\varkappa\acute{e}-\varkappa\varrho\bar{a}-\tau\alpha\iota$ . Pass.  $ml-\acute{a}-ya-t\bar{e}$  'grows soft', cp. Gr. Dor.  $\beta\lambda-\acute{a}-\xi$ .  $py-\acute{a}-ya-t\bar{e}$  'swells' beside  $p\acute{a}y-a-t\bar{e}$   $p\bar{i}-p\acute{a}y-a$   $p\bar{i}-py-\bar{a}-n\acute{a}-s$ .  $y-\bar{a}-ya-t\bar{e}$  pass. 'itur', cp. Goth.  $j\bar{e}-r$  and Lith.  $j\acute{o}-j\iota$ .  $khy-\bar{a}-ya-t\bar{e}$  pass. 'is seen', cp. aor.  $\acute{a}-khy-a-t$ .  $\acute{s}y-\acute{a}-ya-t\bar{i}$  'curdles, congeals', cp. part.  $\acute{s}\bar{i}-t\acute{a}-s$ . Compare §§ 580 and 588.

Also verbs in  $-\bar{a}-y\acute{a}-ti$  in which the root formed a complete syllable. The speaker imagined these to be parallel with  $prtan\bar{a}-y\acute{a}-ti$   $man\bar{a}-y\acute{a}-ti$  and the like (§§ 617, 769) — there really was no difference in character, if we are right in identifying the verb-suffix  $-\bar{a}$ - with the feminine suffix — and therefore kept the old accent without changing it as in  $tr\acute{a}ya-t\bar{c}$ . Skr.  $grbh\bar{a}-y\acute{a}-ti$  'seizes' O.Pers.  $a-garb\bar{a}ya-m$ , Skr.  $dam\bar{a}-y\acute{a}-ti$  'over-

powers' (cp. Lat.  $dom\bar{a}re$ ), Skr.  $tud\bar{a}-y\acute{a}-ti$  'pushes',  $pru\check{s}\bar{a}-y\acute{a}-ti$  'spurts out'.

\*χρ-η- $\iota$ ω 'I give an oracle' χρῶ χρῷ, partic. χρήων Od. 8. 79. Dor. \* $F\lambda$ -η- $\iota$ ω 'I wish, desire' (beside Lat. vel-le)  $\iota$ ῶ  $\iota$ ῷ El. opt.  $\iota$ ληότ $\bar{\alpha}\nu$ ; the Gort.  $\iota$ ητ̂ω (e. g. 3<sup>rd</sup> pl. conj.  $\iota$ λητ̂ωντι) for \* $\iota$ λητ̂ω is formed like χρητρομαι: was this derived from  $\iota$ ο χρῆρς, or was it a formation like Skr. causal  $py\bar{a}$ -y- $\dot{a}$ ya-ti? (cp. § 801). \* $\iota$ ν- $\eta$ - $\iota$ ω 'I rub, scratch' (cp.  $\iota$ ν- $\dot{\nu}$ ω)  $\iota$ νω  $\iota$ ν $\bar{\mu}$ . \* $\iota$ η- $\iota$ ω 'I live' for \* $\iota$ ½- $\bar{e}$ -iρ̄ ( $\iota$ ) ζω ζ $\bar{\mu}$ ; the forms  $\check{\epsilon}$ ζην ζ $\bar{\eta}$  $\iota$ η are later and follow Class X (cp. § 496 p. 56); with - $\bar{e}$ -,  $\iota$ ζω- $\iota$ ω Gort. δοίω ( $\iota$ ω΄ωι δωωντι etc.), like O.C.Sl.  $\iota$ nają beside O.H.G.  $\iota$ ληται (§ 735). \* $\iota$ ψ- $\iota$ - $\iota$ ω 'I grind or crush to pieces' (Skr.  $\iota$   $\iota$ 0. § 587 p. 128)  $\iota$ 0.  $\iota$ 0.

- § 738. Italic. In Latin only the 1<sup>st</sup> sing. pres. has the *io*-suffix, the other persons being formed after Class X. This was perhaps due in part to the early loss of the personal ending -mi in Italic, whence it became possible for  $vol\bar{o}$  to take its place in the same scheme as vult,  $e\bar{o}$  beside it.
- - $\bar{a}$ - $i\bar{o}$ . in- $tr\bar{o}$   $n\bar{o}$   $hi\bar{o}$  see §§ 735, 736. f- $\bar{o}$ , pl. f- $\bar{a}$ -mus. Also juv- $\bar{o}$  lav- $\bar{o}$  and suchlike. See § 583 p. 124.
- -ē-jō. pleō neō fleō vieō, also taceō scateō videō sileō faveō valeō habeö etc. See §§ 587, 590, 708.
- § 739. Germanic. Monosyllabic stems in  $-\bar{e}$  and  $-\bar{o}$ -almost wholly gave up the unthematic inflexion, and took that with -io- (§ 592 p. 133). O.H.G.  $n\bar{a}u$  'I sew'  $kn\bar{a}u$  'I know' Goth. vaia O.H.G.  $w\bar{a}u$  'I blow', see § 735. O.H.G.  $dr\bar{a}u$  'I turn, twist', \*tr- $\bar{e}$  from  $\sqrt{ter}$ -, cp. Gr.  $\tau \varrho \bar{\eta} \mu \alpha$  'hole'  $\tau \dot{e} \varrho \bar{e} \tau \varrho o \nu$  'borer'. There may be Idg.  $-\bar{o} \dot{\varrho} \bar{o}$

in O.H.G. bluoiu bluowu O.Sax. blôiu 'I bloom', cp. Lat. fl- $\bar{o}$ -s (gen. fl- $\bar{o}$ -r-is); it must remain uncertain whether we have  $-\bar{o}$ - $i\bar{o}$  or  $-\bar{a}$ - $i\bar{o}$  as the ending in O.H.G. gluoiu gluowu 'I glow' ( $\sqrt{ghel}$ -).

Dissyllabic stems in  $-\bar{e}$ - and  $-\bar{a}$ - have both non-thematic and io-flexion.

Dissyllabic ē-stems in Gothic show io-flexion in forms containing ái, such as pāháis pāháip (the 1st sing. is pāhā 'I am silent') for \*-ē-ii-zi -ē-ii-di: Lat. taceō. Compare also Goth. vitáip 'looks at, regards': Lat. videō, siláip 'is silent': Lat. sileō; hābáip 'has': Lat. hābeō. Compare § 592 p. 133, § 708 pp. 238 ff. On the spread of this ē-flexion to nasal present stems, see § 605 pp. 146 f., § 623 p. 160; on the formation of ē-verbs from nouns, § 781.3.

Dissyllabic ā-stems were inflected just like the later stratum of ā-denominatives (as Goth. fairinōn from fairina). The io-extension is clearly seen only in Anglo-Frisian, as A.S. 1st sing. -ie pl. -iaā for pr. Germ. -ō-ia- see § 781.1. Examples of "primary" verbs are: Goth. mitō 'I mete, measure' O.H.G. meggōm 'I moderate', Goth. bi-láigō 'I lick all over' (cp. Lith. laižaū 'I lick' inf. laižý-ti), O.H.G. fehōm 'I adorn' O.H.G. mahhōm 'I make'. Compare § 579 p. 121, § 585 p. 126.

§ 740. Balto-Slavonic.

-ā-io-. Lith. žió-ju O.C.Sl. tra-ją see § 735. Lith. jó-ju 'I ride' (jó-ti), see § 587 p. 128. Probably also Lith. gró-ju (gró-ti) O.C.Sl. gra-ją (graja-ti) 'I croak', Lith. kló-ju 'spread out' (kló-ti), and others. Some of the Lithuanian "Iteratives" are in place here, as lindo-ju beside lindau 'I put in' (lindo-ti), rýmo-ju beside rýmau 'I sit supported on something' (rýmo-ti), svyró-yu 'I move to and fio' (svyró-ti), etc. So in O.C.Sl., Iteratives such as sŭn-čdają 'comedo' (-čda-ti), raz-vrĭzają 'I open' (-vrĭza-ti), sŭ-birają 'I gather' (-bira-ti). Compare §§ 586, 783.

-ē-jo-. O.C.Sl. blě-ją vě-ją see § 735. grě-ją 'I warm'

(grěja-ti). gové-ją 'veneror, vereor' (gově-ti): Lat. faveō, see § 735. Lithuanian "Diminutives" (Iteratives), as byrĕ-ju 'I scatter a little' or 'I am a little scattered' (byrĕ-ti), kylĕ-ju 'I lift a little' (kylĕ-ti), lukĕ-ju 'I wait a little' (lukĕ-ti). Compare §§ 593, 784.

 $-\bar{o}$ - $\dot{i}o$ - possibly in O.C.Sl. zna-ja, § 735, and perhaps in a few, none can say which, of O.C.Sl. verbs in -a-ja (Idg.  $-\bar{a}$ -and  $-\bar{o}$ - ran together in Slavonic).

## § 741. Reduplicated Forms.

The Reduplicated forms with ā-suffix mentioned in § 595 have some of them the <u>i</u>o-extension. Lat. 1<sup>st</sup> sing. ululō, Lith. ulūló-ju 'I call, shout for joy' (cp. uló-ju Gr. υλάω § 735 p. 262). Lat. 1<sup>st</sup> sing. murmurō, cp. O.H.G. murmurōm murmulōm. Lat. 1<sup>st</sup> sing. tintinnō tintinō beside tintinn-iō (Class XXVII).

A later Greek form is  $\varkappa\iota\gamma-\varkappa\varrho\tilde{\alpha}$  :  $\varkappa\iota\varrho\nu\tilde{\alpha}$  (Hesych.) beside  $\varkappa\iota\gamma-\varkappa\varrho\tilde{\alpha}-\iota\iota\iota$ , see § 594 p. 135.

O.H.G.  $r\bar{e}r\bar{e}m$  A.S.  $r\bar{a}rie$ , connected with Lith.  $r\acute{e}-ju$   $r\acute{e}-ti$  'I cry out loud', comes from a pr. Germ. \* $ra\dot{i}-r\bar{e}-\dot{i}\bar{o}$ , see § 708 p. 240.  $\bar{e}$  in  $r\bar{e}$ - was a suffix, as may be seen from Lett.  $r\acute{a}-ju$  'I scold' and other words (Per Persson, Wurzelerw. pp. 91, 196).

## Class XXIX.

Nasal Stems + -jo- for the Present Stem.

- § 742. The formations here to be treated are connected with Classes XII to XVIII, and fall into three groups: those connected with (A) Classes XII to XIV, (B) Classes XV and XVI, and (C) Classes XVII and XVIII.
- § 743. (A) -n-io- is fairly common only in Greek. Lesb.  $\lambda \lambda i \nu \nu \omega$  Hom. Att.  $\lambda \lambda i \nu \omega$  'I bend' for  $*\lambda \iota \nu \iota \omega$ , beside O.Sax.  $hlin\bar{o}$ -n etc.  $\iota \varrho t \nu \omega$  'I separate, choose out, distinguish' for  $*\kappa \varrho \nu \iota \omega$ .  $\sigma t \nu \varrho \omega$  'I plunder' for  $*\sigma \iota \iota \omega$ .  $\delta \iota \varrho \psi \nu \omega$

'I urge on' for \* $\dot{o}$ -τρν-ν-μω. φαίνω 'I show, make visible' for \* $\dot{q}$  α-ν-μω, beside Armen.  $\dot{b}$  α- $\dot{n}$  α- $\dot{m}$  (I open' (\* $\dot{b}$   $\dot{h}$   $\partial$ - $\dot{n}$   $\partial$ - $\dot{m}$ ),  $\dot{v}$   $\dot{b}$   $\dot{n}$  α- $\dot{m}$  (I gape' for \* $\dot{q}$  α-ν-μω. See § 601 p. 144, § 611 p. 150. Lat.  $\dot{l}$   $\dot{i}$  - $\dot{n}$   $\dot{i}$  ( $\dot{l}$   $\dot{i}$  - $\dot{n}$   $\dot{i}$  dissolve, disintegrate' (intr.), see § 598 p. 142. O.Ir.  $\dot{a}$  ra-chri-nim 'difficiscor, I go to pieces' beside Skr.  $\dot{s}$  γ- $\dot{n}$   $\dot{a}$ - $\dot{t}$  i, see § 604 p. 146. O.H.G.  $\dot{s}$  γ- $\dot{n}$   $\dot{t}$  ( $\dot{m}$   $\dot{m}$  ) 'I attract, charm' beside  $\dot{s}$  γ- $\dot{n}$   $\dot{m}$  i. e. \* $\dot{s}$  γ- $\dot{n}$   $\dot{n}$   $\dot{v}$  γ- $\dot{n}$   $\dot{v}$   $\dot{v}$  γ- $\dot{n}$   $\dot{v}$  γ- $\dot{v}$ 

-η-io- was used even in pr. Idg., and is especially common in Sanskrit and Greek. Idg. \*is-η-iō: Skr. iṣ-aṇ-yá-ti 'sets in motion, excites' Gr. laivω 'I quicken' beside Skr. iṣ-aṇa-t, Skr. tur-aṇ-yá-ti 'hastens', bhur-aṇ-yá-ti 'is brisk'. Gr. avalvω 'I make dry' beside Lith. saŭs-inu, ολωθαίνω 'I slip' beside δλισθάνω, τερσ-αίνω 'I make dry, κυαίνων' ἔγκυος ἄν, ἐκ-φλ-αίνω 'I bubble or gush out', δρ-αίνω 'I do', κρ-αίνω 'I complete', ξ-αίνω 'I scratch' and many more; -αινω became a very productive suffix. Armen. -anim, as mer-ani-m 'I die', like Gr. μαρ-αίνω. O.H.G. gi-wahannen 'to recount' (pret. gi-wuog), A.S. wæcnan 'awake' (pret. wōc). See §§ 618—621, § 623 pp. 156 ff., § 711 p. 246.

§ 744. (B) Present Stems with "Nasal Infix" become very common in Greek and Baltic. In explanation of the examples given below see §§ 628, 629, 631, 632, 634—637, pp. 164 ff.

Gr.  $\pi \tau i \sigma \sigma \omega \pi \tau i \tau \tau \omega$  'I bray, pound' instead of older \* $\pi \tau \iota \nu \sigma \cdot \iota \omega$ , Lat.  $p \bar{\imath} n s - \bar{\imath} - m u s$ ), beside Skr.  $p i n \dot{a} \dot{s} - \dot{t} \dot{a} - p \dot{\iota} \dot{s} - a - t$ .

Skr. pass.  $vand-ya-t\bar{e}$  beside  $vanda-t\bar{e}$  'praises, honours' compare  $v\acute{a}da-ti$   $ud-y\acute{a}-t\bar{e}$ ; not a very old form.

Lat.  $vinc-i\bar{o}$  ( $\bar{\imath}$ ) beside Skr. vi-vyak-ti 'embraces, surrounds'  $3^{rd}$  dual  $vi-vik-t\acute{a}s$ .  $sanc-i\bar{o}$  ( $\bar{\imath}$ ) beside sacer.

Lett. mi/chu 'mingo' for \*minz-iu. Lith. jùng-iu 'I yoke, put to'. skùnd-žiu 'I weep, bewail myself' beside pra-skundù (pret. -skudaŭ) 'I begin to smart'. sunk-iù 'I strain, filter, let something run through' beside Lett. swak-s 'resin'. Lett. kamp-ju 'I grasp, grip' beside Lat. cap-iō. Lith. lenk-iù 'I bend' \(\simethig{\substack} leq-. \) sténg-iu 'I put my strength to' beside Gr. στείβω. O.C.Sl. žęždą 'I covet' (inf. žę-da-ti) beside Lith. geid-žiù. glęždą 'I look' (ględě-ti) beside O.H.G. glīzu. ob-ręštą 'I find' (-rešti).

§ 745. (C) Rare forms, undoubtedly late, are all that meet us in this section. O.C.Sl. mi-nu-ja 'I go over' beside mi-na, see § 649 p. 185.

## Class XXX.

Root + s-Suffix + -io- (the -s-io- Future).

- § 746. Two groups of forms, with Present and Future meaning respectively.
- (A) With Present meaning: fairly common nowhere but in Sanskrit, and for the mast part clearly later extensions of the s-Present. As regards the examples here following, see §§ 656 and 657, pp. 190 ff.

Skr. tras-ya-ti beside  $tr-\acute{a}sa-ti$  'trembles', Lith. tres-iù 'I am in rut' used of bitches (inf.  $tr\~esti$ ). Skr.  $plu\~s-ya-t\~e$  pass. of  $pl\~o-\~sa-ti$  'burns, singes', Lat.  $pr\~u-r-i\~o$  ( $pr\~ur\~re$ ). Avest.  $ux\~s-ye-it\~i$  beside  $vax-\~sa-iti$  'makes grow', Goth. vahs-ja 'I grow' (pret.  $v\~ohs$ ).

Skr.  $\dot{s}li\dot{s}-ya-ti$  'hangs on to, sticks to' pass.  $\dot{s}li\dot{s}-y\acute{a}-t\bar{e}$ , Avest.  $sra\dot{e}\dot{s}-y\dot{e}-iti$  (same meaning) beside Skr.  $\dot{s}r\bar{e}-\dot{s}a-ti$   $\acute{a}-\dot{s}li-\dot{s}a-t$ . Skr.  $i\dot{s}-ya-ti$  Avest.  $i\dot{s}-y\dot{e}-iti$  'sets in motion' beside Skr.  $i-\dot{s}a-t\bar{e}$ . Skr.  $tvi\dot{s}-ya-ti$  'is excited, distracted' beside  $3^{rd}$  pl.  $\acute{a}-tvi-\dot{s}-ur$ .  $ghu\dot{s}-ya-ti$  'cries out, announces loudly' pass.  $ghu\dot{s}-y\acute{a}-t\bar{e}$  beside  $gh\acute{o}-\dot{s}a-ti$ . Pass.  $rak\dot{s}-ya-t\bar{e}$  beside  $r\acute{a}k-\dot{s}a-ti$  'guards, saves'. Pass.  $gras-ya-t\bar{e}$  beside gr-asa-ti 'devours'.

Lith. tēs-iù 'I stretch' beside Skr. ta-sa-ti etc.

§ 747. (B) With Future Meaning.¹) Even as early as the proethnic period -s-io- (or -os-io-) must have already become a simple suffix for expressing the future. This group of forms grew out of Classes XIX and XX, particularly forms with the strong-grade of root syllable; compare Skr.  $tasy\acute{a}-t\bar{e}$  and ta-sa-ti (Goth. - $\bar{p}in-si-\bar{p}$ )  $\acute{a}-ta-s-mahi$ ,  $\acute{s}r\bar{o}\dot{s}y\acute{a}-ti$  Gr.  $\lambda \dot{s}v-\sigma\acute{o}\mu\dot{s}\partial a$  in Hesychius) and  $\acute{s}r\acute{o}-\dot{s}a-m\bar{a}na-s$ ,  $vak\dot{s}y\acute{a}-ti$  and Avest.  $vax-\dot{s}a-it\bar{e}$  ( $\bigvee ueq-$  'speak'),  $sak\dot{s}ya-ti$  (Gr.  $\dot{\epsilon}\dot{s}\omega$ ) and  $s\acute{a}k-\dot{s}a-nt-\bigvee se\hat{g}h-$  (§§ 657 ff.); very rarely from forms with root-syllables in a weak grade, as Avest.  $b\bar{u}\dot{s}y\dot{e}-iti$  (pr. Ar. doubtless \* $bh\acute{u}\dot{s}\dot{z}a-ti$ , cp. Skr.  $s\bar{u}-\dot{s}ya-nt-$  § 748) Lith.  $b\acute{u}-siu$  (Gr.  $q\acute{v}-\sigma\omega$ ) beside Skr.  $bh\acute{u}-\dot{s}a-ti$  (§ 659 p. 194). Sanskrit forms with  $-i\dot{s}ya$ -were derived from the  $i\dot{s}-a$ -orist, compare  $v\bar{e}di\dot{s}y\acute{a}-ti$  with the aorist stem  $v\bar{e}di\dot{s}-in$   $\acute{a}-v\bar{e}di\dot{s}-am$ .

The oldest meaning of the sio- future was probably that of Wish, which weakened to a mere future. Compare the desiderative meaning of Skr. forms like ti-stīr-ṣa-tē (§ 667 pp. 198 ff.), and the future meaning of such others as O.Ir. no-gigius § 668 p. 200.

<sup>1)</sup> Hadley, On the formation of Indo-European Futures, 1859, in his Essays, pp. 184 ff. [G. Meyer]. Th. Benfey, Über die Entstehung und die Formen des idg. Optativ (Potential) sowie über das Futurum auf sanskritisch syāmi u. s. w., Abhandl. d. Gött. Ges. d. Wissensch. xvi 135 ff. L. Hirzel, Zum Futurum im Idg., Kuhn's Zeitschr. xiii 215 ff. J. Schmidt, La formation des futurs dans les langues indo-germ, Revue de linguistique III 365 ff. — Bezzenberger, Conditionalformen im Avesta, in his Beitr. II 160 f. - A. Franke, Das Futurum im Griech., ein sprachgeschichtlicher Versuch, Gött. 1861. T. H. Key, On the Formation of Greek Futures and First Aorists, Trans. Phil. Soc. 1861, Leskien, Die Formen des Futurums und zusammengesetzten Aorists mit oo in den homer. Gedichten, Curtius' Stud. 11 65 ff. P. Cauer, Die dor. Futur- und Aoristbildungen der abgeleiteten Verba auf -ζω, Sprachwiss. Abhandl. aus G. Curtius' Gramm. Gesellsch. pp. 126 ff. J. Wackernagel Griech. xrequova, Idg. Forsch. II 151 ff. (In the explanation of xτεριούσι and the similar Homeric future forms I concur with Wackernagel, see § 757 Rem. p. 277). Janson, De Graeci sermonis paulopost-futuri forma atque usu, Rastenburg 1844. — J. Sohmidt, Über das Futurum im Aksl., Kuhn-Sohleicher's Beitr. IV 239 ff.

Only in Aryan and in Balto-Slavonic is the sio-future certain. In such forms as Gr. δείξω it cannot be proved that after s an i has been lost, and they may be regarded as conjunctives of the s-aorist, δείξω fut. being the same as  $\partial \varepsilon / \xi \omega$  conj. of  $\ddot{\varepsilon} \partial \varepsilon / \xi \alpha$ , and as Lat.  $d\bar{\imath} x \bar{\imath}$  beside opt. dīxim. Special attention should be given to Epic forms like imper. οἶσε οἴσετε beside fut. οἴσω, imper. ὄψεσθε beside fut. οψομαι, which make strongly for this view (see § 833). On the other hand, I know of nothing to prevent fut. δείξω being derived from \*\delta\ellinetin-\sigma\_kw (Skr. d\bar{e}k\bar{s}y\bar{a}mi). The same doubt is suggested by futures of the type of τενέω τενώ (cp. Skr. tanišyāmi), which as conj. aor. may be compared with είδεω είδω from η δεα (§ 836).1) We may conjecture that in Greek the Idg. forms with -sio- and the conj. aorist had run together; as, in Lithuanian, beside dů'siane dů'sime dů'siate dů'site, the future answering to Skr. dāsyámas dāsyátha, we find used in the same way the Aorist Injunctive forms du'sme du'ste. Compare the Author, M. U. III 58 ff.; G. Meyer, Gr. Gr. 2 473 f.; Johansson, Deriv. Verb. Contr. 203 ff.

Spite of this uncertainty, the Greek future may be treated here along with the Aryan and Balto-Slavonic sio-future.

Remark. I know of no evidence to support Ascoli's assumption (Sprachw. Briefe, 65 ff.), that  $-\sigma_{\epsilon\omega}$  in the Doric future comes regularly from  $*_{-\sigma \underline{\iota}\omega} = 8kr. -sy\bar{a}mi$  Lith. -siu.

- § 748. Pr. Idg. We have two endings to distinguish, -sio- and -sio- (-esio-).
- (A) -sio. The regular form of the root, as has been said in the preceding section, was strong grade (with e in the e-series). Thus the matter remained in Aryan; cp. dekšya-ti beside pres. diśá-ti diś-ya-ti. Thus it often is in Lithuanian, as  $re\tilde{m}$ -siu from  $\sqrt{rem}$ -, versiu from  $\sqrt{uert}$ -. Lithuanian the form fell under the influence of the infinitive

<sup>1)</sup> It is striking that Homer uses no such form as τενείω ελαίω parallel to τελείω for \*τελεσ-μω, λιλαίομαι for \*λιλασ-μο-μαι.

stem, and we have Mksiu following Mkti, instead of \*leiksiu (pres. lëkmì, lëkù), and beside rem-siu (rem-ti) a variant rìm-siu, inf. rìm-ti (pres. rimstù), beside versiu (versti) a variant virsiu, inf. virsti (pres. virstù). In Greek, the vocalism of the future always agrees with the s-aorist, and this was mostly regulated by the present: τέρψω like ἔτερψα from τέρπω, γράψω like ἔγραψα from γράφω, γλύψω like ἔγλυψα from γλύψω, ὀμόρξω like ὤμορξα from ὀμόργνν-μι. Exceptions: τείσω like ἔτεισα, but pres. τίνω (for \*τι-ν-Γω); μείξω like ἕμειξα, but pres. μίγ-νν-μι.

√ rem- 'rest': Skr. rą-sya-tē 'he will rest', Lith. rem-siu 'I will support' (rem-ti) rim-siu 'I will grow calm (in mind)' (rìm-ti). \( \sqrt{men-}\) 'think': Skr. mq-sya-tē, Lith. m\(\tilde{t}\)-siu (mi\(\tilde{n}\)-ti, pres.  $men-\dot{u}$ ).  $\sqrt{qei}$ - 'pay a penalty' etc.: Skr.  $c\bar{e}$ - $\S y\acute{a}$ -tiGr. τεί-σω (τεῖσαι, pres. τίνω).  $\sqrt{pleu}$ - 'swim, rinse, wash': Skr.  $pl\bar{o}$ - $\check{s}y\alpha$ -ti, Gr.  $\pi\lambda\varepsilon\dot{v}$ - $\sigma o$ - $\mu\alpha\iota$  ( $\pi\lambda\varepsilon\tilde{v}\sigma\alpha\iota$ ), Lith.  $pl\acute{a}u$ -siu(pláu-ti). Vuert- 'vertere': Skr. vart-syá-ti, Lith. versiu 'I shall turn' (versti) virsiu 'I shall fall down' (virsti). Vuerg-'to work, be active': Avest. part. mid. var sya-mna-, Gr. ἔρξω (ἔρξαι). V serp- 'crawl': Skr. srap-sya-ti šarp-sya-ti Gr. ξοψω (ξοψαι). \(\sqrt{terp-}\) 'give joy': Skr. \(trap-sya-ti\) tarp-sya-ti (the latter in the Grammarians), Gr. τέρψω (τέρψαι).  $\sqrt{der \hat{k}}$ -'see': Skr. drak- $\S y \acute{a}$ -ti, Gr.  $\delta \acute{\epsilon} \rho \S o \mu a$  ( $\acute{\epsilon} \delta \epsilon \rho \S \acute{a} \mu \eta \nu$ ).  $\sqrt{gert}$ -'cut, strike sharply': Skr. kart-sya-ti (instead of \*cart-, cp. karta-ti § 522 p. 85), Lith. kirsiu (kirsti, pres. kertù).  $\sqrt{\text{leig-'leave'}}$ : Skr.  $r\bar{e}k$ - $\tilde{s}ya$ - $t\bar{e}$ , Gr. λείψω (λεῖψαι), Lith. lik--siu (lìk-ti, pres. lëkù).  $\sqrt{ueid}$ - 'know, see': Skr.  $v\bar{e}t$ -sya-ti, Gr.  $\varepsilon i\sigma \omega \mu \omega$  ( $\varepsilon i\sigma \omega \sigma \vartheta \omega$ ), Lith. isz-v y siu (-v y sti).  $\sqrt{deik}$ -'show': Skr.  $d\bar{e}k$ - $\S ya$ -ti, Gr.  $\delta \varepsilon i \S \omega$  ( $\delta \varepsilon i \S \omega i$ ).  $\sqrt{bheu}dh$ - 'awake, observe': Skr. bhōt-sya-ti, Gr. πεύσομαι, Lith. bùsiu (bùsti). V jeug- 'iungere': Skr.  $y\bar{o}k$ - $\dot{s}ya$ -ti, Gr.  $\zeta\varepsilon\dot{v}\xi\omega$  ( $\zeta\varepsilon\tilde{v}\xi\alpha$ ), Lith.  $j\dot{u}nk$ --siu like jùnk-ti following the present jùngiu. V peq-'coquere': Skr. pak- $\S ya$ -ti, Gr.  $\pi \acute{\epsilon} \psi \omega$ .  $\lor dhegh$ - 'burn': Skr. dhak- $\check{s}y\acute{a}$ -ti, Lith.  $d\grave{e}k$ -siu ( $d\grave{e}k$ -ti).  $\bigvee seq$ - 'to be with, follow': Avest. hax- $\check{s}ye$ -iti, Gr.  $\check{s}\psi o\mu a\iota$ , Lith.  $s\grave{e}k$ -siu ( $s\grave{e}k$ -ti). Ved- 'eat': Skr. at-sya-ti, Lith. ésiu (ésti). V saus- 'grow

dry': Skr.  $\dot{s}\bar{o}k\dot{s}ya$ -ti (pres.  $\dot{s}\dot{u}\dot{s}$ -ya-ti, see I § 557.4 p. 413), Lith.  $sa\ddot{u}siu$  ( $sa\ddot{u}s$ -ti).  $\checkmark d\hbar\bar{e}$ - 'place, lay': Skr.  $d\hbar\bar{a}$ -sya-ti, Gr.  $\vartheta\eta'$ - $\sigma\omega$ , Lith.  $d\acute{e}$ -siu ( $d\acute{e}$ -ti).  $\checkmark d\bar{o}$ - 'give': Skr.  $d\bar{a}$ -sya-ti, Gr.  $\vartheta\omega'$ - $\sigma\omega$ , Lith.  $d\mathring{u}$ '-siu ( $d\mathring{u}$ '-ti).  $\checkmark st\bar{a}$ - 'stand': Skr.  $sth\bar{a}$ -sya-ti, Gr.  $\sigma\tau\dot{\alpha}$ - $\sigma\omega$   $\sigma\tau\dot{\gamma}$ - $\sigma\omega$  ( $\sigma\tau\dot{\gamma}\sigma\omega$ ), Lith.  $st\dot{o}$ -siu ( $st\dot{o}$ -ti).

V bhey- 'become': Avest.  $b\bar{u}$ -šye-iti, Gr.  $\varphi \acute{v}$ -σω ( $\varphi \~v$ σω), Lith.  $b\acute{u}$ -siu O.C.Sl. \*byšą (only in partic. byšąšteje byšęšteje 'τὸ μέλλον'). Analogously, Skr. sứ-šya-nt- beside sō-šyá-ti Avest. hao-šye-iti from V sey- 'drive on, quicken, enliven' (ep. perf. Skr. sasúva like babhúva). Compare § 747 pp. 268 f.

§ 749. (B)  $-\partial s_i o$ - ( $-es_i o$ -). Skr.  $-i\check{s}ya$ - for  $-\partial s_i o$ -. But Gr.  $-\varepsilon o$ - comes from  $-es_i o$ -, unless (more probably)  $-\varepsilon o$ - is for  $-es_i o$ -, and belongs to the conjunctive aorist (see § 747).\(^1\)) The Sanskrit  $-i\check{s}ya$ - could be added to any root ending in a consonant; but Gr.  $-\varepsilon o$ - was the regular future suffix only with roots in a liquid or a nasal. So we have Skr.  $k\check{s}ari\check{s}ya$ -ti 'it will flow, dissolve' (gramm.) answering to Greek  $\varphi \partial \varepsilon \varrho \acute{\omega} \varphi \partial \varepsilon \varrho \acute{\omega}$  'I shall destroy' (Hom.  $\varphi \partial \acute{\varepsilon} \varrho \sigma \omega$ ), Skr.  $hani\check{s}ya$ -ti 'he will strike, kill' to Gr.  $\partial \varepsilon \nu \acute{\varepsilon} \omega - \check{\omega}$  'I shall strike' ( $\vee ghen$ -), Skr.  $tani\check{s}ya$ -ti (gramm.) 'he will stretch' to Gr.  $\tau \varepsilon \nu \acute{\varepsilon} \omega - \check{\omega}$  'I shall stretch', Skr.  $k\check{s}ani\check{s}ya$ -ti 'he will hurt' (gramm.) to Gr.  $\kappa \iota \varepsilon \nu \acute{\varepsilon} \omega - \check{\omega}$  'I shall kill'. A few Greek examples have  $-\alpha o$ - with  $-\alpha = -\partial$ -, as  $\kappa \varrho \varepsilon \mu \acute{\omega} \omega - \check{\omega}$  'I shall hang', cp.  $\kappa \varrho \acute{\varepsilon} \mu \alpha \mu \alpha \iota$ ,  $\kappa \varrho \varepsilon \mu \acute{\omega} \partial \varrho \check{\omega}$  'hanging basket'. Compare §§ 834 ff.

§ 750. Futures with -sio- have also been formed, from the proethnic period onwards, from stems consisting of  $\vee$  + Determinative. We may mention:

(1) Stems with  $-\bar{a}$ -  $-\bar{e}$ -, or  $-\bar{o}$ - (Class X). \* $dr\bar{a}$ - 'run': Skr.  $dr\bar{a}$ -sya-ti (gramm.), Gr.  $\delta\rho\dot{\alpha}$ -so- $\mu\alpha\iota$ . \*mn- $\bar{a}$ - think of, remember': Skr.  $mn\bar{a}$ -sya-ti (gramm.), Gr.  $\mu\nu\dot{\alpha}$ -so  $\mu\nu\dot{\eta}$ -so. \* $q\bar{a}$ - 'go': Skr.  $g\bar{a}$ -sya-tē (gramm.), Gr.  $\beta\dot{\alpha}$ -so- $\mu\alpha\iota$   $\beta\dot{\eta}$ -so- $\mu\alpha\iota$ .

<sup>1)</sup> I now follow Bartholomae (Bezz. Beitr. XVII 109 ff.) in holding that -e— which follows the root in  $\tau e \nu e \omega$  and like words is Idg. -e-, not -e- (I § 110 pp. 103 ff.).

- \* $\psi$ -ē- 'blow': Skr.  $v\bar{a}$ -sya-ti, Gr.  $\mathring{a}\mathring{\eta}$ - $\sigma$ 0- $\mu$ aı. \* $g\bar{n}$ -ē- 'noscere': Skr.  $j\bar{n}\bar{a}$ -sya-ti, Gr.  $\gamma v\mathring{\omega}$ - $\sigma$ 0- $\mu$ aı. \* $\psi id$ -ē- \* $\psi e\dot{i}d$ -ē- 'see, know': Gr. Dor.  $\mathring{l}\mathring{\delta}\eta$ - $\sigma$  $\widetilde{\omega}$  Lith. pa-vydesiu ('invidebo'), Gr.  $\varepsilon \mathring{l}\mathring{\delta}\mathring{\eta}$ - $\sigma$  $\omega$  Lith. veizde-siu. \* $m\eta n$ -ē- 'think': Gr.  $\mu av\mathring{\eta}$ - $\sigma$ 0- $\mu$ au, Lith. mine-siu. Compare §§ 578 ff.
- (2) Stems with s-elements (Class XIX and XX). tr-es'tremble': Skr. tras- $i\S y\acute{a}$ -ti, Gr.  $\tau \varrho \acute{\epsilon} \sigma(\sigma) \omega$ , Lith.  $tr \~esi u$  for \*tr 'esi-si u (pres. tresi u). Skr.  $\=esi s\~esi u$  beside  $\=esi s²$ - $\iesi s²$ - $\iesi u$  beside  $\iesi s²$ - $\iesi s²$ - $\iesi u$  beside  $\iesi s²$ - $\iesi s²$ - $\iesi u$  beside  $\iesi s²$ - $\iesi u$  beside  $\iesi s²$ - $\iesi u$  'suits, accommodates';  $ak \~esi s²$ - $\iesi u$ - $\iesi$
- (3) Stems with dh- and d-elements (Class XXV). Skr. yōt--sya-ti beside yō-dha-ti 'gets into motion', Lith. jùsiu beside jundù 'I begin to tremble', \*ieu-dh-. Skr. rāt-sya-ti beside  $r\bar{a}$ -dh-ya-t $\bar{e}$  'carries out successfully'; mrad-i $\hat{y}ya$ -ti beside vi--mrada-ti 'softens' (mr-ada-). Gr.  $\varkappa\lambda\alpha\sigma(\sigma)\omega$  from  $\varkappa\lambda\alpha-\delta$ - 'break off'. But it is doubtful whether  $\pi \lambda \dot{\eta} \sigma \omega$  'I will fill' is  $*\pi \lambda \dot{\eta} \vartheta - \sigma \omega$ (cp. πλή-θω πέπλησται πληστέο-ς) or πλή-σω (cp. πλήτο πέπληνται), whether ελεύσομαι 'I will come' is \*ελευθ-σομαι (cp. ήλυ-θο-ν  $\vec{\epsilon}\lambda \epsilon v \sigma \tau \vec{\epsilon} o - v$ ) or  $\vec{\epsilon}\lambda \epsilon \vec{v} - \sigma o \mu \alpha \iota$  (cp.  $\vec{\epsilon}\lambda \acute{\eta}\lambda v - \tau \epsilon = \pi \rho o \sigma - \acute{\eta}\lambda v \tau o - c$ ), whether  $\pi \vec{v} \sigma \omega$  'I will make rot' is  $*\pi \vec{v} \vartheta - \sigma \omega$  (cp.  $\pi \vec{v} - \vartheta \omega$ ) or  $\pi \vec{v} - \sigma \omega$  (cp. Lith. pūv-ù). There is the same doubt in Lith. futures like plausiu from płau-d-žiu 'I wash' (Idg. \*pleu-d-), spráusiu from spráu-d--žiu 'I subdue' (Idg. \*spreu-d-) gësiu from gë-du 'I sing'. As we know not in what period of Lithuanian these verbal classes arose, we are not compelled to assume that plausiu, say, comes from a supposed form \*plautsiō. The fact may be that plau-siu is really future to plau-ju; and then, on the analogy of geidžiù geïsiu geïsti, and others of this kind, plausiu was involuntarily associated with plaudžiu plausti as its future. Compare §§ 688 ff.

Forms with other present-signs sometimes make a sio-future in different languages; as Skr. indhiṣyati Gr.  $\varkappa\lambda\acute{a}\gamma\xi\omega$  Lith. jùnksiu. See below, §§ 752 ff.

§ 751. The indicative with -sio- seems to have had in proethnic speech a participle attached, but no more (Skr.  $d\bar{a}$ -syá-nt-, Gr.  $\delta\omega$ - $\sigma\omega\nu$ , Lith. dial.  $d\hat{u}$ 'sius for \* $d\hat{u}$ siās, O.C.Sl. bysāsteje). In Sanskrit grew up a conj. with Ar. - $\bar{a}$ -, and an augmented preterite; and Greek developed an opt. with -i-. See §§ 753, 759.

§ 752. Aryan. -sio- and -ssio-, but the latter is only to be found in Sanskrit (-iṣya-). There is no example of a future in Old Persian; this is probably due to chance. In Sanskrit and Avestic this future was a living and productive type. It is used, true enough, less often in Vedic than later; but then in Vedic injunctive and conjunctive forms were used with future meaning.

To the exx. cited in §§ 748—750 may be added: Skr.  $vak 
olimits_i ya - it$  beside Avest. vak - it 'speaks'; Skr. Skr.  $jan i 
olimits_i ya - it$  beside Skr. jan - a - it 'begets'; Skr. bhantsya - it beside  $badh - n 
olimits_i - it$  'binds';  $r 
olimits_i va - it$  beside  $badh - n 
olimits_i - it$  'binds';

In Sanskrit we meet with specimens of this future made from presents of any kind (cp. § 750).  $m\bar{a}rk\bar{s}ya-t\bar{e}$  (beside  $mrak\bar{s}ya-t\bar{e}$ ) from  $m\acute{a}r\bar{s}-ti$  Class I and  $m\acute{a}rja-ti$  Class II 'wipes' (cp. § 494 p. 55, § 514 p. 81).  $s\bar{i}di\bar{s}ya-ti$  (beside satsya-ti) from  $s\acute{i}da-ti$  Class IV 'sits' (§ 550 p. 106).  $dadi\bar{s}ya-t\bar{e}$  (beside  $d\bar{a}-sy\acute{a}-ti$ ) from  $d\acute{a}-d\bar{a}-ti$  Class V  $d\acute{a}-d-a-ti$  Class VI 'gives';  $jahi\bar{s}ya-ti$  (beside  $h\bar{a}-sya-ti$ ) from  $j\acute{a}-h\bar{a}-ti$  ja-h-a-ti leaves, deserts'.  $j\bar{a}gari\bar{s}y\acute{a}-ti$  from  $j\bar{a}-gar-ti$  Class V wakes' (§ 560 pp. 109 f.).  $indhi\bar{s}ya-ti$  from  $inddh\acute{e}$  Class XV 'burns'  $\bigvee a\dot{i}dh$ -a $s\dot{n}nuvi\bar{s}ya-ti$  from  $a\dot{s}-n\acute{o}-ti$  Class XVII 'attains';  $jinvi\bar{s}ya-ti$  from  $ji-n\acute{o}-ti$  Class XVII ji-nva-ti Class XVIII 'sets in motion, propels'.  $titik\bar{s}i\bar{s}ya-t\bar{e}$  from the desid.  $ti-tik-\bar{s}a-t\bar{e}$  Class XXI from tij- 'to be sharp'.  $khy\bar{a}yi\bar{s}ya-t\bar{e}$  from pass.  $khy-\bar{a}-ya-t\bar{e}$  Class XXVIII 'is seen'.

Rather commoner in the later language is the future of denominatives in -yá-ti, Class XXXI, sa gōpāyišyá-ti from gōpā--yá-ti 'guards' (qōpá-s 'guardian'); and of present stems in -áya-ti (Causatives), Class XXXII, such as vyayišya-tē from vy- $\dot{a}ya$ -ti 'enwraps, covers',  $dh\bar{a}rayi$  $\dot{s}y$  $\dot{a}$ -ti from  $dh\bar{a}r$ - $\dot{a}ya$ -ti'holds'.

§ 753. Sanskrit has an augmented preterite from the future stem, meaning on the point of; as ábharişya-t 'he was just going to take away, wished to take'. But this form usually stands as a conditional; and so Conditional it is called.

There are a few scattered instances (in the Maha-Bharata) of Injunctive forms, implying wish; as 2nd pl. mid. bhavišya--dhvam.

Similarly there are scattered Conjunctives; as Ved. 2nd sing. karišyá-s.

§ 754. Greek. It is not quite certain that the Greek σ-future has any immediate connexion with the Aryan and Balto-Slavonic sio-type, as we have seen already (§ 747 p. 269).

With  $-\sigma_0$  (§ 748) and  $-\varepsilon_0$  - $\alpha_0$  (§ 749), we find a third suffix, -σεο-.

§ 755. (I) -00-, a productive suffix in Ionic-Attic and elsewhere. Examples in §§ 748 and 750.

There is an apparent anomaly in keeping  $\sigma$  after sonants in the future  $\sigma\tau\eta$ - $\sigma\omega$ , as in the agrist  $\ddot{\varepsilon}\sigma\tau\eta\sigma\alpha$ . This is most simply explained as being due to the analogy of δείξω ἔδειξα etc., consonantal stems. Compare I § 564 p. 421.

Stems in Liquid or Nasal generally conform to Type II (§ 757); but roots in  $\rho$  have  $-\sigma\omega$  as well in the language of Homer and poets of the epic school:  $\varphi \vartheta \dot{\epsilon} \rho \sigma \omega$  (pres.  $\varphi \vartheta \dot{\epsilon} \dot{\rho} \omega$ 'I destroy') beside φθερέω -ω.

Remark. Why is it that beside a fut.  $\varphi \vartheta \acute{e} \varrho \sigma \omega$  there is no fut. \* $\varphi \vartheta \epsilon \acute{e} \varrho \omega$ , as might be expected from finding ἔκειρα side by side with ἔκερσα? This is explained without difficulty if we suppose Freiga to be analogical, and due to ἔπτεινα ἔνειμα and the like (I § 563 Rem. 2 p. 419); for there ἔκειρα (Kuhn's Zeitschr. xxix 127 ff.) is not convincing, to my mind. 

- § 756.  $-\sigma_0$  forms futures from all sorts and kinds of stems, present, agrist, and perfect. Often there are parallel  $\sigma$ -agrists.
- (1) Hom. διδώ-σω (beside δώ-σω) from δί-δω-μι 'I give', Class III. διδάξω from δι-δάσαω, Class XXIII (aor. ἐδίδαξα). Hom. ἀίξω Att. ἄξω from ἀίσσω 'I rush', ποι-φύξω from ποι-φύσσω 'I pant, puff', ποι-πνύσω from ποι-πνύω 'I snort, pant, puff', Class XXVII (aor. ἤιξα ἢξα etc.).
- (2) κλάγξω (ἔκλαγξα) beside κλάζω Ί cry, shout' for \*κλαγγ-μω, Class XXIX, and κλαγγάνω, Class XIV (§ 621 p. 158, § 628 p. 165, § 744 p. 266). Ion. λάμψομω beside Att. λήψομω from λαμβάνω 'I take', Class XIV (§ 621 p. 158). σφίγξω ἔσφιγξα) from σφίγγω 'I tie, bind', Class XVI (§ 631 p. 167).
- (3) From the Denominative presents κησύσσω 'I announce' άρπάζω 'I carry off' σαλπίζω 'I trumpet' μειλίσσω 'I soothe, pacify' τελέω -ῶ 'I complete' we have the futures κησύξω άρπάξω σαλπίγξω μειλίξω τελέσ(σ)ω (aor. ἐκήσῦξα etc.), on the analogy of πράξω: πράσσω, σφάξω: σφάζω and the like (cp. θανμανῶ ἀγγελῶ § 757). What made it all the easier for these futures to arise, was that there existed in pre-Greek times denominative participles like κηρῦκ-τό-ς (ἀ-κήσῦκτο-ς), which seemed parallel to πρῶκ-τό-ς σφακ-τό-ς (II § 79 pp. 224 f.).

- εξω) from stem of ε-σχ-ο-ν 'I held' (cp. εσχηκα), μελ-ή-σει from μέλει 'it is a care' (cp. ἐμέλησε μεμέληκε), ἐθελ-ή-σω from ἐθέλω 'I wish' (ἐθέλησα ἢθέληκα), ενδ-ή-σω from ενδω 'I sleep' (cp. καθ-ενδήσαι); of the same kind are Lith. drebĕ-siu from drebù 'I tremble', tekĕ-siu from tekù 'I run, flow'. The same type of future is seen in stems marked as present or aorist, where it retains the special tense mark, as καθ-ιζήσομαι from ζω 'I set' for \*si-zd-ō (cp. -ιζῆσαι ζζηκα), βουλήσομαι from βούλομαι 'I wish' ground-form \*al-no- § 611 p. 150 (cp. βεβούλημαι) βοσκήσω from βό-σκω 'I pasture, feed', τυπτήσω from τύπ-τω 'I strike' (cp. ἐτύπτησα), χαιρήσω from χαίρω 'I rejoice' for \*χαρ-μω (cp. ἐχαίρησα), όζήσω from ὅζω 'I smell' for \*όδ-μω (cp. ἀζησα), πεπιθήσω from πε-πιθ-εῖν 'to persuade', πεφιδήσομαι from πε-φιδ-έ-σθαι 'to spare'.
- (6) Futures in -σω from perfect forms. ἐστήξω from ἔστηκα 'I stand'. λελείψεται from λέλειπται 'is left over'. μεμνήσεται from μέμνηται remembers'. Hom. κεχαρήσω from κεχαρηώς 'glad'.

§ 757. (II) -80- -00- -00- -vo-.

-εο- (becomes -ιο- in Dor., I § 64 p. 51) is the ordinary future suffix in liquid or nasal stems, as  $\varphi \vartheta \varepsilon \varrho \dot{\varepsilon} \omega$  - $\tilde{\omega}$  (beside Hom.  $\varphi \vartheta \dot{\varepsilon} \varrho \sigma \omega$ ),  $\tau \varepsilon \nu \dot{\varepsilon} \omega$  - $\tilde{\omega}$ , see § 749 p. 271.

Hence -so- spread to the future of stems which had a nasal formative suffix in the present; as  $\varphi \alpha \nu \epsilon \omega$  - $\tilde{\omega}$  from  $\varphi \alpha i \nu \omega$ 

'I show, make appear' for \* $\varphi\alpha$ -ν- $\iota\omega$ , κλινέω - $\tilde{\omega}$  from κλίνω 'I bend' for \*κλι-ν- $\iota\omega$ , see § 611 p. 150, ξανέω - $\tilde{\omega}$  from ξαίνω 'I scratch, comb' for \* $\xi$ -αν- $\iota\omega$ , αὐανέω - $\tilde{\omega}$  from αὐαίνω 'I make dry' for \* $\sigma\alpha$ νσ- $\alpha$ ν- $\iota\omega$  (cp. Lith.  $s\alpha$  $\tilde{u}$ s $\tilde{\iota}$ -siu); see § 618 p. 156, § 621 p. 158. It also spread to Denominatives with liquid and nasal stems, as  $\vartheta\alpha$ νμαίνω 'I wonder' ἀγγέλλω 'I announce':  $\vartheta\alpha$ νμανέω ἀγγελέω - $\tilde{\omega}$ , not like κηρύξω from κηρύσσω (§ 756. 3 p. 275).

The analogy of κρεμάω : κρεμάσ(σ)αι, ολέα : ολέσ(σ)αι, and the like, produced from the aorists δικάσ(σ)αι 'to judge, investigate' (δικάζω) δοκιμάσ(σ)αι 'probare' (δοκιμάζω) the futures δικάω δοκιμάω -ῶ, and similarly we have ἀμφιέω -ῶ beside ἀμφι-έσ(σ)αι 'to put on',1) μαχέσμαι -οῦμαι beside μαχέσ(σ)ασθαι 'to fight', τελέω -ῶ beside τελέσ(σ)αι 'to complete', τανύω beside τανν'σ(σ)αι, and many others.

An exceptional group contains the Attic and Ionic future in  $-i\acute{\epsilon}\omega$   $-i\~{\omega}$  from a present in  $-i\~{\zeta}\omega$ , as  $*\epsilon \omega \mu i\~{\omega}$  from  $*\epsilon \omega \mu i\~{\zeta}\omega$  'I bring'; for which  $*\epsilon \omega \mu i \omega$  might be looked for, to judge from  $\delta i \varkappa \acute{\omega}\omega$ . We may conjecture that the type was once actually  $*\epsilon \omega \mu i \omega$ ; and that  $*\epsilon i \omega$  became  $-i\acute{\epsilon}\omega - i \omega$  as the effect of the constant use of  $-i \omega - i \omega$ .  $-i \omega$  is an intruder also in  $\delta \mu \acute{\epsilon} \omega \mu \omega i \omega i \mu \iota \iota \iota \iota$ .

§ 758. (III)  $-\sigma\varepsilon\sigma$  (Doric Future).<sup>2</sup>) Whether  $-\sigma\sigma$  =

<sup>1)</sup> We can hardly regard  $\hat{\alpha}\mu\varphi\iota-\hat{\epsilon}\omega$  as being \*- $f\epsilon\sigma$ - $\omega$ , and a conj. to Skr.  $v\acute{a}s$ - $t\bar{e}$  Gr.  $\hat{\epsilon}\pi\iota$ - $\epsilon\sigma\tau\alpha\iota$ .

<sup>2)</sup> For the Doric Future, see now Solmsen, Kuhn's Zeitsohr. XXXII 546 ff.

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Skr. -sya-, or whether it is the conj. of the s-aorist,  $-\sigma\varepsilon o$ - is  $-\sigma o$ - transformed under the influence of  $-\varepsilon o$ -.

-σεο- is the ordinary Doric suffix answering to Attic -σο-; as  $\pi \rho \bar{\alpha} \xi \dot{\epsilon} \omega$  -ίω  $\beta \sigma \bar{\alpha} \vartheta \eta \sigma \dot{\epsilon} \omega$  -ία, but Att.  $\pi \rho \dot{\alpha} \xi a$   $\beta \sigma \eta \vartheta \dot{\eta} \sigma \omega$ . A few instances of it occur in Ion.-Att., as  $\varphi \varepsilon \nu \xi \sigma \tilde{\nu} \mu \alpha \iota$  beside  $\varphi \varepsilon \iota \xi \sigma \mu \alpha \iota$  (ep. the Author, Gr. Gr.<sup>2</sup> p. 170 footnote 1).

§ 759. Greek, besides the indic., partic., and inf. future, ( $\delta \epsilon l \xi \omega \nu \delta \epsilon l \xi \omega \nu$ ) had only the optative, as  $\delta \epsilon l \xi \omega \mu \nu$ , which is quite a new formation (see the Author, Gr. Gr. <sup>2</sup> p. 188).

§ 760. Balto-Slavonic. Only -sio-, and nothing which answers to Skr. -išya- and Gr. -εο- -αο-, and so forth. In Lithuanian the future in -siu lived on, and still lives and forms a type; but in Slavonic it died before historic times began, all but the sole form O.C.Sl. byšašteje (§ 748 p. 271).

§ 761. The Lith. fut. -siu is inflected differently in different dialects. The 1<sup>st</sup> pl. is sometimes  $d\mathring{u}'$ -sia-m(e) like  $ve\tilde{r}czia-m(e)$  § 725 pp. 254 ff. (cp. partic. dial.  $d\mathring{u}'sius =$  \* $d\mathring{u}si\bar{q}s$ , and O.C.Sl.  $by\check{s}a\check{s}teje$ ); sometimes it is  $d\mathring{u}$ -si-m(e) — in High Lithuanian, for instance — like  $\tilde{a}vi$ -m(e) § 727 pp. 257 ff.¹) The other forms which occur, pl.  $d\mathring{u}'sme$   $d\mathring{u}'ste$  dual  $d\mathring{u}'sva$   $d\mathring{u}'sta$ , like the  $3^{rd}$  sing.  $b\mathring{u}s$   $ga\~{u}s$ , are injunctives of the s-aorist (§ 828). The partic.  $d\mathring{u}'s\~{e}s$  (cp. O.C.Sl.  $by\check{s}e\~{s}teje$ ) admits of more than one explanation; see J. Schmidt, as cited in footnote.

Examples of Lith. fut. are given in § 748 pp. 269 f.

Where marks of the present are retained in the future, they are retained in the other forms from the Infinitive Stem.

Future from Present Stem with inserted nasal: jùnksiu from jùng-iu 'I put in the yoke', skúsiu from skùndžiu 'I weep, bewail myself', leñksiu from lenkiù 'I bend', § 744 p. 267. Compare Gr. κλάγξω etc. § 756.2 p. 275.

From Present in -inu -enu: saŭsį-siu from saŭsinu 'I make dry', gyvé-siu from gyvenù 'I dwell', see § 624 p. 161. Compare Gr. αὐανῶ § 757 p. 277.

<sup>1)</sup> J. Schmidt's assumption (Neutra, pp. 423 ff.) that  $d\mathring{u}$  sime is an optative, is wrong. Idg.  $-\overline{\imath}$ - would remain long in Lithuanian.

The combination -e-siu. minė-siu from menù 'I think of' pret. minė, cp. Gr. μανή-σομαι ε-μάνη-ν. drebė-siu from drebù 'I tremble'. stenė-siu from stenù 'I groan'. penë-siu from penù 'I nourish, fatten'. avĕ-siu from aviù 'I have something on my feet'. Compare § 756.4 p. 275.

Later Stratum of Denominatives.  $dovan\acute{o}-siu$  from  $dovan\acute{o}-ju$  'I give' ( $dovan\grave{a}$  'a gift'),  $p\~{a}sako-siu$  from  $p\~{a}sako-ju$  'I recount, tell' ( $p\~{a}-saka$  'talc'), like  $\check{z}i\acute{o}-siu$  from  $\check{z}i\acute{o}-ju$  'I open my mouth' (§ 740 p. 264), cp. Gr.  $\tau \bar{\iota} \mu \acute{a}-\sigma \omega$ .  $j\~{u}k\~{u}'-siu$  from  $j\~{u}k\~{u}'-ju$  'I sport, jest' ( $j\~{u}ka-s$  'jest'),  $j\~{u}d\~{u}-siu$  from  $j\~{u}d\~{u}-ju$  'I have a black sheen', analogous to Gr.  $\mu \iota \sigma \vartheta \omega -\sigma \omega$ .  $dal\rlap/{y}-su$  from  $dal\rlap/{y}-j\~{u}$  'I share, divide' ( $dal\~{u}-s$  'a share, part'),  $szi\~{r}d\rlap/{y}-si\~{u}-s$  from  $szi\~{r}d\rlap/{y}-j\~{u}-s$  'I take to heart' ( $szird\~{u}-s$  'heart'), like Gr.  $zovt-\sigma \omega$ . Compare § 756. 5 p. 276, § 773.  $kel\~{u}-siu$  from  $kel\~{u}-ju$  'I travel' ( $k\~{e}la-s$   $k\~{e}le-s$  'way').

Appendix to Classes XXVII - XXX.

Extension of Present Stems in -sko-, -to-, and -dho- -doby the Suffix -io-.

§ 762. The reason why this extension of the -sko-class (XXII), the -to-class (XXIV) and the -dho- and -do-class (XXV) is relegated to an Appendix, and they are not allowed a class each to themselves, has been explained in § 704 p. 23%.

§ 763. jo-extension of sko-stems (§§ 669 ff.)

Sanskrit can show only a few passive forms with -ya-(cp. §§ 709 and 710, pp. 243 ff.), in stems where -sko- has lost its character as a present-forming suffix: prch-yá-tē from prchá-ti 'asks', vānch-ya-tē from vāncha-ti 'wishes' (§ 671 p. 203). Possibly vršc-yá-tē, from vršcá-ti 'tears to pieces', is another; see § 669 p. 202.

Lith. dresk-iù 'I tear' trans., beside driskaŭ, O.C.Sl. ištą for \*īsk-ją beside iską 'I scek' (§ 677 p. 210).

Remark. Gr.  $\pi\tau\omega\sigma\sigma\omega$  'I cower, cringe', in view of  $\pi\tau\omega\sigma\varkappa\dot{z}\omega$ , may be derived from  $*\pi\tau\omega\sigma\varkappa-\underline{\iota}\omega$ . However,  $\pi\tau\dot{\omega}-\xi$   $-\varkappa\dot{\omega}-\xi$  and  $\pi\tau\omega-\chi\dot{\omega}-\xi$  make it more natural to suppose that it comes from  $*\pi\tau\omega-\varkappa-\underline{\iota}\omega$  or  $*\pi\tau\omega-\chi-\underline{\iota}\omega$ .

12

Cp.  $\pi \tau \dot{\eta} \sigma \omega$  'I frighten' for \* $\pi \tau \alpha - x - t\omega$ ,  $\dot{\epsilon} \gamma \rho \dot{\eta} \sigma \omega$  'I wake' for \* $\dot{\epsilon} \gamma \rho \dot{\eta} - x - t\omega$  or  $-x - t\omega$ , and verbs in  $-\omega \sigma \sigma \omega$  such as  $\dot{\sigma} \tau \epsilon \rho \dot{\omega} \sigma \omega$  ( $\dot{\sigma} \tau \epsilon \rho \dot{\omega} \rho \dot{\omega} \rho \dot{\omega} \rho \dot{\omega}$ ) in these words were probably the same as -ko- in -s-ko-; see § 669 p. 201.

§ 764. -to-stems extended by -io- (§§ 679 ff.).

Skr. nft-ya-ti 'dances, plays' pass. ngt-ya- $t\bar{e}$  beside ng- $t\acute{a}$ - $m\bar{a}$ -na-s, pass. yat-ya- $t\bar{e}$  beside  $y\acute{a}$ -ta- $t\bar{e}$  'joins itself, strives' (§ 681 p. 213).

Lith. siuncziù 'I send', perhaps from \*su-n-to- (§ 686 p. 218). O.C.Sl. ob-rešta 'I find' perhaps from \*rē-to- (§ 687 p. 218).

Remark. Gr.  $\partial_{\ell}\dot{\nu}\sigma\sigma\omega$  (only Hdt. vI 119) seems to be not an extension of Att.  $\partial_{\ell}\dot{\nu}-\tau\omega$  'I pour, I draw water' (§ 682 p. 214), but an analogical form, suggested by  $\partial_{\ell}\dot{\nu}\omega$ , on the type of  $\partial_{\ell}\dot{\nu}\omega\omega$ :  $\partial_{\ell}\dot{\nu}\omega$  'I pour, draw water'.

§ 765. -dho- and -do- stems extended by -io-(§§ 688 ff.).

(1) -dh- $\dot{i}o$ -. Skr.  $y\dot{u}$ -dh-ya- $t\bar{e}$  'gets in motion, fights',  $r\dot{a}$ -dh-ya- $t\bar{e}$  'carries to a successful end' pass.  $r\bar{a}dh$ -ya- $t\bar{e}$  (§ 689 p. 220),  $kr\dot{u}$ -dh-ya-ti 'scorns',  $s\bar{a}$ -dh-ya-ti 'comes to its goal' (§ 691 p. 221).

Gr. θύσσομαι 'I shake or quiver, am frantic' for \*9ν-9-μο-μαι (§ 689 p. 220), ἐσθ-ίω 'I eat' (§ 694 p. 223, § 713 p. 247).

Lith. skér-d-žiu 'I burst, blow up' (§ 689 p. 219).

(2) -d-io. Only passives in Sanskrit; as  $mrd-y\acute{a}-t\bar{e}$  from  $mr-d-n\bar{a}-mi$  'I grind to pieces, crush' vi-mradati 'softens' (§ 690 p. 220),  $kh\bar{a}d-ya-t\bar{e}$  from  $kh\acute{a}-da-ti$  'bites up, chews',  $\bar{\imath}d-ya-t\bar{e}$  from  $\bar{\imath}da-t\bar{e}$  'honours, praises' (§ 692 p. 222).

Gr.  $\kappa\lambda\nu'\zeta\omega$  'I flood' for \* $\kappa\lambda\nu$ - $\delta$ - $\ell\omega$ ,  $\ell\kappa$ - $\varphi\lambda\nu'\zeta\omega$  'I spurt out' for \* $\varphi\lambda\nu$ - $\delta$ - $\ell\omega$  (§ 695 p. 224).

Lith. płau-d-žiu 'I wash, cleanse', spráu-d-žiu 'I compel, press down' (§ 690 p. 221, § 700 p. 227).

(3) Doubtful: -dh-io- or -d-io-. Avest. siż-d-ye-iti 'drives away' (§ 693 p. 223). Lith. mér-d-žiu 'I lie a dying', skél-d-žiu 'I split or burst', sru-d-žiu 'I make bloody', Lett. e'r/chu 'I separate' for \*erd-i-u (§ 701 p. 227).

## Class XXXI.

Later Group of Denominatives with Present-Suffix -io-.

§ 766. We here discuss present stems like Skr.  $d\bar{e}va-y\acute{a}-ti$  'he worships the gods' from  $d\bar{e}v\acute{a}$ - 'god', Gr.  $\varphi\iota\lambda\acute{e}-(\iota\iota)\omega$  'I treat as a friend' from  $\varphi\iota\lambda\sigma-\varsigma$  ( $\varphi\iota\lambda\varepsilon-$ ) 'friend', Skr.  $namas-y\acute{a}-ti$  'he offers worship or respect' from  $n\acute{a}mas$ - 'respect', Gr.  $\tau\epsilon\lambda\acute{e}(\sigma-\iota\iota)\omega$  'I end' from  $\tau\acute{e}\lambda\sigma\varsigma$  'end' ( $\tau\acute{e}\lambda\varepsilon\sigma-$ ). This is a productive type in almost all languages of our group, and beyond all doubt is as old as the parent language.

As I have pointed out (§ 487 p. 43, § 703 p. 232), no hard and fast line can be drawn between the verbs which grammars usually call Denominative and what they call Primary Verbs. When denominative verbs were formed in the parent language, no new and peculiar mode of conjugation was invented for them. They ran in old grooves; the present stem preferring as its type stems with the secondary suffix -io-. It was only by degrees that inflexional peculiarities sprang up; chiefly because -io- coalesced with the final of the preceding noun-stem, and thus made new suffixes. But the peculiar denominative endings often came again to be the same as those of primary verbs by the action of the laws of language.

§ 767. The proethnic language possesst io-presents from all kinds of consonant stems, from stems in -a- (-a-io), in -o- (-e-io), in -i- (-i-io), and in -u- (-u-io).

So great are the changes worked by analogy, that it is rather rare to find a denominative agreeing with the Idg. type in more than one or two languages. Thus, Lat. oper-ā-rī (Umbr. osatu 'operato' Osc. úpsannam 'operandam') and nōmin-ā-re do not correspond with Skr. apas-yá-ti and Gr. o'voualvo, which do represent the Idg. inflexion; because, in Latin, denominatives of s- and n-stems had been attracted into the ā-class in pre-historic times.

§ 768. (1) Consonant Stems.

Skr. rajas-yá-ti 'turns to dust' (in older Sanskrit only rajas-yá-s 'dusty'), Goth. rigiz-ja 'I darken myself', common ground-form \*reges-ié-ti, from rájas n. 'dust' rigis n. (gen. rigizis, see II § 132 p. 420) 'darkness'. Skr. apas-yá-ti 'is active' from ápas n. 'work' apás- 'active'; namas-yá-ti Avest. nemax-yė-iti 'bows, reveres, worships' from námas nemō n. 'reverence'; Skr. avas-yá-ti 'seeks help' from ávas n. 'help'. Gr. Hom.  $\tau \varepsilon \lambda \varepsilon i \omega \tau \varepsilon \lambda \varepsilon \omega$  Att.  $-\tilde{\omega}$  'I end' for \* $\tau \varepsilon \lambda \varepsilon \sigma$ - $\iota \omega$  (aor.  $\tau \varepsilon \lambda \varepsilon \sigma$ --σαι) from τέλος n. 'end'; Hom. ἀκείομαι ἀκέομαι 'I heal' (aor. ακέσ-σασθαι from ακος n. 'healing'. Lat. fulgur-iō from fulgur. O.H.G. refs(i)u 'I blame, scold, chasten', cp. Skr. rapás- 'bodily hurt'. — Avest, xrvīš-ye-iti i. e. xruvīš-ye-iti 'sheds blood' from a stem \*xr(u)viš-, ground-form \*qruyəs-, closely akin to Skr. kravíš- 'raw, bloody flesh'. Gr. γελάω 'I laugh' for \*γελασ-ιω from stem  $\gamma \epsilon \lambda \alpha \sigma$ - (nom.  $\gamma \epsilon \lambda \omega \varsigma$ ) 'laughter' ground-form \*geləs-(II § 134 p. 425).

Gr. ὀνομαίνω Goth. namn-ja 'I name' from ὄνομα namō n. 'name', the former for \*-my-iō, the latter for \*-my-iō (cp. Idg. \*my-iō- and \*mr-iiō-, \*bhu-iō- and \*bhu-iiō- § 707 p. 235). All the following have Idg. -y-iō-. Skr. vyšaṇ-yá-ti 'is in heat or passion' from vyšan- 'male', brahman-yá-ti 'is pious' from bráhman- n. 'piety' brahmán- 'pious person, one who prays'; Avest. vyāxmainyṣ-iti 'deliberates, thinks over' from vyāxman n. assembly, consultation'. Gr. τεκταίνω 'I carpenter, make' from τέκτων 'carpenter, workman'; σπερμαίνω 'I give forth seed' from σπέρμα 'seed'. Goth. glitmun-ja 'I shine' from \*glitmin-(cp. O.H.G. glizemo) 'brightness'.

Skr.  $vadhar-y\acute{a}-ti$  'shoots, lets off a missile' from  $v\acute{a}dhar$  n. 'shot'. Gr.  $\tau s \varkappa \mu \alpha i \varrho \omega$  'I mark, fix' from  $\tau \acute{\epsilon} \varkappa \mu \alpha \varrho$  n. 'mark, boundary'. We may perhaps assign to this section Latin desideratives like  $scr\bar{\imath}pturi\bar{\imath}$  from  $scr\bar{\imath}ptor$ ,  $\bar{\imath}suri\bar{\imath}$  from  $\bar{\imath}sor$ ;  $-turi\bar{\imath}$  for \*- $tor-i\bar{\imath}$  \*- $ty-i\bar{\imath}$ .').

This explanation follows Thurneysen, Über Herkunft und Bildung der lat. Verba, p. 66. A different view is that of Kretschmer, Kuhn's

Gr.  $\beta\lambda i\tau\tau\omega$  'I cut the honey-combs' (fut.  $\beta\lambda l\sigma\omega$ ) from  $\mu\dot{\epsilon}\lambda\iota\tau$ n. 'honey'. Lat.  $dent-i\bar{o}$  from  $d\bar{e}ns$ . Goth.  $veitv\bar{o}d-ja$  'I certify'
from  $veitv\bar{o}d$ - 'witness'. Skr.  $i\dot{s}udh-y\dot{a}-ti$  'begs, prays' Avest.  $i\dot{s}ud-ye-iti$  'confesses guilt' from Avest.  $i\dot{s}ud$ - 'a cry by which one acknowledges sin'. Gr.  $\varkappa oov\sigma\sigma\omega$  'I helm, arm' for  $\varkappa oov\vartheta-\iota\omega$  from  $\varkappa oov\sigma$ -  $v\vartheta-o\sigma$  'helmet'. Lat.  $cust\bar{o}d-i\bar{o}$  from  $cust\bar{o}s$ - $\bar{o}d-is$ .

Gr. λιθάζω 'I stone' from λιθάς -άδ-ος 'stone', μιγάζομα I mingle with' from μιγάς -άδ-ος 'mixed, motley'. In Germanic, 'verbs in -atjan answer to this Greek denominative group; but the noun stems from which they came had disappeared before the historic period: Goth. lauhatja O.H.G. lougazzu lohazzu 'I shine' (cp. Gr. λεινάς), Goth. svōgatja 'I sigh' kaupatja 'I box the ears' (pret. kaupasta), O.H.G. blecchezzu 'I lighten' (cp. II § 128 p. 409).

To the denominatives formed from cons. stems have always belonged to-participles, as Gr.  $\vec{\alpha}_{\kappa \varepsilon \sigma} - \tau \acute{\sigma} - \varsigma$  Lat. sceles-tu-s, Gr.  $\vec{\sigma}_{\alpha \nu \mu \alpha} - \tau \acute{\sigma} - \varsigma$  (Skr.  $\acute{s}r\acute{o}ma$ -ta-m O.H.G. hliumun-t Lat.  $c\~{o}gn\~{o}men$ -tu-m), Skr.  $\acute{a}n$ -ap-ta-s etc. See II § 79 pp. 224 f., § 82 p. 249.

§ 769. (2) ā-stems: Idg. -ā-ió-.

In a great many languages there are found other forms without -io, as  $1^{st}$  pl. Armen. jana-mk Gr. Aeol.  $\tau t \mu \bar{\alpha} - \mu \epsilon \nu$  Lat.  $plant\bar{a}$ -mus O.Ir. no chara-m Goth.  $salb\bar{o}$ -m Lith.  $j\hat{u}'sto$ -me. These kept close with the old primary  $\bar{a}$ -verbs of Class X. In principle, the two groups are really the same.

Gr.  $\delta\varrho\acute{\alpha}\omega$  - $\~\omega$  'I see', O.H.G. bi-war $\~\sigma$ m 'I observe, am ware' beside Gr. \* $Fo\varrho\~a$  in  $\varphi\varrho\upsilon\upsilon\varrho\~a$  'outlook, protection' O.H.G. wara 'care, protection'. Lat.  $for\~o$  - $\~a$ -s etc., O.H.G.  $bor\~o$ m 'I bore' from O.H.G.  $bor\~a$  'borer' (ground-form \*bhrr- $\~a$ -), but cp. § 579 p. 122. Skr. prtan $\~a$ -yá-ti 'fights' from prtan $\~a$  'fight', man $\~a$ -yá-ti 'is attached' from man $\~a$  'attachment'. Gr.  $\tau \bar{\iota} \mu \acute{a}\omega$  - $\~\omega$  'I honour' from  $\tau \bar{\iota} \mu \acute{a}$  (- $\acute{\eta}$ ) 'honour',  $\acute{\eta} β \acute{a}\omega$  - $\~\omega$  'pubesco' from  $\~{\eta} β \bar{a}$  (- $\~{\eta}$ ) 'ripeness',  $\acute{o} \varrho u \acute{a}\omega$  - $\~\omega$  'I drive or urge' from  $\acute{o} \varrho u \acute{a}$  (- $\~{\eta}$ ) 'movement'. Lat. plant $\~o$  - $\~a$ -s etc. from planta, c $\~u$ r $\~o$  from c $\~u$ ra,

Zeitschr. XXXI 464: he starts with an adj. like \*scriptu-ro- (op. Att. oliv--gd-g from oliv-gdivios II § 74 p. 184).

lacrimō from lacrima. O.Ir. rannaim 'I divide' from rann f. 'part', īccaim 'I heal' from īcc f. 'health'. Goth. salbō O.H.G. salbōm A.S. sealfie 'I salve, anoint' from O.H.G. salbā A.S. sealf 'salve, ointment'; Goth. karō 'I take trouble, care a bout O.H.G. charōm 'I bewail, lament' A.S. cearie 'I care' from Goth. kara 'care' O.H.G. chara 'woe, sorrow, lament' A.S. cearu caru 'care'; O.H.G. klagōm 'I lament' from klagā 'lament'. Lith. lankó-ju 'I bend to and fro, try to make malleable' beside lankà 'valley' ½-lanka 'a dip or bend', O.C.Sl. laka-ja 'I trick, deceive' from laka 'bending, bosom, rascality, deceit'; Lith. dovanó-ju 'I give' from dovanà 'gift', byló-ju 'I speak' from bylà 'speech', pāsako-ju 'I recount' from pā-saka 'tale'; O.C.Sl. kotora-ja se 'I fight' from kotora 'fight', vonja-ja 'I smell' from vonja 'a smell'.

Very common are  $\bar{a}$ -verbs derived from o-stems, principally with transitive meaning, - 'to show oneself so and so, to make so and so'. Skr. priyā-yá-tē 'he makes friends with' Goth. frijo I treat kindly O.C.Sl. prija-ja I am kind to, stand by some one' from Skr. priyá-s 'dear, friend' Goth. \*frijain frija-pva love'. Lat. novō (-ā-s) O.H.G. niuwōm I renew beside Lat. novo-s.1) O.Ir. com-alnaim O.H.G. follom 'I fill' from O.Ir. lan (Idg. \*pl-no-s) O.H.G. fol (Idg. \*pl-no-s) 'full'. Lat. gustō, O.H.G. costōm A.S. costie 'I try, taste' beside Skr. juṣ-ṭa-s 'beloved' etc., √ ĝeus-. Skr. tilvilāyá-tē 'shows himself rich' from tilvila-s rich', rathirāyá-ti hurries up' from rathirá-s 'hasty', rtāyá-ti 'keeps the rule' from rtá-m 'order', sumnāyá-ti shows goodwill' from sumná-s well-wishing' sumná-m goodwill'; Avest. vāđāyę-iti strikes' from vāđa- m. blow'. Gr. φοιβάω 'I cleanse' from φοῖβο-ς 'clean', ἀττμάω 'I treat as dishonoured' from ἄ-τίμο-ς 'dishonoured' μωμάσμαι 'I scorn' from μωμο-ς 'scorn', έδνάομωι I portion' from έδνο-ν 'dower'. Lat, cavō from cavo-s, firmō from firmu-s, sānō from sānu-s, armō from pl. arma, cumulō from cumulu-s, damnō from damnu-m. O.Ir. marbaim I kill' from marb

<sup>1)</sup> Gr. νεάω 'I turn up fallow land' probably has its place elsewhere. See Sütterlin, Zur Gesch. der verba denom. im Altgr., 1 21 f.

'dead', derbaim 'I prove' from derb 'certain', forcennaim I end' from cenn for-cenn 'end', biathaim 'I nourish' from biath 'nourishment', cp. Gall. Γαισάτοι pl. 'pilati' beside Gall.-Lat. gaesu-m 'spear'. Goth. vair\$\bar{p}\_o\$ O.H.G. werdom 'I value, treasure' from vair\$\bar{p}\_s\$ werd adj. 'worth', Goth. ga-vundō O.H.G. wuntōm 'I make wounded, wound' from vund-s wunt 'wound', Goth. ga-leikō 'I compare, make like' from ga-leik-s 'like', O.H.G. ebanom 'I make even' from eban 'even', Goth. bi-ráubō 'I rob, plunder' O.H.G. roubom I rob' from O.H.G. roub robbery', O.H.G. zeihhonom 'I mark, draw' from zeihhan 'mark'. Lith. kilnó-ju 'I lift to and fro' from kilna-s 'high' (unless it be preferred to class this verb in § 606 p. 147), mirksnio-ju I wink, twinkle' from mirksni-s (gen. mirksnio) glance, a single movement of the eyelid', Lett. at-jáunáju I make young, renew from jáun-s young', gůdá-ju I honour, from gůd-s 'honour' apschügáju I enclose' from fchug-s 'hedge, fence'; O.C.Sl. děla-ja 'I do, make' from delo 'work', pri-veslaja 'adveho' from veslo 'oar, rudder'. The beginnings of this series of derivatives from a-verbs from noun stems in -ā- goes back to the proethnic stage; at that time there were often subst. abstr. with -ā- alongside of o-adjectives and o-substantives. Thus the O.H.G. follow may be derived, if we please, not from fol but from Germ. \*fullo- = Avest. perenā-'fulness', which appears in Goth. fullo O.H.G. follo 'fulness'; or Lat. offensare may be derived from subst. offensa and not from offensu-s (cp. II § 158 pp. 473 ff.). These and like verbs were from the first closely associated with the o-stems belonging to these  $\bar{a}$ -nouns; and thus it became possible afterwards to derive verbs in -ā-jō straight from o-stems. The ending -ājō found favour for another reason too; namely, that there was from the earliest period another group of verbs in -ājō, originally denominative too, but with this character long since lost: I mean verbs of Classes X and XXVIII, like Lat. hi-ō Lith,  $\xi i$ - $\delta$ -iu, Gr.  $\psi \lambda$ - $\alpha \omega$  Lith, ul- $\delta$ -ju (Lat.  $ulul\bar{o}$ ), Lat. juv- $\bar{o}$ mic-ō. O.Ir. scaraim, Goth. mit-ō O.H.G. mezzom, Lith. lìnd--o-ju O.C.Sl. raz-vrīz-a-ja (§§ 579 ff. pp. 121 ff., §§ 734 ff. pp. 261 ff.).

As well as these present stems in  $-\bar{\alpha}$ - $i\bar{o}$ , most languages have non-present stems with -a- just like those formed from ā-verbs in Classes X and XXVIII. The latter are the type, the former copied from them. The commonest are verbal nouns, always more or less closely connected with the verb system, with the suffixes -to- -ti- -no- and so forth; e. g. Gr.  $\tau \bar{\iota} \mu \eta - \tau \dot{o} - \varsigma \quad \tau \bar{\iota} \mu \eta - \sigma \iota - \varsigma \quad \text{from} \quad \tau \bar{\iota} \mu \dot{\alpha} \omega, \quad \text{Lat. } plant \bar{a} - t u - s \quad plant \bar{a} - t i \bar{o} \quad \text{from}$ planto, O.Ir. carthe 'loved' from caraim, cessad 'suffering' from cēssaim, Goth. labō-b-s 'invited' labō-n 'to invite' labō-n-s 'invitation' from lapo, Lith. dovanó-ta-s 'given' dovanó-ti 'to give' from dovanó-ju, O.C.Sl. laka-nŭ 'deceived' laka-ti 'to deceive' from laka-ja. Then we have certain tenses, as Gr.  $\tau \bar{\iota} \mu \dot{\eta} - \sigma \omega$ , Lat. plantā-rem, Lith. dovanó-siu O.C.Sl. laka-chŭ. Compare § 756.5, p. 276, § 761 p. 279, § 822.6.

- § 770. (3) From o-stems there were two ways of deriving the present stem. One of them, doubtless the older, suppresses the final vowel of the noun stem. This we have already seen in Classes XIV and XXIX, exemplified by Skr. turan-yá-ti from turána-s, Gr. δλισθαίνω from δλίσθανο-ς (§§ 616 ff. pp. 154 ff., § 743 pp. 265 f.). This is just how io-adjectives are generally derived from noun stems in -o-, as Skr. ášv-iya-s Gr.  $7\pi\pi$ -10-5 from ášva-s  $7\pi\pi$ 0-5 (II § 63 p. 126, and Rem. 3 p. 132). The second, and commoner, formation ends in -e-ió- (cp. voc. in -e, loc. in -e-i and so forth, II § 59 p. 108). This recals Skr. hiranyá-ya-s 'golden' from híranya-m 'gold', and Lat. aureu-s (auru-m), if it is to be explained \*aure-jo- (cp. II § 63 p. 128).1)
- (a) With Aryan present stems in -an-ia-ti are associated but few from other o-stems: Skr. adhvar-yá-ti 'performs an offering' from adhvará-s 'offering', vithuryá-ti 'staggers, reels' from vithurá-s 'tottering, reeling', rathakāmya-ti 'asks for a car' from ratha-kāma- 'desirous of having a car', Avest. vāstrye--iti 'feeds' from vāstre-m 'meadow, field, fodder', avāstrue-itē

<sup>1)</sup> It is noteworthy how well the isolated Ved. varēuá-ti 'he woos (vará-s 'wooer') agrees with the above mentioned adj. in -ēya-, pāúruṣĕya-s from púruša-s and the like.

'is idle' from avāstra- 'idle'. In Greek -αινω was a fertile type (see § 776.6 b); and many other nouns in -o- took this formation in the present, as  $\partial \alpha \partial \omega$  'I hate' from  $\partial \alpha \partial \omega$  'I hate' from  $\partial \alpha \partial \omega$ 'hated, hostile' (I § 293 p. 234), ἀγγέλλω 'I announce' from ἄγγελο-ς 'messenger', ἀιόλλω 'I move quickly backwards and forwards' from αἰόλο-ς 'quickly moving', καμπύλλω 'I crease, bend' from καμπύλο-ς 'bent', ἀπινύσσω 'I am unintelligent' from \* $\dot{\alpha}$ - $\pi i \nu \nu \tau o - \varsigma$  ( $\pi i \nu \nu \tau o - \varsigma$  'intelligent'),  $\mu \epsilon i \lambda l \sigma \sigma \omega$  'I soften, mollify' from μείλιχο-ς 'soft', χαλέπτω 'I crush, overpower' (cp. § 682 with the Rem. p. 214). The same kind of denominatives occurs in First those which contain abstract nouns in -e-toand the like (II § 79 p. 236), as trepeštą 'I tremble' 2nd sing. trepešteši inf. trepetati from trepetu 'a trembling', blekošta 'I bleat' inf. blekotati beside Czech blekot 'a yelping or barking', rŭpŭšta 'I growl' inf. rŭpŭtati from rŭpŭtŭ 'a growling', skrižišta 'I rattle, gnash the teeth' inf. skrižitati from skrižitü 'a gnashing with the teeth', and others of this sort (the noun may also be a tā-stem, as kleveštą 'I calumniate' inf. klevetati from kleveta 'calumny'). Besides these I place here the present in -uja for \*-ou-ia, as běsuja 'I am mad' 2nd sing. -uješi inf. -ovati from běsovů 'mad, devilish', and that from běsů 'demon'; for further details see § 782.3. We cannot tell whether Idg. presents like Skr. turan-yá-ti and Gr. ολισθαίνω, to which trepešta and běsują are parallel, survived down to Slavonic. At all events these present forms have nothing exceptional about them, as the Slavonic had a great number of primitive verbs in -ja with inf. -a-ti, such as ližą lizati 'to lick' gyblją gybati 'to destroy, lose', and some of these put on the look of denominatives, as glagolją glagolati to speak' (cp. § 732 p. 260) did because of the kindred noun-stem glagolü 'word', and duśą duchati 'to breathe, blow' because of the noun duchă 'breath'. So it would be possible to believe that it is only on this analogy that trepeštą was formed from trepetu, and bėsują from bėsovu.

Whether the other Idg. languages had such denominatives is doubtful. In Armenian we meet with denominatives in -im, as taram-i-m 'I fade' beside an-taram 'unfading'. This group

is a new formation, on the lines of Class XXVI, § 711 p. 246, as Lat. custōdī-s fīnī-s follow verbs primitive like farc-ī-s (§ 777). But the contained stems in -iō need not be compared with Skr. turaṇ-yá-ti; they may have arisen out of denominatives from i-stems. Similarly Lat. catuliō (beside catulu-s) blandior (beside blandu-s) īnsāniō (beside īn-sānu-s) may be ad-formates of presents in -i-iō; and Germanic presents such as Goth. hráinja 'I cleanse' (hráin-s 'clean') láusja 'I loose' (láus 'loose') may be either this or derived from -eiō (see b, below).

(b) -e-ió-. Skr. vasna-yá-ti 'haggles' Gr. ωνέομαι 'I buy' from vasná-s -m ω̄νο-ς 'price' (for \*Fωσ-νο-, cp. Solmsen, Kuhn's Zeitschr. xxix 81 f.; for O.C.Sl. věno, see II § 66 p. 149). Lat. seneo, Lith. senë-ju 'I grow old' (-èju instead of \*-eju, see below) beside Lith. sena-s 'old'. Skr. amitra-yá-ti 'is hostile' from á-mitra-s 'foe', kulāya-yá-ti 'wraps itself up' from kuláya-m 'covering'; Avest. vāša-ye-iti 'draws the chariot' from vāša- m. 'chariot', aša-ye-iti 'is pious' from aša- 'pious' (cp. Skr. rtáya-ti with different accent, see §§ 793, 798), O.Pers. a-śāraya-m 'I protected, watched' from \*sa-ra- (Skr. tr-a-), not actually found. Gr. φιλέω -ω 'I treat as a friend' from φίλο-ς 'dear, friend', ποιρανέω 'I rule' from ποίρανο-ς 'ruler', νοστέω 'I return home' from νόστο-ς 'homeward way', εὐφημέω 'I use words of good omen' from ev-qnuo-g 'of good omen'. Lat. claudeo from claudu-s, albeō from albu-s, flāveō from flāvo-s, nigreō from niger. Irish: perhaps scorim scuirim 'I unharness' from scor 'enclosure for unharnessed animals'. Probably forms in -e-iō = pr. Germ. -iįō are at the bottom of Germanic stems like Goth. rigneib 'it rains' from rign 'rain', háurnja 'I blow on the horn' from haurn 'horn', Goth. lausja O.H.G. los(i)u 'I loose' from láus lōs 'loose'; the last verb, like all transitive denominatives taken from adjectives in Germanic, can be counted to Class XXXII; see § 806. Balto-Slavonic has -ē-io- instead of -e-io- (§ 782.2): Lith. gude-ju-s 'I am greedy' from gude-sgreed', kerë-ju 'I grow in stalks, like a bush' from këra-s 'stalk', këtë-ju 'I get hard' from këta-s hard'; 1) O.C.Sl. razumë-

<sup>1)</sup> Kurschat, apparently with less correctness, kětėju.

-ją 'I understand' from raz-umŭ 'understanding, reason', cělě-ją 'I get well' from cělŭ 'well, whole', o-žestočają 'I harden myself' for \*o-žestokěją (I § 76 p. 66), from žestoků 'hard'.

Remark. Greek verbs in  $-\delta\omega$  have their parallel in Lith. verbs with  $-\ddot{u}ju$ . I conjecture that these endings are special upgrowths in these languages (§§ 773, 776.4, 782.2). Of course if Idg. o in open syllables became Aryan  $\bar{a}$ , there is a possibility that Ar.  $-\bar{a}ya-ti$  in some words comes from \*-o-ie-ti.

§ 771. (4.) i-stems, Idg. -ijó-. Gr. μηττο-μαι 'I devise, contrive' Lat. mētior 'I measure, sentence', ') from μη-τι-ς 'counsel, resolve, cleverness' Skr. mā-ti-š 'measure, correct perception'. Skr. arātī-yá-ti 'brews mischief for some one' from árāti-š 'ill luck', janī-yá-ti 'asks for a wife' from jáni-š 'wife', kavī-yá-tē 'acts like a wise man, is wise' from kaví-š 'wise man, seer' (on -īyáti, see § 774). Gr. κονίω 'I make dusty' from κόνι-ς 'dust', δηρίσμαι 'I strive' from δηρι-ς 'contention',  $\mu\eta\nu\bar{t}\omega$  'I grow angry' from  $\mu\tilde{\eta}\nu\iota$ - $\varsigma$  'wrath'. Lat.  $f\bar{\imath}ni\bar{\upsilon}$ from fīni-s, febriō from febri-s, crīniō from crīni-s, grandiō from grandi-s, lēniō from lēni-s. O.Ir. fo-dālim 'I divide up' (3rd sing. fo-dāli) from dāil 'part'. Goth. dáilja O.H.G. teil(i)u 'I divide' from Goth. dáil-s stem dáili- 'part'; Goth. vēnja O.H.G. wān(i)u 'I imagine, hope' beside Goth. vēn-s (stem vēni-) 'delusion, hope'; Goth, dulbja 'I observe a feast' from dulb-s (stem dulbi-) 'feast', anamahtja 'I offer force to' from ana--maht-s (stem -mahti-) 'force'. Lith. daly-jù 'I divide' from dali-s 'part', szirdy-jù-s 'I take to heart' (szirdi-s 'heart'); as regards -y-ju, instead of -i-ju, see § 782. 2.

§ 772. (5.) From u-stems, Idg. -u-ió-. Skr. gātu-yá-ti 'goes an errand' from gātú-š 'errand', vasā-yá-ti 'desires goods' from vásu 'goods', šatrā-yá-ti 'appears as a foe' from śátru-š 'foe', rjā-yá-ti 'is straight' from rjú-š 'straight' (on -ū-yá-ti see § 774); Avest. anhu-ye-iti 'makes oneself master of' from anhu-š 'lord, master'. Gr. φīτύω 'I beget, produce' from φῖτυ

A different account of mētior is given by Johansson, Beitr. zur Gr. Spr., 129.

'sprout, offspring',  $\varphi \tilde{\imath} \tau v \cdot \varsigma$  'begetter, producer',  $\gamma \eta \varrho \dot{\nu} \omega$  'I make a sound' from  $\gamma \tilde{\eta} \varrho v \cdot \varsigma$  'voice',  $\varrho \dot{\zeta} \dot{\nu} \omega$  'I lament' from  $\varrho \dot{\zeta} \dot{\nu} \cdot \varsigma$  'lament',  $\partial u \varkappa \varrho \tilde{v} \omega$  'I weep' from  $\partial \alpha \varkappa \varrho v$  'tear',  $\partial v \omega$  'I go straight towards' from  $\partial \dot{\gamma} \dot{\nu} \cdot \varsigma$  'straight'. Lat.  $statu\bar{\varrho}$  from  $statu \cdot s$ ,  $tribu\bar{\varrho}$  from  $tribu \cdot s$ ,  $metu\bar{\varrho}$  from  $metu \cdot s$ .

§ 773. We have now given the main lines of this denominative formation in Indo-Germanic.

Now we have seen in § 769 p. 286, that  $\bar{a}$ -verbs of this formation very early yield to the analogy of  $\bar{a}$ -verbs of Classes X and XXVIII so far as to make such forms as Gr.  $\tau\bar{\iota}\mu\eta$ - $\tau\dot{o}$ - $\zeta$ - $\dot{\epsilon}\tau\dot{\iota}\mu\eta$ - $\sigma\alpha$ . Next, corresponding non-present stems with  $-\bar{e}$ -,  $-\bar{\epsilon}$ -, or  $-\bar{u}$ - associated themselves with the presents in -e- $\dot{\iota}\bar{o}$  and -u- $\dot{\iota}\bar{o}$ ; to which were soon added verbs with  $-\bar{o}$ - outside the present and with -o- $\dot{\iota}o$ - or  $-\bar{o}$ - $\dot{\iota}o$ - in the present, formed from o-nouns. In the case of Denominatives with  $-\bar{e}$ - and  $-\bar{o}$ -, the type was aided by  $\bar{e}$ - and  $\bar{o}$ - verbs of Classes X and XXVIII as well. These non-present formations are all found in several branches of Indo-Germanic. As far as our knowledge of the relations of the languages to one another now goes, it is hardly possible to say how many such forms are proethnic and how many are later.

Gr.  $\varphi i\lambda \eta$ -τό- $\varphi$  εψίλη-σω  $\varphi i\lambda \eta$ -σω from  $\varphi i\lambda$ εω  $(\varphi i\lambda o - \varphi)$ , compare  $v\eta$ -τό- $\varphi$  ενη-σα  $v\eta$ -σω,  $\mu$ ελη-τέο-v εμέλη-σε  $\mu$ ελή-σει etc. (cp. § 587 pp. 127 f., § 589 pp. 129 ff., §§ 735 and 737 pp. 261 ff., § 756. 4 p. 275). Lat. claudē-rem (conj. of s-aorist) from claudeō (claudu-s), compare  $n\bar{e}$ -rem - $pl\bar{e}$ -rem,  $vid\bar{e}$ -rem tacē-rem (§ 587 pp. 127 f., § 590 p. 132, § 708 pp. 238 ff., §§ 735 and 738 pp. 261 ff.). Lith.  $g\hat{u}d\hat{e}$ -ti-s- $g\hat{u}d\hat{e}$ -siu-s-from  $g\hat{u}d\hat{e}$ - $j\hat{u}$ -s- $g\hat{u}d\hat{e}$ -siu-s-from  $g\hat{u}d\hat{e}$ - $j\hat{u}$ -cilė-ti cėlė-chū from cėlė-ju-(cėlŭ), compare Lith.  $byr\bar{e}$ -ti  $byr\bar{e}$ -siu (§ 740 p. 265). Gr.  $\hat{u}$ - $\delta\eta$ 0 $\bar{v}$ -v- $\varphi$  εκό $v\bar{v}$ -σα κον $\hat{v}$ -σω from κον $\hat{v}$ ω (κόv- $\varphi$ ). Lat.  $f\bar{v}$ n $\bar{v}$ -tu-s- $f\bar{v}$ n $\bar{v}$ -rem from  $f\bar{v}$ niō ( $f\bar{v}$ ni-s). Lith.  $dal\hat{y}$ -ti  $dal\hat{y}$ -siu from daly- $j\hat{u}$  ( $dal\hat{v}$ -s), O.C.Sl. gosti-ti gosti-ch $\bar{u}$  from goštu-g0 from g0u0 (g0u0). Lat. g0u0. Lat. g0u0.

-ō- is commonest within the verb infinite; as Gr. μισθω-

The shapes taken by present *io*-stems in different languages will concern us in §§ 774 ff.

The meaning originally conveyed by this denominative group was that the subject of the verb stood in some kind of relation to the noun it came from. What this relation was had to be gathered from the meaning of the noun and of the context. But it often happens that we find in historical periods some special sense attaching itself to a special denominative ending (-āiō -eiō etc.). In Sanskrit, for example, -iuá-ti implied desire; in Latin, -ō -ā-s -a-t were factitive, and -eō -ē-s -e-t intransitive. This special meaning always started with some particular verbs, where it came from the essential meaning of the noun these verbs were derived from. Then other verbs followed the same pattern. To conform to the pattern, the stem of the ground-noun is often quite neglected; thus we have Skr. putriyá-ti from putrá-s on the model of janiyá-ti (from  $j\acute{a}ni-\check{s}$ ). As we saw in § 769 pp. 284 f., it is the ending  $-\bar{a}-i\bar{o}$ which seems first to have trespassed beyond its own domain.

As a result of this specialising of endings to some particular sense, the same noun often served as base for several denominatives with different meanings; as Gr.  $\dot{\epsilon}\sigma\tau\iota\dot{\alpha}\omega$  'I receive at the hearth, entertain' and  $\dot{\epsilon}\sigma\tau\iota\dot{\alpha}\omega$  'I make into a hearth, found a house' both from  $\dot{\epsilon}\sigma\tau\iota\dot{\alpha}$ ,  $\dot{\alpha}\sigma\vartheta\epsilon\nu\dot{\epsilon}\omega$  'I am weak' and  $\dot{\alpha}\sigma\vartheta\epsilon\nu\dot{\epsilon}\omega$  'I make weak', from  $\dot{\alpha}\sigma\vartheta\epsilon\nu\dot{\gamma}_{\mathcal{S}}$ , Lat.  $cl\bar{\alpha}re\bar{\sigma}$  'I am clear' and  $cl\bar{\alpha}r\bar{\sigma}$  (- $\bar{\alpha}$ -s) 'I make clear' from  $cl\bar{\alpha}ru$ -s.

Remark. Considering how close was the tie between noun and derivative verb, it is not to be wondered at that such verbs often caused the oreation of nouns which looked as though the verbs were derived from them ("noms postverbaux"). So, on the analogy of lacrimāre: lacrima, rixārī: rixa we have Lat. pūgna coined to match pūgnāre, which was

derived from  $p\bar{u}gnu$ -s; in Greek, similarly, we have  $vtx\eta$  'victory' growing out of  $v\bar{\iota}\kappa\acute{a}\omega$  'I bring down, conquer' (II § 86 p. 256). There are many certain examples of this retrospective tendency in modern languages, as Ital. and Span. liga Fr. ligue from  $lig\bar{a}re$ , Mod.H.G. wach from wachen. See Bréal, Mém. Soc. Ling. IV 82 f.; Osthoff, M. U. IV 224.

§ 774. Aryan. The original forms leave the old groove but rarely.

We shall treat below (§ 793) of the shifting of denominatives in  $-\alpha-y\acute{a}-ti$  to the track of Class XXXII, which gives rise to such a form as Skr.  $mantr\acute{a}-ya-t\bar{e}$ .

The wider use of -ā-yá-ti, which began in pre-Aryan times (§ 769 pp. 284 f.), went further; and in later Sanskrit it took a special turn, and the middle voice was used to mean that the subject represented the noun which the form came from; as śakracāpāya-tē 'represents a rainbow, is like it' from śakracāpa-m 'rainbow'. Note for the typical form of the contained noun, Ved. dhiy-āya-tē 'is pious' dhiy-āyá-nt- 'attentive' from dhī-f. 'devotion, piety'; similarly jm-āyá-nt- 'struggling earthwards' from kṣám-f. 'earth' (II § 160 p. 482), unless it be from jmán-ájma- 'a way' ('way-making, carving a path').

-ĭ-yá-ti also was productive. On the model of durgībhī-ya-tē 'is hard to grasp' (dur-gībhī-š 'hard to grasp'), kavī-yá-tē 'is wise (kaví-š 'wise'), tavišī-yá-tē 'is strong' (távišī f. 'strength') sprang up others, as adhvarīyá-ti 'is present at the offering' from adhvará-s 'offering', pitrīyá-ti 'is fatherly' (gramm.) from pitár- 'father'. On the model of janī-yá-ti 'asks for a wife' (jánī-š 'wife') we have putrīyá-ti 'wishes for a son' from putrá-s 'son', māsīyá-ti 'desires meat' from māsá-m 'meat'.

Thirdly, -s-yá- (from s-stems) once or twice leaves its proper sphere.  $m\bar{a}navasy\acute{a}-ti$  'acts after the manner of men' from  $m\bar{a}nav\acute{a}$ -s 'human' follows the type  $svapas-y\acute{a}-t\bar{e}$  'acts nicely' from sv-apas- 'acting nicely'.  $uru\check{s}y\acute{a}-ti$  'seeks the distance' from  $ur\acute{u}$  n. 'the distance' follows such verbs as  $taru\check{s}-y\acute{a}-ti$  'fights' (from  $t\acute{a}ru\check{s}$ - n. 'fight').

Lastly, the ending -arya-ti grew into a type; beginning with vadharyá-ti 'lets fly a shot or missile', beside vádhar- and vadhá-s 'missile', it spread to rátha-s 'a chariot', and formed ratharyá-ti 'he drives in a chariot'.

Remark. I may mention here another word, Skr. Śrudhīyć-ti 'obeys'. This is derived from the imper. Śru-dhí 'listen', which must have crystallised into something hardly more than a particle; the form is then like Gr.  $al-al\zeta\omega$  from al, Mod.H.G. bejahe 'I say yes' verneine 'I say no' from ja and nein, Lat negō from some form like \*ne-gi = Lith. ne-gì ne-gu, contained also in neg-ōtium neg-ligō.

§ 774. Armenian. With io-suffix only denominatives like taram-i-m, § 770 pp. 288 f.

Without io-suffix: jana-m and the like, see § 581 p. 123. Still unexplained are denom. in e-m, as gorce-m 'I work' from gorc 'work', sire-m 'I love' from sēr 'love', čue-m 'I break up, depart' from ču 'a breaking up, departure'. As jana-m answers to Aeol.  $\tau t \mu \bar{\alpha} - \mu u$ , one would be inclined to place gorce-m parallel to  $\varphi i \lambda \eta - \mu u$ . But i would be expected as representing Idg.  $\bar{e}$ . 1)

§ 775. Greek. The original ending  $-\bar{\alpha}\omega = \text{Idg.} -\bar{\alpha}-\underline{i}\bar{o}$  became  $-\check{\alpha}\omega$ , not by rule, but by analogy of  $-\varepsilon\omega -\iota\omega -\upsilon\omega$ .

In several dialects we see  $-\eta\omega$   $-\omega\omega$   $-\bar{\iota}\omega$   $-\bar{\upsilon}\omega$  instead of the other quantity; as Lesb. ἀδικήει, Boeot. δαμιώοντες Delph. στεφανωέτω Hom. ὑπνώοντες, Hom. κονίοντες ἐρητύοντο. Similarly  $-\bar{\alpha}\omega$ , as Hom. μενοινή ησι and ήβάσιμι or (with. Ion. η) ήβήσιμι, which seems to have been the form originally used where the text has ήβώσιμι. This  $\bar{\alpha}$  is certainly not long because

<sup>1)</sup> Hübschmann points out to me the possibility that the analogy of, say, ber ('φορά, latio' etc.): berem (= Gr. φέρω) may have produced gorcem in connexion with gorc. Cp. the denom. Skr. mārga-ti Gr. θέρμε-το etc., § 487 p. 41.

the vowel was long originally (see above), nor did the other endings lengthen their first vowel by analogy of an  $\bar{a}$  so preserved; the long vowel in all of them came from the future, agrist, and other parts which had it, so that  $\dot{\eta}\beta\dot{\bar{\alpha}}\omega$ follows  $\eta \beta \dot{\alpha} - \sigma \omega$ ,  $\dot{\alpha} \delta \iota \kappa \dot{\eta} \omega$  follows  $\dot{\alpha} \delta \iota \kappa \dot{\eta} - \sigma \omega$ . At the same time, some power must be ascribed to the influence present stems such as χοήων (§ 737 p. 263) and θύω (§ 707 p. 236); for the other parts of these had the same endings as the denominatives which now concern as (χρή-σομαι like  $\varphi \iota \lambda \dot{\eta} - \sigma \omega$ ,  $\vartheta \dot{v} - \sigma \omega$  like  $\delta \alpha \varkappa \rho \dot{v} - \sigma \omega$  etc.). To hastily reject this element in the matter would be all the more foolish, because it is clear as day that Primitive verbs have had influence over Denominatives in the futures ὀνομανέω -ω beside ἀρπάξω, and τελέω instead of τελέσσω (§ 757 p. 277). As regards verbs in  $-\bar{\iota}\omega$  and  $-\bar{\nu}\omega$ , we have also to consider that the contained nouns often had  $-\bar{\imath}$ - $\varsigma$  and  $-\bar{\imath}$ -s (cp.  $i\sigma\chi\dot{\tau}\omega$  from  $i\sigma\chi\dot{\tau}$ - $\varsigma$ ); this may have had something to do with it, and analogy may have finished the work. How far this influence acted must remain unsettled while we have no exact statistics of  $-i\omega - v\omega$  and  $-\bar{\nu}\omega - \bar{\nu}\omega$ .

Remark.  $\gamma \epsilon l \dot{\omega} \dot{\omega}$   $i \delta \rho \dot{\omega} \dot{\omega}$   $\bar{\varrho} i \gamma \dot{\omega} \dot{\omega}$  are to be kept distinct from  $\delta \bar{a} \mu \iota \dot{\omega} \dot{\omega} r \tau \epsilon \varepsilon$  etc. because they come from  $-\omega \sigma_{-2} \dot{\omega}$ .  $\gamma \epsilon l \dot{\omega} \dot{\omega}$  from  $\gamma \epsilon l \omega \sigma_{-}$  (nom.  $\gamma \dot{\epsilon} l \omega \varsigma$ ), the strong form of  $\gamma \epsilon l \alpha \sigma_{-}$ , whence  $\gamma \epsilon l \dot{\omega} \dot{\omega}$  (§ 768 p. 282).  $i \delta \rho \dot{\omega} \dot{\omega}$  from  $i \delta \rho \dot{\omega} \dot{\omega}$ .  $\bar{\varrho} i \gamma \dot{\omega} \dot{\omega}$  from a word parallel to Lat.  $r \bar{\imath} g \sigma r$ . These verbs in  $-\omega \sigma_{-1} \omega$  are in all probability upgrowths of the separate period, when the languages were developing singly; in this they resemble the Latin group exemplified by  $f u l g u r - i \bar{\sigma}$  from f u l g u r (O.Lat. f u l g u s), and stand in contrast to the really old forms Gr.  $\tau \epsilon l \epsilon \dot{\omega} \omega r \epsilon l \epsilon \sigma_{-1} \omega$  (§ 768 p. 282).

The origin of the ending in  $\delta\iota\psi\tilde{\eta}$   $\pi\epsilon\iota\nu\tilde{\eta}$  for  $-\eta\epsilon\iota$  is not olear; ep. Hom.  $\delta\iota\psi\tilde{a}\omega\tau$ , Ion. (Archil.)  $\delta\iota\psi\epsilon\omega\tau$ , Pind.  $\delta\iota\psi\tilde{\eta}$ . Compare Wackernagel, Philol. Anz. 1887, p. 238; W. Schnlze, Kuhn's Zeitschr. xxix 269 f.

On the non-thematic present inflexion  $-\bar{\alpha}-\mu\iota$   $(-\alpha\iota\mu\iota)$   $-\eta-\mu\iota$   $-\omega-\mu\iota$  following Class X (instead of  $-\alpha\omega$   $-\varepsilon\omega$   $-\omega$ ) in Aeolic and Arcadian, see § 582 p. 123, § 589 p. 131. The type  $-\bar{\alpha}-\mu\iota$  in our  $\bar{\alpha}$ -denominatives came from the pre-Greek stage; and in Greek itself its analogy produced  $-\eta-\mu\iota$  and  $-\omega-\mu\iota$ .

Cp. γεύω instead of \*γέω following γεύ-σω and the rest; the Author,
 Gr. <sup>2</sup> p. 31. Lithuanian: cp. pres. děmi <sup>3rd</sup> sing. děsti instead of dèmi dèsti following dě-siu dě-ti etc. (§ 546 p. 104).

- § 776. Before turning to trace the way by which the various denominative endings became general types in Greek, we would quote some words of Sütterlin's. He says, "In the every-day language of inscriptions, analogy did not run riot as it did amongst the poets and orators, who were often forced to adopt new words and terms, and depended partly on these for effect". (Zur Gesch. der Verba denom. im Altgr., 15).
- (1) The type  $-\alpha\omega$ , which could be made from o-nouns even in pre-Greek times (§ 769 pp. 284 f.), did not spread so far as it might in forming factitives, because it was met by a countercurrent, the -ow class (4). Thus vsow 'I renew' may have caused \* $\nu \varepsilon F \bar{\alpha} - \iota \omega = \text{Lat. } nov\bar{o} \text{ O.H.G. } niuw\bar{o}m \text{ to drop out of use}$ (cp. p. 284 footnote). But in other directions -αω was fertile; it served to denote disease or diseased appetite, the production of sounds, mechanical operations, and the like. Examples:  $\lambda \epsilon \pi \rho \dot{\alpha} \omega$  'I have an eruption on the skin' (from  $\lambda \epsilon \pi \rho \bar{\alpha}$  'eruption') and similar words give rise to ὑδεράω 'I have dropsy' from ὕδερο-ς 'dropsy'; οφθαλμιάω 'I have diseased eyes' (from οφθαλ--μία 'disease of the eyes') gives νόεριάω from είδερο-ς (beside υδεράω), οδοντιάω 'I cut teeth' from οδούς 'a tooth'; βοάω 'I call, cry' from βοή 'cry' produces γοάω from γόος 'lament'; whilst κωνάω 'I twist like a top' from κῶνο-ς 'top', στιχάονται 'they arrange themselves in rows' from στίχοι and στίχες 'rows', σπαργανάω 'I wrap in swaddling clothes' from σπάργανο-ν 'swaddling clothes' follow τεχνάω 'I work skilfully' from τέχνη 'skill', μηχανάω 'I set to work' from μηχανή 'tool, means', and so -ιάω became another kind of desiderative suffix: στοατηγιάω 'I strive to become a general' (στρατηγία) and others like it gave rise to such forms as ἀρχοντίαω 'I strive to become archon' from ἄρχων, μαθητιάω 'I wish to be a pupil' from  $\mu\alpha\theta\eta\tau\dot{\eta}$ -c; and the last-named verb served as a model for βῖν-ητιάω 'volo coire' from βῖνέω 'coeo'.

Remark. In certain Greek dialects  $-\epsilon \omega$  is often found where we expect  $-\alpha \omega$ ; it is not always possible to suppose that these are due to the analogy of verbs in  $-\epsilon \omega$  from o-stems. Such are  $\mathring{\eta}\beta\dot{\epsilon}\omega$  beside  $\mathring{\eta}\beta\dot{\epsilon}\omega$ ,  $\delta\alpha\pi\alpha r\dot{\epsilon}\omega$  beside  $\delta\alpha\pi\alpha r\dot{\epsilon}\omega$ . J. Schmidt, in his work on the Neuters (pp. 326 ff.), puts forward a view that in pr. Greek  $\alpha o$   $\alpha \omega$  became regularly  $\epsilon o$   $\epsilon \omega$ ; that

thus  $\epsilon o \ \epsilon \omega$  and  $\alpha \epsilon$  stood side by side in sets of verb-forms,  $\eta \beta \dot{\epsilon} \omega \ \eta \beta \dot{\alpha} \epsilon \iota \epsilon_c$  etc.; and that there was levelling in two directions, (1)  $\eta \beta \dot{\alpha} \omega \ \eta \beta \dot{\alpha} o \mu \epsilon \nu$  etc. following  $\eta \beta \dot{\alpha} \epsilon \iota \epsilon_c - \dot{\alpha} \epsilon \iota$ , (2)  $\eta \beta \dot{\epsilon} \epsilon \iota \epsilon_c - \dot{\epsilon} \epsilon_c \epsilon_c$  following  $\eta \beta \dot{\alpha} \omega - \dot{\epsilon} o \mu \epsilon \nu$ .

- (2) Many are the meanings given by verbs in -εω which are formed from uncompounded o-stems; they stand in all sorts of different relations to the contained stem. Here are a few: κοιρανέω 'I am ruler' from κοίρανο-ς 'ruler', ολεέω 'I dwell' from οἶκο-ς 'dwelling, house', ἀριθμέω 'I count' from ἀριθμό-ς number, μοχθέω 'I toil' from μόχθο-ς 'labour'. This type was not very fertile in analogical imitations, though we have ήγεμονέω 'I lead' (ήγεμών) modelled upon κοιρανέω. But when these verbs were taken from compound stems, the case was different. These meant mostly to be or to act as something; and the type spread to an extraordinary extent. Examples of strictly correct forms: οἰνοχοέω 'I am wine-pourer' from οἰνο-χόο-ς, δημιονογέω 'I am a craftsman, artisan' from δημιονογό-ς, άδυνατέω 'I am unable, weak' from α-δυνατό-ς; by analogy — μισθοδοτέω 'I am wage-giver' from μισθο-δύτη-ς, ἀφορνέω 'I am senseless' from uqqvv. It is true some of these verbs have meanings both transitive and intransitive, but this depends on the meaning of the ground-word; this ταλαιπωρέω means 'I plague' or 'I am plagued because ταλαί-πωρο-ς means either suffering misery or inflicting it.
- (3) With -εω-verbs derived from o-stems, another group originally ending in -εσ-ξω ran together. Only in Homer is there a difference in form; there we have -εω, from -εσζω, and the intermediate -ειω, side by side: τελείω and τελέω (I § 131 p. 118). The coincidence of these two classes in the present caused analogy to act in other parts of the verb system. Even in Homer are found such forms as ἀνθῆσαι from ἀνθέω 'I bloom' for \*ἀνθεσ-ζω (ἄνθος n. 'bloom') on the analogy of φιλῆσαι from φιλέω, and τετενχῆσθαι 'to be armed' from τενίχεα pl. 'arms'. Then came a number of verbs in -εω fut. -ησω from compound εσ-stems, as ἀπειθέω 'I am disobedient' from ἀ-πειθής 'disobedient', εὐθαρσέω 'I am of good courage' from εὐ-θαρσής 'courageous'; a step due partly to the fondness

which the Greeks showed for verbal derivatives in  $-\epsilon\omega$  from compound o-stems (for which see above, 2).

(4) The group of verbs in  $-\omega$ , also from o-stems, is probably a purely Greek development, on parallel lines to  $-\varepsilon\omega = \mathrm{Idg.}$   $-e-\underline{i}\bar{o}$  (see § 773 pp. 290 f.). At first probably there were forms of the verb infinite only, as those with the ending  $-\omega-\tau o-\varsigma$ ; these soon produced all the rest.  $-\alpha\omega$   $-\bar{\alpha}\sigma\omega$  etc. may have been the type for  $-\omega\omega$   $-\omega\sigma\omega$ : there is a likeness between  $\mathcal{P}_{\varrho l}\gamma \mu \dot{\omega}\omega$  'I furnish with battlements or eaves'  $(\mathcal{P}_{\varrho l}\gamma \mu \dot{\omega}-\varsigma)$   $\sigma \tau \varepsilon \varrho \alpha \nu \dot{\omega}\omega$  'I provide with a wreath'  $(\sigma \tau \dot{\varepsilon} \varrho \alpha \nu o-\varsigma)$  and  $\pi \varepsilon \dot{\omega} \dot{\omega}\omega$  'I furnish with a fetter'  $(\pi \dot{\varepsilon} \delta \eta)$   $\tau \bar{\iota} \mu \dot{\omega}\omega$  'I provide with honour'  $\tau \bar{\iota} \mu \dot{\eta}$ ; compare particularly  $\sigma \tau \varepsilon \varrho \dot{\omega} \nu \dot{\omega}\omega$  ( $\sigma \tau \varepsilon \varrho \dot{\omega} \nu \dot{\omega}\omega$ )  $\sigma \tau \varepsilon \varrho \dot{\omega} \nu \dot{\omega}\omega$  and  $\tau \bar{\iota} \mu \dot{\omega}$  ( $\tau \bar{\iota} \mu \dot{\omega} \dot{\omega}$ )  $\tau \bar{\iota} \mu \dot{\omega}\omega$ .

A favourite meaning for -oω is factitive; as  $\sigma\iota\varphi\lambda\delta\omega$  'I make a cripple' ( $\sigma\iota\varphi\lambda\delta\cdot\varsigma$ ),  $\nu\epsilon\delta\omega$  'I make new' ( $\nu\epsilon\delta\cdot\varsigma$ ),  $\iota\sigma\delta\omega$  'I make equal' ( $\iota\sigma\delta\cdot\varsigma$ ). This function it seems to have taken from pre-Greek - $\bar{\alpha}\dot{\imath}\bar{\sigma}$ ; compare  $\nu\epsilon\delta\omega$  with Lat. novāre O.H.G. niuwōn (p. 295); and in this sense -oω became enormously productive: sa  $\dot{\varrho}\alpha\kappa\delta\omega$  'I make into rags, tear to rags' from  $\dot{\varrho}\alpha\kappa\delta\varsigma$  n. 'rag',')  $\dot{\nu}\gamma\iota\delta\omega$  'I make well' from  $\dot{\nu}\gamma\iota\dot{\gamma}\varsigma$  'well',  $\dot{\varrho}\rho\nu\iota\partial\delta\omega$  'I turn into a bird' from  $\dot{\varrho}\rho\nu\iota\dot{\varsigma}$  'bird',  $\pi\lambda\alpha\tau\delta\omega$  'I make broad' from  $\pi\lambda\alpha\iota\dot{\varsigma}$  'broad',  $\gamma\epsilon\rho\nu\varrho\delta\omega$  'I make into a bridge' from  $\gamma\epsilon\rho\nu\varrho\alpha$  'bridge'.

(5) Beside verbs in  $-v\omega$  (§ 772) sprang up a class in  $-\varepsilon v\omega$ , as  $vo\mu\varepsilon \dot{v}\omega$  'I am a herdsman' ( $vo\mu\varepsilon \dot{v}-\varsigma$ ),  $\dot{\eta}vo\chi\varepsilon \dot{v}\omega$  'I am a driver' ( $\dot{\eta}vo\chi\varepsilon\dot{v}-\varsigma$ ). If, as we assumed in III § 261 p. 162,  $-\varepsilon v\varsigma$  comes from \*- $\varepsilon_{\xi}v-\varsigma$ , then  $-\varepsilon v\omega = *-\varepsilon_{\xi}v-\xi\omega$ ,  $-\varepsilon v\sigma\omega = *-\varepsilon_{\xi}\bar{v}-\sigma\omega$  are quite regular, and do not differ in principle from  $-v-(\xi)\omega$   $-\bar{v}-\sigma\omega$  ( $\delta\alpha\kappa\rho\dot{v}\omega$   $-\dot{v}\sigma\omega$ ).

The ending  $-\epsilon\nu\omega$  soon became a type for expressing one's usual calling or occupation: as  $\partial\nu\partial\chi\partial\epsilon\dot{\nu}\omega$  'I am cup-bearer' from  $\partial\nu\partial\chi\partial\epsilon_{\sigma}$ ,  $\mu\alpha\nu\nu\epsilon\dot{\nu}\partial\mu\alpha\iota$  'I am a seer' from  $\mu\dot{\alpha}\nu\nu\iota_{\sigma}$ ,  $\partial\eta\partial\epsilon\dot{\nu}\omega$  'I am a hunter' from  $\partial\dot{\eta}\partial\dot{\alpha}$  'hunt',  $\beta\partial\nu\lambda\dot{\nu}\omega$  'I am a counsellor, advise' from  $\beta\partial\nu\lambda\dot{\eta}$  'counsel'. Thus  $-\epsilon\nu\omega$  is partically synonymous with  $-\epsilon\omega$ ; we have  $\partial\nu\partial\chi\partial\dot{\epsilon}\omega$  and  $-\chi\partial\dot{\epsilon}\omega$ , and  $\kappa\partial\partial\alpha\dot{\nu}\dot{\epsilon}\omega$  bears the same kind of sense (see 2., p. 296).

One dare hardly derive this from \*ξαxοσ-μω, although this would have an analogue in Lat. fulgur-iō (see § 775 p. 294).

- (6) Amongst the many endings of verbs derived from substantives with consonantal stems, three are particularly fertile  $-\alpha\zeta\omega$ ,  $-\iota\zeta\omega$ , and  $-\alpha\iota\nu\omega$ .
- (a)  $-\alpha\zeta\omega$ , for  $-\alpha\delta$ - $\mu\omega$ , answers sometimes to a Germanic class in (Goth.) -atja (§ 768 p. 283), and sometimes  $-\alpha\zeta\omega$  comes from  $-*\eta d\dot{z}\bar{o}$ , as in  $\pi\epsilon\mu\pi\dot{\alpha}\zeta\sigma\mu\alpha\iota$  'I count by fives' from  $\pi\epsilon\mu\pi\dot{\alpha}\varsigma$  (II § 123 p. 390, III § 169 pp. 13 f.).

Following  $\mu\nu\gamma\dot{\alpha}\zeta\omega$  'I mix', intr. in middle ( $\mu\nu\gamma\dot{\alpha}\zeta$  'mixt') were coined  $\dot{\eta}\sigma\nu\chi\dot{\alpha}\zeta\omega$  'I pacify, keep quiet' from  $\ddot{\eta}\sigma\nu\chi\sigma$ - $\varsigma$  'quiet',  $\delta\sigma\nu$ - $\mu\dot{\alpha}\zeta\omega$  'I test' from  $\delta\dot{\sigma}\nu\mu\sigma$ - $\varsigma$  'tested, genuine, correct'. Following  $\dot{\alpha}\phi\rho\sigma\delta\iota\sigma\iota\dot{\alpha}\zeta\omega$  'I give myself up to sensuality' ( $\dot{\alpha}\phi\rho\sigma\delta\iota\sigma\iota\dot{\alpha}\varsigma$ ),  $\gamma\epsilon\nu\epsilon\iota\dot{\alpha}\zeta\omega$  'I grow a beard' ( $\gamma\epsilon\nu\epsilon\iota\dot{\alpha}\varsigma$ ) were formed  $\sigma\nu\sigma\dot{\alpha}\dot{\alpha}\zeta\omega$  'I am in tumult' from  $\sigma\nu\dot{\alpha}\sigma\iota$ - $\varsigma$  'tumult',  $\dot{\alpha}\nu\iota\dot{\alpha}\zeta\omega$  'I feel pain or trouble' from  $\dot{\alpha}\nu\dot{\iota}\alpha$  'pain, trouble',  $\dot{\epsilon}\pi\iota\chi\omega\rho\iota\dot{\alpha}\zeta\omega$  'I am at home' from  $\dot{\epsilon}\pi\iota\chi\dot{\omega}\rho\iota\sigma$ - $\varsigma$  'at home'.

In a few words  $-\alpha\zeta\omega$  and  $-\iota\zeta\omega$  come from  $-\alpha\gamma-\iota\omega$  and  $-\iota\gamma-\iota\omega$ ; as  $\dot{\alpha}\varrho\pi\dot{\alpha}\zeta\omega$  'I seize, carry off' (fut.  $\dot{\alpha}\varrho\pi\dot{\alpha}\xi\omega$ ) from  $\ddot{\alpha}\varrho\pi\alpha\xi$  'greedy, piratical'; and  $\mu\alpha\sigma\tau\dot{\iota}\zeta\omega$  'I whip' from  $\mu\dot{\alpha}\sigma\tau\iota\xi$  'a whip'. This concidence of  $-\gamma-\iota\omega$  and  $-\delta-\iota\omega$  in the present caused analogy to act in two directions. (1)  $\dot{\alpha}\varrho\pi\dot{\alpha}\sigma\omega$   $\ddot{\eta}\varrho\pi\alpha\sigma\alpha$  beside  $\dot{\alpha}\varrho\pi\dot{\alpha}\xi\omega$   $\ddot{\eta}\varrho\pi\alpha\xi\alpha$  following the dental stems; and (2) Dor.  $\delta\sigma\iota\mu\alpha\xi\dot{\epsilon}\omega$   $\ddot{\eta}\varrho\iota\xi\alpha$  instead of \* $\delta\sigma\iota\mu\alpha\sigma\dot{\epsilon}\omega$   $\ddot{\eta}\varrho\iota\sigma\alpha$  following guttural stems. The latter kind were very common in Doric.

(b) Verbs in -αινω come from two sources. Some are derived from nominal n-stems; as τεκταίνω 'I carpenter' from τέκτων 'carpenter', εὐφραίνω 'I make glad' from εὐφρων 'glad', ποιμαίνω 'I tend' from ποιμήν 'herdsman', σπερμαίνω 'I give

forth seed' from σπέρμα 'seed', κῦμαίνω 'I undulate' from κῦμα 'billow' (§ 768 p. 282). The others are extended no-stems; as ἰαίνω 'I quicken, make live' beside Skr. ἰξαπα-t, αἰαίνω 'I dry' beside Lith. sαῦsinu (§ 621 pp. 158 f., § 743 p. 266). As the -αινω group spread, either of the two kinds might serve as a type-form. Thus in making factitives from adj. o-stems, a large class, like Φερμαίνω 'I warm' from Φερμό-ς 'warm', λειαίνω 'I smooth', from λεῖο-ς 'smooth', λειναίνω 'I whiten' from λευκό-ς 'white', the model might be either αὐαίνω, which was popularly derived from αὖο-ς 'dry', or εὐφραίνω 'I gladden' (εὐφρων) and πῖαίνω 'I fatten' (πἷων).

§ 777. Italic. Denominatives from consonantal nounstems, as Lat.  $cantur-i\bar{o}$ ,  $dent-i\bar{o}$ ,  $comped-i\bar{o}$ ,  $cust\bar{o}d-i\bar{o}$ ,  $fulgur-i\bar{o}$ , in the present ran on parallel lines with primitives such as  $farc-i\bar{o}$   $-\bar{\imath}$ -s (§ 702 p. 229, § 715 p. 248), and with denominatives from i-stems like  $f\bar{\imath}ni\bar{o}$  ( $-\bar{\imath}$ -s) for -i- $i\bar{o}$ ; with the latter this is true of the non-present stem, as  $cust\bar{o}d\bar{\imath}v\bar{\imath}$   $-\bar{\imath}$ -tus like  $f\bar{\imath}n\bar{\imath}v\bar{\imath}$   $-\bar{\imath}$ tu-s. The association seems to have gone thus far in proethnic Italic; for we have Osc.  $\varkappa\alpha\pi\iota\delta\iota\tau o\mu$ , i. e.  $kapid-\bar{\imath}$ -to-m 'ollarium' (same stem as Lat. capis -id-is); compare Umbr. statita 'statuta' from \*stati- Gr.  $\sigma\iota\acute{\alpha}\sigma\iota$ - $\varsigma$ . Old participials such as Lat. sceles-tu-s  $l\bar{\imath}ber$ -tu-s (II § 79 pp. 231 f., IV § 768 p. 283) had fallen out of the verbal system, thus becoming adjectives, before the beginnings of Latin.

The whole class of denominatives from consonantal nounstems was dying out in Latin. Only those which ended in -turiō were a group of any size (see § 778. 1).

Of the forms used for the present in  $scr\bar{\imath}ptur-i\bar{o}$   $-\bar{\imath}$ -s etc., the only ones which are a regular outgrowth of the Indo-Germanic are the 1<sup>st</sup> sing.  $-i\bar{o}$  and the 3<sup>rd</sup> pl. -iunt. The others cannot be derived either from -ie-s -ie-ti -io-mos -ie-tes nor from -iie-s etc.: to judge from the voc. filie (beside  $fil\bar{\imath}$ , III § 201 p. 83), we should expect as an imper. \* $scr\bar{\imath}pturie$ . As a fact, these denominatives dropt their  $-i\bar{o}$  -ie-s and so forth simply because in Italic primary verbs conjugating  $-i\bar{o}$  -ie-s

-ie-ti exchanged it for  $-i\bar{o}$  - $\bar{i}$ -s - $\bar{i}$ -ti (§ 702 pp. 228 ff.) So scr $\bar{i}$ ptur- $i\bar{o}$  took its type from suf- $fi\bar{o}$  farc- $i\bar{o}$  etc. (§§ 716 f. pp. 249 f.), in the same way as Greek moulded the future  $\Im s \rho \mu a \nu \tilde{o}$   $\mathring{a} \gamma \gamma \varepsilon \lambda \tilde{o}$  upon the primary class (§ 757 p. 277).

What is seen in  $scr\bar{\imath}ptur-i\bar{o}$ , is seen in other verbs with  $-i\bar{o}$ , as  $f\bar{\imath}ni\bar{o}$  from  $f\bar{\imath}ni$ -s. Here, as before, only  $-i\bar{o}$  and -iunt are regular. Here too the new forms sprang up in proethnic Italic; evidence for which is found in Umbr. persnihi-mu persnih-mu persni-mu 'precator' from a noun-stem \*persni-(§ 674 p. 207).

Again: verbs in  $-\bar{a}-\underline{i}\bar{o}$ ,  $-e-\underline{i}\bar{o}$ , and  $-u-\underline{i}\bar{o}$  run parallel to the primary classes:

plantō, for \*- $\bar{a}$ - $i\bar{o}$ , has the io-suffix only in the 1st sing.; elsewhere unthematic - $\bar{a}$ -s-a-t etc., like  $n\bar{o}$   $n\bar{a}$ -s etc., and  $juv\bar{o}$ -a-s etc. This agrees with Umbr. furfant furfa $\theta$  'februant' anstiplatu 'instipulator' Osc. fa a mat 'habitat' and others, beside 1st sing. Umbr. subocau 'adoro' for  $-\bar{a}(i)\bar{o}$  (cp. stahu 'sto', and § 980); so the Latin type may be regarded as proethnic in Italy. See § 583 pp. 123 ff., § 738 p. 263.

So also with claudeo, for \*-e-io, the io-suffix is found only in the 1st sing.: claudeo -ē-s etc. like pleo pl-ē-s etc., video -ē-s etc. (§ 590 pp. 131 f., § 738 p. 263). And the same is true of Causals, moneo -ē-s and so forth (§ 788). remarks may be made. First, claudeo and moneo orig. had -ĕiō, while pleō videō had orig. -ēiō (cp. I § 612 p. 402). Secondly, claudes mones -et -etis may be derived without violence from -e(i)es -e(i)eti -e(i)etes, as easily as Lesb. φίλητε may be derived from φιλέ(ι)ετε (§ 589 p. 131). To judge from Lat. tres, pontes Umbr. puntes for -e(i)es (I § 134 p. 121), ee became ē in pre-Italic times. It is possible that this contraction in persons containing the suffix -ie- may have paved the way for the confluence of verbs in -e-iō and -é-iō with those in -ē-. It must also be carefully remembered that Latin had no ē-forms answering to plantāvī plantātu-s fīnīvī  $f\bar{\imath}n\bar{\imath}tu$ -s, as it had no similar  $\bar{e}$ -forms even in verbs with  $-\bar{e}$ - $i\bar{o}$ , such as video.

Remark. An exception is  $d\bar{e}nse\bar{o}$  'I thicken', which has  $d\bar{e}ns\bar{e}tu$ -s, a bye-form of  $d\bar{e}ns\bar{a}tre$  (same meaning). It would appear that there was once nothing but this participle  $d\bar{e}ns\bar{e}tu$ -s, and that the whole system  $d\bar{e}ns\bar{e}$ -mus etc., sprang up by analogy of  $d\bar{e}ns\bar{a}$ -mus to  $d\bar{e}ns\bar{a}$ -tu-s. This would explain why  $d\bar{e}nse\bar{o}$ , unlike  $albe\bar{o}$  claude $\bar{o}$  etc., had a factitive meaning.

statuō -uis -uit etc. may be directly compared with Skr.  $g\bar{a}tu$ - $y\acute{a}mi$  - $y\acute{a}$ -si etc., Gr.  $\phi\bar{t}\tau\acute{v}\omega$  - $\epsilon\iota\varsigma$  etc.; on the other hand the inflexion is the same as in  $su\bar{o}$  suis suit etc. (§ 717 p. 250).

- § 778. Particular endings becoming a type in Italic:
- (1) The ending -turiō, occurring words like scrīptur-iō from scrīptor (§ 768 p. 282), was made by the usual misunderstanding into a type. Hence came a number of new forms, with the sense of will, wish, intention, often where there was no connected noun in -tor; as parturiō tacituriō, sullāturiō (from Sulla). In late Latin these words lost their distinctive meaning, and parturiō, for example, meant the same as pariō.¹)
- (2) The ending  $-i\bar{o} = -i-i\bar{o}$ , found in many Latin verbs from both subst. and adj. stems, gained no such distinctive meaning as did  $-\bar{o}$  ( $-\bar{a}re$ ) and  $-e\bar{o}$ . Add to the exx. given in § 771 p. 289 the following: parti\(\bar{o}\) and -ior 'I divide, share' from pars (stem parti-), circumr\(\bar{e}ti\bar{o}\) 'I ensnare' from r\(\bar{e}te\), in\(\bar{a}ni\bar{o}\) 'I empty' from in\(\bar{a}ni-s\), molli\(\bar{o}\) 'I soften' from molli-s. None the less did  $-i\bar{o}$  spread by analogy: catuli\(\bar{o}\) from catulu-s, equi\(\bar{o}\) from equo-s, which with nuptu\(\bar{v}re\) remind us in form and sense of the Skr. desiderative class putr\(\bar{v}y\delta-ti\) (§ 774 p. 292); blandior from blandu-s, rauci\(\bar{o}\) from raucu-s, saevi\(\bar{o}\) from saevo-s, largior from largu-s, \(\bar{u}ni\bar{o}\) from \(\bar{u}nu-s\); poeni\(\bar{o}\) p\(\bar{u}ni\bar{o}\) from poena; aborti\(\bar{o}\) from abortu-s, singulti\(\bar{o}\) from singultu-s. It is possible that some of the verbs like catuli\(\bar{o}\) blandior are the same formation as Skr. adhvary\(\dal{o}+ti\) Gr. \(\dal{a}\gamma\gamma\(\bar{e}\)\(\lam{a}\) kv; see § 770 pp. 286 f.
- (3) Verbs in  $-\bar{a}-\dot{i}\bar{o}$  (Lat.  $-\bar{o}$ ), some of which, from o-stems, belong to pre-Italic times (§ 769 pp. 284 f.), became very numerous in Italic.

Many such, derived from a-substantives, meant to

<sup>1)</sup> Johansson (P.-B. Beitr. x 223) thinks that Goth. aihtron 'to beg for' is a desiderative like these. He connects it with aih 'I possess', and thinks the orig. meaning was 'I want to possess'.

occupy oneself with, to practise, use, produce' that which the original stem denoted: Lat. cūrō Umbr. kuraia 'curet' Pelign. coisatens 'curaverunt' (Lat. cūra), Lat. multō Osc. moltaum 'multare' (Lat. multa), Lat. insidior (insidiae), praedor (praeda), lacrimō (lacrima), maculō (macula), fortūnō (fortūna). verbs in  $-\bar{a}i\bar{o}$  were made from other substantive stems. Examples: Lat. termino from terminu-s termen, Umbr. termnas 'terminatu-s' Osc. teremnattens 'terminaverunt'; Lat. loco from locu-s, Pelign, locatin(s) 'locaverunt'; Lat. dono from donu-m, Osc. d]uunated 'donavit'; Lat. vinculo from vinculu-m, Umbr. previslatu imper. 'praevinculato, praepedito vinculis'; Lat. numerō from numeru-s, pāgnō from pāgnu-s (cp. § 773 Rem. p. 291), spolior from spoliu-m, consilior from consiliu-m, rēgno from rēgnu-m, fluctuo from fluctu-s, tumultuo from tumultu-s, contionor from contio, nomino from nomen, examino from examen, coloro from color, fulguro from fulgur, onero from onus, scelerō from scelus, pulverō from pulvi-s, laudō from laus, hiemo from hiems; Osc. deivaid 'iuret' deivast 'iurabit' from deivo- 'deus'.

A few more exx. may be given of verbs in -āṣō derived from adjectival stems, like Lat. novō (pp. 284 f.): Lat. prīvō from prīvo-s, Osc. preivatud 'privato, reo' (for the meaning, cp. Bréal, Dict. etym. Lat. 2281, Mém. Soc. Ling. IV 394 f.); Lat. piō from piu-s, Umbr. pihatu 'piato' prupehast 'ante piabit'; Lat. probō from probu-s, Osc. prufattens 'probaverunt'. Hence by analogy Lat. gravō from gravi-s, levō from levi-s, cicurō from cicur. Lat. sacrō from sacro- sacri-, Osc. sakarater 'sacratur, sacrificatur' from σακορο ('sacrum') sacri-

A mass of Lat. verbs in  $-t\bar{a}\underline{i}\bar{o}$  are based upon to- Participles; usually they have an intensive or frequentative meaning. The following seem to have existed in pre-Italic times: Lat. gust $\bar{o}=0.H.G.$  cost $\bar{o}m$  from Idg. \* $\hat{g}us$ - $t\hat{o}$ -, see § 769 p. 284; Lat.  $it\bar{o}$  Umbr. etaians 'itent' etato 'itate' = Gr.  $it\eta$ - $\tau\acute{e}o\nu$  El. part. perf. act.  $it\ddot{n}$ - $a\nu$ - $it\ddot{\alpha}$  $k\acute{\omega}$  $\hat{o}$ ; Lat. put $\bar{o}$  'I deck, prune, clean, reckon, think' beside O.C.Sl. pytaja 'scrutor, quaero, indago' (Osthoff, M. U. IV 86 f.). Formed in Latin on the same

principle: hortor occultō adjūtō cantō versō tractō dōctō gestō pōtō, domitō crepitō habitō. The ending -itō was abstracted from words which happened to have it, and became a type; hence vocitō from vocō (vocōtu-s), volitō from volō (volōtu-m), agitō from agō, scōscitō from scō-scō, vōsitō from vōsō (Class XX, § 662 p. 197); and, by a combination of -itō with -tō, arose intensives or frequentatives to the second power, as ititō from i-tō, dōctitō from dōc-tō, cursitō from cursō.

The reason why this class derived from the to-participle increased to such a size, was that from the pre-Italic stage onwards, the neuter or the feminine of these participles was used as an abstract noun: as commentu-m 'idea' (hence commentor), repulsa 'defeat' (hence repulsō), offēnsa 'blow' (hence offēnsō). See II § 158 pp. 473 ff., IV § 769 p. 285.

-igāre also became a fertile denominative suffix in Latin;  $n\bar{a}vig\bar{o}$   $r\bar{e}miy\bar{o}$   $j\bar{u}rig\bar{o}$   $j\bar{u}rg\bar{o}$   $m\bar{\imath}tig\bar{o}$ . Cp. Leo Meyer, Bezz. Beitr. vi 130 ff.

(4) The  $-e\bar{o} = -e-i\hat{o}$ , of intrans. verbs like *claude* $\bar{o}$  (§ 770 p. 288), hardly touched any but o-stems; but an example of it elsewhere is *molle* $\bar{o}$  from *molli-s*.

Observe that the same distinction of transitive and intransitive, which we see in the denominatives clārāre and clārēre, is seen in primary verbs with those endings, as liquāre and liquēre.

Remark. fateor seems to be another denominative in  $e\bar{o}$ . Of this verb, Oscan has the inf. fatfum  $(i=\bar{e})$ . The contained stem is \*fa-to-s, answering to Gr.  $\varphi a r o - \varsigma$  'said'  $(\ddot{a} - \varphi a r o - \varsigma)$ , and meaning 'having declared something, open, confessing'; and the word doubtless borrowed its deponent inflexion from  $f\bar{a}r\bar{r}$  (§ 495 p. 56). At first its construction was fateor  $d\bar{e}$  aliqu $\bar{a}$   $r\bar{e}$ , and the accusative constr. came later. The partic. fessu-s follows  $su\bar{a}su$ -s from  $su\bar{a}de\bar{o}$ , and the like.

§ 779. Keltic. The only distinct class of this kind in Irish contains the  $\bar{a}$ -denominatives, as rannaim from the  $\bar{a}$ -stem rann (§ 769 p. 284) and marbaim from the o-stem marb (p. 284). Somewhat as in Latin, the 1<sup>st</sup> sing. only is extended by -io, and all the rest lacks it: 1<sup>st</sup> sing. no charu for \* $car\bar{a}$ - $i\bar{o}$ 

(conjunct inflexion) like Lat. plantō; 3<sup>rd</sup> sing. no chara O.Bret. cospitio-t like Lat. planta-t. Compare § 584 p. 125.

io-presents from consonantal stems (like Skr. apas-yá-ti) there are none. Mid.Ir. ath- $r\bar{\imath}gaim$  'I dethrone' is an  $\bar{a}$ -verb (inf. aith- $r\bar{\imath}gad$ ) from  $r\bar{\imath}$  'king' (stem  $r\bar{\imath}g$ -).

There are none either of the type of Skr.  $g\bar{a}tu-y\acute{a}-ti$  (§ 772 p. 289).

In the Keltic  $3^{rd}$  conjugation, Idg. denominatives in  $-e-i\bar{o}$  (say scorim scuirim, § 770 p. 288), those in  $-i-i\bar{o}$  (say fo-dālim § 771 p. 289), and causals in  $-ei\bar{o}$  (§ 803) have all run together. Then this new composite denominative type spreads by analogy:  $3^{rd}$  sing.  $ad-r\bar{\imath}mi$  'counts' from  $r\bar{\imath}m$  f. 'number' (stem \* $r\bar{\imath}m\bar{a}$ -),  $b\bar{a}gim$   $ar-b\bar{a}gim$  'I strive, brag' from  $b\bar{a}g$  f. 'strife' (stem \* $b\bar{a}g\bar{a}$ -).

§ 780. A denominative ending with -ag- became widespread in Irish and British dialects: e. g. O.Ir. sāraigim or -sāraigiur Mod. Cymr. sarhāf (= O.Cymr. \*sarhagam) 'I injure, offend' from sār 'offence', O.Ir. suidigim 'I place' from suide 'place', Mid.Ir. intamlaigim 'I compare' from intamail 'likeness, imitation', O.Cymr. scamnhegirt 'levant'. Some have wished to connect this suffix with the nominal suffix -āco- (II § 89 p. 273), led to this view by cumachtaigim 'I make myself master of' from cumachtach 'powerful'; but nothing clear is known about its origin.

Remark. "The British dialects point to  $-\bar{\alpha}g$ -, and before the  $\bar{\alpha}$  Cymr. has an h, which I believe to indicate that the orig. sound was s (i. e.  $-s\bar{\alpha}gi$ -). But of this s there is no trace at all in Irish. Leaving this out of count, we might imagine some formation like Lat.  $r\bar{e}miy\bar{\alpha}r\bar{e}$   $p\bar{u}rg\bar{\alpha}re$ , only with i-flexion in Keltic." Thurneysen.

§ 781. Germanic. (1) Here, as in Keltic, the most prominent group consists of  $\bar{a}$ -verbs, with inf. Goth. O.H.G.  $-\bar{o}n$  O.Icel. -a A.S. -ian, called in Germanic grammars the Second Weak Conjugation.  $-\bar{a}$ -io-, with -io-extension, is clear only in Anglo-Frisian, A.S. 1<sup>st</sup> sing. in -ie, pl. in  $-ia\bar{d}$ , as sealfie sealfia $\bar{d}$ , where i must originally have been a long and also dull vowel, so that Germ.  $-\bar{o}$ -ia- is quite out of the question. Without -io-: O.H.G.  $salb\bar{o}m$   $-\bar{o}s$   $-\bar{o}t$   $-\bar{o}m\bar{e}s$   $-\bar{o}t$   $-\bar{o}nt$  Goth.  $salb\bar{o}s$   $-\bar{o}p$   $-\bar{o}m$   $-\bar{o}p$ 

 $-\bar{o}nd$ . The 1st sing. Goth.  $salb\bar{o}$  is doubtless not for \*- $\bar{a}$ -m with secondary personal ending (neither is hab-a for \*- $\bar{e}$ -m, see § 708 p. 239), but a new formation following baira beside bairam and haba beside habam. Compare § 739 p. 264.

Examples of ā-verbs derived from ā-nouns are given in § 769 p. 284. Others are Goth. fairinō 'I accuse, blame' O.H.G. firinōm 'scelero' A.S. firenie 'I sin' from Goth. fairina 'accusation' O.H.G. firina 'scelus' A.S. firen 'sin', Goth. idreigō 'I repent' from idreiga 'repentance', O.H.G. ahtōm (A.S. eahtie) 'I notice' from ahta 'notice', O.H.G. gremizzōm 'I look grim, am gloomy' from gremizza 'dark look, gloom, despondency'. The ending -inō-(ia-), beginning in West Germ. verbs like O.H.G. firinōm, redinōm ('I set forth, recount', from redina 'account, description') became an independent suffix and went further: e. g. O.H.G. wīz-inōm 'I punish' A.S. wītnie, O.H.G. fest-inōm 'I affirm, make fast, promise' A.S. fæstnie, O.H.G. heb-inōm 'I entertain as a guest', and others.

For  $\bar{a}$ -verbs from o-nouns, such as Goth. vair $\bar{p}\bar{o}$  O.H.G. werd $\bar{o}m$ , see § 769 p. 284.

ā-verbs from s-stems (these joined the o-declension very early in Germanic, see II § 132 pp. 419 f.): Goth. hatizō 'I hate' from hatis 'hatred', O.H.G. sigirōm 'I conquer' beside Goth. sigis 'victory', O.H.G. egisōm 'I am terrified' beside Goth. agis 'fear', like Lat. onerāre scelerāre (§ 778 p. 302). -isō-(ia-) became a new independent suffix: Goth. valv-isō 'I roll, revolve', O.H.G. rīch-isōm 'I rule' A.S. rīcsie, O.H.G. līch-isōm 'comparo, simulo' hēr-isōm 'I rule' (also hērrisōm by analogy of hērro 'lord, ruler', which was originally a comparative), A.S. bledsie 'I bless' and others.

ā-verbs from n-stems: Goth. fráujinō 'I am lord, I rule' from fráuja (gen. fráujins) 'lord', gudjinō 'I am a priest, fill priestly office' from gudja 'priest', which gave the type for reik-inō 'I rule over' (reik-s 'ruler') skalk-inō 'I am a servant, am useful' (skalk-s 'servant') hōr-inō 'I commit adultery' (hōr-s 'adulterer').

Many more new endings with the ā-suffix, like these just Brugmann, Elements. IV.

mentioned, are found in West Germanic. The favourites are  $-ar\bar{o}$ ,  $-al\bar{o}$ , and  $-ak\bar{o}$ .

(2) Even in the prehistoric stages of Germanic three classes of verbs, with endings originally different, came to have the same ending; those with consonantal stems, with the ending -iό (-iiό); those from o-stems, with the ending -e-iό (whence pr. Germ.  $-i-i\bar{o}$ , and those ending in  $-i-i\bar{o}$ . Compare Goth. rigizja glitmunja veitvõdja lauhatja O.H.G. lougazzu lohazzu and others § 768 p. 283, Goth. rigneit etc. § 770 p. 288, and Goth. dáilja O.H.G. teil(i)u, Goth. vēnja O.H.G. wān(i)u etc. § 771 p. 289.1) Besides, the causals in -éjō (pr. Germ. -iįō), as Goth. fra-vardja = Idg. \*vortėjō, fell into this conjugation, which is called the First Weak Conjugation in Germanic grammar. It should be mentioned that in Germanic, as in other Idg. languages, many verbs derived from nouns are properly classed among Causals; for example, Goth. háilja O.Sax. hēliu O.H.G. heil(i)u 'I heal' from háil-s hēl heil 'whole' (§§ 793, 806).

But the confluence of the various pre-Germanic conjugations was not always due to regular sound-change. For instance, Goth. glitmuneiþ lauhateiþ (both only inferred) took the place of \*glitmun-ji-þ \*lauhat-ji-þ on the analogy of such forms as rigneiþ for \*rigni-ii-d(i). Goth. vaúrkeiþ (1st sing. vaúrkja Idg. \*urŷ-iō) is a new form, instead of \*vaúrkiþ, following fra-vardeiþ etc. (p. 229 footnote). On the other hand, O.H.G. denit beizit (1st sing. denn(i)u beizz(i)u ground-form \*tonéiō \*bhoidéiō) follow hevit = Lat. capit.

There is often wavering between the first weak conjugation and the second, the  $\bar{a}$ -verbs. Sometimes there were originally variant forms with different structure; e. g. O.H.G. follow 'I fill' was a pre-Germ. verb in  $-\bar{a}$ - $i\bar{o}$  (§ 769 p. 284), whilst full(i)u Goth. fullja 'I fill' is a causal; similarly we have O.H.G.  $tar\bar{o}m$  'I hurt, injure' from tara 'hurt, injury' beside the causal

<sup>1)</sup> Whether \*-u-iō leads regularly to Goth. -ja, and say tagrja 'I cry' comes from pr. Germ. \*tagru-iō, ufarassja 'I exist in abundance' for \*ufarassu-iō, is doubtful.

teriu (same meaning). How far these verbs altered their inflexion in later times, and for what reasons, are questions which need further investigation (cp. for instance O.Sax. fullōn beside fulliu).

(3) Verbs in Goth. -a (2nd sing. -áis) O.H.G. -ēm, as Goth. paha O.H.G. dagēm 'taceo' (Third Weak Conj.), as we have seen in § 587 p. 129, § 592 p. 133, § 708 pp. 238 ff., did not originally belong to what we have called the later stratum of denominatives. However, we do find in Germanic quite a number of later denominatives in this conjugation; as Goth. arma 'I feel pity' fasta O.H.G. fastēm 'I fast'; and one is tempted to class those verbs along with Latin denominatives such as claudeo, which were just in the same way associated in conjugation with taceo video and the like (§ 777 p. 300). Howbeit, this is inadmissible. Because by far the greater number of the verbs in this class were intransitive (as are paha dagēm), it happened that their ending became a sign of intransitive meaning; and as the orig. inceptive verbs with an n-suffix (as Goth. qa-vakna 'to awake') suggested inceptive n-verbs formed from nouns (as Goth. fullna 'I get full' mikilna I grow large', § 623 p. 160), just so paha dagem were the model for fasta fastēm and many others. Since there was a primary verb Goth. saúrga O.H.G. sorgēm 'I care' side by side with the subst. Goth. saurga O.H.G. sorga 'care', which seemed to be derived from that substantive (§ 659 pp. 193 f.), so the subst. (O.H.G.) fasta 'a fast' suggested the above named verb Goth. fasta O.H.G. fastēm; and furthermore the verb wernēm 'I perplex or torment myself' was made to complement werna 'perplexity, pang', wartem 'I watch, wait' was formed from the subst. warta 'watch, spying, waiting', wahtem 'I keep watch' from wahta 'watch'. In O.H.G. the process goes a step further, and verbs like these are derived from adjectives; e.g. O.H.G. fūlēm 'I cause to rot' from fūl 'rotten', altēm 'I grow old' from alt 'old'. Compare some other verbs, belonging to Class XIV, such as O.H.G. wesanēm 'I dry up, wither away' (O.Icel. visna), trunkanēm 'I get drunk' (A.S. druncnie), which, by adopting e-flexion, gained a second sign of their intransitiveinceptive meaning (§ 623 p. 160); and further Goth. maúrna O.H.G. mornēm instead of \*maúrnō \*mornōm (§ 605 p. 147).

There are many and various waverings between  $-\bar{e}$ - and  $-\bar{a}$ -flexion, as O.H.G.  $\bar{e}r\bar{e}m$  and  $\bar{e}r\bar{o}m$  'I honour', which need further investigation.

- § 782. Balto-Slavonic.
- (1) Here it is no longer possible to distinguish beyond a doubt verbs derived from consonantal noun-stems and containing the suffix -io-, of the type of Skr. rajas-yá-ti (§ 768 p. 282). Instead of these, we find in cases where the forms are clear, verbs conjugated in other denominative classes; as Lith. akmenyjù-s 'I turn to stone' from akmã 'stone' (stem akmen-), O.C.Sl. znamenaja 'I mark, term' from zname 'mark' (stem znamen-).
- Remark. Perhaps the Lith.-Lettic verbs Kurschat calls "Punctiva" those ending in (Lith.) -teréti -teléti, as kiřsteré-ti 'I rough-hew a little' are to be connected with Slavonic nomina agentis in -tel- (Idg. -ter-), as žrětel-ĭ 'offerer' (II § 122 p. 389). Then comes the question whether the Lith. present formation kiřster-iu szvilptelu (i. e. -el-iu) represents or not the type of Skr. rajas-yá-ti. The conjugation in the dialects is sometimes -teréjau -teléjau, -teréti -teléti, and sometimes -teriau -telau, -terti -telti (Leskien-Brugmann, Lit. Volksl. und Märchen, 313 f.), the latter like lükuriau lükurti beside lükuriu 'I wait quietly'.
- (2) Beside the endings Lith.  $-o-j\bar{u}$  O.C.Sl.  $-a-j\bar{a}=\mathrm{Idg}$ .  $-\bar{a}-i\bar{o}$ , as Lith.  $lank\bar{o}-ju$  O.C.Sl.  $laka-j\bar{a}$  (§ 769 p. 284), we meet with Lith.  $-\dot{e}-ju$  O.C.Sl.  $-\dot{e}-j\bar{a}$  instead of Idg.  $-e-i\bar{o}$ , e. g. Lith.  $g\hat{u}d\bar{e}-j\hat{u}-s$  O.C.Sl.  $razum\bar{e}-j\bar{a}$  (§ 770 p. 288), and Lith.  $-y-j\bar{a}$  instead of Idg.  $-i-i\bar{o}$ , as  $daly-j\hat{u}$  (§ 771 p. 289). In these formations the long  $-\bar{e}-$  and  $-\bar{i}-$  are to be explained on the same principle as the long vowels in the Greek dialectic forms  $a\bar{o}ix\bar{n}$  or  $z\bar{o}v\bar{t}$  and so forth (§ 775 p. 293): they have been imported from the non-present stems; thus  $g\hat{u}d\bar{e}-j\bar{u}-s$  follows  $-\dot{e}-siu-\dot{e}-ti-s$ ,  $razum\bar{e}-j\bar{a}$  follows  $-\dot{e}-ch\bar{u}-\dot{e}-ti$ , and  $daly-j\hat{u}$  follows  $-\dot{e}-siu-\dot{y}-ti$ , and so forth. At the same time, something is due to such present forms as Lith.  $byr\bar{e}-ju$  O.C.Sl.  $gov\bar{e}-j\bar{a}$ , in which verbs the non-present forms had the same endings as have the present stems now in question (e. g.  $byr\dot{e}-ti$  like  $g\dot{u}d\dot{e}-ti-s$ ,  $qov\bar{e}-ti$  like  $razum\bar{e}-ti$ ); see § 735 p. 262, § 740 pp. 264 f.

Similarly sprang up the present in  $-\mathring{u}-ju$ , as  $j\mathring{u}k\mathring{u}'-ju$ , by analogy of  $-\mathring{u}-ta-s$  (§ 773 p. 291), due to the same principle as the Boeotian  $\delta \bar{a}\mu u\acute{\omega} \circ v \tau \varepsilon \varsigma$  (§ 775 p. 293). This bappened first in Baltic, or at any rate in the proethnic stage of Balto-Slavonic. The preterite of these verbs is odd; it ends in -avau ( $j\mathring{u}kava\mathring{u}$ ), while we should expect \*- $\mathring{u}-jau$ ; the latter ending appears in Lettic as  $-\mathring{u}ju$ , the shape it would naturally take there. I assume, with Wiedemann (Lit. Prät., 198), that -avau is due to the analogy of verbs in -au-ti (pres. -au-ju pret. -avau, see below, 3).

In Slavonic, where Idg.  $\bar{o}$  and  $\bar{a}$  ran together, verbs of the same kind as Lith.  $j\hat{u}k\hat{u}'ju$  may be buried in the class which has the termination -aja. This is all the more likely because such forms as  $rogat\tilde{u}$  and  $rag\hat{u}'ta$ -s cannot be well separated (§ 773 p. 291).

(3) The denominative type exemplified by such forms as Skr.  $adhvar-y\acute{a}-ti$  (from  $adhva-r\acute{a}-s$ ) and Gr.  $a\acute{\gamma}\gamma\acute{\epsilon}\lambda\lambda\omega$  (from  $a\acute{\gamma}\gamma\epsilon\lambda o-\varsigma$ ) is represented, firstly, by Slavonic presents like trepešta 2<sup>nd</sup> sing.  $-e\breve{s}te\breve{s}i$  (from  $trepet\breve{u}$ ). See § 770 p. 287.

Secondly, Lithuanian denominatives in -auju (inf. -au-ti, pret. -avau), and those in Slavonic ending in -u-ja (inf. -ova-ti), have to be examined; e. g. Lith. rěkau-ju 'I make a noise' O.C.Sl. dlugu-ja 'I owe'. They come from the most diverse noun-stems, but it is impossible to tell offhand with what stems the class began. If they are derived from u-stems (dlŭgovati from dlŭgŭ 'debt' gen. dlŭgu, sladovati 'to be sweet' beside sladŭ-kŭ Lith. saldù-s), they must be connected with Idg. verbs in \*-u-jō (§ 772 p. 289). But if so, one cannot understand why the stem-final -u- should have been exchanged in the verb for the strong grade -ey- or -oy- (pr. Balto-Slav. -oymay be either, see I § 68 p. 59). I therefore think it far more likely that the contained nouns had stems in -e-uo- -e-uā-(cp. Skr.  $k\bar{e}\dot{s}a-v\dot{a}-s$  'longhaired' from  $k\dot{e}\dot{s}a-s$  'bair', etc., see II § 64 pp. 133 ff.). This view is supported by Slav. besovati 'to be frenzied' beside běsovů 'devilish, mad' from běsů 'demon',

kraljevati 'to be king' beside kraljevŭ 'royal' from kraljī 'king', vračevati 'to be a physician, to heal' beside vračevŭ 'pertaining to a physician' from vračī 'physician', vinovati 'to accuse' beside vinovīnŭ 'guilty of something' from vina 'cause, guilt' (vinovīnŭ presupposes \*vinovŭ), and many more; Lith. substantives in -ava -java are collected by Leskien, Die Bildung der Nomina im Lit., 199 ff. In Lettic (and Prussian too) the verbs in -auti do not appear at all; and partly for that reason, partly because the large majority of Lith. verbs in -auti are Slavonic in origin, it is at least not improbable that this au-conjugation has been borrowed bodily from the Slavonic. However, the borrowing must have taken place very early, when Slav. ū was still ou.

Genuine Baltic examples of the type of Skr. adhvar-yá-ti would therefore be impossible to find.

(4) Side by side with the ending  $-\bar{o}-ju$ , Baltic has another present inflexion with  $-\bar{a}$ - and without -io-. This occurs, firstly, in the 2nd sing. imper. always without exception; e. g. dovanó-k, which is to be compared with Lat. plantā etc. (§ 957). Secondly, in Frequentatives and Causals with -au (inf. -y-ti), some of which were certainly derived from nouns; e. g. Lith. jů'stau 'I gird (frequently)' from ju'sta 'girdle', pelnau 'I earn' from peł̃na-s 'earnings', vetau 'I fan, winnow' beside Skr. vá-ta-s Gr. ἀή-τη (II § 79 p. 223). The forms justo justo-me justo-te answer to Lat. planta-t -ā-mas -ā-tis Lesb.  $\tau t \mu \bar{\alpha} - \mu \epsilon \nu$  O.Ir. no chara-m Goth. salbō-m etc., but the 1st and 2nd sing. ju'stau justai show the same analogical change as do the primary forms bijaũ-s 'I fear' buvaũ 'I was', see § 586 p. 127. This Lith. present class, as the non-present forms show (inf. ju'sty-ti pret. ju'scziau), stands in very close connexion with the Idg. verbs in - ėįō (Class XXXII), and we must discuss it again in §§ 789 and 807.

The orig. ā-flexion without -io- is also seen in Pruss. waitia 'he speaks' 1st pl. waitiā-mai (inf. waitiā-t) beside O.C.Sl. věšta-ja 'I speak, advise' (inf. věšta-ti), beside Pruss. caria-woyti-s karige-wayte 'address to the army, review' O.C.Sl. věšte n. advice'.

- (5) Slavonic has no distinct present class to correspond to the Lith. present class -y-ju (daly-jù, no. 2, p. 308) which represents the Idg. verbs in -i-iō. These verbs in -i-iō in this branch of Idg. were merged in the class of Causals etc. with -i-ti (Class XXXII); e. g. gošta 'I entertain, receive hospitably' 2<sup>nd</sup> sing. gosti-ši inf. gosti-ti from gosti 'guest', čīšta 'I honour' from čīstī 'honour', mīsta 'I take vengeance' from mīstī 'vengeance', branja 'I strive' from branī 'strife', myšlja 'I think' from myslī 'thought'. The Idg. endings -ėįō and -i-iō in Slavonic were sure to run together after -eį-became -īj- (I § 68 p. 60), and in both classes the endings -ja -iši -itū etc. have undoubtedly taken -ī- from the infinitive. We shall see in § 789 p. 322 how very probable it is that -ī- first got into the Causals, and afterwards spread to i-denominatives.
- § 783. Certain endings of the denominative verbs become types.
- (1) Verbs in (Lith.) -ō-ju (O.C.Sl.) -a-ja from ā- and from o-stems; as Lith. lanko-ju O.C.Sl. laka-ja from lankà laka and Lith. kilnó-ju from kìlna-s, mìrksnio-ju from mìrksni-s, O.C.Sl. prija-ja beside Skr. priyá-s, are cited in § 769 pp. 284 f.

Other Baltic examples are: Lith. klúpo-ju 'I continue kneeling' from klúpa 'kneeling, curtsey', dárgano-ja 'it is rainy weather', from dárgana 'rainy weather', Lett. jaudá-ju 'I have power, I can' from jauda 'power', sukká-ju 'I comb' from sukkas pl. 'comb', scháulá-ju 'I flutter', from schául-s 'fluttering', wájá-ju 'I weaken' from wáj-sch 'weak', jõká-ju 'I jest' from jõk-s 'jest', Lith. való-ju (i. e. \*valió-ju) 'I compel' from valà (i. e. \*valià) 'will' vadžió-ju 'I lead about' from vãdžios pl. 'leading-string, leash', gyló-ju 'I prick repeatedly' from gylỹ-s 'sting', vynió-ju 'I wrap up' beside kakla-vynỹ-s 'necktie'; also derived from -iē-stems, as Lith. páinio-ju 'I confuse, entangle' from páine 'a confusion, entanglement, hindrance', ránkio-ju 'I keep picking up' (berries, for example) from ranke 'a gleaning or gathering'. The predominant meaning of Lith. verbs in -oju is 'to do, to

be occupied with' the thing denoted by the noun whence the verb comes, as dovanó-ju 'I make a present to some one'; and it is easy to see that where there was any verb of this sort and a primary verb containing the same stem, the former might get some kind of frequentative meaning by way of Thus lanko-ju 'I busy myself with bending' distinction. means practically 'I bend to and fro' to make pliant or supple, whilst lenkù means simply 'I bend'. We shall soon meet this same Frequentative class in Slavonic; and we may therefore with some probability infer that it belongs to the proethnic period of Balto-Slavonic. But I would suggest that the type is still older, and was not produced at that time out of the later stratum of denominatives; for there is no objection to comparing forms like Lith. lìndo-ju O.C.Sl. sŭn-ědają with Lat. juvare Goth. miton etc., and placing them in the older denominative stratum. See §§ 734 ff. pp. 261 ff.

The ending -joju, both with and without some part of the foregoing stem adhering to it, became an independent suffix. Alone: lankioju beside lanko-ju, brádžio-ju 'I wade about' from bradà 'a wading' (but Lett. has braddáju) lándžioju 'I crawl about' beside *i-landa* 'place to crawl into' (but Lett. has lodáju), lakióju 'I fly about' from lakà 'place to fly in and out of, entrance to a beehive', sakióju 'I follow, sagióju 'I attach, fix, sew on'. -loju (i. e. \*- $li\bar{o}ju$ ): pirszlóju 'I woo, am a suitor on behalf of some one' from pirsly-s 'suitor, wooer' (perszù pirsti 'to woo, to be suitor'), mirkloju 'I blink' from mirkly-s 'blinker' (mérkiu mérkti 'I close my eyelids') and others; by analogy of these žirg-lóju 'I go straddling about' (žergiù 'I step, stride'), tep-lóju 'I smear or grease over' (tepù 'I smear'), met-lóju 'I throw about' (metù 'I throw' metau 'I throw about'). -czioju -szczioju: badmirszczióju 'I almost starve, suffer hunger' from badmirte 'starvation', and others; which set the type for such forms as mirk-czióju mirk-szczióju 'I blink', trúk-czioju trúk--szczioju 'I throb repeatedly', ráisz-czioju 'I keep tying'. -urioju -uloju (with parallel endings -uriuju -uluju by § 785) for frequentatives: vỹburioju 'I wag my tail, fawn upon' from

vyburỹ-s 'one who wags the tail', krũtuloju 'I stir myself a little' from krũtuli-s 'a stirring of oneself, levy, militia', grōmuloju 'I chew the cud' from gromulỹ-s 'cud', etc.; by this analogy kỹb-urioju 'I kick or struggle a little', võb-uloju 'I chew something tough'. -aloju is used in the same way; in this ending -ioju interchanges with -iũju far oftener than in the endings -urioju -uloju (§ 785):') sárgaloju 'I am sickly' cp. sargal-inga-s 'sickly', darbaloju 'I keep on working, I work vigorously', isz-vartaloju 'I tumble down' and many more, Lett. pirkaláju 'I buy by retail' beside Lith. pirkala-s 'wares', cp. Lith. svambalůju 'I dangle' from svambala-s 'that which dangles, plummet'.

Other Slavonic examples (observe that some of the Slav. verbs in -a-ti may possibly answer to Lith. verbs in -ů-ti, see § 782. 2 p. 309): O.C.Sl. igra-ja 'I play' from igra 'game', sŭ-vraska-ja 'I am wrinkled' from vraska 'wrinkle', klevata-ja 'I calumniate' (beside klevešta, see § 770 p. 287) from kleveta 'slander', gněva-ja se 'I am angry' from gněvů 'anger', kašīlja-ja 'I cough' from kašīlī 'cough'. As in Baltic, these verbs were distinguished by a secondary frequentative meaning from parallel primary verbs. They were associated with the group of frequentatives derived from verbs, whose beginnings go back to the older denominative  $\bar{a}$ -series; thus  $-\dot{e}da-ja$  was associated with  $ja(d)-m\ddot{i}$  'esse',  $-\dot{c}r\ddot{i}pa-ja$  with  $\dot{c}r\ddot{i}pa$ 'I make', -gněta-ja with gneta 'I press', čita-ja 'I read' with čita 'I count, reckon'; some of these could also be conjugated in the present like glagolja (glagola-ti) trepešta (trepeta-ti), etc. (§ 770 p. 287), as na-riča 'I name' (inf. na-rica-ti) beside na-reka. As some of these frequentatives had originally a strong grade of root-vowel, it became a rule for new forms of the same model, that if the primary verb had the vowels e, o,  $\vec{\imath}$ , or  $\vec{\imath}$ , the frequentative had  $\vec{e}$ , a, i, or y (see the comparisons in Leskien's Handbuch, pp. 14 f.).

<sup>1)</sup> The distinction between o and  $\hat{u}$  is in many Lith. writings so incompletely kept, that it is often impossible to say whether an ending be -oju or  $-\hat{u}ju$ .

In vowel-stems, -vaja is found as a frequentative suffix; e. g. o-ba-vają incanto beside ba-ją fabulor, o-dě-vają 'I clothe' beside dě-ja dežda 'I lay', pi-vaja 'I drink' beside pi-ją 'I drink'; o-kleveta-vają beside kleveta-ją kleveštą 'I slander', razumě-vają beside razumě-ją 'I understand'. The origin of -vaja was the noun-suffix -uo- -uā-: piva-ja from pi-vo 'a draught', vŭ-liva-ja 'I pour in' (beside bi-ja 'I pour') from \*li-vŭ Mod.Slov. liv 'funnel' na-liv 'shower of rain' Russ. na--livă 'the time when the corn grows full' pro-livă 'strait, channel', na-sěva-ją 'I sow' a field (beside sě-ją 'I sow') from Russ. sě-vů 'sowing, seed time'. Other similar nouns having v-suffixes may be regarded as derivatives with the suffixes -ŭkū -ŭka: cp. O.C.Sl. pri-dě-v-ŭkŭ 'cognomen' Mod.Slav. o-dě-v-ka 'dress' beside -děvają, Russ. do-bi-v-ka 'a complete driving in' (of stakes) beside raz-bivają 'I knock to bits, destroy' (bi-ją 'I strike'), Mod.Slov. po-mi-v-ek 'rinsing pail' beside u-myvają 'I wash' (my-ja 'I wash'). But the v of davaja 'I give' and of stavają 'consisto' may be taken as original, even if it is not to be put in just the same category as the u-suffix of the aforementioned forms; cp. Lith. dovanà, Skr. dāvánē and O.C.SI. stava stavu po-stavu stavlją = Goth. stoja, Lith. stovà. Since piva-ti dava-ti were regarded as intimately connected with pi-ti and da-ti, the ending -vati became itself a type, and hence we have -znava-ti beside zna-ti 'knows', -klevetava-ti beside klevata-ti, and so on. The endings -vaja -vati were very convenient for making frequentatives from verbs with a vowel stem-final; hence their frequency.

Remark. Frequentatives of derivative verbs, as o-klevetavati razuměvati veličavati, must be regarded, because of their meaning, as an imitation of primary Frequentatives, and must not be derived from nouns in -avă and -ėvă (such as veličavă 'grandiloquent').

§ 784. (2) Verbs from o-nouns in (Lith.) -ė-ju (O.C.Sl.) -ė-ją, as Lith.  $g\hat{u}d\dot{e}$ -jů-s from  $g\hat{u}da$ -s, O.C.Sl.  $razum\check{e}$ -ją from  $razum\check{u}$ , are cited in § 770 pp. 288 f.

Other Baltic examples are: Lith. szykszté-ju 'I am covetous' from szýkszta-s 'covetous', Lett. labbé-ju 'I better

myself' from lab-s 'good', práté-ju 'I subtilize, play the wiseacre' from prát-s 'reason', galé-ju 'I finish' from ga'l-s 'end', mistré-ju 'I mix, mingle' from mistr-s 'hotch-potch'. In Lithuanian these verbs mean 'to be or practise' anything. They are formed from other stems besides those in -o-, as Lith. žygé-ju 'I go an errand' from žỹgi-s 'errand, course', maloněju 'I much wish to have' from malonù-s 'gracious', seilěju 'I slaver, drivel' from séilè 'slaver', Lett. bridéju 'I delay' from bridi-s 'while, period', auréju 'I blow the hunting horn' from aure 'hunting horn'. They are linked with the older group of Verbs in -ėju, as kylě-ju (§ 740 p. 265), in the same way as verbs like dovanóju are linked with those like lìndoju (§ 783 p. 312).

In Lithuanian the ending -inėju was converted into a new type for Frequentatives. First came verbs like tekinė-ju 'I run about a little' from těkina-s 'running', dilbinė-ju 'I glower, glare from beneath my brows' from dilbina-s 'one who glowers'. The next step was smil-inėju 'I keep eating dainties, picking and tasting', lind-inėju 'I crawl about', vag-inėju 'I filch' and others. Verbs already frequentative often add-inėju, and thus form a frequentative of the second power, so to say; thus we have laist-inėju from láistau láistyti 'to pour repeatedly', itself frequentative of lė-ti 'to pour', žarg-inėju from žargaū žargýti 'to straddle or stretch the legs repeatedly', freq. of žeřk-ti 'to spread the legs'; cp. pilst-aloju 'to pour, shed or drop repeatedly' from pilstau pilstyti freq. of pil-ti 'to pour, shed' (§ 783 p. 313).

Other examples from Slavonic, where almost all verbs in -ĕjā are intransitive and most of them mean to get into some condition: o-slabĕ-jā 'I get weak' from slabŭ 'weak', o-malĕ-jā 'to get little' from malŭ 'little', bujā-jā 'I get daft' from bujī 'daft', obŭ-ništā-jā 'I get poor' from ništī 'poor', o-krilĕ-jā 'I wing myself' from krilo 'wing'; vŭz-mā-žajā 'I make a man of myself, take courage' from māžī 'man'. These too can be formed from other besides o-stems, as želējā 'I wish' from željā 'wish', longing'.

-lěja as an independent suffix. On the analogy of

o-mudilė-ją o-mudlė-ją 'I am slow, linger', from mudilu mudlu 'slow, lingering', and like forms, we find prokazilėją 'I make evil plots' from prokaza 'evil plot', mąžilėją 'I become a man' from mąži 'man', pečatilėją pečatlėją 'I seal' from pečati 'seal'.

§ 785. (3) The Lith. suffix -û-ju (§ 773 p. 291, § 782.2 p. 309), which began with o-stems, has the same function as -o-ju. For further examples take the following: Lith. melû'-ju Lett. melû-ju 'I lie' from Lith. melûî Lett. meli pl. 'lies', Lith. żalû'-ju Lett. falû-ju 'I grow green' from Lith. žāla-s žale-s Lett. fa'l'-sch green', Lith. balnû'-ju 'I saddle' from balna-s 'a saddle', dagû'-ju 'I harvest' from dāga-s 'harvest', púlû-ju 'I fester' from pûlei (pûl-jai) 'matter, pus'. Derived from other than o-stems: āszarûju Lett. assarûju 'I pour out tears' from aszarà assara 'tear', Lith. vagû'ju Lett. waggûju 'I draw furrows' from vagà wagga 'furrow', Lith. dejû'ju 'I lament' from dejà 'a lament', prāvardžiûju 'I furnish with a surname' from pravardē 'surname'.

In the Lith. frequentative endings -urioju uloju and -aloju (§ 783 p. 312), particularly in the last, there are variants -iûju and -ioju: here -ioju must be regarded in general as the older ending. Examples are: žiburiů ju 'I flare, flicker' from žiburỹ-s 'light, torch', skliduriůju 'I slide, swim', tyvulůju 'I spread widely'; svambalůju 'I dangle' from svambala-s 'that which dangles, plummet', margalůju 'I shine with varied hues', svaigalůju 'I reel'.

We have already remarked (§ 782.2 p. 309), that the Lith. verbs in -uju may possibly have their counterparts in Slavonic, where the class -ajq may contain some of then.

§ 786. (4) Lith. verbs in -yju from i-stems have been cited in § 771 p. 289; to Lith. szirdy-jû-s answers Lett. si'rdi-jû-s 'I take to heart'. Here are some further examples: Lith. rūdy-jù 'I rust' from rūdì-s 'rust', kirmy-jù 'I am eaten of worms' from kirmi-s 'a worm', which was orig. an i-stem although inflected as a stem in -io- (II § 97 p. 289), Lett. áusi-jù-s I listen' from áus-s (Lith. ausì-s) 'ear'. From

other stems: Lith. rómuju Lett. râmiju 'I castrate' (properly 'I tame') from roma-s romù-s râm-s 'calm, tame, gentle', Lith. vaīdyju-s 'I quarrel' from vaīda-s 'a quarrel', giñczyju-s 'I strive' from giñczia-s 'strife', gaïdryje-s 'clears up' (of the weather) from gaidrù-s 'cloudless, bright', krũvyju 'I heap' from krūvà 'a heap', Lett. gůdíju 'I make myself decorous or agreeable' from gud-s 'demeanour, honour' (stem guda-), skáustíju 'I tighten, wedge tight' from skáust-s 'wedge' (stem skáusta-), meddíju 'I hunt something' from mesch (Lith. medi-s -džio) 'forest'.

Remark. Since there were Lith. denominatives in -inu, as links--minu (§ 624 p. 161), whose future -įsiu became identical with that of the verbs we are now discussing, verbs in -inu and verbs in -yju were mixed up together. Compare Leskien-Brugmann, Lit. Volksl. und Märchen, pp. 314 f. No special examination has been made to find out the local distribution of this confusion, or how far it went.

On Slavonic verbs in -ja from i-stems, see § 782.5 p. 311, § 789 p. 322.

§ 787. (5) The Slavonic ending -uja (inf. -ovati) we have already traced to its beginning with the stems in -ovu (§ 782.3 p. 309). As an independent suffix it became very common, especially to denote condition, possession of a dignity, and the like. Examples: mirinuja I am peaceful, keep the peace' from mirinu 'peaceful', privuja 'I am first' from privu 'first', vojuja 'I am a warrior, I make war' (inf. vojevati) from voji 'warrior', sŭvěděteljują 'I am witness' from sŭvědětelĭ 'witness'. sŭvědětelistvuja 'I give evidence' from sŭvědětelistvo 'evidence', oběduja 'I take a meal' from obědů 'meal', imenują 'I name' from ime 'name'.

Remark. In the same way this ending was fertile in Lithuanian, where it took the shape of -auju (see § 782.3 p. 309). On the model of karaláuju = O.C.Sl. kraljują 'I am king' we have vēszpatáuju 'I rule', karáuju 'I make war', and others.

## K. CLASS XXXII.

## ROOT + -éjo- FORMING THE PRESENT STEM.

§ 788. The Verbs which here come under our consideration are those which are called Causal in Sanskrit grammars, because in Sanskrit their prevailing meaning is causal.

The Skr. accentuation -áya- must be regarded as original. Germanic also shows evidence that the accent lay after the root syllable; compare Goth. fra-vardja with d, but vairpa with p (I § 530 p. 383), and Goth. marzja 'I vex' O.Sax. merriu 'I stop, hinder, disturb' with pr. Germ. z for s (I §§ 581 f. p. 434).

In all languages except Sanskrit, -éio- ran together with other present suffixes without possibility of distinction. But in Sanskrit this ending was differentiated by its accent from that of derivatives from o-nouns: vēd-áya-ti 'gives to understand, informs' is contrasted with vasna-yá-ti from vasná-s (§ 770 p. 288); on the later confusion of these two classes, see In Greek both are alike, and φορέ-ω 'I carry about with me, I wear' looks just the same as φιλέ-ω 'I treat as a friend' from φίλο-ς (§ 770 p. 288, § 776.2 p. 296); how it came to pass that the two classes agreed in the verb infinite as well, where we should expect \*quasives in contrast to φορέοντες, has been explained in § 527 Rem. 1 p. 89. In Latin there is no distinction either, but mon-eo (-e-s) is just like claude-ō (-ē-s) from claudu-s, and like videō for \*vidē-iō 2nd sing. vidē-s (§ 738 p. 263, § 777 p. 300). In Irish, there was a confluence of -ėįō (ad-suidim 'I prolong, postpone'), -e-įó (scorim scuirim 'I unharness' § 770 p. 288), -i-įć (fo-dālim 'I divide up § 771 p. 289), and -iō (-lēc-iu 'I let, allow', § 719 p. 251). The same is true of Germanic: Goth. fra-vardja 'I bring to nothing, destroy = Skr. vart-áyāmi like haúrnja 'I blow the horn' (-e-ió) from haúrna-, like dulþja 'I keep a feast' (-i-įó) from dulþi-, like glitmun-ja 'I shine' from \*glitmun- (§ 768 p. 282), and like vaúrk-ja 'I work' (§§ 720 ff. pp. 251 ff.), compare § 781, 2 pp. 306 f. Slavonic examples: buždą 'I wake' budi-ši (Skr.

bōdháya-ti) like goštą 'I entertain' gosti-ši from the i-stem gostī (§ 782.5 p. 311) and like būždą 'I am awake, watch' būdi-ši = Skr. būdh-yāmi (§ 702 p. 230, § 727 pp. 257 ff.).

Lith. has -au, a wide departure from the original form:  $varta\bar{u}$  'I turn, keep on turning about',  $3^{rd}$  sing.  $va\bar{r}to$ , contrasted with O.C.Sl.  $vra\bar{s}ta$   $vrati-t\bar{u}$  Skr.  $vart-\acute{a}y\bar{a}mi$  Goth. fravard-ja, cp.  $bija\bar{u}$ -s § 586 p. 217 and ju'stau § 782.4 p. 310.

To the same class, as we shall see in § 790, belong some verbs with a weak grade of root, and one of these is Idg. \*\u03c4-\u03c4\u03c4\u03c5\u03c5\u03c5\u03c4\u0

I therefore regard as original the inflexion -eįō -eįe-si -eįe-ti etc., with -eįo- and -eįe- interchanging, as may be clearly seen in Aryan and Greek. What we see in Germanic may also be the same, with for the most part only regular changes; only we must regard such forms as O.H.G. 2<sup>nd</sup> sing. denis legis (1<sup>st</sup> sing. dennu 'I stretch' leggu 'I lay' = Goth. panja lagja) as being ad-formates of hevis ligis etc. (§ 781.2 p. 306). In Latin, the only form directly representing the Idg. is the 1<sup>st</sup> person singular in -eō; but perhaps the persons with -eįe-, which must have become -ē-in proethnic Italic, are also preserved in monēs etc. But monēmus monent, like claudēmus claudent, must be adformates of tacē-mus tacent. See on this matter § 777 p. 300. Lith. vartaū and O.C.Sl. vraštą will be explained in the next few paragraphs.

§ 789. The distinction between the <code>io-verbs</code> which we have placed in Classes XXVI—XXXI, and verbs with -<code>io-verbs</code>, is that in the former the <code>io-element</code> was confined to the present from the proethnic stage onwards; whilst in the latter the perf. part. pass. and the forms closely connected with it show after the root a certain element which seems to be etymologically akin to the present formative suffix. This element is -i- or -ī-. Sanskrit and Germanic as a rule have -i-; e. g. Skr. <code>varti-tá-s</code> Goth. <code>fra-vardi-p-s</code>, and so in the Lat. <code>moni-tu-s</code> qu-i-tum.

-ī- is regular in Balto-Slavonic, as Lith. vartý-ti (vartý-siu) O.C.Sl. vrati-ti (vrati-chŭ). -ī- is also seen in the following. Gr. (f)-ī-τέα 'willow' (beside (f)-i-τν-ς 'felloe'), Lat. v-ī-ti-s, O.H.G. w-ī-da 'willow' (beside w-i-d 'cord of twisted withes'), Lith. v-ý-ti-s 'cane, switch' O.C.Sl. v-i-tī 'res in modum funis torta', which along with inf. Lith. v-ý-ti O.C.Sl. v-i-ti are connected with Idg. \*u-éiō (see § 788 p. 319). Skr. ḡbh-ī-tá-s (a-grah-ī-ṣ-ṭa grah-ī-ṣ-ṭa) beside ḡbh-âya-nt-, háv-ī-tavē beside hv-âya-ti, mṛḍ-ī-kâ-m 'pity, compassion' beside mṛḍ-âya-ti. Lat. noc-ī-vo-s is doubtless related to noceō as O.C.Sl. chodivũ is to chodi-ti, or ljubivũ to ljubi-ti (cp. II § 64 Rem. 2 p. 136, and pp. 137 f.).¹)

From these facts it follows that we have in this verbal class what may be called a Root-Determinative -i-, parallel to the determinative -u-; thus Skr. v- $\acute{a}ya$ -ti: Gr. (f)- $\acute{i}$ - $\tau v$ - $\varsigma$  O.H.G. w-i-d = Skr. sr- $\acute{a}va$ -ti: sr-u- $t\acute{a}$ -s (see § 488 pp. 46 f.). The only difference is that whilst -u- was restricted to some few examples (compare however § 596. 2 pp. 136 f. for what is said on the present suffix -nu-), the -i- was fertile even in proethnic Idg. itself. If this view of the  $-\acute{e}i$ 0- class is correct, the class must be very closely connected with present forms like Skr. am- $\bar{i}$ -ti (§§ 572 ff. pp. 114 ff.). Skr. v- $\acute{a}ya$ -ti: am- $\bar{i}$ -ti = sr- $\acute{a}va$ -ti: tar-u- $t\bar{e}$  (§ 596. 2 pp. 136 f.).

Now are -éio- and -i- connected in any way with the -io-suffix of Classes XXVI—XXXI? It is an obvious conjecture that there may be the same relation between -eio- and -io- as between -eio- and -io- (v-áya-ti: hár-ya-ti = sr-áva-ti: bhár-va-ti, see § 488 p. 47), or -eno- and -no-, or between -eso- and -so- (-esko- and -sko-). I do not venture either to assert or to deny this; but seeing how uncertain the matter is, I think it best not to group the -éio-class with the -io-classes.

<sup>1)</sup> Cp. Skr.  $d-m\bar{\imath}-v\bar{a}$  'pain' beside  $am\bar{\imath}-ti$  beside which we have Avest.  $amayav\bar{a}$ - 'pain', which form Bartholomae uses to postulate an Avest. pres. \*amaye-iti (Stud. Idg. Spr., 11 178).

We now return to the Balto-Slavonic present exemplified by  $varta\tilde{u}$  vrašta.

The simplest explanation of the Slavonic present inflexion is that -ī- has come in from the infinitive stem: vrati-ši vrati-tū then follow vrati-ti, a process which has an exact parallel in the change of \*gostījā -īješi etc. to goštā gosti-ši by analogy of gosti-ti gosti-chū (§ 782.5 p. 311).

Remark. Another explanation of the origin of this Slavonic present type is possible. Sanskrit has a mid. optative e. g.  $v\bar{e}d\alpha y-\bar{t}-ta$  beside  $v\bar{e}d\dot{\alpha}ya-t\bar{e}$ , injunctive  $dhvanay-\bar{t}-t$  (op.  $\dot{\alpha}-brav-\bar{t}-t$ ), and participle  $v\bar{e}day-\bar{a}na-s$ . See § 574 pp. 115 f., § 951. The indicative to  $v\bar{e}day-\bar{t}-ta$  would be \*(a-) $v\bar{e}d\bar{e}-ta$ , and Bartholomae conjectures that certain forms usually regarded as  $o\dot{t}$ -optative may be this very indicative (Stud. Idg. Spr., II 127). This would make it possible to derive  $3^{rd}\sin y$ .  $vrati-t\bar{u}$  from \* $vorte\dot{t}-t(i)$ . I should give more weight to this explanation were it not for a very strong suspicion that these Aryan forms are due to analogy, and are not proethnic at all.

The Lith. inflexion -au -yti is found in Lettic too (-u -it)and also in Prussian (billā 'speaks' inf. billī-t billī-twei); it therefore is proethnic in Baltic. Its origin is a confusion of the old inflexion of our class with both the earlier and the later group of a-denominatives, that is to say, with verbs like bijaŭ-s (§ 586 p. 127) and verbs like jû'stau (§ 782.4 p. 310). But why was it this confusion went so far that the  $\bar{a}$ -flexion drove the ejo-flexion quite out of the present, but yet -ā did not drive -ī- out of the infinitive? (contrast bijaū-s bijó-ti-s.) I explain this by supposing that Baltic once possest verbs like Lat, cubāre sonāre, which had the ā-suffix in the present only. O.C.Sl. ima-mi 'I have' likewise shows ā-flexion only in the present (inf. ime-ti). The Lith. present stems containing Idg. -o- in the root syllable, such as  $vart\bar{o}$ - = \* $vart\bar{a}$ -(Vuert-), seem to have a parallel in Lat. domā- (domō  $dom\bar{a}s$ ) O.H.G.  $zam\bar{o}$ -  $(zam\bar{o}m zam\bar{o}s) = Idg. *dom\bar{a}$ - from √ dem-, since this is best explained as a contamination of \*dmmā- (Skr. damā-yá-ti) and \*doméjo- (Goth. tamja O.H.G. zemm(i)u). laižaŭ 'I lick' (laižý-ti) is the equivalent of Goth. bi-láigō 'I lick over'.

The question next arises when -ā- got the better of -eio-, as the Baltic shews it did at some time or other. I am inclined to place the change in the proethnic period of Balto-Slavonic. What inflexion came just before the type actually found in Slavonic, vraštą vratiši and so forth, is not at all clear. It may very well have been one answering to the Lith., that is 3<sup>rd</sup> sing. \*vortā-tī 1<sup>st</sup> pl. \*vortā-mū, cp. ima-tū ima-mū, and on this supposition it is easier to explain the actually found ī-forms, than if we suppose the Slavonic to have passed direct from \*vortīje-tī to \*vortī-tī. But then we must also assume that \*gostīja \*-iješi = Idg. \*-i-iō \*-i-ie-si (§ 782.5 p. 311) changed to goštā gostiši only on the analogy of vraštā vratiši. For the Baltic i-denominatives like Lith. daly-jū sziīdy-jū-s prove that these forms sprang up within the Slavonic area.

A complete levelling of the Causal conjugation with the i-Denominative is not unknown in Baltic. Here the i-denominative takes the lead. I find only a few examples in Lith., as paisyju -yti instead of  $paisa\tilde{u}$  -yti 'to knock the beard off the barley, thresh' (cp. Skr.  $p\bar{e}\check{s}\acute{a}ya$ -ti). There are more in Lettic; e. g.  $r\mathring{u}/iju$   $r\mathring{u}/it$  'to stretch' instead of Lith.  $r\bar{u}\check{z}au$   $r\bar{u}\check{z}yti$ , pelniju pelnit 'to earn' instead of Lith.  $pelna\bar{u}$  pelnit.

§ 790. In éjo-verbs with roots of the e-series, the rootsyllable has and originally had generally the  $2^{nd}$  strong grade, o; as Gr.  $\varphi o \beta \acute{e} \omega$  beside  $\varphi \acute{e} \beta o \mu \alpha \iota$ , Lat.  $mone\bar{o}$  from  $\sqrt{men}$ , Goth. satja beside sita, Lith.  $vart \acute{y}ti$  O.C.Sl. vratiti for  $vort \bar{\imath}t\bar{\imath}$  from  $\sqrt{uert}$ . This is why Aryan has  $\bar{a}$  in open syllables, as Skr.  $bh\bar{a}raya-ti$  Avest.  $b\bar{a}rayeiti$  from  $\sqrt{bher}$ , if the hypothesis set forth in vol. I § 78 p. 69 is correct. 1)

The European languages make it improbable that there were in the very oldest times any forms with the root-grade e. Aryan forms with -a-, as Skr.  $jar\acute{a}ya$ -ti from  $\sqrt{g}er$ -,  $jan\acute{a}ya$ -ti from  $\sqrt{g}er$ -, may be explained by the admixture

<sup>1)</sup> No explanation of  $\bar{a}$  in  $bh\bar{a}raya$ -ti which is in the least degree satisfactory has hitherto been put forward by those who deny this. The European forms adduced as parallel by Bechtel (Die Hauptprobleme der idg. Lautl., 169 f.) prove nothing at all. Compare § 843, Rem.

with denominatives derived from o-stems which will be described in § 793; on this supposition, jaráya-ti and janáya-ti would belong to the nouns jára- and jána- just as much as mantráya-ti belongs to the noun mántra-. Or they may be explained in another way: In Aryan, the  $\acute{e}i$ o- formation was often made from the connected primary verb instead of being built up on the root (see § 796), so that pātáya-ti would stand to patáya-ti (beside páta-ti) as kartaya-ti to krntaya-ti (beside krntá-ti).

On the other hand, éio-verbs with a weak grade of root have been found from the proethnic period onwards. They are commonest in Aryan, e. g. Skr. grbháya-ti. The following are proethnic Idg.: Skr. v-áya-ti 'weaves' Lith. v-ejù O.C.Sl. v-ija v-ija 'I wind, turn, wrap', beside Gr. - t-τέα Lat. v-ī-ti-s O.H.G.  $w-\overline{\imath}-da$  Lith.  $v-\psi-ti-s$  v-y-ti O.C.Sl.  $v-i-t\overline{\imath}$  v-i-tiand Gr. "-vv-5 O.H.G. w-i-d (§ 789 p. 320); root without determinative in Skr. ó-tu-m u-tá-s perf. 3rd pl. ūv-úr pass.  $\bar{u}$ -ya-t $\bar{e}$ , extended by  $\bar{a}$  in v- $\hat{a}$ -tav $\bar{e}$  and others (Whitney, Skr. Roots, pp. 157 f.).1) Skr. śv-áya-ti 'swells, thrives, is strong' beside Gr. κυ-έω 'I am pregnant', Lat. qu-eō, with supine qu-i-tum (the resemblance of eo : itum made the conjugation of queō run like eō — quīmus quībō etc.); the same root in Skr.  $3^{rd}$  pl.  $\dot{s}\bar{u}$ - $\dot{s}uv$ -ur  $\dot{s}\bar{u}$ - $n\dot{a}$ -s  $\dot{a}$ - $\dot{s}v$ -a-t  $\dot{s}\dot{a}v$ -as Gr.  $\ddot{a}$ - $\times\bar{v}$ - $\rho o g$   $\times \tilde{v}$ - $\mu a$ Lat. in-ciens for \*-cy-jens (§ 715 p. 248, § 717 p. 250), and with  $\bar{a}$ -extension in Skr.  $\dot{s}v$ - $\bar{a}$ - $tr\dot{a}$ -s Gr. El.  $\dot{\epsilon}\pi$ - $\epsilon v$ - $\pi\dot{\eta}\tau\omega$  and others (§ 737 p. 263). Skr. dhun-aya-tē 'roars' (beside dhvan--a-ti 'makes a sound') O.Sax. duniu Mid.H.G. düne O.Icel. dyn 'I roar, rumble, groan'. Of the same kind are: Skr. hv-áya-ti 'calls' Avest. zb-aye-iti zuv-aye-iti beside Skr. háv-a-tē perf. ju-háv-a aor. á-hv-a-t á-huv-a-t, Lat. ci-eō beside ac-ciō ci-tu-s Gr. xί-ω xί-νν-μαι; O.H.G. zunt(i)u 'I kindle' with Goth. tandja 'I kindle' beside Mid.H.G. zinden (strong verb) 'to burn, glow'. Uncertain: Gr. φλ-έω 'I overflow' beside ἐκ-φλαίνω Lat. fl-ē-re;

<sup>1)</sup> From this  $\psi ei - \psi i - \psi i$ , which had become a root again before the end of proethnic Idg., a present was again formed by means of  $-\dot{e}io$ ; Skr.  $vy-\dot{a}ya-ti$  'winds up, wraps up, covers, hides', Lat.  $vi-e\bar{o}$ .

Goth. ga-nsja 'I cause' from  $\sqrt{nes}$ -, originally 'I make to come forward'; O.C.Sl. brija (brija) bri-ti 'to shear, shave' beside Skr. bhur-ij- Gr.  $\varphi \acute{a} \varrho$ -o- $\varepsilon$ , and others.

§ 791. In all branches of our group, the verbal class now being discussed has two distinct meanings, both of which must be regarded as holding for the original language. Each of them serves to contrast a verb with a simple verb from the same stem.

First there is the Causal sense; the subject of the eioverb sets some one in motion, impels him to do something; in fact, makes him do the action of the simple allied verb. Skr. bōdháya-ti O.C.Sl. budi-tũ 'wakes up, makes wake' beside bōdha-ti būdi-tũ 'is awake'. Skr. tarṣáya-ti 'makes languish, thirst' beside tṛṣya-ti 'languishes, thirsts', Lat. torreō 'I dry up, make dry', O.H.G. derr(i)u (same meaning) beside Goth. Þaúrsei-Þmik 'I am athirst'. Gr. φορίω 'I make to flee, scare away' beside φέρομαι 'I flee'. Lat. moneō 'I make some one think, remind' beside meminī. Goth. satja 'I make sit, I place' (Skr. sādáya-ti) beside sita 'I sit'.')

Secondly, they express a meaning which may be called Intensive, Iterative, or Frequentative. This is often weak and elusive, and in many cases was certainly extinct at the time when we find the verb actually used. Skr. vi-vāhayati beside vi-vahati 'leads away (a bride), leads her home' Avest. vāđaye-iti 'leads home', O.C.Sl. voždą vodi-ti freq. of vedą 'I lead', vuedh-. Gr. (f)oxéomai pass. 'I am taken backwards and forwards, I am carried', Goth. vagja 'I move' beside ga-viga 'I move', O.C.Sl. vožą voziti freq. of vezą 'I carry, convey', vueĝh-. Skr. mardaya-ti beside mydnā-ti marda-ti 'presses, crushes', Lat. mordeō beside perf. momordī == Skr. mamarda. Skr. ā-tānayati 'stretches, makes stiff' beside ā-tanōti 'stretches, pulls up' a piece

<sup>1)</sup> Sometimes these verbs are causal to the Passive of the simple verb; as Goth. ga-tarhja 'I cause to be seen' fra-atja 'I divide for food, cause to be eaten' O.H.G. ezzu 'I cause to be grazed upon, use for pasture' (also 'I let eat, give a taste').

of weaving, Goth. -panja 'I lengthen, stretch'. Skr. pēšaya-ti beside pináš-ti 'treads or crushes to atoms' Lith. paisý-ti 'to knock (barley, in order to free it from the beard)'. O.Ir. for--tugim 'I cover, hide', O.H.G. decch(i)u 'I cover' beside Lat. tegō. Skr. dhārāya-ti, beside dharati (very rare), 'holds fast, keeps', nodaya-ti 'drives on' beside nudá-ti 'knocks, strikes away, pulls', rājya kārayati and karōti 'is king, uses lordship'. Gr. φορέω 'I carry about with me, wear' beside φέρω 'I carry', ποτέομαι 'I fly about, flutter' beside πέτομαι 'I fly', στροφέω 'I turn round and round excitedly' beside στρέφω 'I twist, turn', τροπέω beside τρέπω 'I turn', ολέω 'I hold fast' beside έχω 'I hold, have'. Lat. lūceō (in O.Lat. also causal 'to make shine'), haereo, tondeo, and others. Goth. uf-rakja 'I reach up' beside Gr. ὀρέγω 'I reach out', Goth. pragja 'I run' beside Gr. τρέχω 'I run', O.Sax. kenniu 'I beget' beside Skr. jána-ti 'begets'. The Intensive or Frequentative meaning is clearest in Balto-Slavonic: cp. further Lith. ganý-ti 'to keep (animals), pasture them' O.C.Sl. goni-ti 'to drive' freq. of ženą gna-ti to drive, hunt', \square ghen- 'strike, kill', Lith. grāžý-ti freq. of grēžiù grę̃szti 'to turn, twist, bore', O.C.Sl. vlači-ti freq. to vlė̃ką vlė̃šti 'to pull, drag along'.

I shall not go into the question of the relation between these two original uses. An attempt to explain it is made by Gaedicke, Der Acc. im Veda, pp. 276 f.

Considering the very real and living connexion which existed between the éjo-present and the primary present stems, e. g. Skr. bodháya-ti and bódha-ti, vāráya-ti and vṛṇó-ti, it is easy to understand why ejo-forms were often built up on a complete present stem, not on the root. Thus Skr. jīváya-ti O.C.Sl. živi-ti beside ji-vāmi ži-va (inf. ži-ti) I live' (§ 488 p. 47), Skr. dhūnaya-ti beside dhū-nā-ti dhū-nō-ti 'shakes, shatters' (cp. Gr. θυνέω § 801), krntaya-ti with kartaya-ti beside krntá-ti 'cuts', Lat. misceō beside a form \*miscō for \*mic-scō \( \sigma \) meik-, O.H.G. scein(i)u beside scī-nu 'I shine'. Other examples will be given below.

§ 793. There are often nouns which most closely resemble these verbs both in form and meaning. The result of this was that éjo-verbs were formed from nouns direct. If, for instance, people derived Skr. vāj-áya-ti hastens, conquers, spurs on, makes something use its power (= Goth. us-vakja 'I wake up') from vája-s 'speed, power' — which was really inevitable, as there was no such parallel stem as \*vaja-ti — it was easy to form mantráya-tē 'advises' from mán-tra-s 'advice'. It was, as has been observed in § 487 p. 43, the action of the same principle which produced in Gothic fullnan from full-s 'full' by analogy of af-lifnan áuknan, in Lithuanian linksmin-ti from liñksma-s 'glad' by analogy of krùvin-ti kùpin-ti, rentù from reta-s 'thin' following tenkù tèkti, gelstù gelsti from gelta-s 'yellow' following virstù virsti mirsztù mirszti (§ 623 p. 160, § 624 p. 161, § 635 p. 173, § 686 p. 217). Compare further Skr. muš-nā-ti 'steals' from mūš- 'a mouse' § 599 Rem. p. 143.

These éio-denominatives are commonest in Germanic and Balto-Slavonic, and one or two of these new formations occur in both branches: Goth. fulljan O.C.Sl. plŭni-ti 'to fill' from full-s plŭnŭ 'full' (\*pl-no-s), Goth. háiljan O.C.Sl. cěli-ti 'to heal' from háil-s cėlŭ 'whole, healthy'. But it is quite possible that these two developements are independent.

§ 794. Pr. Idg. Examples with monosyllabic root, as Skr. v- $\acute{a}ya$ -ti Lith. v- $\acute{e}j\grave{u}$  O.C.Sl. v- $\breve{i}ja$ , Skr.  $\acute{s}v$ - $\acute{a}ya$ -ti Lat. qu- $e\bar{o}$ , have already been cited in § 790 p. 323.

As regards the following examples, which shew a strong grade of root, it is to be remembered that this formation was always an active living type in Aryan, Germanic, and Balto-Slavonic; so that it is not unlikely that all these languages hit upon the particular forms independently. I therefore give by preference such examples as are found in Greek or Italic as well, where the type was less prolific.

\*bhor-é $i\bar{o}$   $\sqrt{bher}$ -: Skr. sam-bh $\bar{a}raya$ -ti 'causes to be gathered', Gr.  $\varphi o o \epsilon \omega$  'I carry about, wear'. \*tor- $\epsilon i \bar{o}$   $\sqrt{ter}$ -: Skr.  $t\bar{a}r\dot{a}ya$ -ti 'gets carried over, transports, furthers', Gr.  $\tau o \rho \epsilon \omega$ 

'I make to pierce, shout loudly'. \*uol-éjō \(\sigma\) uel-: Skr. pra--vāraya-ti 'appeases, offers, offers for sale', Goth. valja 'I ehoose', O.C.Sl. voli-ti 'to wish, to prefer'. \*mon-éjō \( \sqrt{men-:} \) Skr. mānáya-ti 'honours, shows honour' 1) Avest. manaye-iti 'eauses to believe, regards' (for q cp. I § 200 pp. 168 f.), Lat. moneō (O.H.G. manēm manōm 'I imagine' with different inflexion), Lith. isz-maný-ti 'to understand'. \*ton- $\acute{e}i\bar{o}$   $\sqrt{ten}$ -: Skr. ā-tānaya-ti 'stretches, stiffens' sa-tānaya-ti 'gets earried out, brings to eonelusion', Goth. uf-panja 'I stretch, lengthen out'. \*qiou-éiō \(\sigma\) qieu- (Hom. ε-σσενε): Skr. cyāváya-ti 'sets in motion, moves from its place', Gr. σο(Ε)έω in ἐσσοημένον · τεθορυβημένον, ώρμημένον Hesyeh. (I § 489 p. 360).2) \*poi-éiō √ pei- (Skr. páy-a-tē): Skr. pāyáya-tē 'gives to drink', O.C.Sl. poji-ti 'to give to drink' (1st sing. pojq). \*tors- $\acute{e}i\bar{o}$   $\sqrt{ters}$ - 'to be dry, thirsty': Skr. taršáya-ti 'makes to thirst or pine', Lat. torreō, O.H.G. derr(i)u (pr. Germ. \* $\bar{p}arzi(i)\bar{o}$ ) 'I make dry, cause to wither'. \*mord-éiō √ merd-: Skr. mardaya-ti 'presses, oppresses, crushes', Lat. mordeō. \*uort-éiō \( \square\) uert-: Skr. vartaya-ti 'sets circling, rolls, eauses to take a certain bent or direction', Goth. fra--vardja 'I bring to nought, destroy, make away with', Lith. vartý-ti O.C.Sl. vrati-ti freq. 'to turn, twist'. \*kroth-éjō √ kreth-: Skr. śrāthaya-ti (śratháya-ti) loosens, frees', O.H.G. rett(i)u (Goth. \*hradja) 'I tear away, reseue'. \*bhlog-éiō √ bhleĝ-: Skr. bhrājaya-ti 'eauses to gleam or shine',3) O.H.G. blecch(i)u (Goth. \*blakja) 'I make visible, show'. \*logh-éįō \( \sqrt{legh}-: \) Goth. lagja 'I lay', O.C.Sl. loži-ti 'to lay'. \*month-éiō \( \square\) menth-: Skr. manthaya-ti 'causes to be stirred

<sup>1)</sup> The meaning of this verb was influenced by the subst. māna-s māna-m 'opinion, high opinion, esteem, honour', in the same way as H.G. blenden (O.H.G. blenten 'to daze, darken, blind' = O.C.Sl. bladiti 'to wander' Mod.Slov. bluditi 'lead astray, deceive') by the adj. blind, whose factitive the verb is now used for, though originally the factitive was Goth. -blindjan A.S. blindan. Compare § 681 p. 213 on Skr. löṣṭa-tē.

Parallel verb οοοῦμαι = σοόομαι, a denominative, see W. Schulze in Kuhn's Zeitschr. xx1x 264 f.

<sup>3)</sup> This may also be formed from the pres.  $bhr \tilde{a}ja-l\bar{e}=\mathrm{Idg.}\ *bhl\bar{e}\hat{g}e-ta\underline{i}$  (§ 494 p. 55), by analogy.

O.C.Sl. mati-ti 'to bring into perplexity'. \*tong-éiō up', √ teng-: Lat. tongeō, Goth. pagkja 'I think over, think about', but cp. § 804. \*nok-ejō \( \sigma nek-: \) Skr. nāśáya-ti 'causes to disappear, destroys', Lat. noceō.1) \*louq-éiō Vleuq-: Skr. rōcáya-ti 'causes to shine, lights up', Lat. lūc-eō 'I shine, am bright' and O.Lat. 'I make shine'. \*loubh-éjō √ leubh-: Skr. lōbháya-ti 'excites some one's desire, attracts' Goth. us-láubja 'I allow', O.C.Sl. ljubi-ti 'to love'. \*ĝous-éjō v ĝeus-: Skr. jōṣáya-tē 'likes, takes pleasure in, approves', Goth. káusja 'I taste, try'. \*swop-éjō v swep-: Skr. svāpáya-ti 'sends to sleep', O.H.G. int-swebb(i)u 'I send to sleep' O.Icel. svef 'I pacify, quiet'. \*uoĝh-éiō \(\sigmu\) ueĝh-: Skr. vāhaya-ti 'conveys, makes (a carriage or horses) go, drives', Gr. ὀχέω 'I convey, make ride' pass. 'I am carried about, am carried, I ride on', Goth. ga-vagja 'I move', O.C.Sl. vozi-ti 'to carry (in a vehicle), vehere. \*uoid-ėįō vueid-: Skr. vēdaya-tē 'gives to know, informs', O.H.G. weiz(i)u 'I give to know, I show'. \*bhoid-éjō √ bheid-: Skr. bhēdaya-ti 'splits, divides', O.H.G. beiz(i)u 'I make to bite, I bait'. \*pot-éjō  $\sqrt{pet}$ : Skr. pātáya-ti 'makes to fly or fall', Gr. ποτέομαι 'I fly, flutter'. \*dhogh-éįō √dhegh-: Skr. dāhaya-ti 'causes to be burnt', Lat. foveō 'I warm, keep warm, cherish, take care of'.2) \*bhog-éįō \$\sqrt{bheg}\$-: Skr. bhājáya-ti 'drives away',3) Gr. φοβέω 'I make to flee, scare or hunt away'. \*tjog-éjō \sqrt tjeg-: Skr. tyājaya-ti 'bids leave alone', Gr. σοβέω 'I drive off quickly, scare away'. \*sod-éįō √ sed-: Skr. sādáya-ti 'gets seated, sits', O.Ir. ad-suidim 'I prolong, postpone' (Thurneysen, Kuhn's Zeitschr. xxxi 97), Goth. satja 'I seat, place'. \*od-éjō \( \sigma \) ed-: Skr. \( \bar{a} \) daya-ti 'causes to eat, feeds, fattens', Goth. fra-atja 'I divide up for a meal' O.H.G. ezz(i)u 'to make eat, give to eat, feed'. \*pāk-éjō

<sup>1)</sup> The construction  $noc\bar{e}re$  alicui is doubtless due to the analogy of obesse officere etc.

<sup>2)</sup> Compare formes 'kindling, tinder' (for \*fovimes) with Lett. dagli-s 'tinder'.

Skr. bhaj- is contaminated of two distinct roots, that of φαγεῖν (Fick, Wtb. I 4 87) and that of φέβομαι Lith. bếgu (id. ib. 490).

 $\sqrt{p\bar{a}\hat{k}}$ : Skr.  $p\bar{a}\dot{s}\dot{a}ya-ti$  'binds', O.H.G. fuog(i)u O.Sax.  $f\bar{o}giu$  'I make fit, join, bind together'. Skr.  $hr\bar{a}daya-ti$  'causes to make a sound'  $(hr\bar{a}da-t\bar{e}$  'sounds'), O.H.G. gruoz(i)u O.Sax.  $gr\bar{o}tiu$  'I address, speak to'; if another, Goth.  $gr\bar{e}ta$  'I wail out', is of this kin, then we must assume Idg. \* $\hat{g}hr\bar{o}d\hat{e}i\bar{o}$ . Goth. af-daui-ps 'exhausted' pres. \* $d\bar{o}ja$  for \* $d\bar{o}ui\bar{o}$  in the first instance (I § 179 p. 156), O.C.Sl. davi-ti 'to strangle'.

In the following,  $-\acute{e}i\bar{o}$  was not added immediately to the root; see § 792 p. 325.

\*tons-é $i\bar{o}$  from the stem ten-s-: Skr. tąsaya-ti 'pulls about, tugs, tears, shakes', Lith. tāsý-ti 'to drag about'; cp. Skr. tąsa-ti Lith. tēs-iù § 657 p. 191. \*uos-é $i\bar{o}$  from stem u-es-: Skr. vāsáya-ti 'causes to put on, clothes with something', Goth. ga-vasja O.H.G. weriu 'I clothe'; cp. Skr. v-ás-tē Gr. int-εσ-τω § 656 p. 191.

\*rōdh-éiō stem rē-dh-: Skr. rādhaya-ti 'brings about', O.Ir. no rāidiu 'I speak', Goth. rōdja 'I speak', O.C.Sl. radi-ti 'to consider, care for'; cp. Skr. árādha-t Goth. ur-rēda § 689 p. 220. \*ioudh-éiō \*iudh-éiō stem ieu-dh-'to stir, set in motion': Skr. yōdháya-ti 'involves some one in war, fights against', Lat. jubeō properly 'I set in motion' (cp. Lith. jūdinu 'I move, cheer up, exhort'); cp. Skr. yōdha-ti etc., loc. cit.; the O.Lat. joubeō is only once found (S. C. de Bacch., 27), and ou was perhaps only caused by the spelling of jousiset which precedes. 1)

Goth.  $st\bar{o}ja$  'I direct' for \* $st\bar{o}u\bar{i}\bar{o}$  (I § 179 p. 156), O.C.Sl. stavlja 'I place, stay, stem' with Goth. staua 'court of law' (see ibid.) O.C.Sl.  $stav\bar{u}$  'compages'  $po-stav\bar{u}$  'loom-frame, or web' stava 'joint, limb' Lith.  $stov\dot{a}$  'place' from  $\sqrt{st\bar{a}}$ - 'stand'; to argue from Gr.  $\sigma r\bar{v}\omega \sigma r\bar{v}$ - $\lambda o-\varsigma$  Skr.  $sth\bar{u}$ - $l\acute{a}$ -s, we had best assume  $st\bar{u}$ -  $st\bar{a}u$ - (cp. § 488 pp. 44 ff.).

The causal Skr. jīváya-ti 'makes living, lets live' O.C.Sl. življą 'I make alive' is probably derived from the present

If joubeō is a genuine form, it may be a variant of jūbeō like Skr. šōcáya-ti beside šucáya-ti.

jť-va-ti ži-ve-tŭ 'lives' (§ 792 p. 325), whilst Goth. ga-qiuja 'I make alive' is a denominative causal from qiu-s 'living' (§ 793 p. 326, § 806).

§ 795. Aryan. A pass. part. in  $-i-t\acute{a}$ - formed from all verbs with strong grade of root syllable; see § 789 pp. 319 f.

Skr. dhāráya-ti Avest. dāraye-iti 'holds fast, carries, supports, strengthens, preserves', O.Pers. dārayāmīy 'I hold, possess',  $\sqrt{dher}$ . Skr.  $v\bar{a}r\dot{a}ya$ -ti Avest.  $v\bar{a}raye$ -iti 'holds back, keeps off, hinders': Goth. varja 'I hinder, protect, defend', √uer-. Skr. nāmaya-ti namaya-ti Avest. nāmaye-iti 'makes bend, bends' (tr.),  $\sqrt{nem}$ . Skr. śrāváya-ti śraváya-ti Avest. srāvaye-iti 'causes to hear, recites, informs', V kleu-. Skr. cāyaya-ti cayaya-ti 'ranges together, collects',  $\sqrt{qei}$ -. Skr. nāyaya-ti 'causes to be carried away'. Skr. vardháya-ti Avest. varđaye-iti 'causes to grow, increases, furthers'. Skr. bandhaya-ti 'causes to be bound, chains', Avest. bandaye-iti 'binds', V bhendh-. Skr. raháya-ti Avest. renjaye-iti 'expedites, despatches', V lengh- (I § 199 p. 167). Skr. jambháya-ti Avest. zembaye-iti 'grinds to powder, destroys', V gembh-. Skr. rōcáya-ti 'causes to shine, illuminates', Avest. raocaye-iti 'lights up, illuminates': Lat. lūceō, see § 794 p. 328. Skr. rēcaya-ti 'makes empty, lets free, deserts', Avest. raecaye--iti 'deserts', V leig-. Skr. sādáya-ti 'places', Avest. ni-šāđaye--iti 'causes to sit down, brings under, subdues' O.Pers. niy--ašādaya-m 'I made sit down, arranged' (for š in the O.Pers. cp. I § 556 p. 410): Goth. satja, § 794 p. 328. Skr. bhāyaya--ti 'causes fear to, frightens', V bhai-.

Many Skr. forms are proved by their root syllable to be re-formates. E. g. arjaya-ti (as also  $\acute{a}rja-ti$  and suchlike), from  $\surd re \hat{g}$ - 'to stretch oneself'  $(r\acute{a}ji\S tha-s)$ , Gr.  $\acute{a}\varrho\acute{e}\gamma\omega$ ), is a transformate of  $\acute{r}jya-ti$  following  $ardh\acute{a}ya-ti: rdhya-t\bar{e}rdhn\acute{o}-ti$  etc.  $t\bar{o}laya-ti$  'lifts, weighs' formed from tul-(tulaya-ti) etc.) = Idg. tll- (I § 287 p. 229, § 290 p. 232), follows  $b\bar{o}dh\acute{a}ya-ti: budh$ - and the like.

Forms with weak grade of root. Skr. v-áya-ti 'weaves': Lith. v-eju, see § 790 p. 323.  $\dot{s}v$ -áya-ti 'swells, thrives, is

strong': Gr. xv-św Lat. qu-eō, see ibid. Skr. hv-áya-ti Avest. zb-aye-iti zuv-aye-iti 'calls'. Skr. dhun-aya-tē 'roars': O.Sax. duniu, see ibid. tul-aya-ti beside tōl-aya-ti, see just above. grbh-áya-ti 'grasps'. śuc-áya-ti 'shines, beams'. pīd-aya-ti 'presses' for \*pi-zd-eie-ti (makes sit down') from V sed-, see I § 591 p. 447. Avest. urūpaye-iti 'does harm'. Add doubtless Skr. chad-áya-ti beside chandaya-ti from the pres. chant-ti 'appears'.

§ 796. Many new forms from Primary Present Stems (see § 792 p. 325):

Skr.  $\bar{\imath}r\acute{a}ya$ -ti 'sets a-going, excites, arouses' beside  $\bar{\imath}r$ -té Idg. \* $\bar{r}$ -tai,  $p\bar{\imath}r\acute{a}ya$ -ti 'fills' beside  $p\bar{\imath}r$ -dhí Idg. \* $p\bar{\imath}$ -dhi, Class I § 497 p. 57.

A group of fairly common forms, such as Skr. patáya-ti Avest. pataye-iti beside Skr. pātáya-ti, have been derived from forms of Class II A, as has been already said (§ 790 pp. 322 f.). The following may be connected with stems of Class II B: Skr. gūhaya-ti Avest. guzaye-iti (but not O.Pers. gaudayāhy 2nd sing. conj.), cp. Skr. gūha-ti 'hides' Avest. mid. guza-tē; Skr. turáya-ti ') (beside tāráya-ti), cp. turá-ti 'gets through, makes oneself master of'. But this view is not the only one possible, since the éio-verbs themselves could have a weak grade of root syllable (§ 790 p. 323, § 795 p. 330).

Avest.  $tit\bar{a}raye$ -iti 'seeks to overcome, or strike down' beside Skr. ti-tar-ti Avest. ti-tar-a-p Classes III, IV, § 540 p. 100, § 548 p. 105.

Skr. sajjaya-ti 'fastens on' beside sajja- $t\bar{e}$  for \*sa-zj-a-Class VI § 562 p. 110.

Causal of the Intensive class. Skr.  $d\bar{a}dh\bar{a}raya-ti$  'causes to hold fast' from  $d\bar{a}$ -dhar-ti,  $j\bar{a}gar\acute{a}ya-ti$  'awakes, enlivens' from  $j\bar{a}$ -gar-ti, Class V § 560 p. 109. Skr.  $danda\acute{s}ayi$ - $tv\bar{a}$  gerund 'having caused to be severely bitten' beside  $d\acute{a}n$ - $da\acute{s}$ -dana-s partic., from  $da\acute{s}$ - 'to bite',  $var\bar{v}varj\acute{a}ya$ -nt- turning

<sup>1)</sup> O.Pers. atarayāma may be the same formation (I § 290 p. 232).

backwards and forwards' beside *várī-vrj-at-* partic., from *varj-* 'to turn, twist' Class VII § 568 p. 113.

Skr.  $pr\bar{\imath}naya-ti$  'gladdens, delights, makes inclined' from  $pr\bar{\imath}-n\acute{a}-ti$ ,  $dh\bar{\imath}naya-ti$  'moves to and fro, shakes' from  $dhu-n\bar{\imath}-ti$ , Class XII § 599 pp. 142 f.;  $dh\bar{\imath}naya-ti$  is perhaps identical with Gr.  $\vartheta\bar{\imath}v\acute{\epsilon}\omega$ , § 801.

Skr. išaņaya-nta from išaņa-t Class XIV, and išaņyá-ti Class XIX (§ 619 pp. 156 f., § 743 p. 266), cp. Gr. όλιγο-δρανέων beside δραίνω § 801.

From Present Stems of Classes XV and XVI, §§ 625 ff. pp. 162 ff. Skr. kṛntaya-ti (beside kartaya-ti) Avest. kerentaye-iti 'cuts, splits' from Skr. kṛntá-ti Avest. kerenta-iti. Skr. rundhaya-ti 'stems, holds back, torments' (beside rōdhaya-ti) from runaddhi rundh-a-ti. Skr. śundhaya-ti 'cleanses' (beside śōdhaya-ti) from śunaddhi śundh-a-ti. Skr. limpaya-ti 'besmears, anoints' (beside lēpaya-ti) from limp-á-ti. Skr. bṛhaya-ti 'strengthens' (beside barhaya-ti) from bṛh-a-ti. Skr. dṛhaya-ti makes fast, fixes firmly' from dṛh-a-ti. Avest. bunjaye-iti 'cleanses' from bunj-a-iti.

O.Pers.  $3^{\rm rd}$  pl.  $a-k\bar{u}$ -nav-ayatā 'they made' beside  $a-k\bar{u}$ -nav-am  $3^{\rm rd}$  sing.  $a-k\bar{u}$ -nav-a, Classes XVII and XVIII, § 640 p. 178, § 649 p. 185.

Skr. pinvaya-ti 'makes swell or abound' from pí-nva-ti, Class XVIII § 651 p. 186.

From unreduplicated Presents, Classes XIX and XX, § 656 pp. 190 f. Skr.  $v\bar{a}s\acute{a}ya$ -ti tasaya-ti, see § 794 p. 329. Skr.  $vak\check{s}aya$ -ti  $uk\check{s}aya$ -ti Avest.  $vax\check{s}aye$ -iti 'makes grow' from Skr.  $\acute{u}k$ - $\check{s}a$ -ti Avest. vax- $\check{s}a$ -iti. Skr.  $bh\bar{\imath}\check{s}\acute{a}ya$ -tē 'frightens, overawes' (beside  $bh\bar{a}yaya$ -ti) from bhy- $\acute{a}sa$ -ti § 659 p. 195. Avest. aiwy- $\bar{a}x\check{s}aye$ inti 'they inspected' beside O.Pers. patiy- $ax\check{s}aiy$  'I inspect' § 659 p. 194.

From reduplicated s-Presents (Desideratives), Class XXI §§ 666 f. pp. 198 ff. Skr. cikīršaya-ti from ci-kīr-ṣa-ti 'wishes to make, begins, purposes', śikṣaya-ti from śikṣa-tē 'learns' for \*śi-śk-ša-tai.

prachaya-ti (gramm.) from prchá-ti 'asks' ground-form

\* $pr(\hat{k})$ - $s\hat{k}e$ -ti, ichaya-ti (beside  $\bar{e}$ šaya-ti) from ichá-ti 'desires', Class XXII §§ 670 f. pp. 202 f.

mrdáya-ti 'is gracious' from mrdá-ti for \*mrž-da-ti Class XXV § 692 p. 222.

chāyaya-ti from cha-ya-ti 'cuts up', Class XXVI § 707 p. 237. pyāyáya-ti from pyá-ya-tē 'swells', Class XXVIII § 736 p. 262.

§ 797. Near kin to the éjo-forms cited in the preceding paragraphs, are the Skr. groups ending in -payati and -apayati, as sthā-payati and sn-apáya-ti.

In these endings, as in glei-p- and lei-p- (§ 634 pp. 170 f.), -p- must be counted one of the Root-Determinatives which have been discussed in § 488 pp. 44 ff.1) In principle, these do not differ from ordinary present suffixes.

(1) -payati. The following may be considered as the forms which originated this type in Sanskrit. sthapaya-ti causal of vi-šth-a-ti 'stands', ep. Lith. stapy-ti-s 'to stand still' O.H.G. stab 'staff' stabēm 'I get stiff', 1/ stā- stə-. dāpaya-tē causal of dá-ti d-yá-ti 'divides, gives a share', cp. Gr. δάπ-τω 'I divide up, tear in pieces'  $\delta \alpha \pi - \dot{\alpha} \nu \eta$  'expenditure' Lat. daps,  $\sqrt{d\bar{a}}$ -  $d\bar{a}$ -.  $d\bar{\imath}p\acute{a}ya-ti$  causal of  $\acute{a}-d\bar{\imath}-d\bar{e}-t$  'shone' imper.  $di-d\bar{\imath}-h\acute{\imath}$ , cp.  $d\acute{\imath}p-d\bar{\imath}-h\acute{\imath}$ -ya- $t\bar{e}$  perf.  $did\bar{\imath}p\bar{e}$  part.  $d\bar{\imath}p$ -ta-s. On the analogy of such as these arose forms like dhā-paya-ti from dhā- 'to set, place', snā-páya-ti from snā- 'to wash', kṣ̄ē-paya-ti (beside kṣ̌ay-áya-ti) from kši- 'to stay, dwell', ar-páya-ti from ar- 'to raise oneself'.

Then again smāpaya-ti beside smāy-aya-ti from smi- to smile', māpaya-ti instead of \*māy-aya-ti from mi- 'minuere', adhy-āpaya-ti beside praty-āyaya-ti from i- 'to go'. There were two causes for this set of forms. Firstly, the participles came in contact, smi-ta-s smi-tvā seeming to be parallel with e. g. sthi-tá-s sthi-tvá; secondly, pāy-áya-ti 'gives to drink'

<sup>1)</sup> Compare now Per Persson's Wurzelerweiterung pp. 49 ff. In this work p is taken to be a root determinative in many words where we have regarded it as part of the root proper, as in Skr. sárpa-ti Lat. serpō, which the writer derives from the root of Skr. sár-a-ti 'moves, flows'.

(beside  $p\bar{\imath}$ - $t\acute{a}$ - $p\acute{a}y$ -a- $t\bar{e}$ ) was compared with  $p\bar{a}$ -paya-ti 'gives to drink' (from  $p\vec{a}$ -ti), and  $q\vec{a}y$ -aya-ti 'makes sing' (beside  $q\vec{\imath}$ - $t\acute{a}$ - $-g\bar{e}$ - $\sin a$ -) compared with  $g\bar{a}$ -paya-ti 'makes  $\sin g$ ' (beside  $g\bar{a}$ -ti $q\bar{a}$ -sya-ti). Then a further step was taken, and the resemblance of sthi-tá-s to vardhi-tá-s dīkši-tá-s produced vardhāpaya-ti from vardháya-ti helps, arouses, causes a pleasant excitement, dīkšā-paya-ti from dīkšaya-ti 'consecrates'; and again we have have on the analogy of these bhunjāpaya-ti from bhōjaya-ti 'gives to eat' (pres. bhunák-ti), and others.

(2) gl-apaya-ti 'brings to decay, ruins, exhausts' (beside glā-páya-ti glā-ti glā-ya-ti) beside opt. glapē-t (Whitney, Skr. Roots p. 41), Gr. βλ-έπω 'I look, see' (cp. βαλεῖν ὄμματα or ὄσσε εἴς τι or πρός τι), !) V gel-. sn-apáya-ti 'washes, bathes' (beside  $sn\bar{a}$ -páya-ti  $sn\bar{a}$ -ti  $sn\bar{a}$ -ya-tē) compared with Lat. Nep--tūnu-s. Śr-apáya-ti 'boils, roasts, burns' (beside śrá-ya-ti  $\dot{s}r\bar{a}$ -tá-s) is connected with su- $\dot{s}r\acute{a}pa$ -s 'easy to cook';  $j\hat{n}$ -apaya--ti 'instructs' (beside jînā-paya-ti jīnā-sya-ti) beside jīnap-tá-s 'instructed' jnap-ti-š 'attainment of knowledge'. ml-apaya-ti beside mlā-páya-ti 'makes languid, takes away the elasticity'.

Remark. Other forms with -ep- are: Gr. κλ-έπ-τω Lat. cl-epo Goth. hl-ifa 'I steal' beside O.Ir. celim O.H.G. hilu 'I hide'; Gr.  $\delta_{\varrho}$ - $\epsilon \pi \omega$ 'I break off, cut off, pluck' δρέπανο-ν 'sickle' beside δέρ-ω 'I flay'; Lat. tr-ep-idu-s, O.C.Sl. tr-epe-tŭ 'to tremble' beside Skr. tar-alá-s 'trembling'. Compare the Author, Morph. Unt. 1 40, 48, 49; Per Persson, Wurzelerw. 50 ff.

§ 798. A Denominative éjo-formation like Skr. muntráya--tē (§ 793 p. 326) can only be definitely maintained for Sanskrit; we know nothing of the Old Iranian accent, and therefore cannot say whether Avest. frayrāraye-iti 'wakes up' would answer to a Skr. \*grārāya-ti or \*grārayá-ti. Other examples from Sanskrit are: rtáya-nt- 'behaving in due form and order' from r-tá-m 'order, rite', artháya-tē 'allows oneself to be persuaded from ár-tha-m 'goal, business'; pāláya-ti 'watches, protects' from pā-lá-s 'guardian' is used in Sanskrit as causal

<sup>1)</sup> βλέφαςον seems to be a transformate of γλέφαςον, which comes from another root, on the analogy of βλέπω.

of  $p\vec{a}$ -ti, and  $gh\vec{a}taya$ -ti 'causes to be killed, kills' (aor. a- $j\vec{v}ghata$ -ti) from  $gh\vec{a}$ -ta-s 'blow, killing' as causal of  $h\acute{a}n$ -ti.

It may be mentioned that when a root-final k-sound is not changed to c before -aya-, this proves the form to be denominative; for we have seen in vol. I § 445 p. 331 that a k-sound must become c before  $-e\dot{i}o$ - in proethnic Aryan, as it does in  $r\bar{o}c\dot{a}ya$ -ti. We know therefore that  $mrg\dot{a}ya$ - $t\bar{e}$  'sets on the trail of a quarry' is derived from  $mrg\dot{a}$ -s 'wild animal, game',  $tark\dot{a}ya$ -ti 'conjectures' from tarka-s 'guess', and so with others.

§ 799. In Sanskrit, the present in  $-\dot{a}ya$ -ti served as the foundation for a desiderative formation in -ayi\$ $\dot{s}a$ -ti, as lu- $-l\bar{o}bhayi$ \$ $\dot{s}a$ -ti from  $l\bar{o}bh$  $\dot{a}ya$ -ti.

The passive is formed with  $-y\acute{a}-t\bar{e}$ , -aya- being dropt; e. g.  $bh\bar{a}j-y\acute{a}-t\bar{e}$  from  $bh\bar{a}jaya-ti$ . How this passive originated is not at all clear. It may be supposed that it had no special connexion properly with the  $\acute{e}io$ -present, any more than had the aorist of Class IV (§ 548 p. 105).

§ 800. Armenian. There are no clear traces of this éjo-group, which appears to have been absorbed into the class of verbs ending with -em. For instance, lizem 'I lick' may answer equally well to Skr.  $l\bar{e}h\dot{a}ya$ -ti or to Gr.  $\lambda\epsilon i\chi\omega$ . Compare § 774° p. 293, on gorcem etc.

§ 801. Greek. Here this έχο-class ran into one group with the denominative present in -e-iō, such as φιλέω from φίλο-ς. Hence arose φορήσω ἐφόρησα etc., following φιλήσω ἐφίλησα (§ 773 p. 290). Hence again, in the present itself, Lesb. ποθήω like ἀδικήει (§ 775 p. 293), and φόρημι like φίλημι (§ 589 p. 131).

I arrange the forms about to be cited according as they had one or other of the two original functions of this class (§ 791 p. 324).

Causal (or Factitive).  $\tau o \varrho \acute{\epsilon} \omega$ ,  $(F) o \chi \acute{\epsilon} \omega$ ,  $\varphi o \beta \acute{\epsilon} \omega$ ,  $\sigma o \beta \acute{\epsilon} \omega$ , see § 794 pp. 326 ff.

Intensive (or Iterative). φορέω, σοέω (ἐσσοημένον Hesych.), ποτέομαι, see *ibid*. ὀχέω 'I hold fast, hold out, hold' for \*σοχεω

beside  $\tilde{\epsilon}\chi\omega$ : Skr. ut-sāhaya-ti 'helps some one to endure, strengthens, gives heart'. ποθέω 'I desire' beside θέσσεσθαι Avest. jaidye-iti v ghedh- (§ 706 p. 234): O.Ir. no guidiu 'I pray' first for \*godiu. στροφέω 'I turn round and round' τροπέω 'I turn, twist' beside τρέπω. beside στοέφω. 'I swallow' beside Lith. sreb-iù  $\sqrt{srebh}$ : Lat. sorbeō seems to be an éjo-form with weak grade of root, like jubeo Skr. grbháya--ti, and others (§ 790 p. 323). βρομέω 'I hum, buzz' beside σχοπέω 'I watch, look at, ponder' beside σχέπτομαι. So perhaps ὀρχέσμαι 'I hop, spring, jump, tremble, quake' beside ερχομαι 'I go'; in that case the word will be akin to Skr. rghāyá--ti 'quakes, throbs'. ωθέω 'I push': cp. Skr. vadhaya-ti 'strikes down' Avest. vāđāyę-iti 'knocks back'; ωθέω will be equivalent to Skr.  $b\bar{a}dhaya$ -ti 'subdues', if in this word b is for v- (cp. p. 225 footnote 1).

However, another possibility must not be forgotten: to wit, that before the time in question some few denominative causals, of the type of Skr. *mantráya-ti* (§ 793 p. 326, § 798 pp. 334 f.) may have been formed.

- $\epsilon\omega$  is not uncommon after present formative suffixes (cp. § 792 p. 325). So far as one can see, the new verb meant much the same as the old unextended verb.

ελλέω 'I press' beside εἴλω for \* $\mathcal{F}$ ελ-νω (§ 611 p. 150). Ion. inser. conj. βουλέωνται beside βούλομαι 'I wish' for \* $\beta$ ολ-νο-(§ 611 p. 150). πιτ-νέω 'I fall' beside πίτ-νω, whose preterite επιτνον became agrist by contrast with πιτνέω (see Curtius, Verb<sup>2</sup> 1 268, II 12); ι in the root syllable instead of ε ( $\sqrt{pet}$ -)

as in  $\varkappa l \varrho - \nu \eta - \mu u$  etc., § 602 p. 144.  $\delta \alpha \mu \nu \varepsilon i$  ·  $\delta \alpha \mu \dot{\alpha} \zeta \varepsilon \iota$  (Hesyeh.) beside  $\delta \dot{\alpha} \mu - \nu \eta - \mu u$ .  $i \varkappa \nu \dot{\varepsilon} \omega \mu u \iota$  · I arrive' beside Hom.  $i \varkappa \dot{\alpha} \nu \iota \omega$  for \* $i \varkappa - \alpha \nu \digamma \omega$  § 652 p. 187.  $o i \varkappa - \nu \dot{\varepsilon} \omega$  'I go, go away, I am off'. Cret.  $\dot{\alpha} \gamma - \nu \dot{\varepsilon} \omega$  'I lead, bring'.

όλιγο-δρανέω 'I am faint, weak' beside  $\delta \rho$ -αίνω (§ 621 p. 159) like Skr. iš-an-aya-nta beside iš-an-yá-ti (§ 796 p. 332).

With Skr. pi-nv-aya-ti § 796 p. 332 may be compared the following.  $ay_{\bar{l}}v\epsilon\omega$ , beside  $ay_{\bar{l}}v\omega$  'I lead, bring' for \* $ay_{\bar{l}}-vF\omega$ . Extinct, beside Extine-v for \* $zgi-ny\bar{v}$ . See § 652 p. 187. Perhaps also  $\delta \bar{\iota}v\epsilon\omega$  'I eddy' beside  $\delta tv\omega$ , and  $\vartheta \bar{v}v\epsilon\omega$  'I move wildly, storm' beside  $\vartheta tv\omega$ , see loc. cit.; but still these may be denominatives, derived later from  $\delta \bar{\iota}vo-c$  and  $\vartheta \bar{v}vo-c$ ;  $\vartheta \bar{v}v\epsilon\omega$  moreover may be identified with Skr.  $dh\bar{u}-n-aya-ti$  (§ 796 p. 332). We are still quite in the dark whether  $-nu-\dot{e}i\bar{o}$  or  $-n-\dot{e}i\bar{o}$  ( $-ne-\dot{e}i\bar{o}$ ) is to be assumed for  $z\bar{\iota}v\epsilon\omega$  'I move from its place' beside  $zt-vv-\mu\alpha\iota$ ,  $zv\epsilon\omega$  'I stop up' beside zt-vv and  $zv\epsilon\omega$  fut.  $zt-v\epsilon\omega$  'I stop up' beside  $zt-v\epsilon\omega$  and  $zt-v\epsilon\omega$  'I stop up' beside  $zt-v\epsilon\omega$  'Overpowers, oppresses' partie.  $zt-v\epsilon\omega$  'eoeo' beside Skr.  $zt-v\epsilon\omega$  'overpowers, oppresses' partie.  $zt-v\epsilon\omega$ 

πεκτέω beside πέκτω 'I eomb', § 680 p. 212.

 $\gamma\eta\vartheta\acute{\epsilon}\omega$  beside  $\gamma\acute{\eta}\vartheta$ ομαι 'I am glad' seems to fall here along with Lat. gaudeō for \*gāvideō, § 694 p. 223. μινν $\vartheta\acute{\epsilon}\omega$  (Hippoer.) beside μινν- $\vartheta\omega$  'minuo'.

μυζέω (Hippocr.) beside  $\mu$ ύζω 'I suck'.  $\chi \varrho \eta$ έ $\varrho \mu$ ω (Chale.  $\chi \varrho \eta$ είσ $\vartheta \omega$  Boeot.  $\chi \varrho \epsilon \iota \epsilon \tilde{\iota} \sigma \vartheta \eta$ ) and Gort.  $\lambda \eta \tilde{\iota} \omega$  (for \* $\lambda \eta \dot{\epsilon} \omega$ ) beside  $\chi \varrho \eta \iota \varrho \mu \omega$  \* $\lambda \eta \dot{\omega}$  perhaps like Skr.  $py \bar{a}y - \dot{a}y a - t \bar{e}$  'swells', see § 737 p. 263.

These forms in  $-\epsilon \omega$  are also found in association with present stems which have no special characteristic, as  $\hat{\epsilon} \lambda \kappa \hat{\epsilon} \omega$  beside  $\hat{\epsilon} \lambda \kappa \omega$  'I pull'.

Now eomes the question — are all these forms with  $-\epsilon\omega$  to be brought into close eonnexion with the Idg.  $-\dot{e}i\bar{o}$ , and did they originally have an Intensive or Frequentative meaning? We saw in § 578 p. 119, § 756.4 p. 275, that from the very earliest period non-present forms with an  $\bar{e}$ -suffix occur side by side with present forms which have no  $\bar{e}$ -suffix; as  $\mu\epsilon\lambda\dot{\eta}\sigma\epsilon_{\ell}$  Brugmann, Elements. IV.

έμέλησε μεμέληκε beside μέλει, τυπτήσω beside τύπτω. It is therefore possible, that at first the only forms used were, say, ξλιω ξλιήσω, πέιτω πειτήσω, and that it was only their  $\bar{e}$ -forms which brought these stems in contact with the εω-class, and produced ξλιέω πειτέω.

§ 802. Italic. On the Latin present inflexion see § 788 pp. 318 f. The part. pass. ends sometimes in -i-tus, see § 789 p. 319.

We have already mentioned moneō, torreō, mordeō, tongeō, noceō, lūceō, foveō, and jubeō joubeō, see § 794 pp. 326 ff.

The root syllable has a weak grade in: Lat. qu-eō, identical with Skr. śv-áya-ti, ci-eō, see § 790 p. 323; sorbeō beside Gr. ροφέω, see § 801 p. 336; jubeō, parallel stem joubeō once found, see § 794 p. 329.

We should also add, it seems, the following: misceō, see § 792 p. 325; augeō, cp. Lith. áugu 'I grow'; suādeō 'I make a thing acceptable to some one', cp. Gr. ήδομαι § 690 p. 221.

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Remark. It is hardly possible to prove that the éjo-formation became denominative in Latin as it did in Germanio and Balto-Slavonic, dense I make thick beside densu-s is certainly not to be explained like Goth. Julian beside full-s, and other such; tempting though it be to draw this parallel. See § 777 Rem. p. 301.

§ 803. Keltic. Only a few examples which are anything like certain.

We have already cited the following: O.Ir. for-tugim I cover over: O.H.G. decch(i)u I cover,  $\sqrt{teg}$ - § 791 p. 325; ad-suidim I prolong, postpone: Goth. satja I place,  $\sqrt{sed}$ - § 794 p. 328; no rāidiu I speak, say: Goth. rōdja (same meaning), ibid.; no guidiu I pray: Gr. ποθέω I desire, crave for,  $\sqrt{ghedh}$ -, § 801 p. 337. Further examples: do-luigim I let off, forgive perhaps connected with legaim I fail, perish, go to pieces' (Thurneysen, Rev. Celt. vi 316). luadim im-luadim I set in motion' beside do-lod I went'. no-m-mōidim I boast, exult' beside miad 'pride, honour'. guirim gorim I heat, warm' from  $\sqrt{gher}$ -.

§ 804. Germanic. On the confusion of this type with other present classes see § 781.2 p. 306. The present inflexion in Gothic may be regarded as regularly growing out of the original one (I § 142 p. 125 f.); but in O.H.G. such forms as 2<sup>nd</sup> sing. denis (1<sup>st</sup> sing. denn(i)u = Goth. panja) beizis (1<sup>st</sup> sing. beiz(i)u = Goth. \*báitja) are a re-formation following hevis and suchlike (1<sup>st</sup> sing. heff(i)u = Goth. hafja), Class XXVI. The partic. pass. in pr. Germanic ended in -idá-, as Goth. fra-vardips stem -vardida-, nasips stem nasida- O.H.G. gi-nerit, see § 789 p. 319.

The class was productive, from proethnic Germanic onwards, in the Causal or Factitive use, where the primary verb has some simple meaning. Only a few examples, as O.H.G. decch(i)u 'I hide', still keep the Idg. Intensive or Frequentative meaning (§ 791 p. 324); but this meaning very early became so weak, that soon no difference was felt between the original verb and the secondary verb in -\(\ellio io\_{\cdot}\), for which reason the former was generally dropt altogether out of use.

Goth. varja O.H.G. weriu 'I hinder, guard': Skr. vāráya-ti, see § 795 p. 330. O.H.G. zeriu O.Sax. teriu 'I destroy, tear to pieces': Skr. dāraya-ti 'makes burst, splits'. Goth. valja O.H.G. well(i)u 'I choose': Skr. pra-vāraya-ti, see § 794 p. 327. '

Goth. uf-panja 'I stretch out' O.H.G. denn(i)u 'I stretch': Skr. ā-tānaya-ti, see § 794 p. 327. O.H.G. wenn(i)u O.Icel. ven (inf. venja) I accustom': Skr. sa-vānaya-ti 'makes inclined, accustoms to', V uen- 'to like'. O.H.G. flouw(i)u 'I rinse' (2nd sing. flewis, cp. Braune O.H.G. Gr. 2 pp. 84, 253): Skr. plāvaya-ti 'floods, pours over', Serv. plovi-ti 'to make flooded', / pleu- 'flow, swim'. Goth. fra-vardja 'I bring to nought, destroy, disfigure', O.H.G. wert(i)u 'I destroy': Skr. vartaya-ti etc., see § 794 p. 327. Goth. marzja 'I hurt, vex', O.H.G. merr(i)u 'I hold back, hinder, disturb, mislead' (orig. 'cause any one to make an oversight'): Skr. maršaya-ti 'looks after, carries off, lets alone' (mŕšya-ti 'forgets, neglects, bears patiently'),  $\sqrt{mers}$ 'forget, take no notice of'. O.H.G. derr(i)u 'I make dry, wither up': Skr. taršáya-ti etc., see § 794 p. 327. Goth. ga-tarhja 'I mark out, blame': Skr. daršáya-ti 'shows', V derk- 'see'. Goth. uf-rakja 'I reach up', O.H.G. recch(i)u 'I reach, stretch out' from  $\sqrt{re\hat{g}}$ - (Gr. ορέγω). O.H.G. (h)rett(i)u 'I tear away, rescue': Skr. śrāthaya-ti, see § 794 p. 327. Goth. þragja 'I run', beside Gr. τρέχω 'I run' (fut. θρέξομαι) from  $\sqrt{threkh}$ .') O.H.G. blecch(i)u 'I make visible, show': Skr. bhrājaya-ti, see § 794 p. 327. Goth. lagja O.H.G. legg(i)u 'I lay': O.C.Sl. loži-ti, see § 794 p. 327. Goth. pagkja O.H.G. dench(i)u 'I ponder, think': Lat. tongeō, see § 794 p. 328; the irregular pret. Þāhta dāhta partic. \*Þāht-s gi-dāht (variant gi-denkit) for an becoming a see I § 214 p. 181 — arose on the analogy of the corresponding preterite of pugkja dunch(i)u (Goth. pūhta etc.), which verb we have placed in Class XXVI (§ 722 p. 252); it is true pagkja may also be placed in this class, as it may come from \*tmg-io, which would have a grade of root shown apparently in Osc. tangin-om 'sententiam' (not so Bartholomae, Bezz. Beitr. xvii 123). O.H.G. blent(i)u 'I darken, blind': O.C.Sl. bladi-ti 'to go astray', orig. transitive like

<sup>1)</sup> We must believe that the root is threkh-, not thregh- (I § 553 p. 406), because of O.Icel.  $pr\bar{x}ll$  for \* $pr\acute{a}\chi$ -l/a-. Then the Gothic verb, like fra-vardja and marzja, shows in its root-final the regular voiced consonant.

§ 805. Where the éio-verb, and the primary verb from which it was formed, had come to have a different articulation in the final consonant of the root, through the action of Verner's Law (I §§ 529 f. p. 384 f. § 581 p. 434), the final of the éio-verb was very often in Gothic levelled back to match that of the other. Of the examples cited in § 804, the following show this change: Goth. -tarhja instead of \*-targja following a lost \*tairha, káusja instead of \*káuzja following kiusa, dráusja instead of \*dráuzja

p. 329.

= 0.H.G.  $tr\bar{o}r(i)u$  following driusa,  $l\acute{a}isja$  instead of \* $l\acute{a}izja$  = 0.H.G.  $l\bar{e}r(i)u$  following  $l\acute{a}is$  'knows',  $-hl\bar{o}hja$  instead of \* $-hl\bar{o}gja$  = 0.Icel.  $hl\bar{o}ge$  following hlahja.

The following *éjo*-forms arose from present stems with some characteristic suffix (see § 792 p. 325).

O.H.G. hlein(i)u 'I cause to lean' trans. of  $hli-n\bar{e}-m$  O.Sax.  $hli-n\bar{o}-n$ , Class XII, § 605 p. 146.

O.H.G. scein(i)u 'I make visible, show' beside scīnu; swein(i)u 'I make disappear, diminish' beside swī-nu 'I disappear'; bi-swell(i)u 'I make swell, dam up' beside swillu; scell(i)u 'I cause to sound, dash in pieces' beside scillu: Class XIII, § 614 pp. 151 f.

Goth. sagq ja O.H.G. sench(i)u 'I make sink, push under' beside sigqa; O.Sax. thengiu 'I complete' beside thīhu 'I thrive' for pr. Germ. \*penχō; O.H.G. meng(i)u O.Sax. mengiu 'I mingle, mix' beside a pr. Germ. \*mingō; O.H.G. spreng(i)u 'I make burst, I burst' beside springu: Class XVI § 628 pp. 164 ff., § 634 pp. 170 ff. With these were associated ėjo-formations made from presents with a t-suffix and a nasal infix: Goth. vandja O.H.G. went(i)u 'I turn' from vinda vuei-; O.H.G. swent(i)u 'I make disappear, I annihilate' from swintu beside swī-nu, see § 634 p. 172, § 685 p. 216.

Goth. kannja 'I make know, inform', O.H.G. ir-chenn(i)u 'I make know, understand', beside kann kun-nu-m, Class XVH § 646 p. 183.

Goth. ur-rannja 'I make arise' O.H.G. renn(i)u 'I make run, or make run quickly', beside Goth. rinna; Goth. ga-brannja 'I cause to be burnt up, I burn up', O.H.G. brenn(i)u 'I make burn, I burn' beside brinna: Class XVIII, § 654 pp. 187 f.

Goth. ga-vasja O.H.G. weriu 'I clothe' (Goth. -vasja instead of \*-vasja, see p. 342): Skr. vāsáya-ti, from u-es- (Class XIX)  $\vee$  eu-, see § 794 p. 329.

O.H.G.  $fr\bar{o}r(i)u$  'I make freeze' beside friu-su, Class XX § 664 p. 197.

O.H.G. ir-lesk(i)u T cause to be quenched, I quench' beside ir-lisku, Class XXII, § 676 p. 208.

Goth.  $r\bar{o}dja$  'I speak, say' beside  $-r\bar{e}-da$ : Skr.  $r\bar{a}dhaya-ti$  etc., see § 794 p. 329; O.H.G.  $fl\bar{o}z(i)u$   $fl\bar{o}z(i)u$  Mid.H.G.  $vl\omega tze$   $vl\omega ze$  'I make flow, cause to swim off, to float (trans.)' (cp. weiz(i)u weiz(i)u § 804 p. 341) beside fliu-zu; Class XXV § 699 p. 225.

§ 806. Denominative éjo-verbs (see § 793 p. 326) are common. We have already given some examples found both in Germanic and in Balto-Slavonic (loc. cit.), to wit, Goth. fullja O.H.G. full(i)u 'I fill' from full-s 'full' and Goth. háilja O.H.G. heil(i)u 'I heal' from háils heil 'whole, healthy'. Other examples are: Goth. háuhja O.H.G. hōh(i)u 'I make high, raise aloft' from háuh-s hōh 'high'; Goth. ga-blindja 'I make blind' Engl. to blind (distinguish this from O.H.G. blent(i)u, see § 804 p. 340); Goth. ga-qiuja 'I make living' from qiu-s (cp. § 794 p. 330); O.H.G. sterch(i)u 'I make strong, strengthen' from starc 'strong'; fest(i)u 'I make fast, fortify' from festi 'fast'.

If Germanic did not inherit *éio*-denominatives from pre-Germanic times, we have to turn for an explanation of their existence in this branch to those instances, where, connected with an old primary causal, there is some adjective having the same grade of root-syllable, as Goth. *gramja* O.H.G. *gremm(i)u* 'to provoke, make angry': O.H.G. *gram* O.Icel. *gram-r* 'angry, provoked'; Goth. *hnáivja* 'I lower, degrade' O.H.G. (h)neig(i)u 'I bend, incline, sink' tr.: Goth. hnáiv-s 'low, humble'; O.H.G. *ga-fuog(i)u* 'I make to fit, I join': *ga-fuogi* 'fitting, suiting'. Once these verbs came to be regarded as derived from the adjectives in question, it is easy enough at once to explain new forms like *fullja*.

§ 807. Balto-Slavonic. The original present system,  $-ei\bar{o}$  -eiesi and so forth, is still represented by the Lith. v-ei $\hat{u}$  O.C.Sl. v-ij $\hat{q}$  v-ij $\hat{q}$  'I wind, turn, twist', as we have already seen in § 788 p. 319. How the place of this series was usurped by Lith. -au -ai . . . . . O.C.Sl. -ja -isi . . . . . has been explained in § 789 pp. 321 f.

This type was very fertile in Balto-Slavonic; and we meet with both the original meanings, — the Causal, and the Intensive or Frequentative (§ 791 p. 324).

We may mention as further examples Lith. vartaŭ vartý-ti O.C.Sl. vrašta vrati-ti, O.C.Sl. volja voli-ti, poja poji-ti, loža loži-ti, maštą mati-ti, ljublją ljubi-ti, vožą vozi-ti, davlją davi-ti, Lith. isz-manaŭ -maný-ti § 794 pp. 326 ff., Serv. plovi-m plovi-ti, O.C.Sl. blažda bladi-ti § 804 pp. 339 f. Others are: O.C.Sl. morją mori-ti 'to kill' (causal): Skr. māráya-ti 'makes die, kills', \( \sqrt{mer}\)-. Lith. dara\( \tilde{u} \) dar\( \tilde{y}\)-ti 'to make' beside deri\( \tilde{u} \) 'I bargain, hire, am of use' (cp. Leskien, Der Ablaut der Wurzels, im Lit., 99), / der-. Lith, ganaŭ ganý-ti 'to tend (cattle), to pasture' O.C.Sl. gonją goni-ti 'to drive' (freq.), √ghen- 'strike'. Lith. ramaũ ramý-ti 'to soften, calm' (causal): Skr. rāmaya-ti 'brings to a standstill', V rem-. Lith. žargaū-s žargý-ti-s 'to stretch the legs apart' (freq.) beside žergiù 'I stretch my legs'. Lith. praszaŭ praszý-ti 'I ask, pray', O.C.Sl. prošą prosi-ti 'to ask, pray', V prek-. Lith. láužau láužy-ti 'to break' trans. (freq.) beside láuszti 'to break' trans. O.C.Sl. bužda budi-ti 'to wake' (causal): Skr. bōdháya-ti 'causes to awakes, wakes, makes aware', √ bheudh-. Lith. snaīgo snaigý-ti 'to snow' (freq.) beside snìk-ti 'to snow', √ sneigh-. Lith. szvaitaŭ szvaitý-ti O.C.Sl. svěšta světi-ti 'to make clear, light up' (causal),  $\sqrt{k_{uei}t}$ . O.C.Sl. běžda bědi-ti 'to compel': Goth. báidja 'I compel', V bheidh-. Lith. maiszañ maiszý-ti O.C.Sl. měša měsi-ti 'to mix', / meik-; the verb may just as well be derived from \*mojkéjō, \*mojk-s-éjō (Skr. mēkšaya--ti cp. Classes XIX and XX, §§ 656 ff. pp. 190 ff.), or \*moik- $-s\hat{k}-\acute{e}i\bar{o}$  (cp. Lat.  $misce\bar{o}$ , see § 792 p. 325). Lith.  $saka\tilde{u}$   $sak\acute{y}-ti$ 'to say', O.C.Sl. sočą soči-ti 'to point out': O.H.G. segg(i)u 'I say', V seq- (Gr. ἔνι-σπε Lat. în-sece). Lith. kasaŭ kasý-ti 'to scratch' (freq.), V qes- (O.C.Sl. česa-ti). O.C.Sl. toplja topi-ti 'to warm, beat' (causal): Skr. tāpáya-ti 'warms', V tep-. O.C.Sl. točą toči-ti 'to make run, make flow, pour' (causal): Avest. tācaye-iti 'makes flow', V teq-.

§ 808. New formation from Primary presents, in which a present root-extension of the éjo-form has been handed down (§ 792 pp. 325 f.):

Class XVI §§ 635 ff., pp. 172 ff. — Lith. rāžau rāžy-ti 'to reach' (freq.) beside isz-si-rēszti 'to reach out, extend, resist', ν reĝ- (Gr. δοέγω). Lith. grándau grándy-ti 'to shave, scrape' (freq.) beside gréndu grésti 'to rub, scour', doubtless connected with O.Icel. krota 'to dig in, dig down' O.H.G. chrazzōn 'to scratch'. O.C.Sl. lača lači-ti 'to separate' beside leka 'to bend', ν leq-. O.C.Sl. krašta krati-ti 'to turn, twist' (freq.) beside krę(t)-na 'deflecto', ν qert-. O.C.Sl. izŭ-sača -sači-ti 'to make exhausted, dry up' Pol. w-saczy-ć 'to make trickle in' (causal) beside O.C.Sl. sęk-na 'I dry up', ν seiq-. O.C.Sl. traša trasi-ti 'to shatter' (freq.) beside tręsa 'I shatter', perhaps derived from tr-es- (Class XX, § 636 p. 174, § 657 p. 192).

Class XX, §§ 657 ff., pp. 191 ff. — Lith.  $t\bar{q}sa\tilde{u}$   $t\bar{q}s\acute{y}$ -ti 'I pull or tear about' (freq.) beside  $t\bar{e}$ -s- $i\hat{u}$ ,  $\sqrt{ten}$ - (§ 794 p. 329). Compare too the above mentioned O.C.Sl. trqsi-ti.

Class XXII, §§ 670 ff., pp. 202 ff. — Lith. draskaŭ draský-ti 'to tear about' (freq.) beside dreskiù 'I tear' driskaŭ 'I am torn'. Compare § 807 p. 344, on Lith. maiszý-ti O.C.Sl. měsiti.

Class XXV, §§ 688 ff. pp. 218 ff. — O.C.Sl. raždą radi-ti 'to consider, care for': Skr. rādhaya-ti etc., stem \*rē-dh- (§ 794 Lith. valdaŭ valdý-ti 'to rule', beside veldu 'I rule', p. 329). stem uel-dh-; skardau skardy-ti 'to shred, cut about' (causal) beside skérdžiu 'I burst', stem sqer-dh-; girdau 'I give to drink' (causal) beside geriù 'I drink', stem ger-dh-; púdau 'I cause to rot' (causal) beside  $p\bar{u}v$ -ù 'I rot', stem  $p\bar{u}$ -dh-.  $spr\acute{a}udau$ spráudy-ti (freq.) beside spráudžiu 'l push forcibly into an interstice', stem spreu-d-; száudau száudy-ti (freq.) bcside száu-ju 'I shoot', stem skeu-d-. With -dh- or -d-, uncertain which: maldaŭ maldý-ti 'to beg' (freq.) beside mel-džiù 'I beg'; skáldau skáldy-ti 'to split' (freq.) beside skelù (\*skel-iù) 'I split', both trans. (skél-du and skél-džiu 'I split' intrans.). Starting from verbs of this kind, the ending -dau -dy-ti became independent, like -dinu -din-ti, and was the type for others: spár-dau 'I kick'

(freq.) beside spir-iù, gý-dau 'I heal' (causal) beside gy-jù 'I get well' (cp. Leskien, Der Ablaut der Wurzels. im Lit., 182 ff.).

Lastly, we may mention once again O.C.Sl. življą živi-ti 'to make alive' (causal), beside ži-vą 'I live', see § 794 p. 329.

§ 809. Denominative verbs in Lith. -y-ti O.C.Sl. -i-ti (see § 793 p. 326) are common. Examples found in both Germanic and Slavonic are O.C.Sl. plŭni-ti 'to fill' and cěli-ti 'to heal', mentioned above (loc. cit.).

Lith. denominatives such as jū stau jū sty-ti, a class which is mixed up with the ā-denominatives, have been cited already § 782. 4 p. 310. Some more Slavonic exx. may be mentioned: pravlją pravi-ti 'to make right, direct' beside pravū 'right', oštrją ostri-ti 'to point, sharpen' beside ostrū 'pointed, sharp', divlją divi-ti sę 'to wonder' beside divo 'wonder', dėlją dėli-ti 'to divide' beside dėlū 'part', darją dari-ti 'to present' beside darū 'a present', měrją měri-ti 'to measure' beside měra 'measure', kramolją 'I disturb, confuse' beside kramola 'disquiet, noise, uproar'. It must also be mentioned that the Idg. denominatives from i-stems, ending in -i-jō, have run into this Class; see § 782. 5 p. 311.

## THE s-AORISTS.1)

§ 810. We saw in § 485 p. 38 f., and § 655 p. 190, that thematic and non-thematic s-Preterites belonged to our Present

Aryan. Whitney, On the Classification of the Forms of the Sanscrit Aorists, Proceed. Amer. Or. Soc. 1875—76 pp. xvIII f. Idem, The sis-and sa-Aorists in Sanskrit, Amer. Journ. Phil. vi 275 ff. Bartholomae, Zur Bildung des sigmatischen Aorists [in Avestic], Kuhn's Zeitschr. xxix 288 ff.

Greek. Inama, Degli aoristi greci, Rivista di filol. II 249 ff. L. Meyer, Griech. Aoriste, Berl. 1879. T. H. Key, On the Formation of Greek Futures and First Aorists, Transact. Philol. Soc. 1861 pp. 1 ff. Leskien, Die Formen des Futurums und zusammengesetzten Aorists mit

<sup>1)</sup> On the Indo-Germanic s-Aorist in general: — The Author, Zur sigmatischen Aoristbildung im Griech., Ital., Kelt. und Ar., Morph. Unt. III 16 ff.

Classes XIX and XX. The reason why I treat these stems again by themselves has been given in the first of those two places.

Before -s- we have (1) either the bare Root, as Skr.  $\acute{a}$ -dik- $\ref{s-i}$   $\acute{a}$ -dik- $\acute{a}$ - $\acute$ 

aa in den homer. Gedichten, Curtius' Stud. II 65 ff. P. Cauer, Die dor. Futur - und Aoristbildungen der abgeleiteten Verba auf - ω, Sprachwiss. Abhandl. aus G. Curtius' Gramm. Gesellsch. pp. 126 ff. G. Mekler, Die Flexion des activen Plusquamperfects, in: Beitr. zur Bildung des griech. Verbums, Dorpat 1887, pp. 43 ff.

Italic. J. V. Netušil, Ob aoristach v latinskom jazykě (The Aorist in Latin), Charkow 1881. Corssen, Kein Aoristus I im Lateinischen, in: Beitr. zur ital. Sprachk. pp. 556 ff. Idem, Die synkopierten Formen des Futurum II und Conjunctiv des Perfeots auf -si, -a-ssi, -e-ssi, -i-ssi, ibid. pp. 523 ff. Ch. Blinkenberg, Om resterne af det sigmatiske aorist i Latin, Kort Udsigt det Kjöbenh. phil. Samf. XXXI. Madvig, De formarum quarundam verbi Latini natura et usu [on faxō faxim and the like, Kopenh. 1835 and 36 = Opusc. ac. alt. pp. 60 ff. G. Hermann, De I. N. Madvigii interpretatione quarundam verbi Lat. formarum, Leipz. 1843 = Opusc. VIII 415 ff. G. Curtius, De verbi Lat. futuro exacto et perfecti coniunctivo (issued in welcome of the Congress of Philologers), Dresd. 1844. E. Lübbert, Gramm. Stud. I: der conj. perf. und das fut. ex. im älteren Lat., Bresl. 1867. Idem, Paralipomena zur Geschichte der lat. Tempora und Modi II [on faxim and the like], Archiv f. lat. Lexikogr. II 223 ff. Fr. Cramer, Das lat. futurum exactum, ibid. IV 594 ff. P. Giles, The Origin of the Latin Pluperfect Subjunctive and other etymologies, Cambridge Phil. Transact. 1889 pp. 126 ff. - For other works which deal with the lat. s-Aorist associated with the Perfect, see under Perfect, § 843.

Keltic. D'Arbois de Jubainville, Du futur sigmatique [in Irish], Mém. d. l. Soc. d. ling. vi 56. Thurneysen, Der s-Aorist im Ir., Kuhn's Zeitschr. xxviii 151 ff. H. Zimmer, Die Schioksale des idg. s-Aorists im Ir. und die Entstehung des kelt. s-Präteritums, ibid. xxx 112 ff. Thurneysen, Zu den ir. Verbalformen sigmatischer Bildung, ibid. xxxx 62 ff.

Slavonio. Miklosich, Zusammengesetzter Aorist [in Old Slovenian], Sitzungsber. d. Wien. Akad. LXXXI 110 ff.

associated closely with these, such as Skr.  $\acute{a}$ -yā-s-iṣ-am Gr.  $\delta \varepsilon / \xi \varepsilon \iota \alpha \nu$  for  ${}^*\delta \varepsilon \iota \varkappa - \sigma - \varepsilon (\sigma) - \iota \alpha \nu$  Lat.  $d\bar{\imath} c$ -s-is-tis. Another subdivision includes the forms with -s-s-, as Gr.  $\check{\varepsilon} \sigma \beta \varepsilon \sigma \sigma \alpha$   $\check{\varepsilon} \varkappa \acute{\alpha} \lambda \varepsilon \sigma \sigma \alpha$  Lat.  $v\bar{\imath} dissem$  capessō amāssō O.Ir. ro-charus for  ${}^*car\bar{\alpha}ss$ -.

## A. STEMS IN -S- AND -SO-.

## I. Non-Thematic s-stems.

§ 811. Roots of the e-series appear in three vowel grades; and the original Idg. division of these grades was as follows.

The Indic. Act. Sing. had the  $\bar{e}$ -grade: as O.C.Sl.  $v\check{e}s-\check{u}^{\,1}$ ) Skr.  $\acute{a}-v\bar{a}k\check{s}-am$  from  $\bigvee$   $ue\hat{g}h$ -; whether  $\bar{e}$  in Lat.  $v\bar{e}x-i-t$  is this  $\bar{e}$  unchanged, is doubtful. The Indic. Act. Plural and Dual, and the whole of the Indic. Middle, had the weak root: as Skr.  $\acute{a}-vit-s-i$  Gr.  $\H{i}\sigma-ar$  from  $\bigvee$   $ue\dot{i}d$ -. The Conjunctive had the e-grade: as Skr.  $p\acute{a}k\check{s}-a-t$  Gr.  $\pi\acute{e}\psi-\omega$  from  $\bigvee$  peq-, Avest.  $var^e\check{s}-a-it\bar{i}$  Gr.  $\H{e}\varrho\check{s}-\omega$  from  $\bigvee$   $uer\hat{g}$ -. The Optative had the weak root; as Skr.  $mas-\bar{i}ya$  from  $\bigvee$  men-. With this ablaut compare Skr. indic.  $st\bar{a}\acute{u}-ti$   $stu-m\acute{a}si$   $stu-t\bar{e}$   $m\acute{a}r\check{s}-ti$  mj- $\acute{a}nti$ , conj.  $st\acute{a}v-a-t$   $m\acute{a}rj$ -a-t, opt.  $stuv-\bar{i}-t\acute{a}$  (§ 494 p. 55).

The Conjunctive stem of this s-aorist is identical with the Indicative stem of the XX<sup>th</sup> Present Class; e. g. Skr. tqsa-t(i) and indic. tqsa-ti = Goth. pinsa, Lat. (fut.)  $d\bar{\imath}x\bar{\imath}$  and indic. pret.  $d\bar{\imath}xi-t$   $d\bar{\imath}xi-mus$ , so too the conj. Skr.  $\acute{a}y-a-t$  and indic.  $\acute{a}y-a-t\bar{e} = Lat.$   $e\bar{\imath}$  (§ 489 p. 47, § 493 pp. 51 f.).

§ 812. Pr. Idg. Skr. kšar- Gr.  $\varphi \vartheta \varepsilon \varrho$ - 'cause to run off, make disappear' (cp. Kretschmer, Kuhn's Zeitschr. xxxi 431): á-kšārš-am  $2^{\rm nd}$  and  $3^{\rm rd}$  sing. á-kšār, Gr.  $\check{\varepsilon} \varphi \vartheta \varepsilon \varrho \omega \omega$  ( $\varepsilon \varphi \vartheta \varepsilon \varrho \omega \omega$  Lycophron). V der- 'split, flay': Skr. conj. dárš-a-t(i), Gr.  $\check{\varepsilon} \delta \varepsilon \varrho \omega$ . V bher- 'carry': Skr. á-bhārš-am, Gr.  $\check{\varepsilon} \varphi \varepsilon \varrho \omega \varepsilon v$   $\check{\varepsilon} \varkappa \acute{\upsilon} \eta \varepsilon \varepsilon v$ 

<sup>1)</sup> In the Indicative system of several languages forms of some other inflexion were associated with the non-thematic forms. This will be examined under the headings of the languages in question.

(Hesych.), Lat. conj. ferrem. \(\square\) uel- 'choose, wish': Skr. 1st sing. mid. á-vṛṣ-i Avest. 1st sing. conj. mid. vareṣ-ānē, Lat. vellem. V ten- 'stretch out, lengthen, tighten': Skr. á-tās-am 2nd and 3rd sing. á-tān mid. 1st sing. á-tas-i 1st pl. á-tas-mahi, Gr. E-TELVA. √ men- 'think, mean': Skr. mid. 3rd sing. á-mas-ta conj. más--a-tē opt. 1st sing. mas-īya, Lith. 1st and 2nd pl. injunct. (fut.) mis-me mis-te. Vahen- 'strike': Skr. 2nd and 3rd sing. ghan (gh- instead of h-following \*ghas- == \*ghp-s-), Gr. εθεινα, Lith. injunct. qis-me -te O.C.Sl. 2nd and 3rd sing, po-že. V rem- 'rest': Skr. á-ras-am mid. á-ras-ta, Lith. injunct. rems-me -te (trans.) and rims-me -te (intrans.). Lat. dempsi prompsi opt. emps-i-m, Lith. injunct. ims-me -te O.C.Sl. jęs-ŭ. V qei- 'to inflict punishment' etc.: Skr. ά-cāiṣ-am, Gr. ε-τεισ-a. Skr. kṣi- Gr.  $\varphi \vartheta_{\iota}$ - 'destroy': Skr. mid.  $k \xi \bar{e} \xi t a$ , Gr.  $\xi - \varphi \vartheta_{\epsilon \iota \sigma} - \alpha$ .  $\vee$  pleu- 'swim': Skr. mid.  $\acute{a}$ - $pl\bar{o}$ §- $\dot{t}a$ , Gr.  $\ddot{\epsilon}$ - $\pi\lambda\epsilon\nu\sigma$ - $\alpha$ , Lith. injunct. plaus-me -teO.C.Sl. pluch-ŭ.  $\sqrt{kley}$ - 'hear': Skr. á-śrāuṣ-am O.C.Sl. posluchŭ. V terp- 'satisfy, content': Skr. á-trāps-am á-tārps-am (gramm.), Gr. ĕ-τεφψ-α. V uert- 'vertere': Skr. mid. á-vrts-i, Lith. injunct. vers-me -te (trans.) and virs-me -te (intrans.).  $\sqrt{serp}$ - 'serpere': Skr.  $\acute{a}$ -srāps-am  $\acute{a}$ -sārps-am (gramm.), and perhaps also mid. άsrpta for \*a-srps-ta (§ 816), Gr. είρψ-α (late), Lat.  $serps-\bar{\imath}$ .  $\lor der\hat{k}$ - 'see': Skr.  $\acute{a}$ - $dr\bar{a}k\check{s}$ -am 2<sup>nd</sup> and  $3^{rd}$  sing.  $\acute{a}$ - $dr \vec{a} k$  mid.  $3^{rd}$  pl.  $\acute{a}$ - $dr k \vec{s}$ -ata conj.  $dar k \vec{s}$ -a-t, Gr.  $\hat{\epsilon}$ - $\delta \epsilon_0 \xi$ - $\alpha \mu \eta \nu$  (late). V  $\mu er \hat{g}$ - 'work': Avest. conj.  $var^e \hat{s}$ -a- $it\bar{\iota}$ , Gr. ἔφξ-α. V merĝ- 'stroke, brush': Skr. á-mārkš-am, Gr. αμέρξ-αι ομόρξ-αι. V melĝ- 'milk': Gr. αμέλξ-αι, Lat. muls- $\bar{\imath}$ , Lith. injunct. milsz-me -te. V/eig- 'leave': Skr. a-rāikš-am  $2^{nd}$  and  $3^{rd}$  sing.  $\acute{a}$ - $r\vec{a}ik$  mid.  $\acute{a}$ -rik $\dot{s}$ -i, Gr.  $\acute{s}$ - $\lambda sn/-a$ , Lith. injunct. liks-me -te. V ueid- 'know, learn, find': Skr. mid. á-vits-i, Gr. mid. ε-είσ-ατο 3rd pl. act. ἴσ-αν, Lat. vīs-ī (pres. vīsō § 662 p. 197), Lith. injunct. isz-výs-me -te. V leip- 'besmcar': Skr. mid. ά-lips-i, Gr. ἀλεῖψ-αι, Lith. injunct. lips-me -te.  $\lor$  deik-'show': Skr. mid.  $\acute{a}$ -dikš-i, Gr.  $\ddot{\epsilon}$ - $\delta\epsilon_i\xi$ - $\alpha$ , Lat.  $d\bar{\imath}x$ - $\bar{\imath}$   $d\bar{\imath}x$ - $\bar{o}$ reig- 'wash': Skr. ά-nāikš-am mid. á-nikš-i,  $d\tilde{\imath}x$ -i-m. Gr. ε-νιψ-α. V steigh- 'climb': Gr. ε-στειξ-α, O.Ir. injunct. 3rd sing. for-tē. V jeug- 'yoke to, fasten': Skr. á-yōkš-am and

 $\acute{a}$ -yāukṣˇ-am (gramm.), Gr.  $\acute{\varepsilon}$ - $\zeta \varepsilon v \xi$ - $\alpha$ ; cp. Skr.  $\acute{a}$ -yunkṣˇ-mahi Lat.  $j\bar{u}nx-\bar{\imath}$  Lith. injunct.  $j\hat{u}nks-me$  -te § 813.  $\vee$  meygmeug- 'strip off, let go': Skr. á-māukš-am 2nd and 3rd sing.  $\acute{a}$ - $m\bar{a}uk$  mid.  $\acute{a}$ - $muk\check{s}$ -i Gr.  $\mathring{a}\pi$ - $\acute{\epsilon}\mu\nu\xi\alpha$ , Lith, injunct.  $ma\check{u}k\check{s}$ -me-te; Lat. \(\bar{e}\)-m\(\bar{u}nx\bar{\bar{\gamma}}\). \(\nabla\) bheudh- 'awake, notice': Skr. mid. á-bhuts-i, Lith. injunct. -bùs-me -te O.C.Sl. bljus-ŭ. V ueĝh-'vehere': Skr.  $\acute{a}$ - $v\bar{a}k$  $\check{s}$ -am 2<sup>nd</sup> and 3<sup>rd</sup> sing.  $\acute{a}$ - $v\bar{a}t$  conj.  $v\acute{a}k$  $\check{s}$ -a-t, Lat.  $v\bar{e}x$ - $\bar{\imath}$ , Lith, injunct.  $v\dot{e}sz$ -me -te O.C.Sl.  $v\dot{e}s$ - $\bar{u}$ . 'to lead': O.Ir. don-fe 'let him lead us' for \*vets-t, Lith. injunct. vès-me -te O.C.Sl. věs-ŭ. V dhegh- 'burn': Skr. á-dhākṣ-am á-dhāk conj. dhákš-a-t(i), Lith. injunct. dèks-me -te O.C.Sl. žach-ŭ for \*žěch-ŭ (I § 76 p. 66) beside žega for \*deya (§ 522 pp. 85 f.). V sed- 'sedere': Skr. conj. sáts-a-t, Gr. εσσ-α, Lith. injunct. sés-me -te. V peq- 'coquere': Skr. conj. pákṣ-a-t, Gr.  $\ddot{\varepsilon}$ - $\pi \varepsilon \psi$ - $\alpha$ , Lat.  $cox\bar{\imath}$  for \*quex- $\bar{\imath}$ .  $\lor$  seq- 'to be with, follow': Skr. mid. á-sakš-i conj. sákš-a-t, Lith. sèks-me -te. V reĝregere': Gr. ορέξ-αι, Lat. rēx-ī, O.Ir. 2nd sing. comēir for V leg- 'legere': Gr. ε-λεξ-α, Lat. - $l\bar{e}x$ - $\bar{\imath}$ . \*cóm-ex-rex-s.  $\bigvee plek$ - 'fold': Gr. ε-πλεξ-α, Lat.  $pl\bar{e}x$ - $\bar{\imath}$ .  $\bigvee ed$ - 'eat': Lat. conj. ēss-e-m, Lith. injunct. ës-me -te O.C.Sl. jas-ŭ. V dhē- 'set, place, lay': Skr. á-dhās-am mid. á-dhiš-i, Lat. conj. con-derem, Lith. injunct. dés-me -te O.C.Sl. děch-u. V spē- 'help onwards, further': Avest. conj. spånh-a-iti, Lith. injunct. spës-me -te O.C.Sl. spěch-ŭ. V dō- 'give': Skr. mid. á-diš-i conj. dās-a-t, Lat. conj. dar-e-m, Lith. injunct. du's-me -te O.C.Sl. dach-ŭ; compare also Alban. Jaše 'I gave' (G. Meyer, Kurzgef. alb. Gr., 38). V stā- 'stand': Skr. mid. á-sthiš-i Avest. conj. stånh-a-b, Gr.  $\tilde{\epsilon}$ - $\sigma\tau\eta\sigma$ - $\alpha$  3<sup>rd</sup> pl. Hom.  $\tilde{\epsilon}$ - $\sigma\tau\alpha\sigma$ - $\alpha\nu$ , Lat. conj.  $st\bar{\alpha}r$ -e-m, Lith. injunct. stós-me -te O.C.Sl. stach-ŭ.

The following examples are a group by themselves, having peculiar vocalism in the root  $(\bar{a}, \bar{\imath}, \bar{\imath})$ .  $\checkmark bheu$ - 'be, become': Gr.  $\check{\varepsilon}$ - $\varphi\bar{\nu}\sigma$ - $\alpha$ , conj. (fut.) Umbr. fust fust Osc. fust 'erit', Osc. conj. fusí d'foret', Lith. injunct. bús-me -te O.C.Sl. bych- $\bar{u}$ ; cp. fut. Avest.  $b\bar{u}\check{s}y\dot{e}iti$  etc. § 748 p. 271.  $\checkmark dheu$ - 'shake': Skr. mid.  $\acute{a}$ - $dh\acute{u}\check{s}$ -ta, Gr.  $\check{\epsilon}$ - $\vartheta\bar{\nu}\sigma$ - $\alpha$ .  $\checkmark ge\dot{\imath}$ - 'live': Lith. injunct.  $g\acute{\nu}s$ -me -te (inf.  $g\acute{\nu}$ -ti pres. gy- $j\grave{u}$ ) O.C.Sl.  $\check{z}ich$ - $\check{u}$  (inf.  $\check{z}i$ -ti

pres. ži-va). Skr.  $3^{rd}$  pl.  $\acute{a}$ -kīrṣ-ata from kar- 'scatter'. Gr.  $\acute{\epsilon}$ - $\sigma\tau\rho\omega\sigma$ - $\sigma$  from  $\sigma\tau\epsilon\rho$ - 'sternere'.

§ 813. Forms with the root-suffixes  $-\bar{a}$ -,  $-\bar{e}$ -  $-\bar{o}$ - (§§ 579 ff. pp. 121 ff., §§ 734 ff. pp. 261 ff.). \*dr-ā- 'run': Skr. conj.  $dr\bar{a}s$ -a-t, Gr.  $\dot{a}\pi$ -έδο $\bar{\alpha}\sigma\alpha$  (late). \*tr-ā- 'to press through, succeed in traversing': Skr. 1st pl. mid. á-trās-mahi Avest. 2nd pl. mid.  $pr\bar{a}z-d\bar{u}m$ , Lat. conj. in-trārem. \* $\hat{g}h(i)\hat{i}-\bar{a}$ - 'hiare': Lat. conj. hiār-e-m, Lith. injunct. žiós-me -te. \*\hat{q}h(u)u-\bar{a}- 'call': Skr. mid. á-hvās-ta, O.C.Sl. zŭvach-ŭ. arā- 'plough': Lat. conj. arār-e-m, O.C.Sl. orach-ŭ. \*pl-ē- 'fill': Skr. á-prās-am 2nd and 3rd sing. á-prās, Lat. conj. -plēr-e-m; whether Gr. ἔπλησα comes in here is doubtful (see § 750.3 p. 272). \*sn- $\bar{e}$ - 'weave, spin, sew': Gr. έ-νησ-α, Lat. conj. nēr-e-m. \*bhs-ē- 'chew, devour': Skr.  $\acute{a}$ -psās- $\bar{i}$ -t (gramm., cp. § 816), Gr.  $\check{\epsilon}$ -ψησ-α. \* $\hat{g}$ n- $\bar{e}$   $\hat{g}$ n- $\bar{o}$ - 'learn, know': Skr. ά-jħās-am, Gr. ἀν-έγνωσα, O.C.Sl. znach-ŭ. \*uid-ē-'see': Lat. conj. vidēr-e-m, Lith. injunct. pa-vyděs-me -te O.C.Sl. \*rudh-ē- 'blush': Lat. conj. rubēr-e-m, rŭděch-ŭ. Lat. conj. favēr-e-m, O.C.Sl. gověch-ŭ 'veneratus sum', cp. § 590 p. 132. With these agrists are associated the s-preterites of the later denominative group, as Gr. ε-τίμασ-α Lat. conj. plantār-e-m Lith. injunct. lankós-me O.C.Sl. lakach-ŭ (cp. § 769 p. 286), Gr. ε-φίλησ-α Lat. claudēr-e-m Lith. qůděs--mė-s O.C.Sl. cělěch-ŭ, Gr. ε-κόντσ-α Lat. fīnīr-e-m Lith. dalýs--me O.C.Sl. gostich- $\ddot{u}$ , Gr.  $\dot{\epsilon}$ - $\delta \dot{\alpha} \times \rho \bar{v} \sigma$ - $\alpha$ , Gr.  $\dot{\epsilon}$ - $\mu \dot{l} \sigma \vartheta \omega \sigma$ - $\alpha$  Lith. jůků's-me (cp. § 773 p. 290 f.). Venetian zonas-to 'donavit' (cp. p. 53 footnote 2).

As this s-formation must be regarded as original for stems with the suffixes  $-\bar{a}$ -,  $-\bar{e}$ -  $-\bar{o}$ -, so too for certain roots with a dental suffix. From  $qe\bar{i}$ -t- to observe' (§ 680 p. 212): Skr.  $3^{rd}$  sing.  $\dot{a}$ - $c\bar{a}it$ , O.C.Sl.  $\dot{c}is$ - $\ddot{u}$ . From  $\dot{i}e\dot{u}$ -dh- disturb, set moving, drive' (§ 689 p. 219 f.): Skr.  $\dot{a}$ - $y\bar{o}ts$ -am yuts-mahi, Lat.  $\dot{j}uss$ - $\bar{i}$  O.Lat.  $\dot{j}ous$ - $\bar{i}$ .

Of the remaining s-forms with roots having some extra suffix, those which are associated with Classes XV and XVI deserve particular mention. Skr. 1st pl. mid. á-yunkṣ-mahi Lat. jūnx-ī Lith. jūnks-me beside Skr. yunk-té Lat. jungō

Lith. jùngiu, from V jeug- 'yoke, join'; cp. the associated forms Skr. ά-yōkṣ-am Gr. ἔ-ζενξ-α § 812 p. 349. Gr. ἕ-πλαγξ-α Lat. plānx-ī beside Gr. πλάζω for \*πλαγγ-μω Lat. plangō, from V plāq- plāg- 'strike': cp. Gr. ἕ-πληξ-α Lith. plāks-me. Of course these examples, with many more from Greek, Latin, or Baltic, may all be regarded as new analogical formations in the separate languages.

§ 814. Aryan. First, a few more examples to supplement those given in §§ 812 and 813. V dher- 'hold fast': Skr.  $\acute{a}$ - $dh\bar{a}r\check{s}$ -am (gramm.), Avest.  $3^{rd}$  sing.  $d\bar{a}r^e\check{s}$ -t  $d\bar{o}r^e\check{s}$ -t ( $\bar{o}$  for  $\bar{a}$ ) O.Pers. 1st sing. mid. a-darš-iy (O.Pers. darš- may be either \*dhers- or \*dhrs-). / per- 'bring across, transfer, translate': Skr. conj. párš-a-t(i): Gr. ε-πειο-α. V μεn- 'win, conquer': Skr. mid. vás-i conj. vás-a-t(i) opt. vas-ī-mahi vas-ī-mahi, Avest. Gathic conj.  $v\bar{e}ngh-a-it\bar{\imath} = Skr. v\acute{a}sati.$  V gem- 'go': Skr. mid.  $\acute{a}$ -gas--mahi á-qas-mahi, Avest. conj. Gath. jērəqha-itī. Skr. yam-'cohibere':  $\acute{a}$ - $y\bar{a}s$ -am 3<sup>rd</sup> sing.  $\acute{a}$ - $y\bar{a}n$  conj. yas-a-t(i). Ar.  $na\dot{z}$ lead: Skr. á-nāiš-am mid. á-nēš-i conj. néš-a-t(i), Avest. conj.  $nae\check{s}-a-\rlap/D$ . Skr.  $ja\underline{i}$ - 'conquer':  $\acute{a}-j\bar{a}i\check{s}-am$  mid.  $\acute{a}-j\bar{e}\check{s}-i$  conj.  $j\acute{e}\check{s}-i$ -a-t(i). Skr.  $dh\tilde{\imath}$ - 'notice': Avest.  $2^{nd}$  sing.  $d\tilde{a}i\dot{s}$ , cp. partic. dīšemna- Skr. dhīšamāņa-s § 833. Avest. prau- 'nourish' (pr-u-beside pr-a-, cp. § 579 p. 121 f.): 2nd pl. act. praos-ta 3<sup>rd</sup> sing. mid. *praoš-ta*. Skr. sarj- 'let go': Skr. á-srākṣ-am mid.  $\acute{a}$ -srk $\check{s}$ -i conj. srak $\check{s}$ -a-t(i).  $\lor pre\hat{k}$ - 'ask':  $\acute{a}$ - $pr\bar{a}k$  $\check{s}$ -ammid. á-praš-ta, Avest. mid. fraš-ī fraš-tā imper. ferašvā. Skr. chand- Avest. sand- 'appear': Skr. 2nd and 3rd sing. á-chān conj. chants-a-t(i), Avest. 2nd and 3rd sing. sqs. V deik- 'show, point': Skr. mid.  $\acute{a}$ -dikṣ-i, Avest. opt. di-yā- $\rlap/p$ : Gr.  $\rlap/\epsilon$ - $\delta\epsilon\iota$ - $\xi$ -a etc., see § 812 p. 349. Skr.  $vi\dot{s}$ - 'enter': 1st pl. mid.  $\acute{a}$ - $vik\dot{s}$ -mahi. Vueq- 'speak': Avest. conj. vaxš-u-p. V ped- go': mid. α-pats-i. V bhag- 'enjoy': Skr. ά-bhākš-am 2nd and 3rd sing. á-bhāk mid. á-bhakṣ-i conj. bhakṣ-a-t(i), Avest. 3rd sing. mid. baxš-ta. V dhē- 'place' and dō- 'give': Skr. á-dhās-am á-dhiš-i  $\acute{a}$ - $di\check{s}$ -i  $d\bar{a}s$ -a-t(i), Avest.  $2^{\rm nd}$  sing. opt. mid.  $d\bar{a}h$ - $\bar{i}$ - $\check{s}a$ : Lat. con-derem etc., see § 812 p. 350.  $\sqrt{k\bar{o}}$  'sharpen, cut':

Avest.  $2^{nd}$  pl.  $s\bar{a}z-d\bar{u}m$ . Skr.  $h\bar{a}$ - 'go, yield'  $(j\acute{a}-h\bar{a}-ti\ ja-hi-mas)$ :  $\acute{a}-h\bar{a}s-am$   $3^{rd}$  sing.  $\acute{a}-h\bar{a}s$   $1^{st}$  pl.  $\acute{a}-h\bar{a}s-ma$ .

§ 815. There are many deviations in Sanskrit and Avestic 1) from the original distribution of these three vowel grades, as set forth in § 811.

The weak stem (as Skr. ta-s- from 1/ten-) is hardly found outside its original sphere; but no longer in the plural and dual indic. act., only in the Indic. Middle and the Optative: e. g. Skr. á-dhiṣ-i dhiṣ-īya á-gas-mahi mas-īya, Avest. a-mēh-maidī diṣ-yā-p. Irregular: Skr. 2<sup>nd</sup> sing. conj. mid. dṛkṣ-a-sē instead of \*drakṣ-a-sē.

In Sanskrit the  $\bar{a}$ -grade (as  $t\bar{q}$ -s-) spread from the Sing. indic. act. to the Plural and Dual; e. g.  $\acute{a}$ chāntsur  $\acute{a}$ jāiṣma  $\acute{a}$ bhārṣṭām following the sing.  $\acute{a}$ chāntsam etc.; cp.  $\acute{a}$ dhāma instead of \* $\acute{a}$ -dhi-ma following  $\acute{a}$ -dhā-m (§ 495 p. 55), spar-tam instead of spṛ-tam (§ 499 p. 62), and the like. But beyond this line Sanskrit has very few other examples of  $\bar{a}$ ; one is mid.  $\acute{a}$ -yās-i. In the Gatha dialect  $\bar{a}$  is quite restricted to its original sphere. But in later Avestic it has crept into  $n\bar{a}$ - $\bar{s}$ - $\bar{c}$ -ma, if this be the optative to an indic. \* $n\bar{a}$ - $\bar{s}$ -em (O.C.Sl.  $n\bar{e}$ s- $\bar{u}$ ); cp. Bartholomae, Stud. idg. Spr., II 166.

The a-grade (as Skr. ta-s-) spread from the Conjunctive, where it is still the usual form in Sanskrit and Avestic, through the whole Indicative and Optative moods; and in particular it occurs with the weak stem; e. g. indic.  $3^{\rm rd}$  sing. Skr.  $\acute{a}$ -mas-ta Avest. mas-tā opt. Skr. mas- $\bar{\imath}$ -máhi (variant, Avest. Gath. a-m $\bar{\imath}$ h-maid $\bar{\imath}$  Skr. mas- $\bar{\imath}$ ya) following the conj. Skr.  $m\acute{a}$ s-a-t $\bar{\imath}$ , Skr.  $1^{\rm st}$  pl.  $j\bar{\imath}$ es-ma (beside  $\acute{a}$ - $j\bar{\imath}$ is-ma), Avest. Gath.  $2^{\rm nd}$  pl. praos-tā,  $3^{\rm rd}$  pl.  $v\bar{\imath}$ ngh-en; within the orig. sphere of the  $\bar{a}$ -grade, Skr.  $\acute{a}$ -ras-am  $\acute{a}$ -y $\bar{\imath}$ ks-am.

§ 816. In Sanskrit, the  $2^{nd}$  and  $3^{rd}$  sing. indic. act. became identical by regular change  $(\acute{a}j\vec{a}i\dot{\xi}=*a-j\bar{a}i\dot{\xi}-\dot{\xi}$  and  $*a-j\bar{a}i\dot{\xi}-t)$ ; and if a consonant preceded the aorist sign, the aorist sign was dropt as well as the personal ending  $(\acute{a}r\bar{a}ik=*a-r\bar{a}ik\dot{\xi}-\dot{\xi})$  and

<sup>1)</sup> Here we have to disregard Old Persian, from lack of material.

Brugmann, Elements. IV. 23

\*a-rāikṣ-t), and sometimes this was done even to the root-final  $(\acute{a}-ch\bar{a}n)=*a-ch\bar{a}nts-s$  and \*a-chānts-t). The inconvenience thus caused served to root the forms with -s- $\bar{\imath}$ - $\dot{\imath}$ -s- $\bar{\imath}$ -t firmly in later Vedic, and these are the only ones used in classical Sanskrit (except  $bh\bar{a}i\dot{\imath}$  in the phrase  $m\bar{a}$   $bh\bar{a}i\dot{\imath}$  'fear not'); e. g.  $\acute{a}-j\bar{a}i\dot{\imath}$ - $\ddot{\imath}$ - $\ddot{\imath}$ - $\ddot{\imath}$ -t. These endings were borrowed from the  $si\dot{\imath}$ -aorist (§ 839). For instance,  $\acute{a}y\bar{a}s\bar{\imath}$ - $\dot{\imath}$ - $\acute{a}y\bar{a}s\bar{\imath}$ -t belonged originally to the series  $\acute{a}y\bar{a}si\dot{\imath}$ -am  $\acute{a}y\bar{a}si\dot{\imath}$ -ma etc., next displaced  $2^{nd}$  and  $3^{rd}$  sing.  $\acute{a}y\bar{a}s$  (which belonged to the  $1^{st}$  sing.  $\acute{a}y\bar{a}s$ -am); and the relation between  $\acute{a}y\bar{a}s\bar{\imath}$ - $\dot{\imath}$ - $\dot{\imath}$ - and  $\acute{a}y\bar{a}s$ -am produced  $\acute{a}j\bar{a}i\dot{\imath}\bar{\imath}$ - $\ddot{\imath}$ - $\dot{\imath}$ -t beside  $\acute{a}j\bar{a}i\dot{\imath}$ -am,  $\acute{a}bh\bar{a}r\dot{\imath}$ - $\ddot{\imath}$ - $\ddot{\imath}$ -t beside  $\acute{a}bh\bar{a}r\dot{\imath}$ -am, and so forth.

A few times the  $2^{\text{nd}}$  sing. in  $-\bar{a}i\dot{s}$  (for \*- $\bar{a}i\dot{s}$ - $\dot{s}$ ) produced a  $3^{\text{rd}}$  sing. in  $-\bar{a}i$ -t, as  $\acute{a}n\bar{a}it$  by complementary analogy from  $\acute{a}n\bar{a}i\dot{s}$  ( $n\bar{\imath}$ - 'to lead').\(^1) As this formation touched only roots with an i-vowel, it may be that the type was set by preterites like  $\acute{a}j$ - $\bar{a}i$ -t beside  $\acute{a}j$ - $\bar{a}i$ - $\ddot{s}$  from aj- 'agere' (§ 572 p. 114).

§ 817. s-aorists from Roots with characteristic, or from Present Stems.

Forms with the suffixes  $-\bar{a}$ -,  $-\bar{e}$ -  $-\bar{o}$ - have been cited in

<sup>1)</sup> Analogous formations outside the s-aorist are collected by Joh. Schmidt in Kuhn's Zeitschr. XXVI 403. Compare further 1st sing. achinam (Maha-Bh.) beside 3rd sing. a-chinat = \*u-chinat-t from chid- 'to cut off'.

§ 813 p. 351; add to those Skr.  $\acute{a}$ -y $\vec{a}$ s-am conj. y $\acute{a}$ s-a-t(i) from y- $\vec{a}$ - 'to go',  $\acute{a}$ -dhy $\vec{a}$ s-am from dhy- $\vec{a}$ - 'to think'.

With the suffix  $-\bar{\imath}$ -  $-\bar{\alpha}i$ - (§ 498 pp. 61 f.); Skr.  $\acute{a}$ -grabh- $\bar{\imath}$ - $-\check{\$}$ -am  $\acute{a}$ -grah- $\bar{\alpha}i$ - $\check{\$}$ -am beside  $\acute{a}$ -grabh- $\bar{\imath}$ -t  $\acute{a}$ -grh- $\bar{\imath}$ -tām from grabh- 'to seize' (§ 574 p. 116).

Skr. á-yunkṣ-mahi from yuj-, see § 813 p. 351. Skr. á-stāmps-am beside stambha-tē 'fortifies or strenghthens itself',  $\lor$  stebh-, see § 629 p. 166.

O.Pers. 3<sup>rd</sup> sing. a-kū-nau-š 'he made' a-darš-nau-š 'he durst' come from nu- presents (§ 640 p. 178). And so doubtless 3<sup>rd</sup> sing. -āiš 'he went' 3<sup>rd</sup> pl. -āiša arose in Persian itself in association with the present stem ai-(imperf. -āy-am), and is therefore not an orig. s-aorist as might be supposed from Skr. 3<sup>rd</sup> sing. mid. adhy-āiṣṭa (gramm.). The origin of these new forms lies perhaps in certain pairs of imperfect forms; 2<sup>nd</sup> sing. \*āiš 3<sup>rd</sup> sing. \*āi, 2<sup>nd</sup> sing. \*akūnauš 3<sup>rd</sup> sing. \*akūnau running parallel to 2<sup>nd</sup> sing. \*abara 3<sup>rd</sup> sing. abara, 2<sup>nd</sup> sing. \*adadā 3<sup>rd</sup> sing. adadā, and the like. If there were connected aorist forms such as 2<sup>nd</sup> and 3<sup>rd</sup> sing. \*a-nāiš = Skr. á-nāiš, the above 2<sup>nd</sup> sing. in -š might easily be looked upon as an s-preterite, which its use for both 2<sup>nd</sup> and 3<sup>rd</sup> sing. suggested. After that, -āiš would be complemented by 3<sup>rd</sup> pl. -āiša.

§ 818. Armenian. So far no s-preterites have been found. Compare the remarks on the e-aorist, § 672 p. 204.

§ 819. Greek. First, a few examples shall be added to those given in §§ 812 and 813. Hom. ἔ-κεφσ-α Att. ἔ-κεφ-α from κείφω 'I shave' fut. κεφῶ. Hom. ἕ-κελσ-α from κέλλω 'I move, drive'. ἔ-στειλ-α (ἔστελσεν in Hesych.) from στέλλω 'I order, arrange'. ἔ-πηλ-α for \*ἐ-παλσ-α mid. πάλτο from πάλλω 'I shake, brandish'. On the relation of Lesb. ἔφθεφα Att. ἔφθειφα Dor. ἔφθηφα to Hom. ἔκεφσα, and of Lesb. ἔστειλα Att. ἔστειλα Dor. ἔστηλα to Hom. ἔκελσα, and such like, see I § 563.3 p. 419, Wackernagel, Kuhn's Zeitschr. xxix 127 ff., the Author, Gr. Gr. ² p. 63. ἔμεινα Lesb. ἔμεννα Dor. ἔμηνα for \*ἐ-μενσ-α from μένω 'I remain'. So ἔκτεινα from κτείνω

'I kill',  $\tilde{\epsilon}\nu\epsilon\mu\alpha$  from  $\nu\dot{\epsilon}\mu\omega$  'I divide'.  $\tilde{\epsilon}-\nu\epsilon\nu\sigma$ - $\alpha$  from  $\nu\dot{\epsilon}(F)$ - $\omega$ 'I swim': Skr. mid. ά-snōš-ţa (gramm.). ε-πνευσ-α from  $\pi \nu \dot{\epsilon}(F)$ - $\omega$  'I blow, breathe'.  $\ddot{\epsilon}$ - $\pi \epsilon \varrho \sigma$ -a from  $\pi \dot{\epsilon} \varrho \vartheta \omega$  'I sack, destroy'. ε-τοεψ-α from τοέπω 'I turn': Lat. torsī for \*torcs-ī from torqu-eō. ε-γραψ-α from γράφ-ω 'I write', V gerph-. ε-φρασ-α from φράζω 'I give to understand, show' for \*φραδ-ιω: Lith. 1st and 2nd pl. injunct. (fut.) girs-me -te from girstù 'I apprehend', V gherd-. βράξαι συλλαβεῖν (Hesych.) beside aor. βρακεῖν: Skr. á-mrākṣ-ī-t á-mārkṣ-ī-t from mṛṣá-ti 'touches, grasps' (§ 527 p. 90). ε-σπεισ-α Cret. ε-σπενσ-α from σπένδω I offer, pour'.  $\ddot{\epsilon} - \pi \epsilon i \sigma - \alpha$  from  $\pi \epsilon i \vartheta \omega$  'I persuade',  $\bigvee bheidh$ -; ἔπεισα instead of \*ἔφεισα like Skr. ά-dukṣ̌a-t instead of ά-dhukṣ̌a-t, which is also found (§ 659 p. 195). ε-γενσ-α from γενω 'I give to taste', V ĝeus-. ενο-α from ενω 'I burn': Lat. ussī from  $\bar{u}r-\bar{o}$ ,  $\vee eus-$ .  $\ddot{\varepsilon}-\gamma\lambda\nu\psi-\alpha$  from  $\gamma\lambda\dot{\nu}\phi\omega$  'I incise, engrave'.  $\ddot{\varepsilon}$ -ζεσ-σα εζεσα from ζε(σ)- $\omega$  'I boil, bubble'. Θέσσαντο for \*9ετσ- from  $9 \xi \sigma \sigma \epsilon \sigma 9 \alpha \iota$  'to beseech',  $\vee$  ghedh- (§ 706 p. 234). έ-δεξ-άμην δέκτο for \*δεκσ-το from δέχομαι 'I receive'. έ-κλαυσ-α from κλαίω 'I weep' for \*κλα Ε-μω, ήσ-άμην ἄσ-μενο-ς from ηθομαι 'I rejoice': Lat.  $su\bar{a}s-\bar{\iota}$  from  $su\bar{a}d-e\bar{o}$ .  $\ddot{\epsilon}-\pi\eta\xi-\alpha$   $\pi\tilde{\eta}$ κτο for \* $\pi\eta\varkappa\sigma$ -το from  $\pi\eta'\gamma\nu\bar{\nu}\mu$  'I fix'  $\bigvee p\bar{a}\hat{k}$ -  $p\bar{a}\hat{g}$ -.  $\check{\epsilon}$ - $\delta\eta\sigma$ -a from δί-δη-μι 'I bind',  $\bigvee d\bar{e}$ -.

§ 820. The  $\alpha$  which is seen after  $\sigma$  came from the  $1^{\text{st}}$  sing. in  $-\sigma$ - $\alpha$  and the  $3^{\text{rd}}$  pl. in  $-\sigma$ - $\alpha\nu$  (whence, by complementary analogy,  $-\sigma\alpha$ - $\varsigma$   $-\sigma\alpha$ - $\tau\varepsilon$   $-\sigma\alpha$ - $\sigma$  etc.). According to Osthoff, Perf. 407,  $\alpha$  is regular also in  $-\sigma\alpha\mu\varepsilon\nu$   $-\sigma\alpha\mu\varepsilon\theta$   $-\sigma\alpha\mu\eta\nu$ , which endings he derives from \*-s- $\eta$ men and so forth. The  $3^{\text{rd}}$  sing. in  $-\sigma\varepsilon$  properly belongs to the thematic conjugation;  $\xi$ - $\delta\varepsilon\iota\xi$ - $\varepsilon$  is like Skr.  $\dot{\alpha}$ - $dik\dot{\varsigma}a$ -t Lat.  $d\bar{\imath}xi$ -t (see § 833). The  $2^{\text{nd}}$  and  $3^{\text{rd}}$  sing. \* $\xi$ - $\delta\varepsilon\iota$   $\varepsilon$ - $\varepsilon$  and \* $\xi$ - $\delta\varepsilon\iota$   $\varepsilon$ - $\varepsilon$  were dropt for clearness; and it was the perfect forms ( $\lambda\dot{\varepsilon}\lambda o\iota \pi\varepsilon$ :  $\lambda\dot{\varepsilon}\lambda o\iota \pi\alpha$ ) that caused a thematic form to take root in the  $3^{\text{rd}}$  singular and nowhere else.

The Conjunctive in Homer and elsewhere still shows the thematic vowel, as τείσο-μεν, instead of which we have later τείσω-μεν (§§ 914, 923). We have already seen (§ 747 p. 269)

that the indic fut. in  $-\sigma\omega$  was in all probability partly the conjunctive of the s-aorist; compare further in § 833.

The optative in  $-\sigma\alpha\mu\mu$  is a re-formation on the analogy of the optative in  $-\sigma\mu\mu$ ; see § 944. On forms like  $\delta\epsilon\ell\xi\epsilon\alpha\nu$ , see § 836.

The Participle Active shows in all its cases -σαντ-; see II § 126 pp. 399 f., and IV § 1099.6.

Even before α had spread by analogy in the system of the σ-aorist, σ had dropt between a root-final consonant (explosive, liquid, or spirant) and a personal ending with consonant initial (I § 566 p. 423). Some forms of this kind lasted into the historical period: Hom. λέκτο 'laid itself' for \*λεκσ-το, imper. λέξο for \*λεκσ-σο, partic. -λέγμενο-ς for \*λεκ(σ)-μενο-ς, beside ἔλεξα ελέξατο; ἔμεικτο 'mixed itself' for \*ε-μεικσ-το, ἐμείχθης for \*ε-μεικο-σ-θης (§ 589 p. 130), beside ἔμειξα; πάλτο for \*παλσ-το, beside ἔπηλα; ἄρμενο-ς for \*ἀρσ-μενο-ς, beside ἦρσα.

In forms like ἔστησα ἔδησα ἔμιησα ἐτίμησα ἐμίσθωσα (§§ 819, 822),  $\sigma$  seems to have been due to the analogy of consonantal stems, as ἔτερψα ἐκήρῦξα (cp. I § 564 p. 420), just as στήσω ττμήσω got their  $\sigma$  by analogy of τέρψω κηρύξω (§ 755 p. 274). But  $\sigma$  drops, as it should, in ἤδεα for \*ἐ-Γειδεσ-α (§ 836).

Remark. El.  $\epsilon\pi\sigma i \gamma \alpha$  has not kept unaltered the Idg. sounds. It is far more likely that  $\sigma$  disappeared in Elean itself; in the same way the change of  $\sigma$  to h in Lac.  $\epsilon\nu t \nu \alpha \epsilon$  and Argive  $\epsilon\pi\sigma t f \gamma \epsilon$  belonged to these dialects separately.

The question might be asked whether the  $\sigma$  of  $\tilde{\epsilon}\mu\nu\eta\sigma\alpha$   $\tilde{\epsilon}\mu\nu\eta\sigma\alpha$  may not have returned to them unweakened at some time when the forms  $^*\dot{\epsilon}$ - $\mu\nu\alpha\sigma(-\epsilon)$   $^*\dot{\epsilon}$ - $\mu\nu\alpha\sigma(-\epsilon)$   $^*\dot{\epsilon}$ - $\mu\nu\alpha\sigma-\tau\epsilon$   $^*\dot{\epsilon}$ - $\mu\nu\alpha\sigma-\tau\sigma\nu$  existed; just as  $^{\dagger}\eta\sigma\alpha$  (beside Boeot.  $\pi\alpha\varrho$ - $\epsilon\tilde{\iota}\alpha\nu$ ) got back its  $\sigma$  by analogy of  $^{\dagger}\eta\sigma\tau\epsilon$   $^{\dagger}\eta\sigma\tau\sigma\nu$   $^{\dagger}\eta\sigma\tau\eta\nu$ . I put the counter question, why we have  $^{\dagger}\eta\delta\epsilon\alpha$ , not  $^{\dagger}\eta^{\dagger}\delta\epsilon\sigma\alpha$ . It cannot be made probable that this es-formation was found in the singular only — if so, the state of things would differ widely from the s-aorist.

§ 821. The pr. Idg. differences in root-gradation (§ 811 p. 348) were largely levelled out in Greek.

Often the vocalism of the whole agrist was decided by the Present; and we saw in § 748 p. 270, that where this

dependence upon the present stem is seen, the σ-future always goes along with the aorist. Compare ἔγραψα ἔγλυψα ὤμορξα ἔστιξα ἔσχισα ἔπηλα (for \*ἐπαλσα) with γράφω γλύφω ὀμόργνῦμι στίζω σχίζω πάλλω, but ἔτερψα ἔδειρα (for \*ἐδερσα) ἔστειξα ἔφθειρα (ἔφθερσα) ἔστειλα (ἔστελσα) beside τέρπω δέρω στείχω φθείρω στέλλω. Thus there is no ground for believing that, say, ἐσχισάμην inherited from the parent language its grade σχισ-(cp. Skr. áchitsi), or that the conj. δείρω inherited \*δερσ-(cp. Skr. dárš-α-t).

The vocalism is independent of the present in žreioa beside τίνω, or ἔδειξα beside Cret. -δίκνῦτι (Att. δείκνῦσι), amongst other examples. The  $\varepsilon$  of these forms was carried right through However, it need not come exclusively the agrist system. from the Conjunctive;  $\eta$  may have been shortened to  $\varepsilon$  in the indic. ἔδειξα ἔτεισα, and in ἔζευξα ἔπλευσα ἔκερσα etc., by the rule laid down in vol. I § 611 p. 461. In this case ἔζενξα would be equivalent to Skr. áyāukšam. This shortening cannot have taken place in the 1st sing. ἔμεινα ἔνειμα for pr. Gr. \* $\dot{\epsilon}$ - $\mu$ \varepsilon \sigma -\varepsilon \varepsilon \v Att. μην-ός (see loc. cit.). But it may have come about in the 2<sup>nd</sup> and 3<sup>rd</sup> sing., at a time when these took the forms \*¿-unvo(-c) and \*ε-μηνσ(-τ), etc. On this view, the old vowel gradation must have been kept, or undergone nothing but regular change, in the conj. act. and mid. δείξω δείξομαι and in the sing. indic. act. ἔδειξα; while there has been analogical influence in the plural and dual indic. act., and in the whole of the indic. middle, εδείξαμεν etc., εδειξάμην etc.

Survivals of the original weak grade are  $i\sigma\alpha\nu$ ,  $\eta\sigma\alpha\nu$  for  $*\eta F\iota\sigma\alpha\nu^{1}$ ) beside  $\epsilon \epsilon\iota\sigma\alpha\mu\nu$ , Hom.  $\epsilon\sigma\tau\alpha\sigma\alpha\nu$  beside  $\epsilon\sigma\tau\eta\sigma\alpha$ ,  $\sigma\sigma\mu\epsilon\nu$ 0- $\sigma$ 0 beside  $\sigma\sigma\mu\nu$ 0  $\sigma\sigma\sigma\sigma$ 0 (Lat.  $\sigma\sigma\sigma\sigma\sigma$ 0).

<sup>1)</sup> On  $i\sigma\sigma\sigma\iota$  Dor. 1st sing.  $i\sigma\bar{a}\mu\iota$  etc., which are due to the analogy of  $i\sigma\sigma\nu$ , see § 863.

- § 822. Many  $\sigma$ -aorists come from roots with characteristic, or from present stems of different kinds (usually these have a similar  $\sigma$ -future associated with them).
- (1) Forms with Reduplication. ἐδίδαξα from διδάσιω 
  The teach' for \*δι-δακ-σκω Class XXIII (fut. διδάξω). ἐτίτηνα 
  from τιταίνω 'I stretch' for \*τι-ταν-μω Class XXVII B. 
  Hom. τέτρηνα from τε-τραίνω 'I bore', ep. ἔξηνα under (2). 
  Hom. ἤιξα Att. ἤξα from ἀίσσω 'I rush wildly' for \*Fαι-Fικ-μω, ἐποίφνξα from ποι-φύσσω 'I blow, snort', ἐποίπν $\bar{v}$ σα from ποι-πν $\bar{v}$ τ΄ το μπ, pant' Class XXVII A (fut. ἀίξω ἀξω etc.).
- (2) With a Nasal Suffix. ἔκλῖνα, ἔφηνα for \*ἐ-κλινσ-α, \*ἐ-φανσ-α, from κλίνω 'I bind' for κλι-ν-μω, φαίνω 'I cause to appear' for \*φα-ν-μω. ἔξηνα for \*ἐ-ξανσ-α from ξαίνω 'I seratch, comb' for \*ξ-αν-μω. ἔφηνα from ὑφ-αίνω 'I weave' (on the α of ἔφανα see the Author, Gr. Gr. 2 58 p. 71, Solmsen, Kuhn's Zeitschr. xxix 66 f.). For these presents in -ν-μω and -αν-μω see under Class XXIX § 743 pp. 265 f. The aorists were formed on the analogy of ἔκτεινα from κτείνω, ἔπηλα from πάλλω, and so forth (§ 611 p. 150). The futures of these are κλινῶ φανῶ ὑφανῶ, § 757 p. 276 f.

Remark.  $\alpha \ddot{\nu}_{\eta r\alpha}$  for  $*(\hat{r})$ - $\sigma \alpha \nu \sigma - \alpha r - \sigma \alpha$  should be compared with the Lith. 1st and 2nd pl. injunct. (fut.)  $s\alpha \ddot{u}s - \ddot{q} - s - me$  -te. But these forms are not equivalent. For \* $s\alpha us - \eta - s$ -, which may be the ground-form of the Lith. aorist stem, would become \* $\alpha \ddot{\nu} - \alpha \sigma$ - in Greek. The Greek aorist was built upon the present, at a time when  $-\eta - \dot{q}\bar{v}$  had become  $-\alpha r - \dot{q}\omega$  ( $-\alpha \iota r\omega$ ).

- (3) With Nasal in the root (cp. § 813 p. 351 f.). ἔπλαγξα from πλάζω 'I strike, beat' for \*πλαγγ-μω Class XXIX: Lat. plānx-ī. ἔκλαγξα (fut. κλάγξω) from κλάζω 'I make a sound, cry' for \*κλαγγ-μω Class XXIX and beside κλαγγ-άνω Class XIV. ἔσφιγξα (fut. σφίγξω) from σφίγγω 'I bind, tie' Class XVI. See § 621 p. 158, § 628 p. 166, § 631 p. 167, § 744 p. 266.
- (4) Later group of Denominatives. Following ἔχτεινα: κτείνω, ἔπηλα: πάλλω, ἔστειλα: στέλλω, ἔπληξα: πλήσσω, ἔσφαξα: σφάζω were formed ὧνόμηνα from ὀνομαίνω 'I name', ἐτεκτηνάμην from τεκταίνομαι 'I carpenter' (ἐσήμᾶνα beside ἐσήμηνα like τψανα, see above), ἤγγειλα from ἀγγέλλω 'I announce', ἐχήστξα from

κηρύσσω 'I proclaim', ἥρπαξα from άρπάζω 'I seize', ἐσάλπιγξα from σαλπίζω 'I sound the trumpet' (for \*σαλπιγγ-μω), ἐτέλεσσα Att. ἐτέλεσα from τελέω -ω 'I finish' (for \*τελεσ-μω). The futures are ὀνομανῶ τεκτανοῦμαι ἀγγελῶ like κτενῶ etc., but κηρύξω ἀρπάξω σαλπίγξω τελέσσω like πλήξω etc. Compare § 756.3 p. 275.

Many analogical changes took place in the aorist forms from presents in  $-\zeta \omega$ , because these represent both  $-\delta - \iota \omega$  and  $-\gamma - \iota \omega$ ; e. g.  $\eta \varrho \pi \alpha \sigma \alpha$  instead of  $\eta \varrho \pi \alpha \xi \alpha$  following  $\dot{\epsilon} \delta \dot{\iota} \iota \alpha \sigma \alpha$  ( $\delta \iota \iota \alpha \dot{\epsilon} \zeta \omega$  for  $-\alpha \delta - \iota \omega$ ), and  $\dot{\epsilon} \delta \dot{\iota} \iota \alpha \delta \dot{\epsilon} \alpha$  instead of  $\dot{\epsilon} \delta \dot{\iota} \iota \alpha \sigma \alpha$  following  $\eta \varrho \pi \alpha \xi \alpha$ . The ending  $-\xi \alpha$  became very common for  $\delta$ -verbs in Doric and the N.-W. Greek dialects. The  $\sigma$ -future followed suit.

- (5) σ-aorists from stems having the suffixes  $-\bar{a}$ -,  $-\bar{e}$  or  $\bar{o}$  go back to the pre-Greek period. To those cited in § 813 p. 351, add the following: ἔμνησα Dor. ἔμνᾶσα from mn- $\bar{a}$   $\sqrt{men}$  'think, mean'; ἔβησα Dor. ἔβασα from g- $\bar{a}$  'to go' (§ 497 Rem. p. 57); ἔζησα ἔζωσα from  $g\underline{i}$ - $\bar{e}$   $g\underline{i}$ - $\bar{o}$   $\sqrt{ge\underline{i}}$  'live'; ἔχοησα from χρ- $\eta$  'to give an oracle'. Amongst dissyllabic aorist stems with these suffixes, those in  $-\eta$ - $\sigma$  take a prominent place; as ἐμέλησε from μέλει 'it is a care', ἐθέλησα from θέλω 'I wish', ἐδέησα Hom. Aeol. ἐδεύησα from δέω Hom. Aeol. δεύω 'I lack, need', with which were associated forms made from present stems with some characteristic, as καθιζήσας from ζω 'I place' for \*si-zd- $\bar{o}$ , ἐτύπτησα from τύπ-τω 'I strike', ἐχαίρησα from χαίρω 'I rejoice' for \*χαρ-μω, ωζησα from ὅζω 'I smell' for \*σο'-μω. With these go similar futures, as μνήσω βήσομαι μελήσει, see § 750.1 p. 271, § 756.1 p. 275.
- (6) Along with the forms mentioned under (5) go the aorists of later denominatives, as  $\vec{\epsilon}\tau\vec{\iota}\mu\vec{\alpha}\sigma\alpha$  Ion.  $\vec{\epsilon}r\vec{\iota}\mu\eta\sigma\alpha$ ,  $\vec{\epsilon}\phi\hat{\iota}\lambda\eta\sigma\alpha$ ,  $\vec{\epsilon}\mu\hat{\iota}\sigma\theta\omega\sigma\alpha$ ,  $\vec{\epsilon}\delta\alpha\nu\bar{\iota}\sigma\alpha$ ,  $\vec{\epsilon}\kappa\dot{\nu}\bar{\iota}\sigma\alpha$ . See § 756. 5 p. 276, § 773 p. 290, § 813 p. 351.
  - § 823. Italic. Three Italic categories fall here.
- (1) Forms of the perf. indic. ending in -s-ī (to the building up of which a great many things have gone, see § 367). We have already mentioned dēmpsī prompsī serpsī

torsī mulsī vīsī dīxī ussī vēxī cōxī -rēxī -lēxī plēxī suāsī jousī jussī, jūnxī ē-mūnxī plānxī; §§ 812, 813. Other examples are: mānsī from muneō. tempsī from temnō. mixī (mīxī?) and mīnxī from mingō V meiĝh- 'to stale': Gr. ωμιξα (ī?), Lith.  $1^{st}$  and  $2^{nd}$  pl. injunct. (fut.)  $m\bar{i}sz$ -me -te.  $scr\bar{i}ps\bar{i}$  from  $scr\bar{i}b\bar{o}$ .  $d\bar{\imath}$ - $v\bar{\imath}s\bar{\imath}$  from  $d\bar{\imath}$ - $vid\bar{o}$ .  $fr\bar{\imath}x\bar{\imath}$  from  $fr\bar{\imath}g\bar{o}$ : ep. Skr.  $\acute{a}$ - $bhr\bar{a}k\check{\xi}$ -amá-bhārkš-am (gramm.) from bhrjjá-ti (cp. § 524 p. 87). clepsī from clepō: Gr. ἔκλεψα from κλέπ-τω 'I steal'. pēxī from pec-tō: Gr. ἐπεξάμην from πεκ-τέω 'I comb'.  $c\bar{o}n$ - $sp\bar{e}x\bar{\imath}$  from  $-spici\bar{o}$ . ges- $s\bar{\imath}$  from  $ger\bar{o}$  for \* $ges\bar{o}$ . from augeō: Lith. 1st and 2nd pl. injunct. (fut.) áuks-me -te from áugu 'I increase'. haesī for \*haes-sī from haereō. internal nasal (cp. jūnxī etc., above): O.Lat. nīnxi-t from ningui-t  $\sqrt{\text{sneigh-'snow'}}$ : cp. Gr. ἔνειψε (ἔντψε). distīnxī from distinguō: cp. Gr. ἔστιξα from στίζω 'I prick, pierce'. sānxī from sanciō beside sacer.

In the paradigm of  $d\bar{\imath}x\bar{\imath}$  there is not one form which can be held with any safety to be regularly derived from one of the unthematic forms of the pr. Idg. s-aorist. We cannot connect the 1<sup>st</sup> sing. with Skr. mid.  $kr-\bar{s}-\bar{e}$  beside  $\acute{a}-kr-\bar{s}-i$  (§ 656 p. 191), because of its past meaning. It is as impossible to prove that -imus in  $d\bar{\imath}x$ -imus represents a proethnic \*-mmos, as it is to prove that -umer in  $\dot{e}-\delta\epsilon i\bar{\xi}-\alpha\mu\epsilon r$  represents \*-mmen (§ 820 p. 356). The short forms of the 2<sup>nd</sup> pl., e. g.  $d\bar{\imath}xtis$  accestis exclūstis, may, it is true, be regarded one and all as s-aorist forms (cp. Stolz, Lat. Gr.<sup>2</sup> p. 372 footnote 3); but on the other hand there is nothing against the traditional view, namely, that they are contractions of  $d\bar{\imath}xistis$  accessistis exclūsistis (cp. Osthoff, Perf. 216 ff.).

I would suggest that before the s-aorist had been drawn into any close connexion with perfect forms like tu-tud- $\bar{\imath}$  and with aorists like fid-i-t, some thematic forms had intermingled themselves amongst the non-thematic forms of the s-aorist, just as happened in other branches of Indo-Germanic (§ 833). I regard as thematic aorist forms, originally with secondary personal ending,  $d\bar{\imath}xi$ -t and  $d\bar{\imath}xi$ -mus (cp. Skr.  $\acute{a}$ -dik $\ddot{\imath}a$ -t

§ 824. (2) The Conjunctive with -e- -o-, and the Optative with  $-\bar{\imath}$ -.

Lat.  $d\bar{\imath}x\bar{o}$   $d\bar{\imath}xim$ : Gr.  $\delta\epsilon t\bar{\xi}\omega$ . axim: cp. Gr.  $\check{a}\bar{\xi}\epsilon\tau\epsilon$  § 833. empsim,  $in\text{-}c\bar{e}nsim$ ,  $caps\bar{o}$  capsim, ob-jexim,  $fax\bar{o}$  faxitur faxim,  $oc\text{-}c\bar{\imath}sim$ , ausim. Conj.  $d\bar{\imath}x\bar{o}$  beside indic. pres.  $v\bar{\imath}s\bar{o}$  indic. pret.  $d\bar{\imath}xi\text{-}tus$ , like Skr. conj.  $t\acute{a}sa\text{-}t(i)$  beside indic. pres.  $t\acute{a}sa\text{-}ti$  pret.  $(\acute{a}\text{-})tasa\text{-}t$ , see § 833.

The Umbr.-Osc. s-future is also a similar conjunctive (on the disappearance of the conj. vowel, see I § 633 p. 474, § 655.5 p. 503 and the remarks on the ending -e-d of the 3<sup>rd</sup> sing. perf. in § 867.7 below). Umbr. fust fust Osc. fust 'erit' Umbr. 3<sup>rd</sup> pl. furent: cp. Gr. ἔφῦσα etc., § 812 p. 350. Umbr. pru-pehast 'ante piabit'. Osc. deivast 'iurabit', censazet 'censebunt'. Compare the future with -es-, Umbr. ferest Osc. pert-emest § 837. The ending of the 3<sup>rd</sup> pl. Umbr.-ent(i) stands for \*-onti, see § 1022 at the end.

(3) Conjunctive with -ē- (§ 926 b). Osc. fusíd 'foret', cp. § 812 p. 350. Lat. essem, cp. Gr. fut. ĕσσομαι. Lat. ferrem vellem ēssem con-derem (√ dhē-) darem stārem, see § 812 pp. 348 f. With the root-suffixes -ā-, -ē-: in-trārem hiārem flārem nārem arārem juvārem, -plērem nērem flērem vidērem tacērem; then denominatives as plantārem claudērem fīnīrem. See § 813 p. 351. Pelign. upsaseter 'operaretur' or 'operarentur'.

Compare the forms with -es- Lat. agerem viverem, Osc. patensins for \*patenesēnt § 837.

This ē-conjunctive from the s- and es-aorist was very closely connected in Latin with the Infinitive in -se for \*-s-i (loc. sing.); e. g. esse ferre in-trāre -plēre plantāre claudēre fīnīre. The same sort of thing occurs in Aryan and Greek; as Skr. inf. ji-š-ē beside indic. ά-jāiš-am (mid. \*á-jiš-i), inf. r̄nj-ás-ē beside indic. r̄nj-as-ē part. r̄njas-āná-s, Avest. inf. ā nāš-ē ('to make away with') beside nāš-ī-ma (§ 815), Gr. δείξαι μνῆσαι τιμῆσαι κονῖσαι beside ἐδείξα etc. The infinitives belong to nominal s-stems (II § 132 pp. 414, 416, 418, § 162 pp. 489 f.), and are a proof of the etymological sameness of the s-suffix in the verb and in the noun; see § 655 p. 189, § 834.

§ 825. As regards the relation of the vocalism in the root-syllable of the Italic s-forms to that of the parent language (§ 811 p. 348), all is obscure.

The vocalism has been influenced by non-aorist forms in many words; e. g.  $muls\bar{\imath}$  beside  $mulge\bar{o}$  mulctum,  $tors\bar{\imath}$  beside  $torque\bar{o}$  tortum, compared with  $ters\bar{\imath}$  beside  $terge\bar{o}$   $(terg\bar{o})$  tersum. Sometimes the aorist goes along with the to-participle, and is different from the present;  $uss\bar{\imath}: ustu-s$ , but  $\bar{u}r\bar{o}$ ;  $d\bar{\imath}-v\bar{\imath}s\bar{\imath}: d\bar{\imath}-v\bar{\imath}su-s$ , but  $-vid\bar{o}$ ; howbeit,  $m\bar{\imath}s\bar{\imath}$  is different from missu-s.

Whether  $\bar{e}$  in  $-l\bar{e}x\bar{\imath}$   $t\bar{e}x\bar{\imath}$   $v\bar{e}x\bar{\imath}$   $r\bar{e}x\bar{\imath}$  in the Idg.  $\bar{e}$  of O.C.Sl.  $t\check{e}ch\check{u}$  Skr.  $\acute{a}dh\bar{a}k\check{s}am$ , is doubtful in the extreme. It appears to have been imported from forms like  $l\bar{e}g-\bar{\imath}$  beside partic.  $l\bar{e}c-tu-s$ , and suchlike.  $cox\bar{\imath}$  (for \*quex $\bar{\imath}$ ) like Gr.  $\check{\epsilon}n\epsilon\psi\alpha$ , cp. partic. coctu-s (for \*quectu-s).

As regards forms like  $serps\bar{\imath}$   $d\bar{\imath}x\bar{\imath}$  (for  $de\bar{\imath}x$ -) it must be remembered that  $\bar{\imath}$  may have been shortened to e as set forth in vol. I § 612 p. 462, serps- for \* $s\bar{\imath}rps$ - and so on.

§ 826. Keltic. In Irish the only indic. forms we have are the 2<sup>nd</sup> and 3<sup>rd</sup> sing., but without augment, and therefore really injunctive. The 2<sup>nd</sup> sing. is only used as a conjunctive (or hortative), the 3<sup>rd</sup> sing. both as conj. and future. Examples: 2<sup>nd</sup> sing. comēir 'raise thyself' for \*cóm-ecs-recs-s beside

con-ērgim 'I raise myself': Gr. ω̈ρεξα. 2nd sing. tair 'veni' for \*tó-air-incs-s, 3rd sing. tair 'veniat' for \*-incs-t, co-tī 'donec veniat' for \*-t(o)-incs-t beside -icim: cp. Skr. pret. mid. άkṣ-i beside pres. άkṣ-ā-tē from aṣ-nō-ti 'reaches' (§ 659 p. 194). for-tē 'subveniat, iuvet' for \*-steics-t beside tiagim 'I step, go' (for-tiagim 'I come to the help'),  $\sqrt{steigh}$ -: Gr. ĕ-στείξ-α; perhaps by contamination of -tē with the conjunctive tēis (see below) arose -tēi, which is used as equivalent to -tē. do-n-fē 'let him lead us' for \*-vets-t¹) beside fedim 'I bring, lead': Lith. vèsme etc., see § 812 p. 350.

In all persons the Conjunctive is used with conj. meaning, and more rarely as a future. Examples: — from tiagim: sing. 1st pres. -tias 2nd -tēis 3rd (abs.) tēis tēs, pl. 1st -tiasam 2nd -tēsid 3rd -tiasat. On account of the relation between absolute and conjunct inflexion in the present, arose the new forms sing. 1st tiasu 2nd tēisi, pl. 1st tēisme 2nd tēsit. Other instances: no tes 'effugiam' from techim 'I flee': O.C.Sl. tēch-ŭ from teka 'I run, flee': at-resat 'surgent' from at-reig 'raises itself', cp. comēir above; co n-dārbais 'ut demonstres' from du-ad-bat 'demonstrat' (pass. -badar); ma fris-tōssam 'si abiuraverimus' from tongaim 'iuro'.

Again, the so-called t-preterite comes in here, as far as it was derived from the 3<sup>rd</sup> sing. mid. of the s-aorist in \*-s-to; say do-bert 'he brought' for \*-ber-s-to, celt 'celavit' for \*cel-s-to, ro-anacht 'he protected' for \*anek-s-to. See § 506 p. 72 f.

§ 827. Germanic. A survival of the s-aorist is conjectured in O.H.G. scri-r-un 'they cried' opt. scri-r-i (part. pret. gi-scriran) beside pret. sing. srei 'he cried' pres. inf. scrīan 'to cry'; -r- = pr. Germ. -z-, see I § 581 p. 434. Later on, this r- formation got into the verb spīwan 'to spew', the participle being changed from ge-spiwen to ge-spiren (but, vice versa, O.H.G. 3<sup>rd</sup> pl. er-scriwun follows spiwun). See

<sup>1)</sup> The long vowel in  $-f\hat{e}$  is not due to Compensatory Lengthening, but to the fact that monosyllables bearing the chief accent, and ending in a vowel, were all lengthened in Irish (III § 440.2 p. 373).

Joh. Schmidt, Kuhn's Zeitschr. xxv 599 f.; Kluge, Paul's Grundr. 1 375. But this view of *scrirum* is very questionable; see G. Holz, Urgerm. geschloss.  $\bar{e}$ , pp. 47 f.; and Zarncke in P.-B. Beitr. XV 350 ff.

A few s-aorist forms have perhaps contributed to the system of the weak preterite, as Goth. vissa O.H.G. wissa 'he knew', whose plurals wissum wissut wissun may be compared with Gr. i'ouv. Compare § 907.

§ 828. Balto-Slavonic.

In Lithuanian, we find the 1st and 2nd plural and the 1st and 2nd dual injunctive used with future meaning. They have run into one paradigm with the future in -siu (§ 761 p. 278), and in certain dialects appear side by side with the future in -sime -site and -siva -sita. As the Lith. future could be used hortatively in the 1st and 2nd persons, there is the less reason for surprise at this commixture of the injunctive with the future in -sio-. In addition, the 3rd sing. in -s appears to belong to our s-aorist, at least partly. If, for example, we assume that -s comes from -st, it is easy to understand the vowel shortening in bùs (1st sing. búsiu) rìs (1st sing. rýsiu) gaus (1st sing. gausiu) and the like, of which more is said in I § 664.3 p. 523. Then we may compare the use of the future in general statements as kàs võks nepratõps 'the thief never grows rich' with the similar use of the injunctive in Greek (§ 909. 1). And further, this view of the 3rd singular is favoured by the Prussian forms, used exclusively as conjunctive, boūsai (boūsei boūse) 'be he, be they', and the like, which cannot be separated from Lith. su-gausai beside su-gaus etc., whose -ai moreover is the same affix as we see in tasaī beside tàs This would be making  $b\bar{u}s$  for  $b\bar{u}-s-t$ 'the, that' (§ 999). proethnic Baltic.

O.C.Sl. s-aorist forms of this group are the 2<sup>nd</sup> and 3<sup>rd</sup> sing., plur., and dual; as sing. ję ję, pl. jęste jęsę, dual jęsta jęste; but the 1<sup>st</sup> persons are thematic (jęsŭ jęsomŭ jęsově); see § 833.

Of s-forms preserved in both branches we have mentioned in § 812 gis-me -te from genù 'I hunt, drive' O.C.Sl. po-že from

žīn-ją 'I cut, harvest', Lith. ims-me from imù 'I take' O.C.Sl. jes-ŭ from ima 'I take', Lith. płáus-me from płáu-ju 'I rinse' O.C.Sl. pluch-ŭ from plov-a 'I swim, sail', Lith. pa--bùsme from pa-bundù 'I awake' O.C.Sl. bljusŭ from bljuda 'I guard, protect, take care', Lith. vèsz-me from vezù 'I drive' (trans.) O.C.Sl. věs-ŭ from vezą 'I drive' (trans.), Lith. vès-me from vedù 'I lead' O.C.Sl. věs-ŭ from ved-a 'I lead', Lith, dèks-me from deg-ù 'I burn' (trans. and intr.) O.C.Sl. žachu from žeg-a 'I burn' (trans.), Lith. ës-me from ëd-mi ëd-u 'I eat' O.C.Sl. jas-ŭ from jami 'esse', Lith. dés-me from de-d-ù 'I lay' O.C.Sl. dèch-ŭ from dè-ja 'I lay', Lith. spěs-me from spě-ju 'I have leisure' O.C.Sl. spěch-ŭ from spě-ja 'I get on, have success', Lith. dů's-me from dů'du 'I give' O.C.Sl. dach-ŭ from damī 'I give', Lith. stós-me from stó-ju 'I tread' O.C.Sl. stach-ŭ from sta-ną 'I place myself', Lith. bús-me from bú-ti 'to be' O.C.Sl. bych-ŭ from by-ti 'to be', Lith. gýs-me from gy-jù 'I revive, get well' O.C.Sl. žich-ŭ from ži-vą I live'. Forms with -ā-, -ē-, and denominative forms in § 813: Lith. pa-vydésme from pa-výd-žiu 'invideo' O.C.Sl. viděchŭ from viždą 'I see', Lith. lankós-me from lankó-ju 'I try to make soft or malleable' O.C.Sl. ląkach-ŭ from laka-ja 'I cheat, deceive'.

§ 829. Lithuanian. Besides the examples given in § 828 others were given in §§ 812 and 813, as milsz-me from mélž-u 'I milk', sés-me from séd-u 'I place myself, sit', žiós-me from žió-ju 'I open my mouth', gůděs-mė-s from gůdě-jů-s 'I am greedy', jůků's-me from jůků'-ju 'I play, sport'.

The vocalisation of the root in the forms under § 812 is always that of the sio-future. There is no trace left of the Idg. vowel gradation (§ 811 p. 348).

From present stems with internal Nasal: jùnks-me from jùng-iu 'I put in the yoke', skús-me from skùnd-žiu 'I lament' (cp. § 761 p. 278), to be compared with Skr. á-yuwkṣ-mahi Lat. jūnx-ī. From presents in -inu -enu: saūsīs-me from saūs-inu 'I make dry', gabę́s-me from gabe-nù 'I push something

forward, help it on' (cp. § 761 p. 278), to be compared with Gr. αἴηνα for \*(ἐ-)σανσ-αν-σα (§ 822. 2 p. 359), and again with O.C.Sl. vrignąch-ŭ, granting the correctness of the hypothesis offered in § 615 Rem. p. 154.

§ 830. Slavonic. Some examples were given in § 828, and more in §§ 812 and 813; as po-sluchŭ from -slu-ją 'I hear', orach-ŭ from or-ją 'I plough', rŭděch-ŭ from rŭždą 'rubeo', cělěch-ŭ from cělě-ją 'I get well'. On the aorist in -nąch-ŭ, as vrichnąchŭ from vrĭg-ną 'I throw', see § 615 p. 154 and § 829.

The general question of the s-aorist inflexion has been discussed in § 829 p. 366. In the  $2^{nd}$  and  $3^{rd}$  sing. -s-s and -s-t dropt entirely by rule, which gave forms like  $j\varrho$  the look of a preterite of our Ist Present Class, those like zna ora rŭdė the look of preterites of Present Class X, and denominatives like laka the look of preterites without -io- such as Gr. Lesb.  $\ell\tau t\mu\bar{\alpha}$  (for \*- $\bar{\alpha}$ -t). Probably, however, some of these forms really are what they look like; for instance  $b\check{e}$  'eras, erat' may come from Idg. \*bhu- $\bar{e}$ -s -t as well, and da 'thou gavest, he gave' may also come from Idg. \* $d\bar{o}$ -s -t.

With roots in a consonant, the  $2^{nd}$  and  $3^{rd}$  sing. are found only when this root-final was a nasal, r, or l; as  $j \in (j \in N)$ ,  $\check{z}r\check{e}$  and  $\check{z}r\check{i}$  ( $\check{z}r\check{e}ch\check{u}$  for \* $\check{z}erch\check{u}$  and  $\check{z}r\check{i}ch\check{u}$  from  $\check{z}\check{i}r-a$  'I devour, offer'), kla ( $klach\check{u}$  for \* $kolch\check{u}$  from kol-ja 'I slay'); otherwise the thematic acrist without s was used, as  $2^{nd}$  and  $3^{rd}$  sing.  $te\check{c}e$  beside  $t\check{e}ch\check{u}$   $t\check{e}chom\check{u}$  etc. The reason is that these roots were the only ones which according to the laws of Slavonic did not drop their final consonant.

The 2<sup>nd</sup> and 3<sup>rd</sup> sing. often add -tŭ, the ending of the 3<sup>rd</sup> sing. pres.; as pri-jetŭ instead of -je, bitŭ instead of bi (bija 'I strike'), u-mrětŭ instead of -mrě (u-mřra 'I die'); dastŭ instead of da following dastŭ 'dat'. This addition came up first in the 3<sup>rd</sup> sing. aorist, and then went on to the 2<sup>nd</sup> sing. because the two persons had the same form. Compare imper. jaždĭ both 2<sup>nd</sup> and 3<sup>rd</sup> sing. § 949, and again Skr. 2<sup>nd</sup> and 3<sup>rd</sup> dual cakr-áthur -átur § 1038.

§ 831. From what was said in § 811 p. 348 on the Idg. gradation of the root syllable, it follows that  $\bar{e}$  is original in such forms as  $v\check{e}s\check{u}$   $n\check{e}s\check{u}$   $t\check{e}ch\check{u}$   $r\check{e}ch\check{u}$  (reka 'I say'), and the  $\bar{a}=\mathrm{Idg.}\ \bar{o}$  in  $bas\check{u}$  (boda 'I pierce', cp. Lat.  $fodi\bar{o}$   $f\bar{o}d\bar{\imath}$ ); the long vowel was originally confined to the singular. Since a long vowel before i, u, liquid, or Nasal + Consonant was shortened, as laid down in vol. I § 615 p. 465, the same vowel-grade may be assumed for forms like bich- $\check{u}$  (\* $bh\bar{e}i$ -s-),  $cis\check{u}$   $(c\check{\imath}ta$  'I count, reckon, honour', cp. Skr.  $c\bar{a}its$ -), po-sluch $\check{u}$  (Skr.  $\dot{s}r\bar{a}u\dot{s}$ -),  $mr\check{e}ch$ - $\check{u}$  for \*merch- $\check{u}$   $(m\check{\imath}ra$  'I die', \* $m\bar{e}r$ -s-),  $vr\check{e}s$ - $\check{u}$  for \*vers- $\check{u}$   $(vr\check{\imath}z$ -a 'I tie', cp. Lith. 1st and 2nd pl. injunct.  $ve\tilde{\imath}sz$ -me -te from  $ver\check{z}$ - $i\check{u}$  'I tie',  $ver\hat{\jmath}s$ - $ver\hat{\jmath}s$ -vers-

Where the root syllable has a weak grade, this is always seen in the infinitive stem as well, so that we are not justified in assuming that it comes from the Idg. weak form of the plural and dual active. E. g. žrich-ŭ (also žrěch-ŭ) beside žri-ti (also žrě-ti), klach-ŭ for \*kolch-ŭ beside kla-ti for \*kol-ti from q-l-like Lith. káls-me -te (§ 726 p. 256), krych-ŭ beside kry-ti 'to cover' as contrasted with Lith. kráus-me kráu-ti.

§ 832. Roots ending in a consonant also make a orists with the ending -ochū in O.C.Sl.; e. g. beside něsū: sing. nesochū, pl. nesochomū nesoste nesoše, dual nesochové nesosta nesoste. The W.-Slav. languages have -ech etc. instead of S.-E.-Slav. -ochū etc. The conjecture as to this inflexion offered in vol. I § 110 p. 105, and supported now by Jagić, is untenable (Arch. slav. Phil., x 175, 191). It is far more likely that this is some peculiar Slavonic growth; probably a transformation of the aorist without s (nesū) on the analogy of the s-aorist. The relation of the 2nd and 3rd sing. děla to the 2nd pl. dělaste 2nd dual -asta 3rd dual -aste first caused the 2nd and 3rd sing. nese to change its forms nesete -eta -ete into neseste -esta -este, as the former were the same as those of the present. Next, nesochomū nesochově may have arisen beside nesomū nesově, and by and by the 1st sing. nesochū completed the group. Then

differences were levelled out, the West-Slavonic in all consistency putting e- in all persons (nesech etc.), while the other branch took -o-, and changed neseste to nesoste etc. A different view is taken by Wiedemann, Beitr. zur altbulg. Conj., 109 f.

## II. Thematic s-stems.

§ 833. The forms which fall under this heading belong to our XX<sup>th</sup> Present Class. They have been partly given in §§ 657 ff., and the only reason for reverting to them here is that they are very intimately connected with the non-thematic s-aorist.

(1) Indicative. In Sanskrit, as we saw in § 659 p. 194, the use of the thematic vowel with the s-aorist was conditioned by the form of the Root, as \(\alpha - mrk\)\(\sigma a - t\); but non-thematic inflexion is also found, as \(\alpha - dik\)\(\sigma i \) beside \(\alpha - dik\)\(\sigma a - t\) from \(dis\)
'to show, point', \(\alpha - dr\)\(\alpha k\)\(\sigma - am\) beside \(\alpha - drk\)\(\sigma a - t\) from \(dr\)\(\sigma k\)\(\sigma - m\), see \(loc\). Cit. above. An Avestic thematic form is \(a - sasa - p\) from \(sanh - (kens-)\) 'speak', with strong root.

In Greek, the 3<sup>rd</sup> sing. act. was thematic from the proethnic stage; e. g.  $\ddot{\epsilon}-\delta \epsilon \iota \xi \epsilon$ , see § 820 p. 356. In the Epic dialect this is true of other persons, as  $\ddot{\iota}\xi \epsilon - \varsigma$   $\ddot{\iota}\xi \circ -\nu$  beside  $\ddot{\iota}'\xi \circ -\mu \alpha \iota$  'I will come',  $\dot{\epsilon}-\beta \eta \sigma \epsilon -\tau \sigma$  beside  $\ddot{\epsilon}-\beta \eta \sigma -\alpha$  fut.  $\beta \eta' \sigma \circ -\mu \alpha \iota$  from  $g-\bar{a}$ - 'go' (see Curtius, Verb II <sup>2</sup> pp. 307 f.). Perhaps these latter forms arose partly by analogy of the 3<sup>rd</sup> sing. iu  $-\epsilon$ , and partly by that of thematic forms of the imperative (see below).

Remark. The Att. ἔπεσον 'I fell' ἔχεσον 'cacavi' do not come in here. They got their σ from the fut. πεσοῦμαι χεποῦμαι. See F. Hartmann, De aor. sec., 66; Wackernagel, Kuhn's Zeitschr. XXX 313 ff.; the Author, Gr. Gr. 2 p. 169.

Latin. Aorists of this sort are forms like  $d\bar{\imath}xi$ -t  $d\bar{\imath}xi$ -mus, see § 823 p. 361. These forms were related to the conj. (fut.)  $d\bar{\imath}x\bar{o}$  and to the opt.  $d\bar{\imath}xim$  just as Skr.  $\acute{a}$ -bhak $\check{\$}a$ -t to conj.  $bh\acute{a}k$  $\check{\$}a$ -t, and Gr.  $\check{\epsilon}$ - $\beta\eta\sigma\varepsilon$  to conj.  $\beta\eta\sigma\sigma$ - $\mu\varepsilon\nu$ .

Irish. Mid.Ir. seiss 'has seated himself, sat' and 'sits' for \*setse-t from \sets sed-, cp. Skr. conj. sáts-a-t Gr. indic. έσσ-α. From seiss as used for the present upsprang a redupl. pret. siassair 'he sat' for \*se-(s)ess- (Thurneysen, Kuhn's Zeitschr. xxx1 99), to be compared with Skr. na-nákṣ-úr from nák-ṣa-ti 'reaches' and others (§ 659 p. 194).

In O.C.Slav. the 1<sup>st</sup> persons are thematic, as jęsŭ jęso-mŭ jęso-vě. On the ch of dachŭ trìchŭ etc., see I § 588.1 and 2, pp. 442 f.; on the Idg. sound-groups ks and qs in něsŭ (nesą) and rěchŭ (reką), see ibid., and § 414 p. 303. The s-type spread into the ch-series, and thus we have forms like jachŭ jachomŭ instead of jasŭ jasomŭ (ground-form \*ētso-, led-to eat), as also in the 3<sup>rd</sup> pl. jašę instead of jasę.

- (2) Imperative. Aryan and Greek forms come in here. Ved. 2nd sing. nēša, cp. conj. néš-a-t(i) from nī- 'to lead'; parša, cp. conj. párš-a-t(i) from par- 'to bring over, transfer'; mid. 3rd sing. rāsa-tām 3rd pl. rāsa-ntām, cp. conj. rās-a-t(i) from rā- 'to give'. Avest. 3rd pl. janhe-ntu, cp. conj. Gath. jēngha--itī from jam- (gem-) 'to go'. Gr. Ep. οἶσε οἰσέτω, cp. fut. οἴσω 'I will carry, or bring'; ὄψεσθε (sing. ὄψεο in Hesych.), cp. fut. ὄψομαι 'I shall see'; ἄξετε ἄξεσθε, cp. fut. ἄξω 'I will lead'; ἐπι-βήσεο, λέξεο and others. These Greek imperative forms were adduced in § 747 p. 269 to support the theory that the σ-future, at least in part, has grown out of the conjunctive of the s-aorist. I admit that the parallel o-conjunctives of Aryan and Greek, with which the imperative forms went very closely, belong to the non-thematic indicative with s. But I must remind my readers of the formal identity of the Skr. conj. tás-a-t(i) and the indic. ta-sa-ti Goth. -pinsa. Imperative forms with a genuine personal ending are really Injunctive, and these have been used in the parent language and ever since both for the Indicative and for the Conjunctive (wish, futurity); see § 909. Compare § 854, on the imper. perf. Skr. mumóc-a-ta Gr. κεκράγ-ε-τε.
- (3) Participle. Skr.  $dh\tilde{t}\tilde{s}a-m\bar{a}na-s$  Avest.  $d\bar{\iota}\tilde{s}e-mna-$ beside Avest.  $2^{nd}$  sing. indic.  $d\bar{a}i\tilde{s}$  from  $dh\bar{\iota}$  'to notice'. Avest.

xšnaoše-mna- beside 3<sup>rd</sup> pl. injunct. xšnaošen from xšnu- 'to join oneself to, comply with'.

## B. STEMS IN -es-, -os-, AND -ts-.

§ 834. Between -s- and what is usually called the Root there often appears -e-, -o-, or -i-. We have -e-s- in Aryan, Greek, ¹) Italic, perhaps Keltic; -ə-s- in Aryan, Greek, perhaps Keltic; -i-s- in Latin (-ī-s- in Sanskrit). In view of the connexion of verbal forms with -s- and noun-stems with -s-(§ 655 pp. 189 f., § 824 p. 363), we may identify Gr. \*Fειδες- in εἴδε-α η̈δε-α with \*Fειδεσ- in gen. εἴδε-ος,  $2^{nd}$  sing. mid. ε˙-πελάσ-  $-\Im \eta_{\mathcal{C}}$  with adv. πέλας, Skr. mid.  $\acute{a}$ - $r\bar{o}$ ciṣ-ta with neut.  $r\bar{o}$ ciṣ-,  $3^{rd}$  pl.  $\acute{a}$ - $j\bar{a}$ riṣ-ur with Gr.  $\gamma\bar{\eta}$ ρας, and Lat.  $v\bar{\iota}$ dis-tis may be compared with cinis Gr.  $\Im$ είμισ- (II § 134 pp. 425 f.). The same intermediate vowels occur in the s-future: Gr.  $\tau$ ενέω  $\tau$ εν $\bar{\omega}$ ,  $\pi$ ελάω  $\pi$ ελώ, Skr.  $r\bar{o}$ ciṣya-tē, see § 749 ff. pp. 271 ff.

Special vowel-grades for the root-syllable, as in the s-aorist (§ 811), cannot be made out for the parent language; and regard being had to the variants -e-s-, -ə-s-, -i-s-, which undoubtedly must often have been interchanged by form-transference, we might expect without further argument an intricate ablaut in the root syllable. The commonest grade in historical times is the e-grade (1st Strong Grade), as ueid- in Skr.  $v\bar{e}di\check{s}$ - Gr.  $ei\delta e(\sigma)$ - Lat.  $v\bar{i}dis$ -, gem- in Skr.  $gami\check{s}$ - Umbr.-Osc. benes-; cp. the s-future Skr.  $hani\check{s}ya$ -ti Gr.  $\vartheta ev\acute{e}\omega$  etc.

As regards the tense, or kind of action denoted, we must observe that whilst the s-stems described under (A) are prevailingly acrist, so that we must regard this as fairly representing the proethnic use, these -es- -ss- and -is-stems do not have the acristic use anything like so often in proportion; for instance, Skr. arcas-ē Gr. joea never had it. The verb-

<sup>1)</sup> I no longer regard  $\epsilon$  in Gr.  $\eta'\delta\epsilon\alpha$  as representing Idg. 2. See p. 271 footnote 1.

suffix -s- therefore, in all its forms, had originally nothing at all to do with tense. This explains the mass of instances in all sorts of languages where s runs right through the verb (cp. the s-verbs, iu §§ 656 ff.). Hence it happens that even where s does not go through a verb, s-forms often enough have no aorist meaning, as in Gr.  $\epsilon l \delta - \epsilon \sigma - (\eta \delta \epsilon \alpha \epsilon l \delta \epsilon \omega \epsilon l \delta \epsilon l \eta \nu)$ . It certainly cannot be proven that here the meaning conveyed was originally aorist. Here again we see how useful it would be if we could keep Verb Morphology quite free from terms borrowed from Syntax (cp. § 484 pp. 33 ff.).

#### I. es-stems.

§ 835. There are no es-preterites in Aryan. But we may refer once more to the presents cited in § 656 pp. 190 f., Skr. v-ás-te (Gr. ἐπί-εσται) arc-as-ē Avest. rånh-anh-ōi etc.

§ 836. Greek.  $\eta \delta \varepsilon \alpha$   $\varepsilon i \delta \varepsilon \alpha$  'I knew', served for a preterite to  $o \bar{i} \delta \alpha$  'I knew', ep. O.Ir. ro-fetar 'I knew' with -esor -is- (§ 838), Skr.  $\acute{a}\text{-}v\bar{e}di\bar{s}\text{-}am$  with -əs-, Lat.  $v\bar{i}dis\text{-}tis$  with -is-; conj. Ion.-Att.  $\varepsilon l \delta \varepsilon \omega$   $\varepsilon l \delta \omega$  (2nd sing.  $\varepsilon l \delta \varepsilon \eta \varepsilon$   $\varepsilon l \delta \eta \varepsilon$  3nd pl.  $\varepsilon l \delta \varepsilon \omega \omega$   $\varepsilon l \delta \omega \omega$  by transfer to the  $\bar{e}: \bar{o}\text{-}\text{conj.})$ ') and (Hom.)  $i \delta \varepsilon \omega$ , ep. Skr.  $v\bar{e}di\bar{s}\text{-}a\text{-}t$  Lat.  $v\bar{i}der\text{-}\bar{o}$ , opt.  $\varepsilon l \delta \varepsilon \bar{i} \mu \varepsilon \nu$  for \*f- $\varepsilon \iota \delta$ - $\varepsilon \sigma$ - $\bar{\iota}$ - $\mu \varepsilon \nu$  sing.  $\varepsilon l \delta \varepsilon \ell \eta \nu$ , ep. Lat.  $v\bar{i}der$ - $\bar{\imath}$ -mus  $v\bar{i}der$ -i-m.

Hom.  $\eta_{\ell\alpha}$  (unless it be properly  $\eta_{\ell\alpha}$  — see below —, the form in our texts is  $\eta_{\ell\alpha}$ ) Att.  $\eta_{\ell\alpha\nu}$  'I went', imperf. and aor. preterite to  $\epsilon \tilde{\ell}\mu$ , ground-form \* $\epsilon \tilde{\ell}i$ -es- $\eta$ , cp. Umbr. conj. (fut.) eest est 'ibit' for \* $\epsilon \tilde{\ell}i$ -es-e-t(i), Skr. mid.  $\delta y$ - $i \tilde{s}i$ -ta (gramm.), Lat.  $i \tilde{s}i$ - (i. e. \* $\epsilon \tilde{\ell}i$ - $i \tilde{s}i$ -) in  $i \tilde{s}i$ -tis  $i \tilde{e}i$ - $i \tilde{e}i$ -

<sup>1)</sup> On the forms  $i\partial \tilde{n}$   $i\partial \tilde{\eta}$  in the text of Homer, see W. Schulze, Kuhn's Zeitschr. XIX 251.

optative of  $\epsilon i \mu \iota$  (see Curtius, Verb II <sup>2</sup> p. 99), it is natural to derive it from  $*\dot{\epsilon}(\iota)$ - $\epsilon(\sigma)$ - $\iota\eta$ - $\nu$ .

Remark. G. Mekler's theory (Beitr. zur Bild. des Gr. Verb., 69 ff.), that  $\eta'\delta\epsilon\alpha$  comes from  $*\eta' F\epsilon\iota\delta\epsilon\underline{\iota}\alpha$ , an aorist of the verb  $\epsilon l\delta\epsilon\omega$ , is untenable. See Wackernagel, Phil. Anzeiger 1887 pp. 240 f.

ε-κορέσ- $\theta\eta_S$  (stem κορεσ- 'to satisfy') ε-στορέσ- $\theta\eta_S$  (stem στορεσ- 'sternere') come in here as the  $2^{\rm nd}$  sing. mid., if we may venture to assume that they helped to form the  $\theta\eta_{\nu}$ -aorist (§ 589 pp. 129 f.). On εκόρεσ(σ)α εστόρεσ(σ)α, see § 842.

Furthermore, the future in  $-\epsilon\omega$ , as  $\varkappa o \rho \epsilon \omega \tau \varepsilon \nu \epsilon \omega$ , if it be a conj. of the es-arist and not for  $-\varepsilon \sigma - \iota \omega$  (§ 747 p. 269). The difference in the use of this future and  $\varepsilon \delta \delta \epsilon \omega$  is explained because  $\varepsilon \delta \delta \epsilon \omega$  was bound fast to the indic.  $\epsilon \delta \delta \epsilon \omega$ .

-es- in Greek has been borrowed by perfect stems, as nεποίθ-εα πεποίθειν beside πέποιθα 'I believe', εστήμειν beside εστημα 'I stand', ετεττμήμειν beside τεττμημα 'I have honoured' (side by side with the old perf. preterites like επέπιθμεν εσταμεν γεγάτην); the same with -is- in Latin, as totondis-tis totonder-ō totonder-i-m. I incline to think that this transfer is independent in Greek and Latin, πεποίθεα following είδεα and totondistis following νεdistis; but some hold that it took place before the original language broke up. The matter is discussed by Mahlow, Kuhn's Zeitschr. xxvi 583; the Author, Ber. d. kgl. sächs. Ges. d. Wiss., 1883, pp. 178 f.; Thurneysen, Bezz. Beitr. VIII 274; and others. How obvious this re-formation was can be seen from Irish, where in later times the perfect was very largely transformed on the analogy of the s-preterite, as tānacus 'I came' instead of tānac.

In the Indicative,  $-\varepsilon \alpha - \varepsilon \alpha \varsigma - \varepsilon \varepsilon(\nu)$  became in Ion.-Att.  $-\eta - \eta \varsigma - \varepsilon \iota(\nu)$ . Then  $-\varepsilon \iota(\nu)$  by complementary analogy produces Att.  $-\varepsilon \iota \nu - \varepsilon \iota \varsigma$ , cp.  $\tilde{\eta} \nu$  'eram' instead of  $\tilde{\eta} \alpha \tilde{\eta}$  § 502 p. 65. The 3<sup>rd</sup> pl. was  $-\varepsilon \sigma \alpha \nu$  in older Attic; this followed \* $-\varepsilon \sigma - \varepsilon \varepsilon * -\varepsilon \sigma - \tau \sigma \nu * -\varepsilon \sigma - \tau \eta \nu$  as  $\tilde{\eta} \sigma \alpha \nu$  followed  $\tilde{\eta} \sigma \tau \varepsilon$  etc. (§ 1021).  $-\varepsilon \sigma \alpha \nu$  similarly caused the forming of  $-\varepsilon \mu \varepsilon \nu - \varepsilon \tau \varepsilon$ , which are the endings of old Attic. The endings  $-\varepsilon \iota \mu \varepsilon \nu - \varepsilon \iota \tau \varepsilon - \varepsilon \iota \sigma \alpha \nu$  are first found at a late period; so it can scarcely be allowable to derive  $-\varepsilon \iota \mu \varepsilon \nu$  from \* $-\varepsilon \sigma \mu \varepsilon \nu$ , which

has to be postulated for proethnic Greek. Probably -e.- came in from the singular.

A Greek new formation is doubtless the opt.  $\delta \epsilon l \xi \epsilon \iota \alpha \nu$ , for \*- $\sigma$ - $\epsilon \sigma$ - $\iota \alpha \nu$ , which, on the analogy of the indicative, produced  $\delta \epsilon l \xi \epsilon \iota \alpha \zeta$  - $\epsilon \iota \epsilon$ ; similarly Skr.  $\alpha$ - $\eta \bar{\alpha}$ -s- $i \xi$ - $\eta m$  (§ 839) and Lat.  $d \bar{\imath} x$ -i s-i s-

§ 837. Italic has nothing but Conjunctive forms.

- (1) o-Conjunctive used as future in Umbr.-Osc. (cp. fust § 824 p. 362). Umbr. eest est 'ibit' for \*ei-es-e(ti): Gr. η ειν § 836; ferest 'feret', an-penes 'impendes'. Osc. pert-emest 'perimet'. The same future could be made from present stems with some characteristic, as Osc. didest 'dabit' beside Vestin. di-d-e-t 'dat' (§ 553 p. 107), to be compared with Skr. mid. ά-dad-iṣ-ta beside dá-dā-ti dá-d-a-ti; Umbr. heries 'voles' heriest 'volet' beside heris 'vis' Osc. heriiad 'velit' (§ 706 p. 233, § 716 p. 249).
- (2) ē-Conjunctive in Latin and Umbr.-Oscan (cp. Lat. es-s-e-m Osc. fu-s-í-d, § 824 p. 362).

Lat. ager-e-m  $ager-\bar{e}-s$ : cp. Skr.  $3^{rd}$  pl.  $\acute{a}ji\c v.u$ . unguer-e-m: cp. Skr.  $\acute{a}nji\c v.u$ . v.v v.v

Umbr. ostensendi 'ostenderentur' for \*-tendes-ē-ntēr (§ 1082.1). Osc. herríns caperent' for \*heres-ē-nt from a pres. \*herō, patensíns 'aperirent' for \*patenes-ē-nt from a pres. \*patenō (§ 622 p. 159).

§ 838. Keltic. O.Ir. ro-fetar 'I know' 3<sup>rd</sup> sing. ro-fitir for \*uid-es- (I § 521 p. 379, and Thurneysen Kuhn's Zeitschr. xxxI 62 f., 98): Gr. η δεα conj. Hom. ἰδέω beside εἰδέω, § 836 p. 373. I conjecture that ro-fetar originally meant 'I have

learnt', hence its present meaning 'I know', cp. seiss § 833 p. 370. The phonetic rules however permit of another derivation, from \*uid-is-, in which case it would come near to Lat. vīdis-tis.

## II. əs-stems.

§ 839. Aryan -iš- in Sanskrit and in the Gatha dialect of the Avesta.

In the Gathas we find three forms. 1st sing. conj. xšnev--īš-ā from xšnu- 'to attach oneself' (cp. xšnao-še-mna- § 833 p. 371), indic. mid. civ-īš-ī civ-iš-tā from ku- 'to look away to something, to hope'; ī is probably to be read ĭ, as often.

The formation is common in Sanskrit. As regards the  $2^{nd}$  pl. mid. in -idhvam, as  $\acute{ajanidhvam}$ , it is to be noted that -idh- is due to the analogy of the other persons which have -i§- instead of \*- $\bar{i}dh$ - = \*-i§dh- (I § 591 pp. 447 f.).

Usually with e-grade (1st Strong Grade) in the root.  $\acute{a}$ -star-i $\acute{s}$ -am from star- 'to strew'.  $2^{\rm nd}$  sing. mid.  $k\check{s}$ an-i $\acute{s}$ -thās from  $k\check{s}$ an- 'to wound'.  $3^{\rm rd}$  sing. mid.  $y\acute{a}$ m-i $\acute{s}$ -ta from yam-'cohibere'.  $2^{\rm nd}$  dual cay-i $\acute{s}$ -tam from ci- 'to put in layers, collect'.  $3^{\rm rd}$  sing. mid.  $\acute{a}$ -nav-i $\acute{s}$ -ta from nu- 'to praise'.  $\acute{a}$ -dhar $\acute{s}$ -i $\acute{s}$ -ur from  $dhar \acute{s}$ - 'to be brave, dare'. Conj. jambh-i $\acute{s}$ -a-t from jambh- 'to snap at'.  $\acute{a}$ - $\acute{s}$ as-i $\acute{s}$ -am from  $\acute{s}$ as- 'to praise'.  $3^{\rm rd}$  pl. mid.  $\acute{a}$ -b $\bar{o}$ dh-i $\acute{s}$ -ata, conj.  $b\acute{o}$ dh-i $\acute{s}$ -a-t from budh- 'to awake, notice'.  $3^{\rm rd}$  sing. mid.  $\acute{a}$ -sah-i $\acute{s}$ -ta opt. sah-i $\acute{s}$ - $\bar{i}$ -máhi from sah-'to subdue'.  $3^{\rm rd}$  pl.  $\acute{a}j$ -i $\acute{s}$ -ur from aj- 'agere'.

Other grades of root.  $\acute{a}$ -bhār-iṣ-am from bhar- 'to carry'.  $\acute{a}$ -tār-iṣ-am conj. tāriṣ-a-t opt. tāriṣ-ī-mahi from tar- to carry across, pass through'.  $3^{\rm rd}$  pl. mid. (pass.)  $\acute{a}$ -nāy-iṣ-ata from nī- 'to lead'. Opt. idh-iṣ-ī-mahi from idh- 'set afire'. Opt. gm-iṣ-īya from gam- 'to go'.

As the root of  $2^{nd}$  sing. mid.  $p\bar{u}r-i\bar{s}$ - $th\bar{a}s$  (par- 'to fill') shows it to have been based upon verbal forms like  $p\bar{u}r$ -dhi, so also the  $i\bar{s}$ -aorist is often made from a characterised present stem.  $3^{rd}$  sing. mid. a-dad- $i\bar{s}$ -ta beside da- $d\bar{a}$ -ti da-d-a-ti from

dā-'to give' (cp. Osc. didest, § 837.1 p. 374). 3rd sing. mid. āindh-iṣ-ṭa opt. indh-iṣ-ṭya (also idh-iṣ-) beside in(d)dhē pl. indh-átē from idh-, á-dṛh-iṣ-am beside dṛh-a-ti from darh-'to make firm' (cp. Lat. junger-e-m § 837.2 p. 374). āips-iṣ-am beside fṛp-sa-ti from āp- ap- 'to attain', 1st sing. mid. jijnās-iṣ-i beside ji-jāā-sa-tē from jāā- 'to learn'. 3rd pl. mid. á-hlāday-iṣ-ata beside hlād-aya-ti causal of hlād- 'to refresh, give life to', 2rd sing. mid. pyāyay-iṣ-ṭhās beside pyāy-áya-ti causal of pyā-ya-tē 'swells' (§ 796 p. 333). Compare 1st sing. pres. mid. gāyiṣ-ē beside gā-ya-ti 'sings' (§ 656 p. 191).

The origin of the  $si\S$ - aorist is like that of the latter group of forms.  $3^{rd}$  pl. all all all beside pres. al all all

Remark. In Mss. of the Veda occur forms with -\$i\(\delta\)- instead of -si\(\delta\)-, as  $py\(\varpi\)-\delta i\(\delta\)-\delta i-mahi. This shows the same phonetic change as \(\delta u\)-i\(\delta\)-ka-s for *su\(\delta k\)-s I \(\delta\) 587. 4 p. 413. Compare Whitney, Am. Journ. Phil. VI 277; Bloomfield and Spieker, Journ. Amer. Or. Soc. XIII 118.$ 

The  $2^{nd}$  and  $3^{rd}$  sing. of the aorists with  $-i\check{s}$ - and  $-si\check{s}$ - ended regularly in  $-\bar{\imath}$ - $\check{s}$  and  $-\bar{\imath}$ -t, as  $\acute{a}$ -star $\bar{\imath}$ - $\check{s}$  -t beside  $\acute{a}$ -star $\check{i}$ - $\check{s}$ -am,  $\acute{a}$ -yās $\bar{\imath}$ - $\check{s}$  -t beside  $\acute{a}$ -yās $\check{s}$ -am. The original endings must have been \*- $i\check{s}$ (- $\check{s}$ ) and \*- $i\check{s}$ (-t). That of the  $3^{rd}$  sing. is still seen in injunctive forms like avi $\check{s}$ -t-t-t (§ 909), and the influence of the  $2^{nd}$  sing. can be made out in aorist forms such as  $\acute{a}$ -jay-i-t (§ 574 p. 115).  $-\bar{\imath}$ - $\check{s}$ - $\bar{\imath}$ -t cannot be got out of \*- $i\check{s}$ - $\check{s}$  and \*- $i\check{s}$ -t. They rather belonged in origin to our IX<sup>th</sup> Present Class, and were not signatic aorist at all;  $\acute{a}$ -star- $\bar{\imath}$ -t is like  $\acute{a}$ - $r\bar{o}d$ - $\bar{\imath}$ -t

 $\acute{a}$ -brav- $\bar{\imath}$ -t (§ 574 p. 116). As  $\acute{a}$ -star- $\bar{\imath}$ -t is to stara-ti, so is  $\acute{a}$ - $h\bar{a}s$ - $\bar{\imath}$ -t to  $h\acute{a}$ -sa- $t\bar{e}$ , and  $\acute{a}$ - $bh\bar{a}s$ - $\bar{\imath}$ -t to  $bh\acute{a}$ -sa-ti.\) These forms in  $-\bar{\imath}$ 's  $-\bar{\imath}$ t took the place of \*astari's \* $ah\bar{a}si$ 's (2nd and 3rd sing.) because it then became possible to distinguish the persons; then  $-\bar{\imath}$ 's and  $-\bar{\imath}$ t drove \*-i's \*-it out of the field altogether. Compare  $\bar{\imath}$  instead of i in  $\acute{a}$ - $dh\bar{\imath}$ -mahi,  $m_{\bar{\imath}}$ - $n\bar{\imath}$ - $m\acute{a}s$  and the like § 498 p. 62. How  $-s\bar{\imath}$ 's  $-s\bar{\imath}$ t passed afterwards from the si's-aorist to the s-aorist, see in § 816 p. 354.

§ 840. Greek. Here  $-\alpha\sigma = -\partial s$  is found only in such verbs as use the s-suffix outside of the acrist stem. Attention should be called to the future in  $-\alpha\omega$ , if it was conj. of the  $\sigma$ -acrist (§ 747 p. 269, § 757 pp. 276 f.), and the indic.  $2^{\rm nd}$  sing. in  $-\alpha\sigma - \vartheta \eta_S$ , if it had a share in originating the  $\vartheta \eta \nu$ -acrist (§ 589 pp. 129 ff.). E. g.  $\varkappa \varrho \varepsilon \mu \dot{\alpha}\omega = \varepsilon \varkappa \varrho \varepsilon \mu \dot{\alpha} \sigma \vartheta \eta_S$  from  $\varkappa \varrho \varepsilon \mu \alpha \sigma$  'to hang' ( $\varkappa \varrho \varepsilon \mu \alpha \sigma - \tau \dot{\sigma} - \varsigma$ ) beside  $\varkappa \varrho \varepsilon \mu \alpha \omega = (\varkappa \varrho \varepsilon \mu \alpha - \mu \omega \varepsilon \mu \alpha \vartheta - \vartheta \varrho \alpha)$ ,  $\varkappa \varepsilon \varrho \dot{\alpha}\omega = \varepsilon \varkappa \varepsilon \dot{\alpha} \dot{\alpha} \vartheta \eta_S$  from  $\varkappa \varepsilon \varrho \alpha \sigma$  'to mix' ( $\varkappa \varepsilon \varrho \alpha \sigma - \tau \dot{\sigma} - \varsigma \varepsilon \varepsilon \varepsilon \dot{\alpha} \alpha \sigma \tau \dot{\alpha}$ ). On the  $\sigma \sigma$ -acrists  $\varepsilon \varkappa \varrho \dot{\varepsilon} \mu \alpha \sigma (\sigma) \alpha \varepsilon \dot{\varepsilon} \dot{\varepsilon} \alpha \sigma (\sigma)$ , see § 842.

In Keltic, -3s- may be looked for in the s-preterite of the 1<sup>st</sup> and 2<sup>nd</sup> Conjugations, as O.Ir. ro-charus Mid.Cymr. cereis 'I loved'. For the Britannic dialects only -ās(s)- and not -ās(s)- may be assumed. 3<sup>rd</sup> sing. O.Ir. ro-char for \*-caras-t, 2<sup>nd</sup> sing. depon. -asser for \*-as-thēs+r (Thurneysen, Idg. Forsch. 1463). Also found, pl. ro-charsam -charsid -charsat for \*carassomo(s) \*carassete \*carassont(o). Thurneysen, who sends me this explanation of ro-char, throws out the question whether ss did not come from forms in which st originally was: the 2<sup>nd</sup> pl. \*caras-te became \*carasse, this was enlarged to \*carassete by adding the usual ending of the 2<sup>nd</sup> pl., and then by analogy \*carassomo(s) etc. May we venture to suggest a parallel with the relation of Gr. ἐ-κοεμώσ-θης (see above) and ἐ-κοέμασσα (§ 842)?

<sup>1)</sup> Jackson believes that he has found an Avestic  $2^{nd}$  sing. of this kind in  $fr\bar{a}-d\bar{a}h\bar{\imath}\bar{s}$  Yt. 3. 2, from  $\swarrow d\bar{a}$ - (Proceed. Am. Or. Soc., Oct. 1889, p. CLXV).

### III. žs-stems.

§ 841. In Latin, -is- appears in the inflexion of the perfect stem. Indicative only -is-tis -is-tī and -erunt, if the last is for \*-is-ont(i) (§ 1023); Conjunctive (fut. perf.) -erō -erimus for \*-i-s-ō \*-is-i-mus: Optative (conj. perf.) -erim -erīmus for \*-is-ī-, and in the late-born pluperf. with -eram = \*-is-ā-m.  $v\bar{t}$ dis-tis: cp. Skr.  $v\bar{e}$ diṣ- Gr.  $e\bar{t}$ de(o)-; iis-tis for \*eis- \*ei-is-: cp. Skr. ayiṣ- Gr.  $e\bar{t}$ (o)-.  $l\bar{t}$ quis-tis,  $f\bar{t}$ dis-tis  $v\bar{t}$ cis-tis. And doubtless  $f\bar{u}$ gis-tis  $r\bar{u}$ pis-tis  $j\bar{u}$ vis-tis (juv- for \*diugu-, beside Lith. džiaugiū-s T am glad') with  $\bar{u}$  = Idg. eq. vertis-tis scandis-tis. Also scābis-tis cāvis-tis,  $f\bar{v}$ dis-tis and  $l\bar{v}$ gis-tis  $v\bar{v}$ nis-tis may come in here, the last two to be compared with Gr.  $\gamma \bar{\eta} \rho a \varsigma$  (§ 834 p. 371).

Remark. Since so many kinds of forms have contributed to the Latin perfect (§ 867), it is impossible to restore with any certainty the proper vowel grades of the root. As regards  $\bar{e}$ , for instance, in the system of  $l\bar{e}g\bar{i}$ ; (1) this may have come from  $l\bar{e}gis$ -tis as suggested, (2)  $l\bar{e}gimus$  may follow the analogy of  $s\bar{e}dimus$  for \*se-zd-, as Skr.  $p\bar{e}tim\acute{a}$  follows  $s\bar{e}dim\acute{a}$  (§ 471 p. 16), (3)  $l\bar{e}g$ - $\bar{i}$   $v\bar{e}n$ - $\bar{i}$  may be non-thematic, like Goth.  $q\bar{e}m$ -um Skr.  $s\bar{a}h$ - $v\acute{a}s$ - (loc. cit.), or (4)  $l\bar{e}gi$ -t may = pr. Ital. \* $l\bar{e}g$ -e-d, and be a thematic preterite form related to legi-t as Gr.  $\mu_i\dot{\gamma}_s$ - $\tau\alpha_i$  to  $\mu\dot{e}\delta_s$ - $\tau\alpha_i$ , Skr.  $s\bar{a}ha$ -ti to  $sah\acute{a}$ - $t\bar{e}$  (§ 480 Rem. p. 28, § 514 p. 81).

Phonetic law forbids our assuming that -es- has been weakened to -is- in vīdis-tis (vīdis-sem § 842); cp. scelestu-s capessō and the like. It is not a sufficient explanation to say that -e- became -i- because of -imus, or that the relation of amāmus: amāssem produced vertissem beside vertimus (Bartholomae, Bezz. Beitr. xvii 112). Nothing is left but to hark back to Idg. -i-s-.¹) In § 834 p. 371 we compared cini-s-Gr. Θέμι-σ-. Compare further α-F-ι-σ- in ἐπάισ-το-ς ἤισ-(σ)α from

<sup>1)</sup> I will here give a possible way of identifying Lat. -is- with Idg. -es- or -əs-; but I do not believe that any one will adopt it. \*ste-ti-tis \*ste-ti-fi or -bī (Gr. β-στα-τε Skr. ta-s/hi-tha), \*tu-tudi-tis \*/u-tūdi-fī (Gr. τε-τεάφα-τε Skr. tu-tūdi-tha), \*scidi-tis (Skr. ά-chida-ta) become stelistis stelistī, tuludistīs tutūdistī, scidistis on the analogy of \*vīdes-tis \*vīdes-tī; and then by reciprocal analogy, these became rīdis-tis -tī.

 $v\bar{\imath}dera$ -m shows the same  $\bar{a}$ -suffix as -bam eram (§ 583 p. 124), and probably it is due to analogy, being made to complement  $v\bar{\imath}der\bar{o}$  like  $eram:er\bar{o}$ . Observe that  $d\bar{\imath}x\bar{o}$   $d\bar{\imath}xim$  have no \* $d\bar{\imath}xam$ .

The endings of  $v\bar{\iota}distis$  - $ist\bar{\iota}$   $v\bar{\iota}der\bar{o}$   $v\bar{\iota}derim$   $v\bar{\iota}deram$   $v\bar{\iota}dissem$  were transferred both to forms like  $totond\bar{\iota}$   $tetig\bar{\iota}$  and to those like  $d\bar{\iota}x\bar{\iota}$ , so that we have totondistis  $totonder\bar{o}$  and  $d\bar{\iota}xistis$   $d\bar{\iota}xer\bar{o}$  etc. The former may be compared with Gr.  $n\epsilon noi \theta \epsilon a$  (§ 836 p. 373), the latter with Skr.  $a'y\bar{a}si\bar{\iota}sam$  (§ 839 p. 376). The efficient cause of these new formations may have been that in the Indicative many of the original forms of the  $2^{nd}$  sing. and pl. had become rather awkward, as  $2^{nd}$  sing. \* $totons(s)\bar{\iota}$   $2^{nd}$  pl. \*totons(s)is (or \* $totonst\bar{\iota}$  \*totonstis with t restored from estis) and  $2^{nd}$  sing. \* $d\bar{\iota}x(s)$   $2^{nd}$  pl. \* $d\bar{\iota}xtis$ .

We proceed to mention the is-aorists of Latin and Irish belonging to io-present stems (Class XXVI):

In Latin, those verbs whose 2<sup>nd</sup> sing. indic. pres. ended in -īs, had the ē-conjunctive in -īrem, as farcīrem from farciō. The only exception is fierem like agerem, § 837.2 p. 374. But from verbs like capiō -ĭs the conj. was -ĕrem, caperem; and it remain suncertain whether this be for \*-is-ē-m or \*-es-ē-m, cp. capis-sō and capes-sō § 842.

To assume a 'Root' avis- for αιον and a present \*afεισω I hold to be wrong (Schulze, Kuhn's Zeitschr. XXIX 249 ff.).

It must be remembered, in considering Lat. farcīrem and the like, that these went hand in hand with the original denominatives in -i-iō, as fīniō, whose s-aorist, fīnīrem, is to be compared with Gr. ἐκόντοα O.C.Sl. gostichŭ (§ 813 p. 351). Hence the question presents itself — whether farcīrem is really like Skr. ά-grahīṣ-am, whether it was not rather produced simply by the analogy of the īs-formation. In this case it might be compared with O.C.Sl. bichomū (§ 727 p. 257), which was modelled upon gostichomū.

In the s-aorist of the io-present (3<sup>rd</sup> Conjugation) in Irish, the 3<sup>rd</sup> sing. ended with \*-i-s-t, as -lēic for \*leikuis-t. A short i is seen also in Mid.Cymr., which in this aorist had -yss-, e. g. eistedyssant 'they sat'. Compare § 840 on ro-char for \*-caras-t. The question which there had to be answered on behalf of ro-charsam, now crops up again for -lēcsem. Hand in hand with these io-verbs went those in \*-i-ió and those in \*-éiō, as 1<sup>st</sup> sing. do-ro-dālius from -dālim 'I divide', 1<sup>st</sup> pl. ro-moit-sem from moidim 'I extol'.

#### C. STEMS WITH -s-s-.

§ 842. As the s-suffix was in no sense a special agrist suffix, but was used in the parent language with other tenses of a certain number of verbs, it need not surprise us to see that verbal s-stems often make an agrist with a second s. Analogous formations with -ss- have been brought before us in § 839, the Sanskrit agrist series of which one is ák-šiš-ur.

Greek. Hom.  $\tilde{\epsilon}$ -σπασ-σα Att.  $\tilde{\epsilon}$ σπασα from σπάω 'I pull' for \*σπα-σω,  $\tilde{\epsilon}$ -σπασ-ται.  $\tilde{\epsilon}$ -κλασ-σα from κλάω 'I break off' for \*κλα-σω, κέ-κλασ-ται.  $\tilde{\epsilon}$ -κρέμασ-(σ)α 'I hung'  $\tilde{\epsilon}$ -κέρασ-(σ)α 'I mixed'  $\tilde{\epsilon}$ -σκέδασ-(σ)α 'I scattered' beside κρεμασ-τό-ς κε-κέρασ-ται  $\tilde{\epsilon}$ -σκέδασ-ται. (f)- $\tilde{\epsilon}$ σ-( $\sigma$ )α 'I clothed' beside  $2^{\rm nd}$  sing.  $\tilde{\epsilon}$ σ-σαι.  $\tilde{\epsilon}$ -σ $\tilde{\beta}$ -εσ-( $\sigma$ )α 'I quenched' beside  $\sigma \tilde{\beta}$ -εσ-τό-ς  $\tilde{\epsilon}$ -σ $\tilde{\beta}$ εσ-ται.  $\tilde{\epsilon}$ -κόρεσ-( $\sigma$ )α 'I satisfied' beside κε-κόρεσ-ται.  $\tilde{\alpha}$ -ρ-έσ-( $\sigma$ )ασ $\tilde{\beta}$ αι 'to come to an understanding'

beside ἀρεσ-τό-ς. ἐ-κάλεσ-(σ)α 'I called' ἄλ-εσ-(σ)α 'I ground'  $\xi\mu$ -εσ-(σ)α 'I spewed' from the presents καλέω ἀλέω ἐμέω, perhaps for \*καλεσω \*ἀλεσω \*ἐμεσω. εἴρνσ-(σ)α ἔρνσ-(σ)α 'I pulled' beside εἴρνσ-ται. Compare § 575 p. 117, § 656 p. 191, § 661 p. 196, § 836 p. 372 f., § 840 p. 377.

Remark. There is too little support for the theory that these Greek so-aorists stand in a direct historical connexion with the Sanskrit si\(\tilde{s}\)-aorist, — that originally the singular active had -ses- (-sos-) and the plural -ss-, and that Sanskrit kept only the singular form, Greek the form of the plural (W. Schulze, Kuhn's Zeitschr. XXIX 266 ff.).

Italic. With Lat.  $v\bar{\imath}s\bar{o}$  for \*ueit-sō, quaesō for \*quais-sō (§ 662 p. 197), compare petes-sō O.Lat. ad-petis-si-s, capes-sō O.Lat. capis-sa-m, laces-sō, faces-sō. And to the same group as faxō faxitur faxim (§ 824 p. 362) belong amās-sō amāssim, turbās-situr, infin. averruncās-sere; habēs-sō pro-hibēssim, licēssi-t; amb-īssim; -ss- after a long vowel, which should be -s-, is due to the analogy of forms with -ss- following a short vowel, cp. ēssem instead of \*ēsem (edō) on the analogy of ĕssem (from sum). With petissis capessam are associated forms like vīdis-se-m, ē-conjunctives, whose analogy produced (1) totondissem and (2) dīxissem etc. The forms with -is-s- have their nearest parallels in Gr. ημο(σ)α from ἀβ-ισ- (§ 841 p. 378 f.).

# THE PERFECT.1)

§ 843. The chief marks which keep the Idg. Perfect distinct from Present and Aorist are two. (1) Firstly some peculiar personal endings in the Indicative; as from  $\sqrt{ueid}$ 

<sup>1)</sup> On the Indo-Germanic Perfect in general. H. Osthoff, Zur Geschichte des Perfects im Idg. mit besonderer Rücksicht auf Griech. und Latein., Strassb. 1884. C. Pauli, Das praeteritum reduplicatum der idg. Sprachen und der deutsche Ablaut, Kuhn's Zeitschr. XII 50 ff. Pott, Verschiedene Bezeichnung des Perfects in einigen Sprachen und Lautsymbolik, Zeitschr. für Völkerpsych. xv 287 ff., xvi 117 ff.

'to know, see': 1st sing. Skr. véd-a Gr. olo-a Goth. váit, 2nd sing. véttha olo-α váist, 3rd sing. véd-a olo-ε váit. (2) Secondly, the participle active formed with the suffix -ues-, as Skr. vid-vás-

Aryan. Bartholomae, Die ai. ē-Formen im schwachen Perfect, Kuhn's Zeitschr. XXVII 337 ff. Idem, Der 'Bindevocal' i im avestischen Perf., Ar. Forsch. II 97 ff.

Greek and Latin. Ernault, Du parfait en grec et en latin, Paris 1886.

Greek. H. Malden, On Perfect Tenses in Greek, and especially the First Perfect Active, Trans. Phil. Soc., 1865, pp. 168 ff. Quaestiones de perfecti Homerici forma et usu, Leipz. 1877. der Pfordten, Zur Gesch. des griech. Perfectums, Munich 1882. J. Stender, Beiträge zur Gesch. des griech. Perfects, 2 Theile, München-Gladbach 1883-84. R. Fritzsche, Über griech. Perfecta mit Präsensbedeutung, Sprachwiss. Abhandl. aus G. Curtius' Gramm. Gesellsch. pp. 43 ff. H. Uhle, Die Vocalisation und Aspiration des griech. starken Perf., ibid. Mahlow, Einige altertümliche Perfectbildungen des Griech. Kuhn's Zeitschr. xxiv 293 ff. J. Schmidt, Die Entstehung der griech. aspirierten Perfecta, ibid. xxvII 309 ff. Idem, Noch einmal die griech. aspirierten Perfecta, ibid. xxvIII 176 ff. Alex. Hoppe, Über das griech. zweite Perfect, Festprogr. des Erfurter Gymn., Erfurt 1870, pp. 34 ff. The Author, Der Ursprung des griech. schwachen Perfects, Kuhn's Zeitschr. xxv 212 ff. F. Hartmann, Wieder einmal das z-Perfectum, K. F. Johansson, Über das griech. z-Perfect, in: ibid. XXVIII 284 ff. Beitr. zur griech. Sprachk., Upsala 1890, pp. 33 ff. F. W. Walker, Greek Aorists and Perfects in -xa, Class. Review v 446 ff.

A. Harkness, On the Formation of the Tenses for Completed Action in the Latin Finite Verb, Trans. Amer. Phil. Assoc. v 14 ff., vi 5 ff. Platzer, Die Lehre von den lat. Perfectis und Supinis, Neubrandenburg 1840. Lattmann, Das Gesetz der Perfect- und Supinbildung im Lateinischen, Zeitschr. f. d. Gymnasialw. N. F. 11 (1868) pp. 94 ff. M. Kinke, Die Zeitwörter der latein. 3. Conjugation in ihren Perfectformen, Heiligenstadt 1843. Sohleicher, Der Perfectstamm im Lateinischen, Kuhn's Zeitschr. vm 399 f. Fr. Müller, Über das lat. Perfectum, Sitzungsber. d. Wien. Akad. LXVI 225 ff. Corssen, Zur Bildung des Perfectums, in: Beitr. zur ital. Sprachk., pp. 503 ff. W. Deecke. De reduplicato linguae Latinae praeterito, Leipz. 1869. E. Frohwein, Die Perfectbildungen auf vi bei Cicero, ein Beitrag zum Sprachgebrauch C.'s und zugleich ein Supplement zu F. Neue's Formenlehre, Gera 1874. L. Havet, Les prétendus parfaits en  $-\bar{a}vi$ , Mém. Soc. lingu. vi 39. W. Schulze, Das lat. v-Perfectum, Kuhn's Zeitschr. xxvIII 266 ff. G. Curtius, Über das lat. Perfect auf vi und ui, Ber. d. sächs. Gesellsoh. d. Wiss. 1885 pp. 421 ff. P. Regnaud, Les parfaits composés en latin, L. Scheffler, De perfecti in vi exeuntis formis apud Lyon 1882.

Gr.  $\epsilon l\delta - \omega_{\varsigma}$  O.C.Sl.  $sta-v\breve{u}$  from  $\sqrt{sta}$  'stand' (II § 136 pp. 438 ff.).

Except in Armenian and Balto-Slavonic, the pr. Idg. Perfect remained in all branches of the language a large and comprehensive group. It was least changed in Aryan, Keltic, and Germanic. In Greek it was mixt up with a x-formation, and in Italic with a whole series of non-perfect tense forms.

The proethnic perfect forms may be divided into two groups according to the stem.

poetas Latinos dactylicos occurentibus, Marburg 1890. Th. Birt, Verbalformen vom Perfectstamme bei Claudian, Archiv f. lat. Lexikogr. IV 589 ff. H. Kern, Das osk. Perfect auf -tte, Kuhn's Zeitschr. XXI 240 ff. Danielsson, Zum altital. t-Perfect, Pauli's Altital. Stud. IV 133 ff.

Keltic. Windisch, Das reduplicierte Perfectum im Irischen, Kuhn's Zeitschr. XXIII 201 ff.

Germanic. W. Scherer, Die reduplicierten Präterita, Zeitschr. f. österr. Gymnas. XXIV 295 ff., and Zeitschr. f. deutsch. Altert. XIX 154 ff., 390 ff. Sievers, Die reduplicierten Präterita, Paul-Braune's Beitr. 1 504 ff. Pokorny, Über die reduplicierten Praeterita der germ. Sprachen und ihre Umwandlung in ablautende, Landskron 1874. Holthausen, Die reduplicierenden Verba im German., Kuhn's Zeitsohr. xxvII 618 ff. G. Burghauser, Die Bildung des germ. Perfectstammes vornehmlich vom Standpunkte der idg. Vocalforschung, Prag 1887. Ljungstedt, Anmärkningar till det starka preteritum i germanska språk, Upsala 1887. mann, Die reduplicierten Praeterita in den german. Sprachen, Alzey 1890. G. Holz, Die im Got. noch reduplicierten Perfecta, in: Urgerm. ê und Verwandtes (Leipz. 1890) pp. 21 ff. H. Lichtenberger, De verbis quae in vetustissima Germanorum lingua reduplicatum praeteritum J. Grimm, Die ahd. Praeterita, Germania III exhibeant, Nancy 1891. J. Hoffory, Die reduplicierten Praeterita im Altnord., Kuhn's C. Pauli, Über die deutschen Verba praeterito-Zeitschr. XXVII 593 ff. Osthoff, Das praeteritopraesens mag, Paulpraesentia, Stettin 1863. Braune's Beitr. xv 211 ff. Aufrecht, Eine altnord. Aoristform, Kuhn's Von Knoblauch, Die germ. Perfecte auf r, ibid. Zeitschr. I 474 ff. 1 573 ff. Schweizer-Sidler, r im altdeutsch. Praeteritum, ibid. II 400. Müllenhoff, Angebliche Aoriste oder Perfecta auf r im Altnord. und Hochd., Zeitschr. f. deutsch. Altert. XII 397 ff. Zarneke, Zu den reduplicierten Praeteriten, Paul-Braune's Beitr. xv 350 ff. J. von Fierlinger, Die 2. ps. sg. perf. starker Flexion im Westgerm., Kuhn's Zeitschr. XXVII 430). Works on the weak Germanic Preterite are given under § 907.

- (1) Reduplicated Stem, with o in the root syllable of the 3<sup>rd</sup> sing. indic. act., if the root belonged to the e-series. E. g. \*ge-gon-, \*ge-go-go- \*ge-go-go- from  $\sqrt{ge}$  'gignere': Gr.  $\gamma \acute{\epsilon}$ - $\gamma o\nu$ - $\epsilon$   $\gamma \acute{\epsilon}$ - $\gamma u$ - $\mu \epsilon \nu$ , Skr. ja- $j\acute{a}$ n-a ja- $j\acute{n}$ - $u\acute{r}$ .
- (2) Unreduplicated Stem. Sometimes the ablaut is the same as in (1), as \*uoid- \*uid- from  $\sqrt{ueid}$ -: Gr. oid-e iid-uev, Skr.  $v\acute{e}d$ -a vid- $m\acute{a}$ . Sometimes different, as with  $\bar{e}$  in roots of the e-series; e. g. \* $m\bar{e}d$  from  $\sqrt{med}$  'ineasure': O.Ir. ro  $m\bar{u}d$ -ar Goth.  $m\bar{e}t$ -um; \* $s\bar{e}d$  from  $\sqrt{sed}$  'sit': Goth.  $s\bar{e}t$ -um Lith.  $s\acute{e}d$ - $\bar{e}s$ ; \* $s\bar{e}\bar{g}h$  from  $\sqrt{se\hat{g}h}$  'conquer, hold': Skr.  $s\bar{a}h$ - $v\acute{a}s$ -.

In perfect stems like \*ge-gon- or \*uoid- the o-grade prevailed in the  $2^{nd}$  and  $3^{rd}$  sing. Indic. Active ( $o\bar{t}\sigma\theta\alpha$   $o\bar{t}\delta\epsilon$ ), and, in the opinion of most scholars, the  $1^{st}$  sing. as well ( $o\bar{t}\delta\alpha$ ); the e-grade in the Conjunctive ( $\epsilon \check{u}\delta$ -o- $\mu\epsilon\nu$ ) Skr. ta- $t\acute{a}n$ -a-n), and, according to some scholars, in the  $1^{st}$  sing. Indic. Active too ( $\pi\dot{\epsilon}\phi\epsilon\nu\gamma$ - $\alpha$ ); the weak grade in the plural and dual Active, and right through the Indicative Middle ( $\gamma\dot{\epsilon}$ - $\gamma\alpha$ - $\mu\epsilon\nu$   $\check{\epsilon}$ - $i\kappa$ - $\tau\sigma\nu$   $\tau\dot{\epsilon}$ - $\tau\rho\alpha\pi$ - $\tau\alpha\iota$  Skr. ni-ny- $u\acute{r}$  ni-ny- $u\acute{e}$ ), and in the Optative (Skr. va-vxt- $y\bar{a}$ -t Goth.  $va\dot{u}r\bar{p}$ -ei-ma). To o in \*ge-gon-e answers  $\bar{o}$  in \*se- $s\bar{o}$ -(Gr.  $u\acute{e}$ - $v\acute{e}$ - $v\kappa$  Goth.  $sa\acute{t}$ - $s\bar{o}$ ) from  $\sqrt{s\bar{e}}$ - 'send forth, sow'.

Remark. Considering that the ending of the 1st sing. indic. act. was Idg. -a, while that of the 3rd sing. was Idg. -e, there is a difficulty in the difference between Skr. 1st sing. ja-ján-a and 3rd sing. ja-ján-a. I have identified jajāna with γέγονε (I § 78 p. 69). De Saussure (Mém sur le syst. prim. 72 f.) and Osthoff (Perfeot, 61) equate jajána = Idg. \*ĝeĝena, on which view γέγονα would be due to levelling and should be \*yeyeva; and as a matter of fact no difficulty worth mentioning faces this view. From the standpoint of those scholars who deny that Idg. o becoms Ar.  $\bar{a}$  in open syllables, no explanation of Skr.  $jaj\bar{a}na$  has been found which is in the smallest degree satisfactory (see the last attempt in Bechtel, Die Hauptprobleme der idg. Lautlehre, 57, 165); cp. § 790 p. 322 on the ā of bhāraya-ti. It may be observed in passing that the means lately used by J. Schmidt to combat my theory of this Aryan  $\bar{a}$  are very little calculated to help in solving the point (see Kuhn's Zeitschr. XXXI 472 footnote). A long list of authorities and ex cathedra statements will never decide the matter; this can only be done by constant and scrupulous examination of the facts. Perhaps the question may be helped to a conclusion by the study of Indo-Germanic accent which has lately been taken up.

§ 844. When the root ends in a consonant, some part at least, large or small, of the indicative forms in all the different languages have a short vowel before those personal endings which begin with a consonant.

Greek shows -α- in the 1st and 2nd pl. τε-τράφ-α-μεν τε-τράφ-α-τε (but ἴδ-μεν εἰλήλουθ-μεν ἴστε). Compare partic.  $\pi επτω'$ ς for \* $\pi ε$ - $\pi τ$ - $\alpha$ -Fω'ς, answering to Skr. pa-pt-i-vάs- (but εἰδ-(F)ω'ς), and the mid.  $\pi έ$ - $\pi τ$ - $\alpha$ - $\mu α$  beside  $\pi ε τ$ - $\alpha$ - $\sigma α$ α. On - $\alpha$ ς beside - $\theta$ α in the 2nd sing., see p. 386.

Latin.  $1^{st}$  pl. tu-tud-i-mus  $s\bar{e}d$ -i-mus.

Old Irish. 1st pl. ce-chn-ammar 2nd pl. ce-chn-aid.

Gothic.  $1^{st}$  pl. vit-um  $s\bar{e}t$ -um skai-skáid-um  $2^{nd}$  pl. vit-u-p  $s\bar{e}t$ -u-p skai-skáid-u-p.

It is hard to decide when or how this intermediate vowel was to be found in the various perfect schemes of the parent language (for the same scheme did not do duty for all perfects). Perhaps then, as in the Veda, the quantity of the preceding syllable had something to do with it.

What complicates the problem greatly is the suspicion that so many forms may have been changed by analogy. In Aryan, Greek, and Italic the question arises whether forms with the intermediate vowel were not influenced by forms from a root ending in a long ā-vowel, as Skr. ta-sthi-má Gr. ξ-στα-μεν Lat. ste-ti-mus (for stetimus cp. however § 869). In Greek, Italic, Keltic, and Germanic the 3<sup>rd</sup> pl. has an nt-suffix, Gr.

<sup>1)</sup> I do not here consider the a of the  $2^{nd}$  and  $3^{rd}$  dual active  $vid\acute{a}thur$   $vid\acute{a}tur$ , because it may have been identical with that of the  $2^{nd}$  and  $3^{rd}$  pl. vid- $\acute{a}$  and  $3^{rd}$  sing.  $v\acute{e}d$ -a (§ 1038).

-αντι -ατι (mid. -αται), Umbr.-Osc. -ens, O.Ir. -atar and Goth. -un; and it is quite possible that the vowel of these endings passed on to other persons. In Greek, there was mutual attraction between the perfect and s-aorist, because one or two personal endings were the same, τέτροφ-α -ε having the same suffixes as εδειξ-α -ε (beyond doubt τέτροφ-ας follows εδειξ-ας, and in later Doric γέγον-αν follows εδειξ-αν); then which came first, τετράφ-α-μεν -ατε or εδείξ-αμεν -ατε? In Italic, again, as early as the proethnic stage, the old perfect had got mixt up with thematic aorist. If, for instance, i was the thematic vowel in fu-i-mus tetig-i-mus dīx-i-mus as well as with fu-i-t tetig-i-t  $d\bar{\imath}x$ -i-t (cp. pres. ag-i-mus), yet it is uncertain whether the -i- of Lat. -i-mus, when used with consonantal roots, was ever anything else but Idg. -o-. Even in Keltic the question meets us whether the plural forms had not the thematic vowel.

Since Avest. daidy-ama cannot be kept apart from optative forms like jam-y-ama (see § 1001), to assume an Idg. suffix -mme as variant of -me in the perfect seems almost inevitable; and therefore I am inclined to refer to this the Gr. -uuer in τετράφ-αμεν etc., and the Goth. -um in skaiskáid-um etc.; Lat. -imus and O.Ir. -ammar may also in some cases But again the conjecture offers represent the same. itself that the difference between Skr. papt-i-má and yuyuj-má, between Gr. τετρά-φαμεν and ελλήλουθ-μεν, represents a difference of structure like that which exists in Skr. rud-i-más (Class IX §§ 572 ff.) and uš-más (Class I §§ 492 ff.). It may be that once \*papt-ama \*sazd-amá (like Avest. daidy-ama) and tasthi-má (= ξστα-μεν) dadhi-má existed side by side, and that the former were transformed to match the latter and became paptimá sēdimá. But proved this cannot be, not even by the Vedic law of quantity. There is always the possibility that the parent language itself possessed perfect stems like \*pe-pto- (and thus 1st pl. \*pe-pto-me).

§ 845. The preterite connected with the Idg. perfect — pluperfect as it is called — which is only found with certainty

in Aryan and Greek, shows the same personal endings as other augmented preterites. Like the conjunctive and optative of the perfect, this cannot be distinguisht from the corresponding forms of our V<sup>th</sup> Present Class; see § 485 p. 39, § 555 p. 108.

In the same languages the pluperfect sometimes has thematic inflexion. These forms are to be compared with the corresponding forms of Present Class VI (§§ 561 ff.).

### Proethnic Indo-Germanic.

# § 846. (A) Reduplicated Perfect.

With roots beginning in a consonant, the syllable of reduplication originally ended in -e, no matter what ablaut series the root might belong to. Examples: \* $\hat{g}e$ - $\hat{g}on$ -\* $\hat{g}e$ - $\hat{g}n$ -Gr.  $\gamma \dot{\varepsilon}$ - $\gamma o\nu$ - $\varepsilon$  O.Ir. ro  $g\bar{e}nar$  (for \*ge-gn-) Skr. ja- $j\acute{a}n$ -a from  $\sqrt{\hat{g}en}$ -, \*se- $st\bar{a}$ -\*se- $st\bar{a}$ - Gr.  $\tilde{\varepsilon}$ - $\sigma\tau\alpha$ - $\mu\varepsilon\nu$  Lat. ste-ti-mus Skr. ta- $-sth\vec{a}$ u from  $\sqrt{st}\bar{a}$ -. But even then there were not lacking perfect forms with  $\bar{e}$  in the reduplicator, which one may call the Intensive Perfect: Gr.  $\dot{\varepsilon}\gamma\dot{\eta}$ - $\gamma\varepsilon\varrho$ - $\mu\omega$  Skr.  $j\bar{a}$ - $g\acute{a}r$ -a from  $\sqrt{ger}$ -. See §§ 471, 472 pp. 15 and 17. The treatment of the initial root-consonants in the reduplicator has been already described, §§ 475 and 476, pp. 20 ff.

It cannot be proved for the parent language, that in roots beginning with a vowel, an e (or some other short vowel), serving for the reduplicator, contracted with the root-initial (as some have inferred from Lat.  $\bar{e}d-\bar{\imath}$  Goth.  $fr-\bar{e}t$  Skr.  $\bar{a}d-a$  from  $\sqrt{ed}$ -, Gr.  $\bar{\imath}\chi\alpha$  O.Icel.  $\bar{o}k$  Skr.  $\bar{a}j-a$  from  $\sqrt{ag}$ -). It is very likely indeed that all these forms belong to the unreduplicated perfect type. See § 848.

 $\sqrt{der}$  'split, tear, flay', act.  $3^{rd}$  sing. \*de- $d\acute{o}r$ -e 1st pl. \*de- $d\emph{q}$ - $m\acute{e}$  mid. 1st sing. \*de-dr- $d\acute{e}$  (conj. \*de- $d\acute{e}r$ -e- $t(\emph{i})$  opt. \*de-dr- $i\acute{e}$ -t or \*de-dr- $i\acute{e}$ -t): Skr.  $dad\acute{a}ra$  mid.  $dadr\~{e}$  partic. da- $d\emph{q}$ - $v\acute{a}s$ -, Gr.  $\delta \acute{e}\delta a_0 \tau a_1$  (Goth. ga-tar).  $\sqrt{smer}$ - 'remember': Skr. sa- $sm\~{a}r$ -a, Lat. adj. memor derived from a perf. \*me-mor- $\vec{\imath}$  (§ 476 p. 23). Skr.  $k\~{s}ar$ - Gr.  $g\mathscr{P}$ -e- 'to cause to run off or

disappear' (§ 812 p. 348): Skr. ca-kšār-a, Gr. δι-έφθορε έ-φθαρ--ται. Skr. śa-śār-a 'he broke up, crushed' pl. śa-śr-ur (gramm.) mid. śa-śr-ē (O.Ir. do-ro-chair 'cecidit').  $\sqrt{ger}$ - 'swallow': Skr.  $ja-g\bar{a}r-a$ , Gr. βέ-βρω-ται (βρω- = \* $q\bar{r}$ -).  $\sqrt{per}$ - 'bring, bring forth, give a share' (Lith. per-iù 'I brood, incubate, hatch'): Gr.  $\pi \acute{\epsilon}$ - $\pi \rho \omega$ - $\tau \alpha \iota$ , Lat. pe-per- $\bar{\iota}$  for \*pe-par- $\bar{\iota}$  ( $\pi \rho \omega$ - par- = \* $p\bar{r}$ -).  $\sqrt{tel}$ - 'carry, bear': Gr. τέ-τλα-μεν, Lat. te-tul- $\bar{\imath}$ .  $\sqrt{\hat{g}}$ engignere': Skr. ja-ján-a ja-jn-úr ja-jn-é, Gr. γέ-γον-ε γέ-γα-μεν, O.Ir. mid. ro genar (gen- for \*gegn-). \(\sqrt{men-}\) think, mean, regard': Skr. 3rd dual mid. ma-mn-átē (this may be from stem  $mn-\bar{a}$  as said in § 850), opt.  $ma-man-y\bar{a}-t$ , Gr.  $\mu \dot{\epsilon}-\mu o \nu - \epsilon$  $\mu \dot{\varepsilon} - \mu \alpha - \mu \varepsilon \nu$ , Lat.  $me-min-\bar{\imath}$  imper.  $me-men-t\bar{o}$  (= Gr.  $\mu \varepsilon - \mu \dot{\alpha} - \tau \omega$ ), O.Ir. mid. do-mēnar instead of pr. Kelt. \*me-mn- (Goth. man mun-un, Lith. part. mìn-ēs).  $\sqrt{ghen}$ - 'strike': Skr. ja-ghán-a ja-ghn-é conj. ja-ghán-a-t part. ja-ghan-vás- ja-ghn-i-vas-, Gr. πέ-φα-τω, O.Ir. 1st sing. ro ge-gon. \(\sqrt{ten-}\) ten- 'stretch': Skr. ta-tán-a ta-tn- $\bar{e}$  ta-tan- $\bar{e}$   $(tan-=*t\eta n-)$  conj. ta-tan-a-t, Gr. rέ-τα-ται, O.Lat. te-tin-ī. Skr. kšan- Gr. κτεν- 'to wound, kill': Skr. ca-kšān-a ca-kšan-ē (gramm.), Gr. ἀπ-έκτονε.  $\sqrt{gem}$ - 'go': Skr. ja-gám-a ja-gm-úr ja-gm-é Avest. opt. ja-ym-yā-b Skr. part. ja-gan-vás- (I § 199 Rem. 2 p. 168, § 225 p. 193), Gr. βέ-βα-μεν (Goth. qam, Lith. gim-\(\bar{\epsilon}\)s 'come into the world' partic.). V klej- 'bend, incline': Skr. śi-śráy-a śi-śriy-έ, Gr. κέ-κλι-ται. V lei- 'linere': Skr. li-ly-ur li-ly-ē, O.Ir. 3rd sing. ro li-l 3rd pl. ro le-l-dar. V kleu- 'hear': Skr. śu-śráv-a śu-śruv-é conj. śu--śrav-a-t opt. śu-śru-yá-t śu-śrū-yá-t, Gr. imper. κέ-κλυ-θι beside κέ-κλυκα (see § 557 p. 109), O.Ir. 1st sing. ro chuala for \*cōla \*cu-clov-a Mid.Cymr. ci-gleu. V qieu- 'to move, shift': Skr. cu--cyuv-é Gr. έ-σου-ται. V gheu- 'pour': Skr. ju-hāv-a ju-huv-ur iu-hv-é ju-huv-ē, Gr. κέ-χν-ται. V pleu- 'to swim, float': Skr. pu-pluv-ur pu-pluv-ē, Gr. πέ-πλυ-ται. V dheu- 'move violently, shake, take hold': Skr. du- $dh\bar{a}v$ -a du-dhuv- $\bar{e}$  opt. mid. du--dhuv-ī-ta, Gr. τέ-θν-ται. V bheu- 'become, be': Avest. ba--vāv-a 3rd pl. bā-bv-are Skr. 3rd pl. ba-bhūv-úr opt. ba-bhū-yá-t partic. ba- $bh\bar{u}$ - $v\acute{a}s$ - (- $\bar{u}v$ - instead of -uu- as in  $\acute{a}$ - $bh\bar{u}v$ -am8 497 p. 56 f.; with ba-bhūv-a ba-bhū-tha compare á-bhū-t

Gr.  $\ddot{\varepsilon}$ - $\varphi\bar{v}$ , loc. cit., and fut. Avest.  $b\bar{u}$ - $\dot{s}ye$ -iti Gr.  $q\cdot\dot{v}$ - $\sigma\omega$  § 748 p. 271), Gr.  $\pi \varepsilon - \varphi \psi - \bar{\alpha} \sigma \iota \quad \pi \varepsilon - \varphi \psi - \omega \varsigma$  (O.Ir. 3<sup>rd</sup> sing. ro  $b\bar{\rho} i$ , Lith. bù-vēs O.C.Sl. by-vŭ). V derk- 'see': Skr. da-dárs-a da-drs-úr  $da-dr\acute{s}-\acute{e}$ , Gr.  $\delta\acute{e}-\delta o \varrho \varkappa - \varepsilon$  (O.Ir. ad-con-dairc).  $\lor uer \mathring{g}-$  'work': Avest.  $3^{rd}$  sing. mid.  $v\vec{a}-ver^ez-\bar{o}i$ , Gr.  $\acute{e}-o \varrho \gamma - \varepsilon$ .  $\lor mer d-$  'crush': Skr. ma-mard-a ma-mrd-ur  $ma-mrd-\bar{e}$ , Lat.  $me-mord-\bar{\iota}$   $me-mard-\bar{\iota}$ mord-i-mus momordī momordimus. V ters- 'be dry, athirst': Skr. tā-tṛṣ-úr part. mid. ta-tṛṣ-āṇá-s (Goth. ga-pars -paúrs-un opt. 1st pl. -þaúrs-ei-ma). V dhers- 'be bold': Skr. da-dhárṣ-a  $d\bar{a}$ -dhrš-ur conj. da- $dh\acute{a}r$ š-a-t (Goth. ga-daurs-un). V yert- 'turn, give a certain direction or inclination to': Skr. va-várt-a va-vrt-úr va-vrt-é vā-várt-a vā-vrt-úr vā-vrt-é (Goth. varþ vaúrþ-um). kl-ep- 'to steal' (§ 797 Rem. p. 334): Gr. κέ-κλοφ-ε part. Messen. κε-κλεβ-ώς mid. κέ-κλεπ-ται (Goth. hlaf). V bhendh- 'bind': Skr. ba-bandh-a ba-bandh-ur (Goth. band  $V dei\hat{k}$ - 'show': Skr. di- $d\acute{e}\dot{s}$ -a di- $di\acute{s}$ - $\bar{e}$ , Umbr. de-rsic-ust for \*de-dic- (I § 369 p. 279) fut. perf. 'dixerit' (Goth. ga-táih -taíh-un). V bheid- 'split': Skr. bi-bhéd-a bi-bhid-úr bi-bhid-ē (Goth. báit bit-un). ∨ leig- 'leave': Skr. ri- $r\acute{e}c$ -a ri-ric- $\acute{e}$  opt. ri-ric- $y\ddot{a}$ -t, Gr.  $\lambda \acute{\epsilon}$ - $\lambda oi\pi$ - $\epsilon$   $\lambda \acute{\epsilon}$ - $\lambda si\pi$ - $\tau \alpha \iota$  (Goth. táihv lathv-un O.H.G. lēh liw-un). V seig- 'pour out, strain, filter': Skr. si-šēc-a si-šic-ē Ved. si-sic-ur si-sic-ē § 475 p. 20 (O.H.G. sēh sig-un). V ĝeus- 'taste, try, enjoy': Skr. ju-jóš-a ju-juš-ur ju-juš-é, Gr. γέ-γεν-μαι, O.Ir. 3rd sing. do-roigu (Goth. káus kus-un O.H.G. kōs kur-un opt. 2nd pl. kur-ī-t).  $\bigvee bheudh$ - 'wake, observe': Skr.  $bu-b\bar{o}dh$ -a bu-budh- $\bar{e}$  conj. bu-bodh-a-s, Gr. πέ-πνοται (Goth. ana-báuþ -bud-un). V bheugbheug- 'to bend': Skr. bu-bhōj-a (gramm.), Gr. πέ-φευγ-α πε-φυγ--μένο-ς (Goth. báug bug-un). V jeug- 'iungere': Skr. yu-yōj-u yu-yuj-ma yu-yuj-é, Gr. έ-ζενκ-ται. V reud- 'weep, lament': Skr. ru- $r\bar{o}d$ -a ru-rud-ur (O.H.G.  $r\bar{o}z$  ruzz-un). 'sleep': Skr. su- $\S v\bar{a}p$ -a su- $\S up$ -ur (O.Icel. svaf).  $\checkmark$  uegh-'vehere': Skr. u-vāh-a ūh-ur (Goth. ga-vag, Lith. vēž-ēs O.C.Sl. vez-ŭ). V pet- 'fly, shoot through the air, fall': Skr. pa-pát-a pa-pt-úr (pēt-ur) part. papt-i-vás-, Gr. πεπτώς doubtless for \* $\pi \varepsilon - \pi \tau a - F \omega \varsigma$ .  $\vee$  sed- 'sit': Skr. sa-s\(\dar{a}\)d-a s\(\bar{e}\)d-ur

for \*sa-zd-, Lat.  $s\bar{e}d-\bar{i}$  for \*se-zd-? (Goth. sat).  $\vee dh\bar{e}-$  'set, place, lay': Skr. da-dhāú da-dhá-tha da-dhi-má da-dh-úr da-dh-é, Gr. τέ-θε-ται, Lat. crēdidī (I § 507 Rem. p. 372), Gall. de-de 'dedit' or 'posuit' (O.Sax. de-du-n opt. de-d-i? § 886). V sē- 'send forth, throw, sow': Gr. εἶται for \*έ-ε-ται Dor. ἀφ-έω--ται with ω from the active (αφ-έωνα), Goth.  $sαi-s\bar{o}$   $sαi-s\bar{o}-un$ . V dō- 'give': Skr. da-dāú da-di-má dad-é, Gr. 3rd pl. Boeot. απο-δεδόανθι mid. δέ-δο-ται, Lat.  $de-d-\bar{\imath}$ .  $\vee p\bar{o}$ - 'drink': Skr. pa-pāιi pa-pi-mά pa-p- $\acute{e}$ , Gr. πέ-πο-ται (act. πέ-πωκα), Lat.  $bib\bar{\imath}$  instead of \*pe-p- $\bar{\imath}$  (following  $bi-b\bar{o}$ ).  $\vee st\bar{a}$ - 'stand': Skr. ta-sthāú ta-sthi-má ta-sthé, Gr.  $\xi$ - $\sigma \tau \alpha$ - $\mu \varepsilon \nu$   $\times \alpha \vartheta$ - $\varepsilon \sigma \tau \alpha \tau \alpha \iota$ , Lat. ste-t-\(\bar{\tau}\) ste-ti-mus. \(\nu\) s\(\hat{k}\) hait- s\(\hat{k}\) haid- 'scindere' (\(\xi\) 521 p. 85): Skr. ci-chéd-a ci-chid-ē, Lat. sci-cid-ī, Goth. skai-skáiþ skai--skáid-un. V (s)taud- 'knock': Skr. tu-tód-a tu-tud-úr, Lat. tu-tud-ī tu-tūd-ī, Goth. staí-stáut staí-stáut-un. Ital. Kelt. kan-'sing': Lat. ce-cin-ī for \*ce-can-ī, O.Ir. 1st sing. ce-chan. V dau- 'burn': Skr. du- $d\bar{a}v$ -a (gramm.), Gr.  $\delta \varepsilon$ - $\delta \eta(F)$ - $\varepsilon$  ( $\eta$  = pr. Gr. ā) δε-δαν-μένο-ς. Skr. šad- Gr. καδ- 'to distinguish oneself': Skr. śā-śad-úr mid. 1st pl. śā-śad-mahē, Gr. κε-καδ--μένο-ς (Pindar), Hom. κέκασσαι κεκάσμεθα. V pāk- pāg- 'make firm': Gr. Dor.  $\pi \acute{\varepsilon} - \pi \vec{\alpha} \gamma - \varepsilon$ , Lat.  $pe-pig-\bar{\imath}$  for  $*pe-pag-\bar{\imath}$ .  $\vee$   $pl\bar{\alpha}q$  $pl\bar{a}a$ - 'strike': Gr. Dor.  $\pi \dot{\epsilon}$ -πλ $\bar{\alpha}\gamma$ - $\epsilon$ , Goth.  $fa\acute{a}$ - $fl\bar{o}k$ . Skr. ja- $hl\bar{a}d$ - $\bar{e}$ (gramm.) from hlād- 'to refresh, give life to', Gr. Dor. κέ-γλαδ-ε 'swells, becomes luxuriant'.

Skr.  $\bar{a}n$ - $\acute{a}\dot{s}a$  'he désired',  $\bar{a}n$ - $a\dot{s}$ -ma  $\bar{a}n$ - $a\dot{s}$ - $\acute{u}r$   $\bar{a}n$ - $a\dot{s}$ - $\acute{e}$ , opt.  $\bar{a}n$ - $a\dot{s}$ - $y\bar{a}$ -t, O.Ir. t- $\bar{a}n$ -aic 'he came' 1st sing. t- $\bar{a}n$ -ac (-c = -nc-, I § 212 p. 178, § 513 p. 375), cp. aor. Gr.  $\grave{\epsilon}\nu$ - $\epsilon\gamma\nu$ - $\epsilon\tilde{\nu}\nu$ , § 470 p. 15. Variant Skr.  $\bar{a}n\bar{a}\dot{s}$ -a Gr.  $\kappa\alpha\tau\dot{\eta}\nu$ o $\kappa\alpha$  '  $\kappa\alpha\tau\epsilon\nu\dot{\eta}\nu$ o $\kappa\alpha$  (cp.  $\pi$ o $\delta$ - $\eta\nu$ e $\kappa$ - $\eta$ ' $\epsilon$  'reaching to the feet'). On Skr.  $\bar{a}\dot{s}$ -a see § 851; on Gr.  $\grave{\epsilon}\nu$ - $\eta$ ' $\nu$ o $\kappa$ - $\epsilon$   $\grave{\epsilon}\nu$ - $\eta$ ' $\nu$ e $\gamma\nu$ - $\tau$ a $\iota$ , § 858.

§ 847. Perfect forms from Extended Roots.

Root + suffix  $-\bar{a}$ -,  $-\bar{e}$ -  $-\bar{o}$ - (§§ 578 ff. pp. 118 ff.). Skr. ji- $jy\bar{a}\dot{u}$ , Gr. Ion.  $\beta\varepsilon$ - $\betai\eta$ - $\tau\alpha\iota$  ( $\beta\varepsilon$ - $\betai\eta\kappa\varepsilon$ ) from \* $g(i)\dot{i}$ - $\bar{a}$ -,  $\swarrow$   $ge\dot{i}$ -'compel, subdue'. Skr. ma- $mn\bar{a}u$  (gramm.), Gr. Dor.  $\mu\dot{\varepsilon}$ - $\mu\nu\bar{a}$ - $\tau\alpha\iota$  from mn- $\bar{a}$ -  $\swarrow$  men-'think, mean'. Skr. ja- $gl\bar{a}u$ , Gr.  $\beta\dot{\varepsilon}$ - $\beta\lambda\eta$ - $\tau\alpha\iota$  ( $\beta\dot{\varepsilon}$ - $\beta\lambda\eta\kappa\varepsilon$ ) from gl- $\bar{e}$ -  $\bigvee$  gel-'fall' (cp. § 587 p. 127). Skr. va- $v\bar{a}u$ ,

Goth. vai- $v\bar{o}$  from u- $\bar{e}$ - $\vee au$ -'blow'. Skr. ja- $j\bar{n}\bar{a}u$ , Gr.  $\bar{e}$ - $\gamma\nu\omega$ - $\sigma$ - $\tau\alpha\iota$  with  $\sigma$  added later  $(\bar{e}$ - $\gamma\nu\omega\kappa\epsilon)$ , O.Ir. ad- $g\bar{e}n$  (§ 877) from gn- $\bar{o}$ - $\vee gen$ -'know'. On the Sanskrit conjugation of these perfects, see § 850.

Root + s-suffix (§§ 655 ff. pp. 189 ff.). ten-s- 'pull, draw': Skr. 3<sup>rd</sup> pl. mid. ta-tas- $r\acute{e}$  (Goth. at-pans -puns-un).  $tu\acute{e}$ -s- 'shake': Skr. ti- $tvi\check{s}$ - $\acute{e}$ , Gr.  $\sigma\acute{e}$ - $\sigma\acute{e}i\sigma$ - $\tau a\iota$ .

Root + dh-suffix (§§ 688 ff. pp. 218 ff.).  $r\bar{e}$ -dh-: Skr. ra- $r\bar{a}dh$ -a ra- $r\bar{a}dh$  ur (pres.  $r\bar{a}dh$ - $n\bar{o}$ -ti 'finishes successfully, makes all right'), Goth. ga- $rair\bar{o}\bar{p}$  - $rair\bar{o}dun$  (pres. ga- $r\bar{e}da$  'I consider, busy myself').

In the same way, the present sk-suffix in seen in Skr. pa-prach-a pa-prach-ur and Lat. po posc- $\bar{\imath}$  for \* $poporcsc\bar{\imath}$  from prek- 'ask'; beside these we have Umbr. pepurkurent 'rogaverint', Mid.Ir. mid. im-chom-arc-air, Goth. frah (§ 670 p. 203). Probably perfect forms with sk are not so old as the parent language.

- § 848. (B) Unreduplicated Perfect.
- (1) First comes a group in which the vowel gradation was the same as in the Reduplicated Perfect. No perfect of this kind can now be recognised in particular forms of Italic, Keltic, or Balto-Slavonic; and in Germanic, only with those roots which do not belong to the e-series.

Skr.  $v\acute{e}d$ -a vid- $m\acute{a}$  Avest. Gath.  $va\acute{e}d$ - $\bar{a}$ , Gr.  $o\widetilde{i}\delta$ - $\varepsilon$   $i\delta$ - $\mu\varepsilon\nu$  from  $\nu$   $\mu\acute{e}id$ - 'know'.') Skr.  $i\acute{s}$ - $\bar{e}$  (and  $i\acute{s}$ - $i\acute{e}$ ) Avest. is- $i\acute{e}$  'has got something into one's power, has power over', Goth.  $\acute{a}ih$  'has' pl.  $\acute{a}ig$ -un (cp. § 888). Skr. sarpa 'he crept' (upa-sarpa) beside sa-sarpa,  $vi\acute{s}$ -i- $v\acute{a}s$ - beside vi- $v\acute{e}\acute{s}$ -a vi- $vi\acute{s}$ - $\bar{e}$  from  $vi\acute{s}$ - 'to enter', ni- $i\acute{s}idhur$  beside ni- $i\acute{s}i\dot{s}idha$  'he warded off, forbade' -i- $i\acute{s}ii\acute{s}idhur$ . Gr. Lesb. Ion.  $o\acute{i}\varkappa$ - $\varepsilon$  'is like'  $o\acute{i}\varkappa$ - $\alpha$ - $\mu\varepsilon\nu$  beside  $i\acute{e}o\iota\varkappa$ e for \* $F\varepsilon$ - $Fo\iota\varkappa$ - $\varepsilon$ , Hom.  $i\acute{e}\mu\varphi\iota$ - $(F)\alpha\chi\nu\~i\alpha$  beside  $i\acute{e}\chi\omega$  'I cry out' for \* $F\iota$ - $F\alpha\chi\omega$  (§ 552 p. 107).

<sup>1)</sup> Skr.  $viv\acuteeda$  'he found out' does not ask for consideration here, although it comes from the same root. It probably first arose when the root had become differentiated into two — vid- 'know' and vid- 'find' (pres.  $vind\acutea-ti$   $vitt\acutee$ ).

(2) Next these I place a number of forms which perhaps had e for the root vowel in the parent language itself. Gr. Hom. ἔρχ-αται ἔρχ-ατο from (f)έργω 'I shut up, shut off'.1) Gort. κατα-Γελμένο-ς 'collected'2) from \*Γελ-νω Lesb. ἀπ-έλλω etc., see § 611 p. 150; parallel reduplicated stem Hom. ἐέλμεθα, έπί-τευκται εν έπιτυχία έστί (Ms. εστω) Pind. plpf. έόλει. Hesych. beside ἐπι-τυγχάνω; but redupl. τέ-τινχ-ε. Hom. δέχ--αται from δέχομαι 'I receive'; but redupl. δέ-δεκ-ται. Compare further Curtius, Verb 112 163 ff.; G. Meyer, Gr. Gr. 2 pp. 480 f. Skr. yam-ur yam-átur beside ya-yām-a yēm-úr from yam-'cohibere'. darš-i-vas- beside da-dárš-a da-drš-úr da-drš-i-vasfrom darš- 'to see'. ōk-i-vás- beside u-vốc-a ūc-úr from uc-(Veuq-) 'to take pleasure in'. skambh-ur skambh-áthur beside ca-skambh-a ca-skabh-āná-s from skambh- 'to support'. śas-ur  $\dot{s}as-ir\bar{e}$  beside  $\dot{s}a-\dot{s}as-a$   $\dot{s}a-\dot{s}as-ur$  (instead of \* $\dot{s}a-\dot{s}as-ur$ ) from śąs- (kens-) 'to prophesy, praise'. takš-ur takš-atur beside ta-tákṣ-a ta-takṣ-úr from takṣ- 'to fashion'. sah-vás- (Rig-V., Pada text) beside  $s\bar{a}-s\bar{a}h-a$   $s\bar{e}h-i-ma$   $sa-sah-\bar{e}$  from sah- 'to subdue' (cp. sāh-vás- under 3). In forms like darš-i-vas-, the strong grade in the root may be explained as due to the analogy of the sing. indic. active, as in reduplicated forms like śa-śas-ur. But an argument for the formation of the whole group from a stem which is not really perfect to begin with is found in the partic. vi-jān-úṣ-as Rig-V. x 271, which must be derived from jna- 'to know' and was modelled upon the present jāná-ti (§ 598 p. 141 f.), and in the perfects belonging to reduplicated present stems, such as sid-atur (from sid-a-ti), vivak-vás- (from ví-vak-ti), didās-i-tha (from dí-dāsa-ti), nốnāv-a (from nố-nav-ī-ti), see § 850; compare viś-i-vás-, cited under (1), beside pres. viś-á-ti and dhi-šē dhirē beside aor. ά-dhi-ta, also Gr. ἄγ-νια 'way, road' (sc. όδός) beside ηχα ηχμαι and pres. ἄγω.

<sup>1)</sup> Whether ἐέρχατο is augmented or reduplicated is doubtful.

<sup>2)</sup> Wrongly read - Fηλμέ-νος by Baunack.

Remark 1. Skr.  $sa-sah-\bar{e}$  (beside  $s\bar{e}h$ -) may have been formed from the stem seen in  $sah-v\acute{a}s$ -, just as  $sa-s\bar{a}h-\bar{e}$  was from that of  $s\bar{a}h-v\acute{a}s$ -(see below). Again, there is no need to ascribe the re-formation  $\acute{s}a-\acute{s}as-ur$ - instead of  $*\check{s}a-\check{s}as-ur$  to the influence of the singular alone  $(\check{s}a-\check{s}\acute{a}s-a)$ , cp. § 852. For Greek, too, we should have one more point in favour of the explanation of the secondary vocalism of the root in forms like  $\check{s}-\check{s}\ell-u\alpha$  (instead of  $*f-\check{s}-fu\ell-u\alpha$ ), cp. § 859.

(3) Forms with  $\bar{e}$ - in the root-syllable, from roots of the e-series ending in a single consonant; the connexion with present stems having similar vocalism is obvious (§ 480 Rcm. p. 28 f., § 494 p. 28). O.Ir. mid.  $ro\ m\bar{e}d$ -ar 'iudicavi', Goth. pl.  $m\bar{e}t$ -un opt.  $1^{st}$  pl.  $m\bar{e}t$ -ei-ma from  $\nu$  med- 'measure', cp. Gr. pres.  $\mu\eta'\delta$ - $\varepsilon$ - $\tau\alpha\iota$ . Goth. pl.  $s\bar{e}t$ -un, Lith. partic.  $s\dot{e}d$ - $\bar{e}s$  from  $\nu$  sed-'sit' (cp. § 494 p. 54, § 859 on Gr.  $\bar{\eta}\sigma$ - $\tau\alpha\iota$ , whose initial is perhaps to be explained by supposing that \* $s\bar{e}d$ - was represented in Greek), cp. Lith. pres.  $s\dot{e}d$ -mi. Skr.  $s\bar{a}h$ - $v\dot{a}s$ - from  $\nu$   $se\hat{g}h$ -'to subdue', cp.  $s\dot{a}k$ - $s\dot{v}a$   $s\dot{a}h$ -a-ti  $s\bar{a}dh\dot{a}$ -s (= \* $s\bar{e}gh$ + $t\bar{o}$ -);  $d\bar{a}\dot{s}$ - $v\dot{a}s$ -  $d\bar{a}\dot{s}$ -i- $v\dot{a}s$ - from  $\nu$   $de\hat{k}$ - 'honour, prize' ( $da\dot{s}as$ - $y\dot{a}$ -ti Lat. dec-us), cp.  $d\bar{a}\dot{s}$ -ti (fr.  $\delta\eta\varkappa$ - $v\dot{\nu}\mu\varepsilon\nu\sigma$ -s-  $\delta\eta\varkappa$ - $av\dot{a}\sigma\iota\alpha\iota$  (§ 621 p. 158, § 639 p. 178); I regard sa- $s\bar{a}$ - $h\bar{e}$  da- $da\dot{s}$ -i-ma as new forms in place of \* $s\bar{a}h$ - $\bar{e}$  \* $d\bar{a}\dot{s}$ -i-ma.

Since Latin  $s\bar{e}d$ - in  $s\bar{e}d$ - $\bar{i}$   $s\bar{e}d$ - $\bar{i}$ -mus can be regularly derived from \*se-zd- (cp.  $s\bar{i}d\bar{o}$  for \*si-zd- $\bar{o}$  I § 594 p. 450), it is reasonable to assume that  $l\bar{e}g$ - $\bar{i}$   $v\bar{e}n$ - $\bar{i}$  are simply cast in the same mould by analogy: just as in Sanskrit  $p\bar{e}t$ -ur  $s\bar{e}c$ - $\bar{e}$  and others must really be looked upon as coined on the analogy of  $s\bar{e}d$ - $y\bar{e}m$ - (§ 852). On the other hand,  $s\bar{e}d$ - $\bar{i}$  can also be connected with Goth.  $s\bar{e}t$ -un Lith.  $s\dot{e}d$ - $\bar{e}s$ , and  $v\bar{e}n$ - $\bar{i}$  with Goth.  $q\bar{e}m$ -un; and this theory has the advantage that it becomes unnecessary to suppose that all  $\bar{e}$ -perfect forms from roots of the e-series with initial consonant are due to the analogy of the single form  $s\bar{e}d$ - $\bar{i}$ .\(\frac{1}{2}\) However compare § 841 Rem., p. 378.

<sup>1)</sup> After what has been said on Umbr. ander-sistu in § 553 p. 107, the question would be at once decided if one such  $\bar{e}$ -perfect could be found in Umbrian or Samnitic. For Umbr.-Osc.  $s\bar{e}d$ - is probably not derived from sezd-.

Furthermore, Idg. perfect forms of roots beginning with e and ending in a single consonant may also be brought under this  $\bar{e}$ -type. Gr.  $\dot{\epsilon}\delta$ - $\eta\delta$ - $\dot{\omega}\varsigma$  instead of \* $\dot{\eta}\delta$ - $\omega\varsigma$  (§ 858), Lat.  $\bar{e}d$ - $\bar{e}$   $\bar{e}d$ -i-mus, Goth. fr- $\bar{e}t$  - $\bar{e}t$ -un, Lith.  $\dot{e}d$ - $\bar{e}s$  O.C.Sl.  $\dot{e}d$ - $\ddot{u}$  jad- $\ddot{u}$ , Skr.  $\bar{a}d$ -a  $\bar{a}d$ -ur from  $\vee$  ed-'cat'. Gr.  $2^{nd}$  sing.  $\ddot{\eta}\sigma$ -9a (came to be used for the imperf., see § 858), Skr.  $\dot{a}s$ -a  $\bar{a}s$ - $\dot{u}r$  from  $\vee$  es-'be'. Lith.  $\dot{e}j$ - $\dot{e}s$  fem.  $\dot{e}j$ -us-i from  $\vee$   $e\dot{i}$ -'go'. That  $\bar{e}$  is due to a contraction of e-e-cannot be made probable.

(4) Roots with initial a-vowel, and ending in a single consonant, seen to have made this perfect in all forms with  $\bar{a}$  in the parent language:  $*\bar{a}g$ -e 'cgit' from  $\vee ag$ -: Skr.  $\bar{a}j$ -a (gramm.), Gr.  $\bar{\eta}\chi$ - $\varepsilon$   $\bar{\eta}\gamma$ - $\mu\alpha\iota$  ( $\eta$  for  $\bar{a}$ ), O.Icel.  $\bar{o}k$   $3^{rd}$  pl.  $\bar{o}k$ -o-u; \* $\bar{a}n$ -e from  $\vee$  an-'breathe': Skr.  $\bar{a}n$ -a Goth.  $\bar{o}n$   $\bar{o}n$ -un; Goth.  $\bar{o}g$  'I fear' beside agis Gr.  $\bar{a}\chi o\varepsilon$  (Lat.  $\bar{e}g$ - $\bar{i}$  co- $\bar{e}p\bar{i}$  — Skr.  $\bar{a}p$ -a-a-a-a-re Italic re-formates as much as  $c\bar{e}p\bar{i}$ , see § 870). Similarly with  $\bar{o}$ - the perf. \* $\bar{o}d$ -e from  $\vee$  od-'smell': Gr.  $\bar{o}\delta$ - $\omega\delta$ - $\varepsilon$  instead of \* $\omega\delta$ - $\varepsilon$  (§ 858), Lith.  $\omega'd$ - $\bar{e}s$ .  $\bar{a}g$ - $\bar{o}d$ - from ag- odseem to be formed on the same principle as  $\bar{e}d$ - from ed-; and if there is no reduplication in  $\bar{e}d$ -, there was none in  $\bar{a}g$ - or  $\bar{o}d$ -. Then again, some forms which never had reduplication are no doubt to be found amongst the perfects of Germanic and Latin from roots with initial Consonant, as Goth.  $sk\bar{o}f$   $sk\bar{o}b$ -un Lat.  $sc\bar{a}b$ - $\bar{i}$   $sc\bar{a}b$ -i-mus ( $sk\bar{o}b$ -un:  $s\bar{e}t$ -un  $= \bar{o}n$ -un: fr- $\bar{e}t$ -un).

Remark 2. In II § 136 p. 438 I have offered a conjecture on the origin of the originally unreduplicated perfect; namely, that the participle with the suffix - $\mu es$ - never had any reduplication. When these  $\mu es$ -participles became associated with the Perfect system in the parent language, two results followed: (1) either the participle itself was reduplicated, or (2) the finite verb with which it went sometimes lost its own reduplication. That the perfect participle once stood independent of the reduplicated perfect type, such as Gr.  $\gamma \epsilon - \gamma \alpha - \nu \epsilon - \gamma \alpha - \gamma \alpha - \nu \epsilon - \gamma \alpha - \nu \epsilon - \gamma \alpha - \gamma \alpha - \nu \epsilon - \gamma \alpha - \gamma \alpha$ 

<sup>1)</sup> The Conjunctive with similar root-vocalism ( $\epsilon \tilde{\iota} \delta_{-o-\mu \epsilon \nu}$  Skr. ta-tan-a-t,  $\S$  843 p. 384), also did not belong originally to the proper perfect forms, being thematic.

 $v\check{e}d-\check{e}$ , all these are unreduplicated; and they include the large group exemplified by Lith.  $s\check{e}d-\check{e}s$   $v\check{e}\check{z}-\check{e}s$  O.C.Sl.  $vez-\check{u}$ . Lastly, it must be added that it is easy to explain the wide diffusion by analogy of stems like  $s\bar{e}d$ -and  $sk\bar{u}p$ - in roots with initial consonant, displacing the older reduplicated forms, by supposing that they were taken up in order to get rid of a number of awkward and unnatural sound-groups which had developed amongst the weak forms in (plural and dual indic., etc.).

## Aryan.

 $\S$  849. We begin with a few additional examples (cp.  $\S\S$  846—848).

V ger- 'make': Skr. ca-kár-a ca-kṛ-má ca-kṛ-ur mid. ca-kr-é ca-kr-šé opt. (prec.) ca-kr-iyā-s part. ca-kr-vás- ca-kr-úš-, Avest. 3rd pl. act. ca-xr-ar, O.Pers. 3rd sing. opt. ca-xr-iyā. ∨ dher- 'hold fast': Skr. da-dhār-a dā-dhār-a da-dhr-ē, Avest. da-đār-a dā-dr-ē. V uen- 'win': Skr. vā-vān-a va-van-má (cp. han-mas § 498 p. 58) va-vn-é conj. vā-ván-a-s part. va--van-vás-, Avest. Gath. vaon-arē opt. vaon-yā-p part. va-van-vå vaon-uš-. Vei- 'go'. Skr. iy-āy-a iy-ē-tha īy-úr. V bhai-'fear': Skr. bi- $bh\bar{a}y$ -a bi-bhy-ur part. bi- $bh\bar{v}$ -vás-bi-bhy-u $\bar{s}$ -, Avest. part. bi-wi-vå. Vkley- 'hear': Avest. su-sru-ma su--sruyē i. e. su-sruv-ē (Bartholomae, Handb. § 90 p. 40), Skr.  $\dot{s}u$ - $\dot{s}r\dot{a}v$ -a etc., see § 846 p. 388.  $\checkmark$  teu- 'be strong': Skr.  $t\bar{u}$ - $t\bar{u}$ -tav-a, Avest.  $t\bar{u}$ -tav-a 3rd sing. opt. (prec.)  $t\bar{u}$ -tu- $y\bar{a}$ . Ar. sarž- 'to let go': Skr. sa-sarj-a sa-srj-ē sa-srj-máhē part. mid. sa-srj-āna-s, Avest. part. mid. hanherez-āna-. Skr. vardh-'to grow': va-várdh-a vā-vṛdh-úr vā-vṛdh-é. Skr. kṣip- 'to throw': ci-kšēp-a ci-kšip-ur. Skr. vyadh- 'to pierce': vi-vyādh-a vi-vidh-ur vi-vyadh-ur vi-vidh-vás-. V leuq- 'shine': Skr. ru--rōc-a ru-ruc-úr ru-ruk-vás-. Avest. rud- 'to grow' (Skr. rudh-):  $1^{st} \sin g$ .  $ur\bar{u}$ - $rao\bar{d}$ -a part.  $ur\bar{u}$ - $ru\bar{d}$ - $u\check{s}$ -. Skr. yam-'cohibere': ya-yām-a ya-yan-tha yēm-i-má yēm-úr yēm-ē; yēmfor \*įa-įm-. Vįaĝ- 'offer': Skr. i-yāj-a yēj-é and īj-ē; yējfor \*ia-ij-. V ueq- 'speak' (pr. Ar. weak stem \*ua-uk- ua-uc-): Skr. va-vāc-a and u-vác-a u-vak-tha ūc-úr ūc-é, Avest. 3rd sing. va-vac-a Gath. vaoxe-mā mid. 3rd sing. vaoc-ē part. vaok-uš-.

Ves- 'be': Skr. ás-a ās-úr, Avest. ånh-a ånh-ur': cp. Gr.  $\vec{r}_i\sigma$ -9a, § 848 p. 394.

§ 850. Perfect Forms derived from an Extended Root, or from a Present Stem with some characteristic attacht (Suffix or Determinative). Compare § 847.

From Roots + -ā-, -ē- or -ō-, only in Sanskrit. Skr. perfects, of which ji-jyāú ma-mnāu ja-qlāu va-vāu ja-jînāú are represented in the European languages (see loc. cit.), have the ā only in the strong stem; being in this unlike the Present, where  $\bar{a}$  runs through all the persons (e. g. dr- $\bar{a}$ -ti $dr-\bar{a}-nti$  §§ 578 ff. pp. 118 ff.). The reason why in their weak forms they followed Perfects with root gradation was that so many of the perfect endings began in a sonant. As we have  $ja-j\hat{n}-\hat{e}$  (beside  $ja-j\hat{n}\bar{a}\hat{u}$ ),  $ya-y-\hat{a}$  ya-y-ur (beside  $ya-y\bar{a}\hat{u}$   $ya-y-\hat{u}$  $-y\dot{a}$ -tha,  $y-\bar{a}$ - 'to go'), da-dr-ur ( $dr-\bar{a}$ - 'to run'),  $ta-tr-\dot{e}$  ( $tr-\bar{a}$ -'to protect'), so also ja-j\hat{n}-i-v\hat{a}s- instead of \*ja-j\hat{n}\bar{a}-v\hat{a}s-, ya-y-i-v\hat{a}sinstead of \*ya-yā-vás-, pa-pr-vás- instead of \*pa-prā-vás- (beside pa-prā pa-prā pa-prā-tha, pr-ā- 'to fill'). jajnivás- and papyvás- belonged properly to the Indicatives \*ja-jān-a and pa-pār-a (gramm.); and it is possible that there has been contamination of the extended root  $(\hat{g}n-\bar{e} \ \hat{g}n-\bar{o}-, \ pl-\bar{e}-)$  and the unextended (ĝen-, pel-); 1) compare Gr. τέ-τλα-μεν and

<sup>1)</sup> Parallel to  $papr\bar{a}\dot{u}$ :  $pap\bar{a}ra$  we have  $papy\bar{e}$  (pres.  $py\bar{a}-ya-t\bar{e}$ ) and  $p\bar{\imath}p\bar{a}ya$  (pres.  $p\dot{a}y-a-t\bar{e}$ ); so that it is naturally doubtful with which of the two perfects Ved.  $pipy\bar{e}$  is to be connected. The i in the reduplicator decides nothing, ep.  $ji-jy\bar{a}\dot{u}$ .

τε-τλ-η-ώς τέ-τλ-η-κα), πίμ-πλα-μεν and πίμ-πλ-η-μι (§ 594 p. 135. However, yayivás- at any rate is a new form, following some such analogy as ta-sthi-vás-.

Root + Nasal Infix or Nasal Suffixes (§§ 596 ff. pp. 136 ff.). Skr. ta-stámbh-a ta-stabh-úr (stabh- = \*stṃbh-) and ta-stambh-ur (§ 852) conj. ta-stámbh-a-t beside stambh-a-tē 'makes itself firm, supports itself' from  $\vee$  stebh-, sa-sañj-a from  $\vee$  seg- 'hang, affix', da-dámbh-a beside da-dábh-a from dabh- 'to hurt, deceive', see § 629 p. 167. ju-ghūrn-a beside ghūr-na-ti 'wavers'. ji-jinv-a beside ji-nva-ti 'sets in motion, helps on', pi-pinv-a beside pi-nva-ti 'swells, makes fat'.

Root + s-suffix. Skr. ta-ta-s-ré ti-tvi- $\S$ -é see  $\S$  847 p. 391. Ar. dui- $\S$ - $\S$ - 'to hate' ( $\S$  656 p. 190): Skr. di-dve $\S$ -a di-dvi $\S$ -e (gramm.), Avest.  $d\bar{\imath}$ -dvae $\S$ -a di- $dv\bar{\imath}$ -s-ma. Skr. ba- $bh\bar{a}$ - $\S$ -a (gramm.) beside bha $\S$ -at 'barks' for Idg. \*bhel-se-ti (the  $\bar{a}$  betrays this as a later re-formate): cp. O.H.G. bal(l) ballun ( $\S$  657 p. 191). da-dak- $\S$ - $\bar{e}$  beside dak- $\S$ -a- $t\bar{e}$  'is able, is of value, is brave' ( $\S$  659 p. 194). mi-mik- $\S$ - $\bar{e}$  from  $\nu$  me-i-i-mix' ( $\S$  669 p. 200).

With sk-suffix. Skr. pa-prach-a see p. 391. mu- $m\bar{u}$ rch-a beside  $m\bar{u}$ rcha-ti 'eurdles, congeals'. ju- $h\bar{u}$ rch-a (gramm.) beside  $h\bar{u}$ rcha-ti 'slips, falls'. Compare too the thematie  $\bar{a}$ n-archa-t beside  $\gamma$ -chá-ti ar-cha-ti 'hits, attains', like  $\bar{a}$ n-ar $\hat{s}$ -a-t  $\S$  854.

With t-suffix (§§ 679 ff. pp. 211 ff.). Skr. ci-t- 'to notice, recognise' (§ 680 p. 212): Skr. ci-kēt-a ci-kit-ur ci-kit-ē ci-kit-vás-, Avest. 3<sup>rd</sup> pl. Gath. ci-kōit-er<sup>e</sup>š (ep. § 852) part. ci-kip-wå. Skr. ya-t- 'to join on to, strive' (§ 681 p. 213), weak stem \*ia-it-: Skr. yēt-ē, Avest. ya-yat-u yaṣp-ma (Gath. yōip-emā) part. yaṣt-uš-. Skr. na-nart-a na-nrt-ur beside nf-t-ya-ti 'danees'. pu-sphōṭ-a beside sphuṭa-ti bursts, splits' (beside phál-a-ti, § 680 p. 211). ci-cēṣṭ-a beside céṣ-ṭa-ti 'is in motion'.

With dh-suffix. Skr. ra- $r\acute{a}dh$ -a see p. 391. yu- $y\acute{o}dh$ -a yu-yudh- $\acute{e}$  beside  $y\bar{o}$ -dha-ti 'gets in motion' (§ 689 p. 219).

Skr. ji- $j\bar{\imath}$ -va ji- $j\bar{\imath}v$ - $\bar{e}$  beside  $j\dot{\imath}$ -va-ti 'lives' (§ 487 p. 41).

From a reduplicated Present is often formed a Perfect having no further reduplication besides what the present had.  $s\bar{\imath}d$ -atur (beside sa- $s\acute{a}d$ -a  $s\bar{e}d$ - $\acute{u}r$ ) from  $s\acute{\imath}d$ -a-ti Idg. \*si-zd-e-tifrom V sed- 'sit', nind-i-ma from ni-nd-a-ti 'abuses, reviles', see § 550 p. 106. vivak-vás- from ví-vak-ti 'speaks'. -tha from di- $d\bar{a}sa$ -ti desid, of  $d\dot{a}$ - $d\bar{a}$ -ti 'gives'. nonuv-ur from no-nav-ī-ti no-nu-mas intens. of nau-ti 'praises', davidhāv-a beside part. dávi-dhv-at- intens. of dhū-nố-ti 'shakes'.') We may also if we choose place here  $j\bar{a}g\hat{a}r$ -a (cp. Gr.  $\dot{\epsilon}\gamma\dot{\eta}$ - $\gamma\epsilon\rho$ - $\mu\alpha\iota$ ) beside  $j\bar{a}$ -gar-ti 'wakes, watches', since the present may be regarded as an intensive (§ 560 p. 109).  $\bar{a}$  instead of a in the reduplicating syllable is found elsewhere in Aryan too; and we have noticed in § 472 p. 17 that the spread of this  $\bar{a}$  in the reduplication is certainly not unconnected with the similarity in meaning of the Perfect-present and the Intensive. In later times another perfect ja-jāgār-a was made from  $j\bar{a}gar-ti$ . That a perfect  $bi-bhik\c s-\bar{e}$  was formed for bhíkša-tē (desid. of bháj-a-ti 'divides, distributes, assigns', § 667 p. 200), and for sajja-te 'hangs on to' (for \*saz-j-a-, § 562 p. 110) a perfect sa-sajj-ur Mahābh. (beside sa-saj-ur  $s\vec{e}j$ -ur and sa- $sa\hat{n}j$ -a p. 397), is not surprising in view of the complete obscuration of the reduplication in the present.

As regards the above named perfects without special perfect reduplication, compare § 848 p. 392.

Lastly, two more Skr. perfects shall be cited, which have arisen from a root which has been completely fused into unity with a prefix.  $pi-p\bar{\iota}d-\bar{e}$  beside  $p\bar{\iota}d-aya-ti$  presses' for \*pi-zd-(lit. 'to sit upon'), see § 795 p. 331; cp. Gr.  $\pi\epsilon\pi i\epsilon\sigma\tau\alpha\iota$  from  $\pi\iota - \dot{\epsilon}\zeta\omega$ .  $ni-niy\bar{\sigma}j-a$  (Ait. Brāhm.) from ni-yuj- 'to fasten on'. So Gr.  $\dot{\eta}\mu\varphi i\epsilon\sigma\tau\alpha\iota$  from  $\dot{a}\mu\varphi\iota - (f)\epsilon\sigma$ - 'to clothe, draw on'. The same principle is exemplified in the Augment, see § 477 p. 25.

<sup>1)</sup> We should expect  $dav\bar{\imath}dh\bar{\imath}av-a$  by § 467 p. 13. The i seems to me to be more simply explained by supposing that the perfect is a comparatively late analogical form from ddvidhv- than by adopting Wackernagel's conjecture,  $Dehnungsgesetz\ der\ gr.\ Compp.\ p.\ 18.$ 

§ 851. The syllable of reduplication had originally a = Idg. e with Roots beginning in a Consonant; the variant  $\bar{a} = \text{Idg. } \bar{e}$  is also found (cp. § 850, p. 398).

This was changed in Aryan where a root had i- or u-vocalism.

(1) Of Roots with internal or final i- or u-vowel only three retained the a in the reduplicator: Skr. ba-bhūv-a Avest. ba-vāv-a, Skr. sa-sūv-a (beside su-ṣāv-a), part. mid. ša-šay-ānā-s (beside indic. ši-šy-ē). In all others, i and u had taken the place of a in proethnic Aryan; as Skr. di-dvēṣ-a di-dviṣ-ē Avest. dī-dvaeṣ-a di-dvīṣ-ma, Skr. vi-vyādh-a vi-vidh-ur, Skr. ru-rōc-a ru-ruc-ūr Avest. "rū-raoā-a "rū-ruā-uṣ-, Skr. su-ṣvāpv-a su-ṣup-ūr. This tendency affected even roots with initial diphthong: hence Skr. iy-āy-a īy-ūr i. e. \*i-iy-ur instead of pr. Ar. 3rd sing. \*āi-a 3rd pl. \*āi-rr (ep. Lith. part. fem. ēj-us-i) beside ē-ti 'goes'; Skr. ūv-ur i. e. \*u-uv-ur beside u-tā-s 'woven' ō-tu-m; Skr. u-vōc-a ūc-ūr beside uc-ya-ti 'takes pleasure in' ōkas- 'pleasure, satisfaction' (ep. the archaic adjectival participle without reduplication ōk-i-vás-§ 848 p. 392).

(2) Roots beginning with i- and u-, of the form of Ar. jat-'join on, strive' and wak- wac- 'speak', still had ia- and wa- for reduplication right through the Perfect in proethnic Aryan: Skr.  $y\bar{e}t$ - $\bar{e}$  Avest. ya-yat-a yae $\bar{p}$ -ma, Skr. ya- $y\bar{a}m$ -a  $y\bar{e}m$ -ur, Skr.  $y\bar{e}j$ - $\bar{e}$ , Skr. va- $v\bar{a}c$ -a Avest. va-vac-a vaox- $^{\ell}m\bar{a}$ , Skr. va--vāh-a Avest. vaoz-i-rem, Skr. va-vām-a; with the weak stems compare pres. Skr.  $y \not\in \dot{s}a - ti = \dot{s}a - \dot{s}s - a - ti$  and aor.  $a - v \bar{o}ca - ti$ Avest. vaoca-b = \*ua-uc-a-§ 562 p. 110. These forms stood on the same level as those like Skr. va-vart-a va-vrt-ur vi--veś-a vi-viś-úr and with Gr. ε-όλ-ει (§ 848 p. 392) ε-οργ-ε (§ 846 p. 389) E-oux-& (§ 848 p. 392) and Goth. vai-vald. Next, in Sanskrit, those verbs which had amongst their nonperfect forms some in which the root, being of the weak grade, began with i- or u-, substituted i- and u- for ya- and va- as the reduplicator; and thus we get i-yáj-a īj-úr (i. e. \*i-ij-ur) beside  $ij-y\acute{a}-te$   $i\check{s}-t\acute{a}-s$  etc.,  $u-v\acute{a}c-a$   $\bar{u}c-\acute{u}r$  (i. e. \*u-uc-ur) beside  $uc-y\acute{a}-t\bar{e}$   $uk-t\acute{a}-s$  etc., on the analogy of  $iy-\acute{a}y-a$   $iy-\acute{u}r$  beside iy-ē i-tás etc., vi-vyādh-a vi-vidh-ur beside vídh-ya-ti viddha-s etc., su- $ilde{s}v ilde{a}p$ -a su- $ilde{s}up$ -ur beside sup-ya- $t\bar{e}$  sup- $t\acute{a}$ -s etc.\(^1\) On the other hand,  $ya-y\bar{a}m-a$   $y\bar{e}m-\dot{u}r$   $va-vas-\bar{e}$  (from vas- to clothe'), and other such remained simply because none of their forms had such beginnings as im- or uṣ-. Only here and there did u- transgress these prescribed limits: as in u-vām-a (Satap.-Brāhm.) instead of va-vām-a from vam- vomere.

With this Sanskrit developement compare Lat.  $sci\text{-}cid\text{-}\bar{\imath}$  from  $scind\bar{o}$  as contrasted with  $ce\text{-}cid\text{-}\bar{\imath}$  from  $cad\bar{o}$ , § 868.

Remark. The reason why we have in Sanskrit  $vavr-\acute{u}r$  and not \* $v\bar{o}r\acute{u}r$ , and  $vavn-\acute{u}\S$ - not \* $v\bar{o}n\acute{u}\S$ - (cp. Avest.  $vaonu\~s$ -), as might have been expected from  $magh\bar{o}n$ -, the weak form of the stem maghavan- 'giver, offerer', was the analogical influence of forms whose ending began with a consonant, such as  $va-v_T-m\acute{a}$  and  $va-van-m\acute{a}$   $va-van-v\acute{a}s$ -, perhaps also that of bye-forms with a weak-grade root syllable which still remained

<sup>1)</sup> I hold accordingly that the favourite theory which sees pr. Idg. reduplications i- u- or  $\underline{i}i$ -  $\underline{u}u$ - in i- $y\underline{\acute{a}}j$ -a u- $v\underline{\acute{a}}c$ -a is incorrect. Observe further, that the evidence offered by i- $y\underline{\acute{a}}j$ -a ij-e and the like for the view that the  $|\!\!|$  yaj- began in Idg. with  $\underline{i}$ - and not with the spirant j is only indirect (I § 598 p. 453).

a syllable by itself (cp. ta-tan- $\bar{e}$  i. e. \*-tnn- $a\underline{i}$  beside ta-tn- $\bar{e}$ , ti-stir- $\bar{e}$  i. e. \*- $st_{\bar{i}}r$ - $a\underline{i}$ ). Thus va-vn- in this way depended upon va-van-; and, by a contrary application of the principle,  $y\bar{e}m$ -i-ma  $y\bar{e}m$ -i-vas- instead of \*ya-yan-ma \*ya-yan-vas- (cp. ja-gan-ma ja-gan-vas- from gan- 'to go') depended upon  $y\bar{e}m$ -ur  $y\bar{e}m$ -us- (cp. jagm-i-vas- instead of jayan-vas-following jagm-us-s-).

Whilst Roots beginning with an a-vowel had in Aryan  $\bar{a}$ - through all forms of the Perfect, if they ended in a single consonant, as Skr.  $\acute{a}s$ -a Avest.  $\acute{a}nh$ -a (§ 848 p. 394, § 949 p. 396), they have  $\bar{a}n$ - (or an-) for the reduplicating syllable if the root ends in a double consonant. Of these forms, the following were inherited from the parent language: Skr.  $\bar{a}n$ - $-\acute{a}s$ -a with the weak stem  $\bar{a}n$ - $a\acute{s}$ - (- $a\acute{s}$ - = - $n\acute{k}$ -) in  $\bar{a}na\acute{s}$ - $u\acute{r}$   $\bar{a}na\acute{s}$ - $y\bar{a}$ -t (pres.  $a\acute{s}$ - $n\acute{o}$ -ti 'attains'): O.Ir. t- $a\bar{n}$ -aic, see § 846 p. 390; parallel Skr.  $\bar{a}n\bar{a}\dot{s}$ -a Avest. Gath. plpf.  $\bar{e}n\bar{a}x\dot{s}t\bar{a}$  for \* $an\bar{a}\dot{s}$ -ta, which are similar to Gr.  $a\alpha t$ - $a\alpha t$ 

Hence afterwards arose  $\bar{a}n$ -arc-a  $\bar{a}n$ - $\gamma c$ -ur from arc- 'to shine, praise',  $\bar{a}n$ - $\gamma dh$ -ur from ardh- 'to thrive',  $\bar{a}n$ - $\gamma h$ -ur from arh- 'to earn'.

§ 852. Form of the Root Syllable.

The pr. Aryan distinction between Skr. 1st sing.  $ja-j\acute{a}n-a$  with  $\breve{a}$ , and  $3^{\rm rd}$  sing.  $ja-j\acute{a}n-a$  with  $\breve{a}$  (§ 843 p. 384), was lost. Thus we have in later Sanskrit the  $3^{\rm rd}$  sing. form used for the 1st as well as  $3^{\rm rd}$  (still,  $jaj\acute{a}na$  was not dropt altogether), and in Avestic the 1st singular form was used for both (e. g. va-vac-a beside the regular  $hi-\check{s}\bar{a}y-a$ ). 1)

In imitation of such forms as  $sa-sad-a:s\bar{e}d-ur$  (for \*sa-zd-ur) and  $ya-yam-a:y\bar{e}m-ur$  (for \*ia-im-ur), arose the Skr. forms  $s\bar{e}h-ur$  (sah- 'to subdue'),  $s\bar{e}j-ur$  (saj- 'to hang, fasten'),  $p\bar{e}c-ur$  (pac- 'to cook'),  $s\bar{e}c-\bar{e}$  (sac- 'to be with, accompany', but also  $sa-\dot{s}c-\bar{e}$ ),  $p\bar{e}t-ur$  (pat- 'to fly, fall', but also

The Avestic change was natural enough because tataša (Skr. tatákša) had got in amongst roots with single final consonant.

Brugmann, Elements. IV.

pa-pt-úr), nēm-ur (nam- 'to bow, bend'), tēn-é (tan- 'to stretch', but also  $ta-tn-\acute{e}$ ). This type recommended itself because it avoided certain awkward sounds which had developed in some roots, as was the case in Germanic with the type  $q\bar{e}m$ - (§ 893). mēthur beside ma-mánth-a (manth- 'to shake, knead'), and bēdh-úr beside ba-bándh-a (bandh- 'to bind'), arose because the weak roots math- and badh- in mátha-ti badh-ná-ti etc. (-a-=-n-) were conceived as being parallel to roots like sad- or yaj-; which also explains mamáth-a beside mamanth-a, mathišya-ti beside manthišya-ti and the like. That a Perfect stem such as sed- or yem- was to the consciousness of the speaker nothing more than an ablaut-form of the unreduplicate root is shewn by forms with initial media aspirata like bhēj-ur (beside ba-bháj-a from bhaj- 'to distribute'), and those which begin with a double consonant, as trēš-ur trēs-ur (beside ta--trās-a from tras- 'to tremble').

The strong singular stem seems often to have invaded forms proper to the weak stem. Skr. tastambhur (but also tastabhúr) following tastámbha, cp. § 850 p. 397. babandhur following babándha. yuyōpimá following yuyópa from yup- 'to obstruct'. vivēšur (but also vivišē) following vivéša from viš-'to enter'. bibhēdur (but bibhidur also) following bibhēda from bhid- 'to split'. vavāhatur (but ūhatur) following vavāha from vah- 'vehere'. nanāmirē (but nēm-ur) following nānāma. śaśāsur following šašāsa (cp. aor. á-šiš-a-t) from šās- 'to order': cp. pres. 3rd pl. šás-ati beside opt. šiš-yā-t. dadāvás- (but dadvásdadivás-) following dadāú from dā- 'to give'. Avest. 3rd pl. cikōitereš (but cikibwå) following \*cikōitā from cit- 'to observe' (§ 850 p. 397). 2nd pl. hanhāna following 3rd sing. \*hanhāna from han- 'to give, earn'. But we may see, from what has been said in § 848 pp. 392 f. on sa-sah-ē śa-śas-ur and sa--sāh-ē da-dāś-i-ma, that it is possible to hold that the germ of these consists of unreduplicated forms with a strong root (such as Skr. \*stambh-ur) which received reduplication in Aryan.

In Skr. 1<sup>st</sup> and 3<sup>rd</sup> sing. ta-sthāú da-dhāú pa-prāú etc., the origin of -āu is obscure. Now and then we meet with variants

 $3^{rd}$  sing.  $pa-pr\acute{a}$  and Avest.  $3^{rd}$  sing. da-da.<sup>1</sup>) Some regard -u as a particle affixed to the perfect with final  $-\ddot{a}$ , as  $pa-pr\acute{a}+u$  ==  $pa-pr\ddot{a}\acute{u}$ ; and others compare  $ta-sth\ddot{a}\acute{u}$  with  $sth\acute{a}v-ira-sth\ddot{a}v-ar\acute{a}-sth\ddot{u}-r\acute{a}-$ , or  $pa-pr\ddot{a}\acute{u}$  with Lat.  $pl\ddot{e}v-\ddot{\imath}$ ,  $ja-j\dot{n}\ddot{a}\acute{u}$  with Lat.  $n\ddot{o}v-\ddot{\imath}$ . All these are thoroughly uncertain conjectures.

§ 853. As regards the -i- which precedes the personal ending in -i-tha -i-ma -i-va -i-šē -i-mahē -i-vahē, which is much commoner in the later language than it is in the Veda, the most essential facts have been pointed out in § 844, pages 385 f.

The same i is seen in the unreduplicated  $t\mathring{s}-\bar{e}$  (§ 848 p. 391):  $t\mathring{s}-i-\xi\bar{e}$  (beside  $t\mathring{k}-\bar{s}\bar{e}$ )  $t\mathring{s}-i-dhv\bar{e}$  like  $ja-j\bar{n}-i-\xi\bar{e}$   $ja-j\bar{n}-i-dhv\bar{e}$ . After what was said in § 574 p. 115, it is not strange that beside  $t\mathring{s}-t\bar{e}$  we find  $t\mathring{s}-i-t\bar{e}$ . Compare however the pres.  $t\mathring{s}-nv-i-\xi\acute{e}$  beside  $t\mathring{s}-nv-i-t\acute{e}$  (like  $t\mathring{s}-i-t\bar{e}$   $ja-j\bar{n}-i-t\acute{e}$ ).

§ 854. The so-called Pluperfect, and Thematic Forms of the Perfect Stem (cp. § 555 p. 108, § 845 p. 387 f.).

Un-Thematic Pluperfect. Skr.  $2^{nd}$  and  $3^{rd}$  sing.  $\acute{a}$ -ja-gan  $3^{rd}$  pl.  $\acute{a}$ -ja-gan-ta (with strong stem like gan- $t\acute{a}$  beside ga- $t\acute{a}$ , § 498 p. 58)  $3^{rd}$  pl. mid.  $\acute{a}$ -ja-gm-iran beside ja- $g\acute{a}m$ -a.  $1^{st}$  sing. ca-kar-am beside ca- $k\acute{a}r$ -a. Avest.  $3^{rd}$  pl. mid. vaoz-irem beside Skr. va- $v\bar{a}h$ -a (§ 849 p. 396). Gath.  $2^{nd}$  pl. mid.  $v\bar{o}iz$ - $d\bar{u}m$  (with strong stem instead of weak) beside  $v\bar{o}ist\bar{a}$  = Skr.  $v\acute{e}ttha$ . Compare Gr.  $\acute{e}$ - $n\acute{e}$ -n

<sup>1)</sup> On the assumed Avest.  $dad\bar{d}\bar{o}=$  Skr.  $dadh\bar{a}\dot{u},$  see Bartholomae, Bezz. Beitr. IX 301.

Skr. ta- $t\acute{a}k$ §-a from tak§- 'to shape, form'. Compare Gr.  $\grave{\epsilon}$ - $\mu\acute{\epsilon}$ - $\mu\eta\varkappa$ - $\nu$ § 865.

The Thematic Imperative, as Skr.  $2^{nd}$  dual  $mu-m\acute{o}c-a-tam$   $2^{nd}$  pl.  $mu-m\acute{o}c-a-ta$  (muc- 'to loose')  $2^{nd}$  sing. mid.  $v\bar{a}-v\gamma dh$ - $\acute{a}-sva$  (vardh- 'to grow'), stood beside the Unthematic mu-muk-tam mu-mug-dhi, as in Greek e. g.  $\varkappa \varepsilon$ - $\varkappa \varrho \acute{a}\gamma$ - $\varepsilon$ - $\tau \varepsilon$   $\varkappa \varepsilon$ - $\chi \varrho \acute{a}\chi$ - $\vartheta \iota$ ; and they were related to the Thematic Conjunctive Skr. mu- $m\acute{o}c$ -a-t(i) Gr.  $\varepsilon i \acute{o}$ -o- $\mu \varepsilon \nu$  as, in the s-aorist, Skr.  $2^{nd}$  sing. imper.  $n\bar{e}$ - $\dot{s}$ -a to the conj.  $n\acute{e}$ - $\dot{s}$ -a-ti, Gr.  $2^{nd}$  pl. imper.  $a \acute{s}$ - $\varepsilon$ - $\tau \varepsilon$  to conj. (fut.)  $a \acute{s}$ - $\varepsilon$ - $\tau \varepsilon$  (§ 833 p. 370).

The forms Skr.  $\bar{\imath}\dot{s}$ -a- $t\bar{e}$  Avest. is-a- $it\bar{e}$  beside  $\dot{\imath}\dot{s}$ - $\bar{e}$  is- $\bar{e}$  'has brought into his power' doubtless first arose because the latter had ceased to be looked upon as belonging to the Perfect. Thus they are classed along with Presents like Skr. han-a-ti Avest. janaiti beside  $h\acute{a}n$ -ti jainti (§ 498 p. 58). Compare § 888 on Goth.  $\acute{a}ihan$   $\acute{a}ihands$ .

#### Armenian.

§ 855. The old Perfect inflexion seems to be wholly lost. gitem 'I know' may have been transformed from \*uoid-a in the same way as Lesb.  $oid\eta u$  from oida; but it may also be regarded as a present of Class II A (§ 517 Rem. p. 82). For another even more uncertain trace of the Perfect in Armenian, see Meillet, Mém. Soc. Ling. VII 164.

#### Greek.

§ 856. We begin with a few examples in addition to those given in § 846.

ε-σπαρ-ται from σπείρω 'I sow'. ε-ολ-ε ε-ελ-ται from εἴλω 'I press' V Fελ- (§ 848 p. 392). ε-στολ-ε (gramm.) ε-σταλ-ται from στέλλω 'I place, ordain'. δέ-δρομ-ε beside ε-δραμ-ο-ν 'I ran'. Hom. δείδω i. e. \*δέδFω 'I fear' for \*δε-δ $Fο_μ$ -α, δείδια i. e. \*δέ-δFι-μεν, δειδιότ-ες i. e. \*δέ-δFι-οίτ-ες (I § 166 p. 147), Att. δέ-δι-μεν δέ-δι-θι δε-δι-ώς δε-δι-ώναι.

κέ-κρι-ται from κρίνω 'I separate, choose, decide' (§ 611 p. 150). πέ-πορδ-ε from πέρδομαι 'pedo'. πέ-φασ-ται from φοάζω 'I give to understand, show',  $\sqrt{gherd}$ : Lith. part. isz-gird-ęs from isz-girstù 'I perceive' (§ 707 p. 236, § 686 pp. 216 f.). τέ-τροφ-ε τέ-τραφ-ε τέ-τραπ-ται from τρέπω 'I turn'. ε-ολπ-ε from ελπομαι 'I hope',  $\mathcal{F}$ ελπ-.  $\pi$ έ-πον $\vartheta$ -ε πεπα $\vartheta$ -νῖα beside fut.  $\pi \epsilon i \sigma o \mu \alpha \iota$  for \* $\pi \epsilon \nu \vartheta + \sigma$ -, pres.  $\pi \acute{\alpha} \sigma \chi \omega$  'I suffer' (§ 673) p. 205).  $\vec{\epsilon}$ -oix- $\epsilon$  is like  $\vec{\epsilon}$ -ix- $\tau$ ov  $\vec{\eta}$ -ix- $\tau$ o  $\vec{\epsilon}$ -oiy- $\mu$ \varepsilon  $\vec{\epsilon}$ -oix- $\alpha$ - $\mu$ \varepsilon v  $\varepsilon l \mathbf{x} - \omega' \mathbf{c} \quad \dot{\varepsilon} - o \iota \mathbf{x} - \omega' \mathbf{c}, \quad \sqrt{f} \varepsilon \iota \mathbf{x} - \dots \quad \pi \dot{\varepsilon} - \pi o \iota \vartheta - \varepsilon \quad \dot{\varepsilon} - \pi \dot{\varepsilon} - \pi \iota \vartheta - \mu \varepsilon v \quad \pi \varepsilon - \pi o \iota \vartheta - \alpha - \mu \varepsilon v$ πέ-πεισται from πείθω 'I persuade'.  $\tau$ ε-τενχ-ώς τέ-τνχ-ται τε-τεύχ-αταί from τεύχω 'I prepare'. κέ-χοδ-ε from χέζω 'caco'.  $\tau \dot{\varepsilon}$ -τοx- $\varepsilon$  beside  $\ddot{\varepsilon}$ -τεx-ο- $\nu$  'I begat, bore'.  $\ddot{\varepsilon}$ - $\varrho \varrho \omega \gamma$ - $\varepsilon$  $\dot{\epsilon}$ -ροηγ-εῖα from  $\dot{\epsilon}\dot{\eta}\gamma$ -ν $\bar{v}$ - $\mu\iota$  'I break', Fρηγ-.  $\lambda \dot{\epsilon}$ - $\lambda \eta \varkappa$ - $\epsilon$   $\lambda \epsilon$ - $\lambda \eta \varkappa$ - $\iota$  'S  $(-\eta$ - for  $-\bar{\alpha}$ -)  $\lambda \varepsilon$ - $\lambda \alpha x$ - $\nu i \alpha$  beside  $\ddot{\varepsilon}$ - $\lambda \alpha x$ - $\sigma$ - $\nu$  'I spoke'.  $\mu \varepsilon$ - $\mu \eta x$ - $\omega' \varsigma$  $(-\eta$ - for  $-\bar{\alpha}$ -)  $\mu$ ε- $\mu$ ακ- $\nu$ ῖα beside  $\mu$ ακων 'bleating, crying'.  $\lambda$ έ--λαμπ-ε from λάμπω 'I shine'.

 $\delta \acute{\epsilon} - \delta \epsilon - \tau \alpha \iota$  from  $\delta \acute{\iota} - \delta \eta - \mu \iota$  'I bind'. The root-vowel  $\epsilon$ , like that of  $\tau \acute{\epsilon} - \theta \epsilon - \tau \alpha \iota$   $\epsilon \vec{\iota} - \tau \alpha \iota$  (for  $* \acute{\epsilon} - \epsilon - \tau \alpha \iota$ ) and that of  $\delta \acute{\epsilon} - \delta \circ - \tau \alpha$ , is instead of  $\alpha = \text{Idg. } \theta$ . Compare § 493 p. 53 on  $\check{\epsilon} - \theta \epsilon - \mu \epsilon \nu$   $\check{\epsilon} - \delta \circ - \mu \epsilon \nu$ , and § 542 p. 102 on  $\tau \acute{\iota} - \theta \epsilon - \mu \epsilon \nu$   $\delta \iota - \delta \acute{\epsilon} \nu - \tau \omega \nu$   $\delta \acute{\iota} - \delta \circ - \mu \epsilon \nu$ .

Forms with so-called Attic Reduplication. Hom. ελλήλουθα ελλήλουθμεν Att. ελήλυθα εληλύθαμεν beside ελεύσομαι 'I will come' aor. ήλυθον, έλευθ-. Ion. ἄρ-ηρ-ε ἄρηρώς ἀρ-αρ-υῖα beside ἤρ-αρ-ο-ν 'I joined'.

- § 857. Numerous Perfect forms based upon Roots extended in some way, and upon Presents of all sorts and kinds. Compare § 847 pp. 391 f.
- (1) δέ-δρ $\bar{\alpha}$ -ται from δρ- $\bar{\alpha}$  'to do'.  $κέ-κρ\bar{\alpha}$ -ται from  $κρ-\bar{\alpha}$  'to mix'. τε-τλη-ω'ς from  $τλ-\bar{\alpha}$  'to bear'. κε-κμη-ω'ς from  $κμ-\bar{\alpha}$  'to weary'. τέ-τμη-ται from  $τμ-\bar{\alpha}$  'to cut'. τέ-τρη-ται from τρ-η- 'to wear away, pierce'. κέ-κλη-ται from κλ-η- 'to call'. κέ-χρη-ται from χρ-η- 'to lend, borrow'. τε-τιη-ω'ς τε-τίη-ται from τιη- 'to be still, overawed' Idg.  $qi\dot{z}-\bar{e}$ -, see § 590 p. 132. κε-χαρη-ω'ς κε-χάρη-ται from χαίρω 'I rejoice'. κε-καμη-ω'ς 'breathing hard'. δε-δέη-ται from δέω Hom. Aeol. δεν-ω 'I need'. νε-νέμη-ται

- from νέμω 'I distribute'. βε-βούλη-ται from βούλομαι 'I wish' for \*βολνο-μαι. τε-τύπτη-ται from τύπ-τω 'I strike'. Compare § 750. 1 p. 271, § 756. 4 pp. 275 f., § 822. 5 p. 360.
- (2) Along with these go Perfects from later denominatives, as Hom. κε-κοτη-ω΄ς, Boeot. gen. pl.  $Fε-F\overline{v}κονομειόντων$  (Att. ω΄κο-νομηκότων, cp. § 866), τε-τίμη-ται (-η-=-ᾱ-), πε-φίλη-ται, με-μίσθω-ται,  $κε-κόν \bar{ι}-ται$ ,  $δε-δάκο \bar{v}-ται$ . Compare § 756.5 p. 276, § 773 pp. 290 f., § 813 p. 351, § 822.6 p. 360.
- (3)  $\delta \varepsilon$ -δίδαχ- $\varepsilon$   $\delta \varepsilon$ -δίδακ-ται  $\delta \varepsilon$ -δίδαγ-μαι beside δι-δάσκω 'I teach' (§ 678 p. 210), cp. aor.  $\dot{\varepsilon}$ -δίδαξα.
- (4) πέ-φην-ε (Dor. πέ-φαν-ε) πέ-φαν-ται from φαίνω 'I make appear, show' for \* $\varphi\alpha$ -ν<sub>ε</sub>-ω. κέ-χην-ε (Dor. κέ-χαν-ε) from χαίνω 'I gape' for \* $\chi\alpha$ -ν<sub>ε</sub>-ω. ἔ-ξαν-ται ἕξαμμαι from ξ-αίνω 'I scratch, comb'. On the forms πέφασμαι ἕξασμαι (= ἔξαμμαι), see § 862. προ-βέβουλε beside βούλομαι (see under 1). Compare § 822. 2 p. 359.
- (5) Nasal Infix. κέ-κλαγγ-ε, also κέ-κληγ-ε, beside κλαγγάνω and κλάζω (for \*κλαγγ-εω) 'I make a sound, cry out'. The verb κανδάνω 'I have room for' ( $\sqrt{ghed}$ -, § 631 p. 168) perhaps had both κέ-κανδ-ε and κέ-κονδ-ε (like λέλογχε from λαγχάνω) for its perfect; see Mekler, Beitr. zur Bildung des griech. Verbums, 60 f.; Wackernagel, Berl. Phil. Wochenschr. 1891, col. 1475 f. Aeol. part. πε-φύγγ-ων (Att. πε-φενγ-ως) from qνγγάνω 'I flee'. ε-σφηγκ-νω 1st sing. εσφηνω (-γμ- for -νωgm-, I § 492 p. 363) from σφίγγω 'I tie'. Compare § 822. 3 p. 359.
- (6) ἔ-σπα-σ-ται, κέ-κλα-σ-ται, κε-κέρασ-ται, ἐ-σκέδασ-ται; ἔ-σβ--εσ-ται, κε-κόρεσ-ται; ἔ-ξν-σ-ται, εἴρνσ-ται. See § 661 p. 196 § 842 pp. 380 f.
- (7) Syrac. πέποσχε instead of πέπονθε from πάσχω (§ 673
   p. 205). Compare Skr. papracha Lat. poposcī from V preĥ÷.
- (8) κατα-πέπνθα κατερούηκα Hesych., beside πύ-θω 'I make to rot'. βέ-βρ $\bar{\iota}$ θ-ε from βρ $\bar{\iota}$ -θω 'I weigh down'. Compare § 694 p. 223. πέ-φλοιδ-ε beside ε-φλι-δ-εν διέρρεεν. διαλκεχλοιδώς and δια-κεχλιδώς beside χλ $\bar{\iota}$ ω 'I am weakly'.  $3^{\rm rd}$  pl.  $\hat{\epsilon}$ -ρράδ-αται from ράινω 'I sprinkle' for \*σρ-αν $\bar{\iota}$ ω (§ 621 p. 159). Compare § 695 p. 224.

- (9) Hom.  $\pi \epsilon \varphi v \zeta \delta \tau \epsilon \varsigma$  from  $*\varphi \dot{v} \zeta \omega$  for  $*\varphi v \gamma \iota \omega$  (§ 707 p. 236).

§ 858. The Reduplication with ε in roots with initial consonant has been more faithfully kept in Greek than in any other language. The vitality of this type can be best seen in its use with denominative forms like πε-φύλακται δε-δυστύχηκε, τε-θαλασσοκράτηκε, Boeot. Γε-Γυκονομειόντων.

Remark. On the analogy of compounds like  $\tilde{\epsilon}\mu-n\epsilon\pi\sigma i\eta\kappa\epsilon$  were made others such as  $\tilde{\epsilon}\nu-\delta\epsilon\delta\eta'_{\mu}\eta\kappa\epsilon$   $\tilde{\epsilon}\pi\sigma-\delta\epsilon\delta\eta'_{\mu}\eta\kappa\epsilon$  instead of  $*\tilde{\gamma}\nu\delta\eta\mu\eta\kappa\epsilon$   $*\tilde{\eta}\pi\sigma\delta\eta'_{\mu}\eta\kappa\epsilon$  from  $\tilde{\epsilon}\nu-\delta\eta\mu\sigma-\varsigma$   $\tilde{\epsilon}\pi\dot{\sigma}-\delta\eta\mu\sigma-\varsigma$ . The group was further enlarged by  $\Im\epsilon\sigma-\pi\epsilon\pi\sigma i\eta\kappa\epsilon$   $\epsilon\tilde{\epsilon}\partial\sigma-\pi\epsilon\pi\sigma i\eta\kappa\epsilon$   $\epsilon\tilde{\epsilon}\partial\sigma-\pi\epsilon\pi\sigma i\eta\kappa\epsilon$   $\epsilon\tilde{\epsilon}\partial\sigma-\pi\epsilon\pi\sigma i\eta\kappa\epsilon$  in  $\pi\sigma-\tau\epsilon\tau\varrho\dot{\sigma}\eta\kappa\epsilon$  and many other like them.

On the treatment of the initial consonant or consonants of the reduplicator, see §§ 475 f. pp. 20 ff.

Verbs with initial vowel were treated in two ways, as in Sanskrit:

(1) By lengthening the initial vowel.  $2^{nd}$  sing.  $\bar{\eta}\sigma - \theta \alpha$  from  $\sqrt{es}$ - 'to be' (cp. Skr.  $\bar{\alpha}s$ -i-tha), which form came afterwards to be used as imperfect because  $\bar{\eta}\alpha$   $\bar{\eta}\mu \epsilon \nu$   $\bar{\eta}\sigma \epsilon \epsilon$   $\bar{\eta}\sigma \tau \nu$  belonged to both;  $\bar{\eta}\rho\mu\epsilon$  from  $\bar{\epsilon}\rho\ell\zeta\omega$  'I strive'.  $\bar{\eta}\chi-\epsilon$   $\bar{\eta}\gamma-\mu\mu$  ( $\eta=\bar{\alpha}$ ) from  $\bar{\alpha}\gamma\omega$  'I lead': Skr.  $\bar{\alpha}j-a$  O.Icel.  $\bar{\sigma}k$ - (here comes  $\bar{\alpha}\nu-\omega\gamma-\epsilon$  from  $\bar{\alpha}\nu-\dot{\alpha}\gamma\omega$  according to Danielsson, Nord. tidskr. f. filol., ny række, vii 138 ff.);  $\bar{\eta}\sigma\kappa\eta-\tau\omega$  from  $\bar{\alpha}\sigma\kappa\dot{\epsilon}\omega$  'I practice';  $\bar{\eta}\rho\chi-\epsilon$   $\bar{\eta}\rho\gamma-\mu\omega$  from  $\bar{\alpha}\rho\chi\omega$  'I begin';  $\bar{\eta}\mu\rho/\epsilon\sigma-\tau\omega$  from  $\bar{\alpha}\mu\omega$ - $\epsilon\sigma-\sigma\omega$  'to draw on, clothe'.  $\bar{\omega}\gamma\kappa\omega-\tau\omega$  from  $\bar{\delta}\gamma\kappa\dot{\epsilon}\omega$  'I grow big, swell up'. This perfect formation has been treated in

§ 848 p. 393 f.; it is very doubtful whether it ever had any reduplication.

(2) By the "Attic Reduplication", which corresponds to the structure of Skr. ān-áś-a (§ 851 p. 401). This flourished considerably at the expense of the last named (1). εδ-ηδώς: Skr. dd-a;  $\delta \rho - \omega \rho - \varepsilon$ : Skr. dr-a;  $\delta \delta - \omega \delta - \varepsilon$ : Lith.  $u'd-\bar{e}s$ . Att.  $\partial u$ - $-\omega'\mu o$ - $\tau\alpha\iota$  (and  $\partial\mu$ - $\omega'\mu o$ - $\sigma$ - $\tau\alpha\iota$ ) from  $\partial\mu$ - $\nu\bar{\nu}$ - $\mu\iota$  'I swear'. Hesiod has ξο-ήρισται from ξοίζω 'I strive'; but ήρικε above. Perhaps Hom.  $\ddot{\epsilon}\eta\sigma\vartheta\alpha$  'eras' and  $\dot{\epsilon}\eta\nu$   $\ddot{\eta}\eta\nu$ , as contrasted with  $\ddot{\eta}\sigma\vartheta\epsilon$   $\tilde{\eta}\epsilon\nu$   $\tilde{\eta}\nu$ (§ 502 p. 65 f.), was based upon a form \*εσ-ησ-; cp. § 583 p. 124, and the Author, Gr. Gr. 2 p. 164, Bartholomae, Stud. z. idg. Spr. 11 118 f. Ιοπ. ἀν-αο-αίρη-ται and ἀν-αιο-έρη-ται from ἀν-αιρέω 'I raise up on high'; but ἀν-ήρη-ται. Hom. δρ--ωρέχ-αται from ὀρέγω 'I stretch out', but ώρεγ-μαι, from V reg- (O.Ir. perf. re-raig 'porrexit'). On the analogy of  $\partial \lambda - \dot{\eta} \lambda v \partial - \varepsilon : \partial \lambda v \partial \varepsilon \tilde{\iota} v$ , the form  $\partial v - \varepsilon \gamma \kappa - \varepsilon \tilde{\iota} v$  'to bring', which already had the Attic reduplication (cp. Skr. ān-áś-a), formed a perfect έν-ήνεγκ-ται, which next called into being the act. έν-ήνοχε beside κατ-ήνοκε (§ 846 p. 390); έν- in έν-ήνεγκ-ται and έν-ήνοχε must then be the preposition  $\dot{\epsilon}\nu$ , which I see in the agrist έν-εικα (§ 504 p. 68); if so, έν-ήνεγκ-ται must be compared directly with Skr. ān-ás-a. Ion: όρ-ώρηκ-ε (Herodas) beside έδρακε έωρακε from δράω 'I see' for \*Foρα-, late Attic ελ-ηλιγ--μένο-ς beside είλικ-ται from έλίσσω 'I wind' for \*Fελικ-.

§ 859. The original differences of root-gradation in the group of Perfect forms transmitted from the parent language were very largely wiped out by analogy.

First, the vowel-grade of the indic. active invaded other forms; as γεγόν-α-μεν γεγον-ώς, ἐφθόρ-α-μεν ἐφθορ-ώς, πεπόνθ-α-μεν, τετρόφ-α-μεν, ἔοιγ-μεν ἐοίκ-α-μεν, πεποίθ-α-μεν conj. Hom. πεποίθ-ο-μεν Att. πεποίθ-ω-μεν, εἰλήλουθ-μεν εἰληλουθ-ώς, ἐρρώγ-α-μεν, ἀφ-έω-ται.

Next, the weak form sometimes became the type; as  $\delta \dot{\epsilon} \delta \iota$ - $\alpha$ ,  $\tau \dot{\epsilon} \tau \rho \alpha \phi$ - $\alpha$ ,  $\dot{\epsilon} \lambda \dot{\eta} \lambda v \vartheta$ - $\alpha$ .

Thirdly,  $\varepsilon$  is often found where it originally was not, as

πέφενγ-ε πεφεύγ-α-μεν, πέ-πλεχ-ε, λέ-λεγ-ε; particularly often in the Middle, as πέπλεχ-ται πέπεισ-ται. The original place of this ablaut-grade was in the perfect Conjunctive, sometimes in the Participle active (II § 136 p. 438 f.), and also, according to the hypothesis of De Saussure and Osthoff, the 1st sing. Indic. active (§ 843 Rem. p. 384). Again, ἔ-ελ-ται and like forms may be based upon the unreduplicated (κατα-)Fελμένο-ς; see § 848. 2 with Rem. 1, pages 392 and 393. Lastly, non-perfect verbal forms with ε may have had a hand in it; thus  $\varphi$ εύγω may have influenced πέφενγε, or πείθομαι πέπεισται.

Sometimes the change which took place was that weak perfect forms with  $\alpha$  from roots of the e-series caused the production of other forms on the analogy of a-roots. Thus  $\mu \dot{\epsilon} \mu \eta \lambda \epsilon$  (Dor.  $\mu \dot{\epsilon} \mu \ddot{\alpha} \lambda \epsilon$ ) took the place of \* $\mu \dot{\epsilon} \mu o \lambda \epsilon$  (from  $\mu \dot{\epsilon} \lambda \epsilon \iota$  'it is a care to'), because forms with  $\mu \epsilon - \mu a \lambda$ - (cp. Skr. ti-stir- from V ster- 'sternere') were associated with such others as  $\tau \epsilon - \theta a \lambda - v \ddot{\alpha}$  beside  $\tau \dot{\epsilon} \theta \eta \lambda \epsilon$  (Dor.  $\tau \dot{\epsilon} \theta \ddot{\alpha} \lambda \dot{\epsilon}$ ). Similar considerations account for  $\mu \dot{\epsilon} \mu \eta \nu \epsilon$  (V  $\mu \epsilon \nu$ - 'think') and  $\delta \epsilon \delta \eta \chi \dot{\omega} \dot{\epsilon}$   $\delta \dot{\epsilon} \delta \eta \gamma \mu a \iota$  (V  $de \dot{n} \dot{k}$ - 'bite') by analogy with  $\mu \epsilon - \mu a \nu - = *me - m \eta n$ - and  $\delta \epsilon - \delta a \varkappa - = *de - d \dot{\eta} \dot{k}$ - (cp. Skr.  $da da \dot{s} - v \dot{a} s$ - beside  $da da \dot{s} - a$ ). But undoubtedly with both these perfects other non-perfect forms, such as  $\mu a \dot{\iota} \nu o \mu a \iota \dot{\epsilon} \mu \dot{\alpha} \nu \eta \nu$  and  $\delta \dot{\alpha} \varkappa \nu \omega \, \dot{\epsilon} \delta \alpha \varkappa o \nu$ , helped to change them over to the new vowel-series.

The  $\bar{e}$ -grade seen in O.Ir.  $m\bar{i}d$ -ar Goth.  $s\bar{e}t$ -um Lith.  $s\bar{e}d$ - $\bar{e}s$  etc. (§ 848.3 p. 393), has been conjectured for Gr.  $\bar{i}j\sigma\tau\omega$  'sits', whose aspirate is odd as contrasted with Skr. ds- $t\bar{e}$ . It is quite possible that, in Greek, middle forms of \* $s\bar{e}d$ - were confused with the verb \* $\bar{e}s$ -. Compare pres. Lith.  $s\bar{e}d$ -mi § 494 p. 54.

§ 860. On the - $\alpha$ - of  $\tau \acute{\epsilon} \tau \varrho o \varphi - \alpha - \varphi$  - $\alpha - \mu \epsilon \nu$  - $\alpha - \tau \epsilon$ , on Dor,  $\gamma \acute{\epsilon} \gamma o \nu - \alpha \nu$  and part.  $\pi \epsilon \pi \tau \acute{\omega} \dot{\varsigma}$ , see § 844 pp. 385 f.

The  $3^{\rm rd}$  pl. ἐστᾶσι 'they stand' is contracted for \*ἑ-στά- $\bar{\alpha}$ σι, which had taken the place of a previous \*ἔστᾶσι. So also Ep. γεγάᾶσι μεμά $\bar{\alpha}$ σι βεβά $\bar{\alpha}$ σι Att. βεβ $\bar{\alpha}$ σι. See § 1021. 4.

§ 861. Aspirated Perfects like δεδειχε ( $\sqrt{}$  δεικ-) πέ-πλεχε (πλεκ-) κεκήρυχε (κηρύκ-) τέτροφε τετράφαται (τοεπ-) κέκλοφε

(κλεπ-) ἦχε (ἀγ-) λέλεχε (λεγ-) ὀρωρέχαται (ὀρεγ-) τέτριφε τετρίφαται (τρτβ-) have borrowed the aspirate, and put it in place of media or tenuis, from perfect stems which properly ended in an aspirate, such as γέγραψε γεγράφαται and τετεύχαται. The cause of this change was that in some perfect forms and in forms outside the perfect, these phonetic differences disappeared, and the aspirate was no longer distinguished from the tenuis or media. Thus τέτραμμαι τέτραψαι etc. and ἔτρεψα τρέψω looked exactly like γέγραμμωι γέγραψαι etc. and ἔτρεψα γράψω; hence the analogy of γεγράφαμεν gives rise to τετράφαμεν instead of \*τετραπαμεν. Compare Osthoff, Perf. 284 ff., 614 ff.; Curtius, Zur Kritik der neuesten Sprachforschung, 58 ff.

§ 862. Perfects from verbal stems in s generally show in the middle the endings  $-\sigma\mu\alpha$   $-\sigma\mu\epsilon\theta\alpha$   $-\sigma\mu\epsilon\nu\sigma\varsigma$ , as  $\epsilon\zeta\epsilon\sigma\mu\alpha$   $\epsilon\zeta\omega\sigma\mu\alpha$   $\epsilon\zeta\omega\sigma\mu\alpha$   $\epsilon\zeta\omega\sigma\mu\alpha$   $\epsilon\zeta\omega\sigma\mu\alpha$   $\epsilon\zeta\omega\sigma\mu\alpha$   $\epsilon\zeta\omega\sigma\mu\alpha$   $\epsilon\zeta\omega\sigma\mu\alpha$   $\epsilon\zeta\omega\sigma\mu\alpha$   $\epsilon\zeta\omega\sigma\mu\alpha$   $\epsilon\zeta\omega\sigma\mu\alpha$ , thus traversing the law laid down in vol. I 565 § p. 422, by which we should expect forms without  $\sigma$ , and with a lengthening of the preceding vowel when this was short. There are some of these regular forms, as  $\epsilon\zeta\omega\mu\alpha$  ( $\sqrt{j\bar{o}s}$ )  $\gamma\dot{e}\gamma\epsilon\nu\mu\alpha$  ( $\sqrt{g}\epsilon\mu s$ )  $\epsilon\dot{\varphi}$ - $\epsilon\nu\mu\dot{\epsilon}\nu\sigma\varsigma$  ( $\sqrt{e}\mu s$ ). But the other set are a re-formation on the model of those with  $-\sigma\tau$ -, as  $\epsilon\zeta\epsilon\omega\mu\alpha$  instead of  $\epsilon\zeta\omega\omega\alpha$  following  $\epsilon\zeta\omega\omega\alpha$ . On the contrary,  $\epsilon\zeta\omega\mu\alpha$  and  $\epsilon\zeta\omega\omega\alpha$  suggested  $\epsilon\zeta\omega\omega\alpha$  instead of  $\epsilon\zeta\omega\omega\alpha$   $\epsilon\zeta\omega\omega\alpha$  instead of  $\epsilon\zeta\omega\omega\alpha$ .

The agreement of forms like σείσω ἔσεισα (for \*σεισ-σω \*ε̄-σεισ-σα) ἐρείσω ἤρεισα (for \*ἐρειδ+σω \*ἦρειδ+σα) with such forms as τεί-σω ἔ-τει-σα ( $\sqrt{\phantom{a}}$ τει-) had this result, that the endings -σται -σμαι etc. spread from σέσεισται -σμαι ἐρήρεισται -σμαι to the Perfect of verbal stems which ended in a vowel: τέτει-σται -σμαι, κέκλαν-σται instead of κέκλανται, ἔγνω-σται, κεκέλεν-σται. The same cause gave rise to ἀπο-τειστέο-ς ἐτείσθην, κλανστό-ς instead of κλαντός, ἐγνώσθην etc. Or the  $\sigma$  of these forms from verb stems with final vowel may have originated from the  $2^{\rm nd}$  sing. mid. in -σ-θης, as ἐγνώσθης (= άjπāsthās) ἐμνήσθης (Wackernagel, Kuhn's Zeitschr. xxx 312, Henry, Précis de gramm. comp. 3 § 102); cp. § 589 p. 129 f., § 820 p. 357, § 836 p. 373, § 840 p. 377.

§ 863. The  $3^{rd}$  pl. of olds idust was in Homer isoāst (Att. isāst Dor. isatt by vol. I § 563. 2 p. 419), an ad-formate of the s-aorist \*issat isat, augmented for (§ 812 p. 349, § 821 p. 358). The formation of issāst was due to ist issat beside fore foror. Compare § 862, on Att. is  $\mu$ er.

ἴσαντι, associated with ἵσταντι 'they place', caused the Doric dialect to make the further forms ἴσᾶμι ἴσαμεν ἰσάμεναι etc. following ἵστᾶμι and the rest.

In Heraclean, this σ went on to the middle of the perfect: γεγράψαται. Then, on the strength of the relation of γεγράψαται to ἐγράψαντο, we get \*μεμισθώσαται beside ἐμισθώσαντο — the conj. μεμισθώσωνται is found.

§ 864. There can be no doubt that the \*\*-perfect, as &orn\*\*e, existed in all its important features as early as proethnic Greek, although it only become a large group in Greek itself. As to the origin of the formation very diverse theories have been set forth; they are collected and criticised by Johansson, Beitr. zur gr. Sprachkunde, pp. 56 ff. (compare Per Persson, Wurzelerw., 209 f.).

Remark. The explanation which has most in its favour is the following.  $\varkappa$  is called a Root-Determinative, which came from the parent language into Greek in a few verbs; and then it became a fertile perfect suffix in pr. Greek just as s became a fertile agrist suffix in the original language. It was not confined to the perfect any more than s was confined to the agrist: we have for instance agr.  $\xi \partial_{\eta \varkappa \alpha}$  as well as perf.  $\xi \partial_{\eta \varkappa \alpha}$ , agr.  $\xi \partial_{\omega \varkappa \alpha}$  discuss as will as perf.  $\delta \xi \partial_{\omega \varkappa \alpha}$ ,  $\delta \lambda \ell \varkappa \omega$  as well as  $\delta \lambda \ell \omega \ell \omega$ . We will as  $\delta \lambda \ell \omega \ell \omega \omega \omega$ .

The favourite sphere of the z-formation lay from the proethnic period of Greek in stems with e-, o- and a-vowels, as  $\tau \dot{\varepsilon}$ - $\vartheta \eta$ -x $\varepsilon$   $\dot{\varepsilon}$ - $\omega$ -x $\varepsilon$   $\delta \dot{\varepsilon}$ - $\delta \omega$ -x $\varepsilon$   $\dot{\varepsilon}$ - $\delta \omega$ -x $\varepsilon$ . Forms like \* $\tau \varepsilon$ - $\vartheta \eta$  \* $\dot{\varepsilon}$ - $\omega$  (Avest. da-da) without - $\alpha$  and - $\varepsilon$  in the 1st and 3rd sing. may have seemed too unnatural and unlike the rest of the system; this may have brought in some z-form, which afterwards spread rapidly by analogy.

Beside the above named perfect forms with the root-suffixes  $-\bar{\alpha}$ - and  $-\bar{\epsilon}$ -  $-\bar{o}$ -, were formed others, such as κεχάρηκε γεγάμηκε ήθέληκε δεδείπνηκε μεμίσθωκε τετίμακε δεδάκρυκε. Compare κεχαρηώς κεκοτηώς νενέμηται πεφίληται etc., § 857.1 and 2, p. 405 f.

Again, the relation of ξστηπα to στήσω ξστησα, of δέδοαπα to δράσω ξδοασα, produced perfects like πέπειπα beside πείσω ξπεισα (πείθω 'I advise'), πέφραπα beside φράσω ξφρασα (φράζω 'I give to understand, show' for \*φραδ-ιω), γεγύμναπα beside γυμνάσω ξγύμνασα (γυμνάζω 'I exercise), ήρμοπα beside άρμόσω ήρμοσα (άρμόζω 'I fit, join'), ξσπειπα beside σπείσω ξσπεισα for \*σπεντ-σ- (σπένδω 'I pour'), ξσπαπα beside σπάσω ξσπασα (σπάω 'I pull' for \*σπα-σ-ω).

By analogy of the perfect middle (cp.  $\delta \acute{\epsilon} \delta \varrho \bar{\alpha} \tau a \iota : \delta \acute{\epsilon} \delta \varrho \bar{\alpha} \tau a \iota$ ) arose e.g. Phoc.  $\tau \acute{\epsilon} \vartheta \epsilon \iota a$  (instead of  $\tau \acute{\epsilon} \vartheta \eta \iota a$ ) following  $\tau \acute{\epsilon} \vartheta \epsilon \tau a \iota$ ,

Att. εἶκα (\*ἕεκα) following εἶται (\*ἕεται), δέδεκα following δέδεται, εἰφθαρκα following ἔφθαρται, κέκλικα following κέκλιται, ἤγγελκα following ἤγγελται. Vice versa, mid Dor. ἀφ-έωται follows ἕωκα (§ 859 p. 408).

Following εἶκα εἶται, the forms τέθηκα τέθεμαι were changed in late Attic to τέθεικα τέθειται.

Following ξστάκα: ξσταμεν we get γέγάκα (Pind.) beside γέγαμεν (\*ĝe-ĝη-); vice versa ἠρίσταμεν (Comedy) beside ἠρίστηκα (ἀριστάω 'I breakfast').

§ 865. For the Pluperfect Greek, like Sanskrit, at first had two formations, thematic and unthematic (cp. § 555 p. 108, § 845 p. 387, § 854 p. 403).

- (1) The Unthematic type is found in the Active only for Plural and Dual, e. g.  $\hat{\epsilon}-n\hat{\epsilon}-n\imath\vartheta-\mu\epsilon\nu$   $\gamma\epsilon-\gamma\acute{\alpha}-\tau\eta\nu$   $\hat{\epsilon}-\sigma\tau\alpha-\mu\epsilon\nu$ ; the  $3^{\rm rd}$  pl. ends in  $-\sigma\alpha\nu$ , e. g.  $\hat{\epsilon}-\sigma\tau\alpha-\sigma\alpha\nu$   $\mu\acute{\epsilon}-\mu\alpha-\sigma\alpha\nu$   $\hat{\epsilon}\delta\epsilon\acute{\epsilon}\delta\acute{\epsilon}\sigma\alpha\nu$  i. e.  $*\hat{\epsilon}-\delta\acute{\epsilon}-\delta\digamma_{\iota}-\sigma\alpha\nu$  (§ 1021. 2). Far oftener, and found in all three numbers, this occurs in the Middle; as  $\tau\epsilon-\tau\acute{\nu}\gamma-\mu\eta\nu$   $\hat{\epsilon}-\tau\acute{\epsilon}-\tau\alpha\varkappa-\tau\sigma$   $\beta\epsilon-\beta\acute{\kappa}\eta\acute{-}\alpha\tau\sigma$   $\varkappa\epsilon-\chi\acute{\sigma}\lambda\omega-\sigma\sigma$ . Compare Skr. 1st and 3rd sing.  $\acute{\alpha}-j\alpha-g\alpha n$ .
- (2) Thematic Forms are e. g.  $\hat{\epsilon}$ - $\mu\hat{\epsilon}$ - $\mu\eta\varkappa$ -o- $\nu$  (but  $\mu\epsilon$ - $\mu\eta\varkappa$ - $\omega\hat{\epsilon}$ ),  $\hat{\epsilon}$ - $\pi\hat{\epsilon}$ - $\pi\lambda\eta\gamma$ -o- $\nu$  (but  $\pi\hat{\epsilon}$ - $\pi\lambda\eta\gamma$ -a),  $\tilde{\alpha}\nu$ - $\omega\gamma$ -o- $\nu$  (but  $\tilde{\alpha}\nu$ - $\omega\gamma\alpha$ ),  $\delta\hat{\epsilon}$ io i. e. \* $\delta\hat{\epsilon}$ - $\delta F_{t-\hat{\epsilon}}$  (but perf.  $\delta\hat{\epsilon}$ - $\delta t$ - $\mu\epsilon\nu$ ); with  $\varkappa$ ,  $\hat{\epsilon}$ - $\pi\hat{\epsilon}$ - $\varphi\bar{\nu}\varkappa$ -o- $\nu$  (but  $\pi\hat{\epsilon}$ - $\varphi\bar{\nu}$ - $\varkappa\alpha$ ). Compare Skr.  $\hat{\alpha}$ -ca-kr-a-t. Sometimes it is doubtful whether a form comes here or in the VI<sup>th</sup> Present Class (§ 563 p. 111); as  $\lambda\epsilon$ - $\lambda\hat{\alpha}\varkappa$ -o- $\nu\tau$ 0 (cp.  $\lambda\hat{\epsilon}\lambda\eta\varkappa\alpha$   $\lambda\epsilon\lambda\alpha\varkappa\nu\tilde{\alpha}$  and  $\tilde{\epsilon}$ - $\lambda\alpha\varkappa$ -o- $\nu$ ).
- § 866. Like the thematic pluperfect  $\vec{\epsilon} \mu \acute{\epsilon} \mu \eta \varkappa o \nu$  etc., mentioned in § 865. 2, the thematic imperative  $\varkappa \epsilon \varkappa \rho \acute{\alpha} \gamma \epsilon \tau \epsilon$  and so forth belong to the parent speech; cp. Skr.  $mu m\acute{o}c a ta$ , § 844 p. 404.

But thematic forms occur more or less in all other formations of the Greek perfect system. Indicative Hom.

μέ-μβλ-ε-ται it is dear beside μέλ-ει (which may also belong to Present Class VI, § 563 p. 111),  $\delta \varrho - \omega \varrho - \varepsilon - \tau \alpha \iota$  is aroused beside  $\delta \varrho - \omega \varrho - \alpha$ ,  $\delta \iota - \omega \iota \omega \omega$  beside  $\delta \iota - \omega \iota \omega \omega$ . Syrac.  $\delta \iota \delta \iota \delta \iota - \omega \omega$  beside Att.  $\delta \iota - \omega \iota - \omega \omega$ . And again,  $\tilde{\eta} \varkappa \omega$  I am here may have taken the place of a perfect \* $\tilde{\eta} \varkappa \alpha$ ; the last essay to explain the etymology of this verb is by Johansson, Beitr. gr. Sprachk., 62 f., who would connect it with a root  $i - \tilde{e}$ - 'to go'. Conj. Hom.  $\delta \varrho - \tilde{\eta} \varrho - \tilde{\eta}$  Att.  $\beta \varepsilon - \beta \iota \tilde{\eta} \varkappa - \eta$  beside Hom.  $\varepsilon \iota \tilde{\varrho} - \sigma \iota \omega - \iota \omega \omega$ . Opt. Att.  $\beta \varepsilon - \beta \iota \tilde{\eta} \varkappa - \sigma \iota$  beside  $\tilde{\varepsilon} - \sigma \iota \omega - \tilde{\iota} - \iota \omega \varepsilon$ . Inf. Rhod.  $\gamma \varepsilon \gamma \tilde{\varrho} \nu \varepsilon \iota \nu$ , in Pindar  $\varkappa \varepsilon \chi \iota \tilde{\varrho} \tilde{\varrho} \varepsilon \iota \nu$ . Part. Lesb.  $\pi \varepsilon \pi \lambda \eta \varrho \omega \varkappa \omega \nu$ , Hom. (Aeol.)  $\varkappa \varepsilon \varkappa \lambda \tilde{\eta} \gamma \varrho \nu \iota \varepsilon \varsigma$ , Boeot.  $\mathcal{F} \varepsilon \mathcal{F} \tilde{\upsilon} \varkappa \varrho \nu \varrho \iota \varepsilon \tilde{\upsilon} \nu \iota \omega \nu$ .

## Italic.

- § 867. The "Perfect" of Latin and Umbro-Samnitic is a mixture of elements very widely different. Ten distinct types contribute to make it up.
- (1) Genuine Reduplicated Perfects like Lat. tu-tud- $\bar{t}$  = Skr. tu-tud- $\bar{e}$ , de-d- $\bar{t}$  = Skr. da-d- $\bar{e}$  (§ 1044). In § 846 we have compared with perfect forms of other Idg. languages these others:  $peper\bar{t}$ ,  $tetul\bar{t}$ ,  $memin\bar{t}$   $mement\bar{o}$ ,  $tetin\bar{t}$ ,  $memord\bar{t}$   $momord\bar{t}$ ,  $cr\bar{e}did\bar{t}$ ,  $bib\bar{t}$ ,  $stet\bar{t}$ ,  $scicid\bar{t}$ ,  $cecin\bar{t}$ ,  $pepig\bar{t}$ ; to which add Umbr. dersicust.
- (2) Probable Unreduplicated Perfect forms. First  $l\bar{e}g-\bar{\imath}$   $v\bar{e}n-\bar{\imath}$  and the like, with possibly  $\bar{e}d-\bar{\imath}$ , cp. § 848.3 p. 393. Next  $scand-\bar{\imath}$ ,  $vort-\bar{\imath}$   $vert-\bar{\imath}$  Umbr. co-vortus 'converterit',  $sc\bar{a}b-\bar{\imath}$ ,  $\bar{o}d-\bar{\imath}$ , cp. § 848.1, 2 and 4, pp. 391, 392, 394.
- (3) Forms of the s-Aorist, both thematic and non-thematic, as  $d\bar{\imath}x-\bar{\imath}$   $d\bar{\imath}x-i-t$   $d\bar{\imath}x-i-mus$ , ep. Gr.  $\ddot{\varepsilon}-\delta \omega \xi-\alpha$  Skr.  $\acute{a}-dik \xi-a-t$ . See § 823 p. 360 f.
- (4) Forms of the non-thematic is-Aorist, as vīdis-tis (vīdis-tī) vīder-ō vīder-i-m, ep. Skr. á-vēdiš-am Gr. ησεα. See § 841 pp. 378 ff.
- (5) Thematic Aorists of Class II. Lat. fu-i-t fu-i-mus, Osc. fuid 'fuerit': Skr. á-bhuv-a-t. Lat. scid-i-t: Skr. á-chid-a-t. fid-i-t: Skr. á-bhid-a-t. ex-uit for \*-uy-e-t (Class II B) or

- \*-eu-e-t (Class II A). Osc. dic-ust 'dixerit' beside \*dic-e-d 'dixit': Skr. imperf. á-diś-a-t. Osc. kúm-běned 'convēnit' ce-bnust 'huc venerit' 1): Skr. á-gam-a-t Avest. \( \gamma \bar{p}, \subseteq \gamma \bar{p}, \subset
- (6) Possibly amongst forms like  $l\bar{e}g$ -i-t  $l\bar{e}g$ -i-mus ( $\sqrt{leg}$ -) were some like Gr.  $\dot{\epsilon}$ - $\mu\dot{\eta}\delta$ - $\epsilon$ - $\tau o$  ( $\sqrt{med}$ -) Skr.  $\dot{a}$ - $s\bar{a}h$ -a-t ( $\sqrt{se\hat{g}h}$ -). See § 841 Rem. p. 378.

To these must be added (8) the Latin perfect in  $-v\bar{\imath}$  and  $-u\bar{\imath}$ , (9) the Umbr.-Samn. perfect with f, and (10) the t-perfect of Oscan, Pelignian, and Volscian; see §§ 873 ff.

This fusion of the forms of Aorist and Perfect implies that the Idg. Perfect had become a historic tense as early as proethnic Italic.

Conway (Amer. Journ. Phil. XI 308) defends the old view of cebnust as a reduplicated form.

<sup>2)</sup> The Umbr.-Oso. ending -e-d is odd as compared with forms like fust, where the short vowel of the last syllable is syncopated (I § 633 p. 474). Whether the law of syncopation allowed certain exceptions in the case of a final dental (say, depending on what the preceding syllable was, or the accent), or whether -e- in this -e-d is due to some analogy, I do not here discuss.

Of the endings of the perfect indicative, these belonged to the perfect in Idg.: Lat.  $-\bar{\imath}$  in the 1<sup>st</sup> sing. = Skr.  $-\bar{e}$ ;  $-t\bar{\imath}$  which fused with the agrist element -is- made the 2<sup>nd</sup> sing. (: Skr. -tha § 988. 3); and -imus in tutud-imus  $v\bar{e}n$ -imus may be equated with Skr. -i-ma, Avest. -ama Gr.  $-a\mu\epsilon\nu$  Goth. -um (ste-ti-mus = Gr.  $\epsilon$ - $\sigma\tau\alpha$ - $\mu\epsilon\nu$  Skr. ta-sthi- $m\acute{a}$ ?). To the is-agrist belongs Lat. 2<sup>nd</sup> pl. -is-tis, also -is- $t\bar{\imath}$  in 2<sup>nd</sup> sing. (see above), and possibly  $-\epsilon runt$  in the 3<sup>rd</sup> plural. To the thematic agrist belong Lat. 3<sup>rd</sup> sing. -i-t, earlier -e-d (vhevhaked), whose agreement with Umbr.-Samn. -e-d is most important (the -e of the 3<sup>rd</sup> sing. perf. Idg. must doubtless have given place to -e-d = Idg. -e-t completely in pr. Italic), and partly -i-mus in the 1<sup>st</sup> plural. The 3<sup>rd</sup> pl. Umbr.-Samn. -ens and Lat.  $-\epsilon runt$  are ambiguous.

The precise way by which this fusion of different endings came about is not clear; nor will it be made clear so long as the 3<sup>rd</sup> singular and 3<sup>rd</sup> plural are the only endings we know in Umbro-Samnitic dialects (as to Osc. manafum, see § 874). Thus much only seems certain, that as early as proethnic Italic some thematic forms had joined on to the old perfect system; cp. Lat. de-d-i-t Osc. de-d-e-d beside Lat. de-d-ī, pe-pig-i-t beside pe-pig-ī.

Beside -e-d = Idg. -e-t, Latin has also  $-\bar{\imath}d$   $-\bar{\imath}t$ , on inscriptions -eit, as funcit redicit. Since intericisti also occurs on inscriptions, the simplest explanation is that the  $\bar{\imath}$  came from the  $1^{\text{st}}$  sing. which had  $-\bar{\imath}$ .

Remark. Bartholomae (Stud. idg. Spr., 11 195) derives fuit from Idg. \*bhey-ī-t or \*bhuy-ēṣ-t, which seems to me very far-fetcht. I identify fuit with Skr. á-bhuv-a-t (Osc. conj. fuid for \*bhuy-ē-t § 872), and I regard fūi (Ennius has fūimus) as a re-formate like plūī (cp. Osthoff, Perf. 254 f.).

§ 868. The Idg. e of the reduplicating syllable seems to have been kept without change in proethnic Italic. Compare O.Lat. vhe-vhaked 'fecit' Osc. fe-facid 'fecerit', Lat. de-dī Osc. de-ded Umbr. ře-ře, Lat. me-mordī pe-pugī ste-tī, Umbr. de-rsicust 'dixerit' pe-purkurent 'poposcerint, rogaverint'.

But Latin, if the vowel of the syllable which followed the reduplicator was the same as that of its present stem, assimilated this e to it; as  $mo-mord\bar{\imath}: morde\bar{o}, cu-curr\bar{\imath}: curr\bar{o}, pu-pug\bar{\imath}: pung\bar{o}, sci-cid\bar{\imath}: scind\bar{o}, di-dic\bar{\imath}: disc\bar{o}, sti-t\bar{\imath}: sist\bar{o};$  whilst in Old Latin we still find the regular forms  $me-mord\bar{\imath}$   $pe-pug\bar{\imath}$  etc. (see above). Compare Skr.  $u-v\acute{a}c-a$  instead of  $va-v\acute{a}c-a$  following  $uc-y\acute{a}-te$   $ukt\acute{a}-s$  and the like, § 851 p. 400. However, e remained if the vowel of the next syllable, and the present vowel, were of the e-kind; as  $pend\bar{\imath}: pend\bar{\imath}: pend\bar{\imath}$   $pend\bar{\imath}: ped\bar{\imath}: p\bar{e}d\bar{\imath}: p\bar{e}d\bar{\imath}: and$  the same if it differed from the present vowel, as  $ce-cin\bar{\imath}: can\bar{\imath}$ ,  $ce-cid\bar{\imath}: cad\bar{\imath}$ ,  $pepul\bar{\imath}: pell\bar{\imath}$ ,  $pe-per\bar{\imath}: pari\bar{\imath}$ ,  $ste-t\bar{\imath}: st\bar{\imath}$  stās etc.

In compounds four syllables long (in the 1<sup>st</sup> and 3<sup>rd</sup> singular), the reduplicator underwent syncope in proethnic Latin, as a consequence of the accentuation then given to the first member; as reppulī rettulī reccidī for \*ré-pepulī \*ré-tetulī \*ré-cecidī, dēcidī attigī incurrī for \*dé-cecidī \*át-tetigī \*in-cecurrī (I § 633 p. 474).

That both reduplicated and unreduplicated forms occurred in pr. Italic within the perfect system of the same verb is shewn by O.Lat. vhe-vhaked Osc. fe-facust as compared with Lat. fēcē Umbr. fakust. Compare further Lat. sci-cidē and scidē, te-tulē and tulē, Umbr. de-rsicust and Osc. dicust, Lat. ce-cinē and Umbr. pro-canurent. Thus we have no right to assume that Lat. tulē was abstracted from compounds in which the reduplicator had suffered syncope, as in rettulē attulē. When a form has only survived in compounds, as -culē (per-culē), it is impossible to say whether it never was reduplicated or whether syncope has hidden the reduplication.

This loss of reduplication in Latin compounds helped to link reduplicated and unreduplicated forms all the closer.

Beside Lat. abs-condidī (from abs-condō) the form abs-condī sprang up on the analogy of scandī: scandō, since condō in this word joined with abs had ceased to be regarded as a compound; cp. abscōnsum beside absconditum. On the contrary, condidī:

Brugmann, Elements. IV.

 $cond\bar{o}$ ,  $cr\bar{e}did\bar{\imath}$ :  $cr\bar{e}d\bar{o}$  and the like gave rise to perf.  $d\bar{e}scendid\bar{\imath}$  beside  $d\bar{e}scend\bar{\imath}$ .

As regards verbs with initial vowel, such forms as Skr.  $\bar{a}n$ - $\dot{a}\dot{s}$ -a (§ 851 p. 401) and Gr.  $\ddot{o}\varrho$ - $\omega\varrho$ -a (§ 858 p. 408) were foreign to Italic. Lat.  $\bar{e}d$ - $\bar{\imath}$   $\bar{e}m$ - $\bar{\imath}$  (from ed- $\bar{o}$  em- $\bar{o}$ ), as well as  $s\bar{e}d$ - $\bar{\imath}$   $v\bar{e}n$ - $\bar{\imath}$ ,  $\bar{e}g$ - $\bar{\imath}$  co- $\bar{e}p\bar{\imath}$  coe $p\bar{\imath}$  (from ag- $\bar{o}$  ap- $i\bar{o}$ ), as well as  $c\bar{e}p$ - $\bar{\imath}$   $p\bar{e}g$ - $\bar{\imath}$ ,  $\bar{o}d$ - $\bar{\imath}$  (od- $i\bar{o}$ ), as well as  $f\bar{o}d$ - $\bar{\imath}$ , may be regarded as forms which never had any reduplication at all. See § 848 p. 393 f., § 870.

§ 869. Of the old Ablaut in the Root Syllable of the Perfect little trace is left.

The reason for the variants  $tut\bar{u}d\bar{\imath}$  and  $tutud\bar{\imath}$  is doubtless a difference of ablaut, such as we see in Skr.  $tu-t\bar{o}d-a$   $tu-tud-\dot{u}r$  (cp. also Goth. stai-staut); then  $tu-t\bar{u}d-$  will come from \* $t\dot{u}-taud-$ , as  $in-cl\bar{u}d\bar{o}$  for \* $in-claud\bar{o}$ .

The o-grade of the sing. indic. appears in spopondī totondī, which had run into one verbal system with the éjo-presents spondeō tondeō (§ 802 p. 338). spopond-imus instead of \*spe-pend- like Gr.  $\pi \varepsilon \pi \acute{o} \nu \vartheta$ - $\alpha \mu \varepsilon \nu$  instead of  $\pi \varepsilon$ - $\pi \alpha \vartheta$ - (part.  $\pi \varepsilon \pi \alpha \vartheta \nu \~{i}\alpha$ ). momord- in momordī momordimus (pres. mordeō like spondeō) may be both Idg. \*me-mord- and \*me-myd- (Skr. ma-mard-a ma-myd-ur). Similarly, we have cu-currī from currō for \*corsō \*krsō (§ 662 p. 197). Umbr. pepurkurent from  $\sqrt{prek}$ - may like de-rsic-ust contain the weak stem (\*pe-prk-), although persklum persnimu, which have changed the position of r (§ 674 p. 207), suggest some doubt.

Strong and Weak forms may be found, again, in meminī tetinī pepulī tetulī (memin-i-mus tetul-i-mus: Gr.  $\mu \acute{\epsilon} \mu \alpha - \mu \epsilon \nu \tau \acute{\epsilon} \tau \lambda \alpha - \mu \epsilon \nu$ , as Skr. jagm-i-ma: jagan-ma Gr.  $\beta \acute{\epsilon} \beta \alpha - \mu \epsilon \nu$ , and as Skr. jagm-i-vás-: jagan-vás-); only the weak form in pepigī for \*pepagī (but Gr.  $n\acute{\epsilon} n \eta \gamma \epsilon$ ) tetigī cecidī. But it is doubtful how far we are to look for the origin of these perfects in old reduplicated aorists (§ 867. 7 p. 415).

Doubtless it is the weak stem in Osc. fefacust beside Lat.  $f\bar{e}c\bar{i}$  from  $\sqrt{dh\bar{e}}$ . The a of Lat. vhevhaked is difficult.

Remark. If it is short, this seems to prove that at the time of the Manios inscription (attributed to the 6th century B. c.) the weakening of \*pépagī to \*pépigī and the like (I § 680 p. 547) had not yet been completed. But hear what Bücheler says (Rhein. Mus. XLII 317): "After the second h the carver first put i, which he afterwards erased, though not so completely but that the intent is clear". Again, p. 318: "The quantity of the a is not known. What we know of the reduplicated perfects which are preserved in Latin, makes it likely that the a was short. Possibly this is the reason of the i which was first engraved (cano cecini, infacetus inficetus)". If this i is rightly so explained, and if the a put in on second thoughts was short, it must be a reversion to the old type on the analogy of facio etc. (as with in-facetus); but such a reversion in the perfect is hardly oredible. If  $\bar{a}$  was meant, it must be assumed that \*fefāk- was made in connexion with \*fefak- \*fefik- on the analogy of some such form as \*pepāg- (beside weak \*pepāg- \*pepig-). — We may now refer to Buck, Der Vocalismus der osk. Spr., 26 f.

§ 870. A word of explanation is needed on those reduplicated perfects which have  $\bar{e}$  where the present has an a-sound. Lat.  $f\bar{e}c\bar{\iota}$  (beside vhevhaked):  $faci\bar{o}$ ,  $cap\bar{\iota}$ :  $capi\bar{o}$  (cp. Goth.  $h\bar{o}f$ ),  $j\bar{e}c\bar{\iota}$ :  $jaci\bar{o}$ ,  $p\bar{e}g\bar{\iota}$  (beside  $pepig\bar{\iota}$  Gr. Dor.  $n\ell n\bar{e}\gamma\ell$ ):  $pang\bar{o}$ ,  $fr\bar{e}g\bar{\imath}$ :  $frang\bar{o}$ ; Osc. conj. hipid 'habuerit' fut. perf. hipust 'habuerit': hafiest 'habebit', sipus 'sciens': Lat.  $sapi\bar{o}$  (cp. O.H.G. int-suab). With initial vowel Lat.  $eg\bar{\imath}$ :  $ag\bar{o}$  (cp. O.Icel.  $eg\bar{\imath}$ ),  $eg\bar{\imath}$   $eg\bar{\imath}$ :  $eg\bar{\imath}$ :  $eg\bar{\imath}$   $eg\bar{\imath}$  coep $\bar{\imath}$ :  $eg\bar{\imath}$ :  $eg\bar{\imath}$  is certainly original in  $eg\bar{\imath}$ ,  $eg\bar{\imath}$ ) compare Gr.  $eg\bar{\imath}$  (§ 864 Rem. p. 412), and doubtless

Bronisch sees fēk- in Umbr. feitu fetu fetu fetu 'facito' = \*fēke-tōd. Another explanation, but less probable, is offered by Conway, Amer. Journ. Phil. XI 307, Class. Rev. v 300.

in  $fr\bar{e}g\bar{\imath}$ , compare Goth.  $br\bar{e}kum$  from  $\slashed{breg-}$  (on  $frang\bar{o}$  see § 632 p. 168), and perhaps  $j\bar{e}c\bar{\imath}$  (Johansson, Beitr. gr. Spr. 61). Beginning with these forms,  $\bar{e}$  spread to those which originally had  $\bar{a}$ ; in the causing of which not only the present with a, but also the to-participle had some effect, captu-s for example being like factu-s; the reason why  $sc\bar{a}b\bar{\imath}$  (= Goth.  $sk\bar{o}f$ ) remained, from  $scab\bar{\imath}$ , whilst  $*c\bar{a}p\bar{\imath}$  (= Goth.  $h\bar{o}f$ ) changed to  $c\bar{e}p\bar{\imath}$ , was perhaps the lack of any participle \*scaptu-s. It was natural, too, to make  $p\bar{e}g\bar{\imath}$  like  $fr\bar{e}g\bar{\imath}$ , simply because the verbs had opposite meanings.

§ 871. Perfect from Present stems with stem-characteristic. Compare § 847 p. 390 f.

Lat. po-poscī from poscō for \*por(c)-scō, cp. Skr. papracha. fe-fellī for \*fe-fallī from fallō for \*fal-nō (§ 608 p. 149). tetend-ī from tendō,  $\sqrt{ten}$ - (§ 564 p. 111, § 696 p. 225).

Lat.  $pre\text{-}hend\bar{\imath}$  from  $-hend\bar{\imath}$  from  $\sqrt{ghed}$ ,  $lamb\bar{\imath}$  from  $lamb\bar{\imath}$  beside O.H.G. laffu,  $pand\bar{\imath}$  from  $pand\bar{\imath}$  beside  $pate\bar{\imath}$  (§ 632 p. 168 f.).  $c\bar{\imath}d\bar{\imath}$  from  $c\bar{\imath}-d\bar{\imath}$  (§ 696 p. 225). Osc. com-parascuster 'consultus erit' beside Lat.  $-pesc\bar{\imath}$  for \*perc- $sc\bar{\imath}$  or \*parc- $sc\bar{\imath}$  (§ 674 p. 207). Umbr. eiscurent 'poposcerint, arcessierint' beside pres. Skr.  $ich\dot{a}$ -ti etc. (§ 670 p. 203). If Bugge's explanation of the Osc. fut. perf. fifikus as 'feceris' is right (Altital. Stud. 31), we must allow Oscan a present stem \*fi- $f\bar{\imath}k$ -(o-), showing the same reduplication as Gr.  $\tau i$ - $9\eta$ - $\mu \iota$ , and to be compared with Vestin. di-d-e-t 'dat' Lat. si- $st\bar{\imath}$  etc. (§ 553 p. 107); cp. Skr. part. vivak-vas- from pres. vi-vak-ti (§ 850 p. 398).

minu $\bar{\imath}$  sternu $\bar{\imath}$  (pres. mi-nu $\bar{o}$  ster-nu $\bar{o}$  § 649 p. 185) keep the present stem in the perfect; this being due to imitation of ex-u $\bar{\imath}$ : ex-u $\bar{o}$ ,  $plu\bar{\imath}$ :  $plu\bar{o}$  and the like. The same is true of perf. statu $\bar{\imath}$  from the denominative statu $\bar{o}$ .

§ 872. The Moods of the Idg. perfect, and its preterite the Pluperfect, died out in Latin owing to the influx of signatic acrist forms into the perfect system. Still,  $mement\bar{o} = Gr$ .  $\mu \epsilon \mu \dot{a} \tau \omega$  remains, because  $memin\bar{\imath}$  was used as a perfect present.

Umbro-Samnitic has an  $\bar{e}$ -conjunctive (§ 926 c). Osc. fefacid 'fecerit' hipid 'habuerit' fuid 'fuerit', Umbr. stiti-steteiens 'stiterint'. From the f-Perfect Osc. sakrafír 'sacraverint', Umbr. pihafei = \*pihāfēr 'piaverint', from the t-Perfect, Osc. trí barakattíns 'aedificaverint'. This Conjunctive may be derived from either conj. of the Idg. perfect (cp. Gr.  $\pi \epsilon \pi \acute{o} \nu \vartheta - \eta$  Skr.  $paprc-\bar{a}-si$ ) or conj. of the thematic aorist (Osc. fuid = Skr. bhuv- $\bar{a}$ -t).

In the same area, the Idg. yes-participle held its own. Osc. sipus 'sapiens' probably like nom. sing. Skr. vidúš Avest. vīđuš (II § 136 p. 439 f., III § 193 p. 73). From this form was built up the future perfect (cp. W. Schulze, Kuhn's Zeitschr. XXVIII 272 f., the Author, Ber. sächs. Ges. Wiss., 1890, pp. 223 ff.), by combining it with injunctives, used for future, of the stem s-o- (from es- 'esse'). 2nd sing. -us = \*-us-ses, 3rd sing. -ust = \*-us-set (\*-us-sed): Umbr. kuvurtus 'converteris' dersicust 'dixerit', Osc. fefacust 'fecerit'. Osc. fust 'fuerit' (beside fust 'erit') for \*fu-ust from conj. fuid. \*fu-ust \*fūst existed in Umbrian too, this explains the form amprefuus 'circumieris' (beside apr-etu 'circumito')1), which will be due to analogy of it. On the analogy of the Ist future, where -zent is the ending of the 3rd pl., - as Osc. censazet 'censebunt' Umbr. furent 'erunt', — arose the plurals Osc. trí barakattuset 'aedificaverint' Umbr. pepurkurent 'poposcerint'. But we also find Umbr. covortuso 'conversum erit, converterint' for \*covortus so(r), benuso 'ventum erit, venerint' for \*benus so(r).

§ 873. The us-formation mentioned in the last section was used with other preterite participles besides those described.

<sup>1)</sup> The u is doubtless long in Osc. tríbarakattuset too; if it had been short, we should expect \*tríbarakattiuset (I § 49 p. 41). I assume the same analogy here. — G. Bronisch, in his new work on the Osc. i- and e-vowels, regards the nominative ending -us as earlier \*- $\bar{o}$ s for \*- $u\bar{o}$ s, and supports his view by amprefuus and tríbarakattuset.

Umbr. en-telust 'intenderit' a-pelust 'impenderit' derived from \*tend-lo- \*pend-lo- (Lat. pendulu-s 'hanging'). Compare the Slavonic part. pret. act. with -lo-, as nes-lü from nes-ti 'to carry' (II § 76 p. 212).

Umbr. sesust 'sederit' from \*sesso-s 'seated, sitting' (Skr. sattá-s). So too the Osc. t-preterite, which we must follow Danielsson in connecting with the to-participles, is derived from the fut. perf. in -t-us-. First arose forms like tríbarakattuset from partic. tríbarakato-. On the analogy of \*aamanafust to ind. aamanaffed etc. arose such Indicatives as prúfatted profated 'probavit' and Conjunctives like tríbarakattíns. The same new formation is seen in Pelign. coisatens 'curaverunt' and in Volsk. sistiatiens 'statuerunt' = \*sistātens. The frequent spelling with double t in Oscan is the same in principle as tf in the f-perfect; it is possible that it is entirely due to the analogy of the f-perfect, which was the model for the whole t-perfect system (§ 874).

Remark. In Umbr.-Oscan, as we shall see in § 874, the  $\bar{a}$ -denominatives can make a strong perfect. It may therefore be held that as the perfect pruffed was made for the present stem  $prof\bar{a}$ -'probare', so the perfect pruffatted was made for \* $prof\bar{a}t\bar{a}$ -'\*probatare'. But I prefer the explanation given above, so long as no forms are found from a stem \* $prof\bar{a}t\bar{a}$  or anything like it.

An origin similar to that of these future perfects must be postulated for Umbr. combifiansiust beside combifiatu 'nuntiato', purdinsiust 'porrexerit' beside pur-ditom 'porrectum', which presuppose noun-stems \*combifiankio-\*purdinkio- (see Johansson, Beitr. z. gr. Sprachk., 84 ff., 147 ff.).

§ 874. We pause a moment here to explain the origin of the f-perfect in this Umbro-Samnitic. Examples are: indic. Osc. aamanaffed 'mandavit' aikdafed '\*aequidavit', Osc. manafum, which may be 1st sing. ('mandavi') or 1st pl. ('mandavimus'), it is uncertain which; conj. Umbr. pihafei(r) 'piaverint' Osc. sakrafír 'sacraverint'; fut. perf. Umbr. ateřafust andirsafust 'circumtulerit' ambrefurent 'circumierint'.

This formation belongs to the Italic imperfect compounded with \*bhu-ā-m 'I was' (Lat. amā-bam Osc. fu-fans 'erant') and

the Latin future compounded with \*bhu-\(\bar{o}\) 'I shall be' (am\(\bar{a}\)-b\(\bar{o}\)), found also in Keltic (§ 899); the Umbr.-Samn. -fed is indic. aor. = Idg. \*bhu-e-t (Avest. bva-\(\bar{p}\)), ep. Lat. fuit Osc. conj. fuid, to be connected with Skr. \(\delta\)-bhuv-a-t (§ 867.5 p. 414). If Osc. mana-fum is 1st sing., its second part must be = Idg. \*bhu-o-m. In the ff of Oscan, as a a man affed, we should perhaps recognise another effect of the \(\bar{u}\) which once followed \(f\). But it is possible to explain the sharpening of the consonant if we take as our starting point \(f\) (for \(f\)u); see Danielsson, Pauli's Altit. Stud. In 139 ff. For the Umbr.-Samn. conjunctive stem \(-f\bar{e}\)- = \*f\(\bar{u}\)-\(\bar{e}\)- may be equated with O.C.Sl. b\(\bar{e}\) (§ 578 p. 119, § 587 p. 128).

The attraction of these forms into the Perfect called up a future perfect with -us-. Umbr. ampr-e-fuus shows that the u was long; and this may be explained as due to the analogy of the fut. perf. \*fūst = Osc. fust for \*fu-ust (§ 872 p. 420 f.).

No complete explanation has been given for the forms Umbr. portust 'portaverit' beside portatu 'portato', Osc. upsed 'operatus est' 3<sup>rd</sup> pl. uupsens ουποενς beside úpsannam 'operandam', prúffed 'probavit' prúftú-set 'probata sunt' beside prúfatted 'probavit', urust 'oraverit'. They look as though formed after the fashion of primary ā-verbs with strong perfect. Umbro-Samnitic perhaps had, as Latin had, primary ā-verbs with strong perfect (cp. juvāre jūvī § 583 p. 124); and thus the ā-denominatives may have followed their inflexion in some particulars, as in late Latin we meet forms like part. probitus or imper. probuntō from probāre (see Georges, Lex. Lat. Wortf., 556).

§ 875. We now return to Latin, in order to finish with the perfect in  $-v\bar{\imath}$  and  $-u\bar{\imath}$ , as  $\bar{\imath}-v\bar{\imath}$   $sc\bar{\imath}-v\bar{\imath}$   $s\bar{e}-v\bar{\imath}$   $pl\bar{e}-v\bar{\imath}$   $n\bar{o}-v\bar{\imath}$   $fl\bar{a}-v\bar{\imath}$   $f\bar{\imath}n\bar{\imath}-v\bar{\imath}$   $am\bar{a}-v\bar{\imath}$  and  $genu\bar{\imath}$   $texu\bar{\imath}$   $crepu\bar{\imath}$   $monu\bar{\imath}$   $salu\bar{\imath}$ .

Of the attempts hitherto made to explain these, which are summarised by Stolz, Lat. Gr.<sup>2</sup> 370 f., and more fully by Per Persson, Wurzelerw. 210 (Ernault, Du Parfait, 63 and 92 f. should also be consulted), the simplest and most credible is the

following. The analogy of  $m\bar{o}$ -tu-s (Umbr. comoho-ta abl. commota)  $j\bar{u}$ -tu-s:  $m\bar{o}v$ - $\bar{i}$   $j\bar{u}v$ - $\bar{i}$ , and the like, suggested (1)  $pl\bar{e}v\bar{i}$   $n\bar{o}v\bar{i}$   $am\bar{a}v\bar{i}$  beside  $pl\bar{e}tu$ -s  $n\bar{o}tu$ -s  $am\bar{a}tu$ -s etc., to which were added  $s\bar{e}v\bar{i}$   $\bar{v}v\bar{i}$  etc.; and (2) e. g. \*gene- $u\bar{i}$  beside \*gene-to-s (genitus), which became  $genu\bar{i}$ . Between  $genu\bar{i}$  and  $fl\bar{a}v\bar{i}$ , then, there would be the same relation as between Gr.  $\delta\mu\omega'\mu\omega\kappa$  and  $\delta\dot{\epsilon}\delta\rho\bar{c}\kappa\alpha$ .

The reason why  $m\bar{o}v\bar{\imath}$   $j\bar{u}v\bar{\imath}$  had this influence, in spite of their present  $move\bar{o}$   $juv\bar{o}$ , is the specially close connexion between the to-participle and the perfect active;  $m\bar{o}tus$  sum being the passive of  $m\bar{o}v\bar{\imath}$ . The Gr.  $\tau'_{\bar{\nu}}\partial\eta\kappa\alpha$   $\delta\dot{\delta}\omega\kappa\alpha$  etc., it will be remembered, caused the  $\kappa$ -type of perfect to spread (as  $\beta\dot{\epsilon}\beta\lambda\eta\kappa\alpha$   $\ddot{\epsilon}\gamma\nu\omega\kappa\alpha$ ), in spite of their connexion with the aorist  $\ddot{\epsilon}\partial\eta\kappa\alpha$   $\ddot{\epsilon}\delta\omega\kappa\alpha$ , which themselves were not fertile.

Remark. We must assume that  $n\bar{o}v-\bar{\iota}$  goes along with Skr.  $ja-j\bar{n}\bar{a}u$ ,  $n\bar{a}v-\bar{\iota}$  with Skr.  $sn\bar{a}u-ti$ , and  $n\bar{e}v-\bar{\iota}$  with Goth.  $sn\bar{e}v-um$ . The old part. perf. active has also been brought in evidence, and  $s\bar{e}vistis$  derived from \* $s\bar{e}-ves$  stes,  $s\bar{e}vimus$  from \* $s\bar{e}ves$  smos (though \* $s\bar{e}ves-smos$  could regularly only become \* $s\bar{e}v\bar{e}mus$ ); and others have connected  $genu\bar{\iota}$  with in-genuo-s,  $s\bar{\imath}v\bar{\imath}$  with  $d\bar{e}-s\bar{\imath}v\bar{a}re$ , and so forth.

The forms in  $-v\bar{\imath}$  and -ui, like all perfect forms not based upon the is-aorist, were attracted to take the endings of this tense in the other persons:  $n\bar{o}vist\bar{\imath}$   $n\bar{o}vist\bar{\imath}$  genuist $\bar{\imath}$  genuistis  $n\bar{o}ver\bar{o}$  genuer $\bar{o}$   $n\bar{o}verim$  genuerim  $n\bar{o}veram$  genueram  $n\bar{o}vissem$  genuissem.

A few original s-perfects were transformed to match genuī:  $p\bar{e}xu\bar{\imath}$   $n\bar{e}xu\bar{\imath}$  instead of  $p\bar{e}x\bar{\imath}$   $n\bar{e}x\bar{\imath}$  (§ 823 p. 361) from pectō nectō (§ 683 p. 214 f.), messuī instead of \*messī from metō.

## Keltic.

§ 876. Outside of Irish, few survivals remain of the Idg. perfect. Gall. dede 'dedit' or 'posuit', Mid.Cymr. ciglef 'audivi' = O.Ir. ro chuala.

<sup>1)</sup> Beside  $p\bar{o}n\bar{o}$  for \* $po-s(i)n\bar{o}$  stood  $po-s\bar{i}v\bar{\imath}$  and since po-situ-s was incorrectly analysed pos-itu-s, there arose the other Perfect form  $posu\bar{\imath}$ . See Osthoff, Perf., 261 and 611 f.

Of Irish examples, we have already cited, and compared with perfect forms from other Idg. languages in § 846, the following: do-ro-chair 'cecidit, periit', ro gēnar 'natus sum', do-mēnar 'putavi', ro gegon 'interfeci', ro lil 'adhaesit' 3<sup>rd</sup> pl. ro leldar, ro chuala 'audivi', ro bōi 'fuit', ad-con-dairc 'conspexit', do-roigu 'elegit', ro cechan 'cecini'; in § 847 im-chom-arc-air 'interrogavit', in § 849 ro tāich 'fugit' 3<sup>rd</sup> pl. ro tāchatar.

To these examples a few more may be added which show the reduplication either retained, or changed only in accordance with the phonetic rules. ro reraig 'porrexit' for \*re-rog-e, pres. rigim,  $\sqrt{re\hat{g}}$ : cp. O.Icel. rak. ro memaid 'he broke' (intr.) 3<sup>rd</sup> pl. ro me-md-atur, pres. maidim. ro de-daig 'oppressit' 3<sup>rd</sup> pl. ro de-dg-atar, pres. for-dengat 'opprimunt'. fris-racacha 'speravi', pres. ad-chiu 'I see'. ro selaig 'he struck down' i. e. se-slaig, pres. sligim: cp. Goth. slōh § 888. ro cechladatar suffoderunt', pres. -cladar 'he is buried'. ro sescaind 'he sprang', pres. Mid.Ir. scinnim: Skr. ca-skánd-a 'he sprang'; on the vocalism of this root see § 520 p. 84. ro sescaing 'he leapt out', pres. Mid.Ir. scingim. Mid.Ir. ro leblaing 'he leapt' instead of \*lelaing beside pres. lingim O.Ir. lengaim (R. Schmidt, Idg. Forsch. I 48 f.). ro cechaing 'he stepped', pres. cengaim.

Mid.Ir. ro-fiu 'he slept', not from  $\vee$  suep-, but, as Thurneysen holds, from  $\vee$  ues- (Skr. vas- 'to pass the night' perf. u-vās-a), therefore for \*ue-uo(s)-e, which became first \*fi-ui, 3<sup>rd</sup> pl. -feotar for \*ue-uo(s)-atar; cp. feiss 'sleep'. Observe the analogical e of the reduplicator, for by I § 66 p. 54 f. \*ueuos- must have become \*uouos-.

§ 877. Perfects based upon presents with stem-characteristic (cp. § 847). in-roigrann 'I pursued' beside

in-grennim from  $\vee$  ghredh- (§ 628 p. 165). do-sefainn 'pepulit'  $3^{rd}$  pl. do-sefnatar, if the present sennim § 613 p. 151 is rightly derived from \*suem-nō. ro nenasc 'I bound, promised' beside nascim from  $\vee$  nedh- (§ 675 p. 208).

ad-gēn 'cognovi' 3<sup>rd</sup> sing. -geuin 1<sup>st</sup> pl. -gēnammar 3<sup>rd</sup> pl. -gēnatar comes from the Idg. perfect \*ĝe-ĝn-ō- (Skr. jajñāú Gr. ἔγνωνα ἔγνωσται, also perhaps Goth. \*kai-knō, see p. 128 footnote 1), from V ĝen-. The plural may be derived at once from this ground-form. The 1<sup>st</sup> and 3<sup>rd</sup> sing., which point to \*ge-gn-a and \*ge-yn-e, are later re-formates. Compare in Sanskrit the forms jajñimá jajñivás- beside jajñāú etc. (§ 850 p. 396).

§ 878. The syllable of reduplication usually has the vowel e quite clear; e. g. ro ge-gon ge-guin like Gr.  $\pi \acute{\epsilon}$ - $\varphi \alpha \tau \alpha \iota$ , ro ce-chan ce-chain like Lat. ce- $cin\bar{\iota}$ .

By dissimilation, the initial consonant of the unaccented reduplicating syllable was dropt after ro, after which the e-vowel of this syllable was contracted with ro into the genuine diphthong oi (I p. 483 footnote 1). Of the examples already given do-roigu for \*-ró-gegu, and in-roigrann, come in here. Others are for-roichan beside ro cechan, fo-roiblang beside ro leblang, arob-roinasc beside ro nenasc, fo-roichlaid beside ro cechladatar.

By a process of re-formation which cannot now be traced exactly we have u in the reduplicator of ro chuala, for \*cu-clou-a; the Mid.Cymr. ci-glef (3<sup>rd</sup> sing. ci-gleu) gives no help in determining the age of Ir. cu-, because its ci- admits of more than one explanation. In Irish, i seems also to have been used in reduplicating i-roots: ro lil 'adhaesit' pres. lenim  $\bigvee$  lei-, ro giuil 'adhaesit' pres. glenim  $\bigvee$  glei-, do-rad-chiuir 'redemit' 1<sup>st</sup> sing. -chēr pres. crenim  $\bigvee$  qrei- (§ 598 p. 142, § 604 p. 145). The last attempts to deal with this difficult group of perfect forms are those of Thurneysen, Kuhn's Zeitschr. xxxi 89, and R. Schmidt, Idg. Forsch. I 62 f.\(^1) The forms which must be

<sup>1)</sup> Thurneysen informs me that he does not back his explanation against R. Schmidt's, which he recognises as being right in all essentials.

postulated as those which just preceded these show the personal ending affixed immediately to the root-final consonant: 3rd sing. \*li-l-e \*gi-gl-e \*ki-kr-e, 1st sing. \*ki-kr-a (-chēr) 3rd pl. \*li-l-ontor (leldar). And again the perfect of renim 'I sell' (for \*pr-na-mi from  $\sqrt{per}$ , § 598 p. 141) shows this perfect formation, 3rd sing. ro rir = \*pi-pr-e (this first becomes \*ir, instead of which we get rir by § 476 p. 23), whilst what one would expect is \*reir = \*pe-pr-e (with strong stem \*pe-por-e). R. Schmidt conjectures that this \*pe-pr-e and \*li-lo(i)-e etc., the present formation being the same for both, became \*pi-pre and \*li-le by mutual analogy. Is it not better to suppose that -rir is based upon a reduplicated preterite \*pi-pr-e-t, in Class IV? In Thurneysen's opinion the Conjunctive of this present class is represented in futures like do-ber (§ 565 p. 112), and we shall see anon (in § 879) that some of the Keltic perfects probably come from a thematic preterite (aorist or imperfect). -ciuir too may be derived from \*qi-qr-e-t, as the "root" grei-, it may be conjectured, is possibly an extension of qer- 'make'.1) If this be the origin of -rir (and -ciuir), the difficulty of -lil and the rest at once vanishes.

t-ānac 'I came'  $3^{rd}$  sing. t-ānaic beside Skr. ānáśa, also to be compared with Gr.  $\dot{\epsilon}\nu$ - $\dot{\eta}\nu\epsilon\gamma\nu$ - $\tau\alpha\iota$ , if  $\dot{\epsilon}\nu$ - is the preposition and not a reduplicator. See § 846 p. 390, § 858 p. 408.

§ 879. Beside the reduplicated forms appear unreduplicated not a few. To those already cited, do-ro-chair, ro bōi, ad-con-dōirc, im-chom-arc-air, ro tōich, we may add 3<sup>rd</sup> sing. ro scāich beside scuchim 'I yield', ro gōid beside gudim 'I beg', 1<sup>st</sup> sing. fo-ro-damar for -dāmar beside fo-daim 'patitur', 3<sup>rd</sup> sing. du-fu-tharcair 'wishes'.

There is no proof that these forms have lost a reduplicating syllable in Keltic itself. Like ro-mīdar (§ 848.3 p. 393), they

<sup>1)</sup> See Per Persson, Wurzelerweiterung p. 108 (where Ir. taid-chur 'redemptio' must be struck out; as I learn from Thurneysen, the word rather means 'return').

are forms which never had reduplication; -dairc may be compared with Skr. darś-i-vas- (§ 848.2 p. 392).

Unfortunately there is nothing to decide whether in the plural of the Irish perfect, in such forms as ro cechnammar cechnaid cechnatar, the vowel preceding the personal ending was the thematic vowel, or Idg. a (= pr. Kelt. a); in the  $1^{st}$  plural another question offers, whether a does not come from the initial sonant of the personal ending (-mm-). If, as is most probable, these are thematic, there may have been thematic preterites amongst the above unreduplicated forms, and -dairc, for instance, may be identical with Gr. Edgaze, boi with Skr. ábhavat; do-cer 'cecidit' too, beside do-ro-chair, gives the impression of such a preterite. Compare the agrist forms which have obstained a footing in the Latin Perfect, e. g. scidit = Skr. áchidat (§ 867.5 p. 414). In § 878 p. 427. I conjectured that -rir was a reduplicated thematic agrist. In the 3rd singular, the original endings \*-e (perf.) and \*-e-t (thematic pret.) must have run together in Irish; so in the 1st plural with -o-m- (Skr. -i-ma), -mm- (Goth. -um), and -o-m-; and this may have brought about the commingling of the different tenses.

§ 880. Of the Idg. vowel gradation in the Root Syllable little now remains. Within the indic active, the differences of gradation between singular and plural were all levelled away in Old Irish; e. g.  $3^{\text{rd}}$  sing. ro geguin 'vulneravit, trucidavit' for \*gegon-e (Skr.  $jagh\acute{a}n-a$ )  $2^{\text{nd}}$  pl. ro gegnaid for \*gegon- (Skr.  $jaghn-\acute{a}$ ). But the original middle shows in some forms the weak stem proper to it; e. g. ro  $g\bar{e}nar$  'natus sum' for \*ge-gn-, like Skr.  $ja-j\acute{n}-\acute{e}$ .

The vocalism of some forms is exceptional: ro tāich beside techim 'I flee', ro rāith beside rethim 'I run', cp. ro scāich beside scuchim, ro gāid beside gudim. Except ro mīdar, all unreduplicated preterites with roots having a single initial consonant show -ā-.

§ 881. One thing yet remains to say of the personal endings. The 1<sup>st</sup> and 3<sup>rd</sup> plural have a deponent formation (-ammar and -atar).

## Germanic.

§ 882. I first give once again the forms cited in § 846, and compared with perfects from other languages. Goth. ga-tar 'he tore up, destroyed' -tērun, O.H.G. zar zārun. Goth. man 'remembers, wishes' munun, O.Icel. man muno. Goth. gam 'came' qēmun, O.H.G. quam quāmun. Goth. ga-pars 'dried up' -paúrsun. Goth. ga-dars 'dares' -daúrsun, O.H.G. gi-tar -turrun. Goth. varþ 'became' vaúrþun, O.H.G. ward wurtun. Goth. hlaf 'stole' hlēfun. Goth. band 'bound' bundun, Goth. gatáih 'showed, recounted' O.H.G. bant buntun. -taíhun, O.H.G. zēh zigun. Goth. báit 'bit' bitun, O.H.G. beig biggun. Goth. láihv 'lent' laíhvun, O.H.G. lēh liwun. O.H.G. sēh 'strained, filtered' sigun. Goth. káus 'tried, chose' kusun, O.H.G. kos kurun. Goth. ana-báup 'bade, commanded -budun, O.H.G. bot butun. Goth. báug 'bent' bugun, O.H.G. boug bugun. O.H.G. rōz 'wept' ruzzun. O.Icel. svaf 'slept' svofo. Goth. gavag 'moved' -vēgun, O.H.G. wag wāgun. Goth. sat 'sat' sētun, O.H.G. saz sāzun. Goth. saí-sō 'sowed' saí-sōun. Goth. skaí-skáið 'separated, parted' skai-skáidun. Goth. stai-stáut 'pushed', knocked' staí-stáutun.

The Idg. difference in accent of singular and plural (cf. Skr.  $v \not\in da$ :  $v \not\in da$ : v

Whether the ending of the 1<sup>st</sup> pl. indic. -um represents Idg. -nme, or is due to the analogy of 3<sup>rd</sup> pl. -un and was originally Idg. -me or -o-me, is doubtful; see § 844 p. 385 f.

Besides the indic. perf., the Optative is seen in Germanic; e. g. 1<sup>st</sup> pl. Goth. vit-ei-ma O.H.G. wizz-ī-mēs, Goth. skaiskaid-

-ei-ma. Then there is one isolated Conjunctive form, used as an imperative, Goth.  $\bar{o}gs$  'fear thou' (beside indic.  $\bar{o}g$  he fears'), and a few substantives based upon the Participle, as Goth.  $b\bar{e}r$ -us-j $\bar{o}s$  'parents' and A.S.  $\bar{e}zesa$   $\bar{e}zsa$  O.Sax.  $\bar{e}cso$  'owner' (II § 136 p. 445, Johansson Beitr. zur griech. Sprachkunde, 134).

The Germanic Perfect falls into two divisions, (I) Reduplicated and (II) Unreduplicated.

§ 883. (I) The reduplicating syllable of the Idg. reduplicated perfect is kept clear and true in Gothic; but this only by roots which as far as Germanic is concerned do not belong to the e-series. 1)

All Gothic reduplicating syllables have ai, which is regular for i = Idg. e before h and r; e. g. hai-háit rai-rop (I § 67 p. 58). Begining with those cases where it was regular, ai spread to the rest by analogy; hence skai-skáip; which regularly would be \*ski-skáip. As regards Johansson's view that Goth. ai is to be read as a long vowel, see Addendum to page 17.

The fact that the analogy of ai really did so act is clear from the new forms ai-aiuk (= O.Icel.  $j\bar{o}k$  § 885) beside aiuka 'I increase', and af-aiaik beside af-aika 'I deny, refuse' (§ 473 p. 19).

The root syllable of these reduplicated forms is always the same in the plural as in the singular; the strong grade of the singular has become general. skai-skai p skai-skai dun: Skr. ci- $ch\bar{c}da$  ci-chidur,  $\sqrt{skhai}t$ -skhaid-. stai-stau stai-stau tai-stau tai-stau-stau tai-stau-st

<sup>1) &</sup>quot;As far as Germanic is concerned", because the analogy of these attracted into the same group some others which in the parent language did have e-vocalism; for instance, Goth. vaivald beside valda 'I rule' for valda from valda for valda from valda for valda from valda fr

also shows itself not to be in its original form by the ending -un, taken over from the stems which had initial consonant. lai-lōt 'let' lai-lōtun, pres. lēta,  $\vee$  lēd- (§ 521 p. 85).

§ 884. This Gothic reduplicated Perfect was also formed from extended roots, or from presents with some stem-characteristic (cp. §§ 847, 889, 891).

 $vai-v\bar{o}$  'blew': Skr.  $va-v\bar{a}u$  from  $u-\bar{e}$ - 'to blow', pres. vaia =  $u\bar{e}-i\bar{o}$  (§ 587 p. 128, § 735 p. 262).

fai-fāh 'grasped' fai-fāhun (cp. O.H.G. fiang fiangun § 885) beside pres. fāha (O.H.G. fāhu) for \*fanzō, probably a nasal present from V  $pā\hat{k}$ - (§ 632 p. 168, § 634 p. 171).

fai-fal $\bar{p}$  'folded' fai-fal $\bar{p}$ un beside pres. fal $\bar{p}$ a groundform \* $p\bar{q}$ - $t\bar{o}$  (§ 680 p. 213); hai-hald 'tended, pastured' beside pres. halda ground-form \* $k\bar{q}$ - $t\bar{o}$  (§ 585 p. 215). vai-vald 'he ruled' vai-valdun beside pres. valda ground-form \* $u\bar{q}$ - $dh\bar{o}$  (§ 689 p. 219); ga-rair $\bar{o}$  $\bar{p}$  'considered' -rair $\bar{o}$ dun beside pres. ga-r $\bar{e}$ da ground-form \* $r\bar{e}$ - $dh\bar{o}$  (§ 689 p. 220). sai-salt 'he salted' beside pres. sal-ta = Lat. sall $\bar{o}$  for \*sal- $d\bar{o}$  (§ 690 p. 221).

§ 885. In West Germanic and Norse there are only a few distinct traces of the reduplicated type. The most important forms for our purpose are the following.

First some Anglo-Saxon forms, as  $reo-rd = Goth. rai-r\bar{o}p$ ,  $(leo-rt = lai-l\bar{o}t)$ , leo-lc 'he leapt' =  $lai-l\dot{a}ik$  with long vowel lost in the find syllable, as it is in hwylc 'which?' swylc 'such' = Goth. hvileiks svaleiks.

More uncertain are some forms which Bopp regarded as reduplicated. O.H.G. Alemann.  $3^{rd}$  pl. ind. pleruzzun  $3^{rd}$  sing. opt. ca-pleruzzi beside pres. bluozu 'I offer',  $3^{rd}$  sing. ind. ki-skrerot beside pres.  $scr\bar{o}tu$  'I cut' (= Goth. \*skráuda),  $3^{rd}$  sing. ind. steroz beside pres.  $st\bar{o}zu$  'I knock, push'. According to Holz (Urgermanisches geschlossenes  $\bar{e}$ , p. 28) \*ske-skr $\bar{o}d$ - became \*skre-skr $\bar{o}d$ - \*skre-r $\bar{o}d$ -, \*be-bl $\bar{o}t$ - became \*ble-bl $\bar{o}t$ - \*ble-l $\bar{o}t$ - \*bler $\bar{o}t$ -; this, he says, produced a perfect type with r, whence \*ster $\bar{o}t$ - instead of \*ste-st $\bar{o}t$ -. A different view is taken by Zarncke, P.-B. Beitr. xv 350 ff.; but his is more dubious even than that of Holz.

O. Icel. sera 'I sowed' for \*se-zō- = Goth. saí-sō; sera is inflected as a weak preterite in the singular (as is Goth. 2<sup>nd</sup> sing. saísōst perhaps from \*saísōs); in the plural, serom. O. Icel. jōk 'I increased' (pl. jōkom) for \*eauka = Goth. aí-áuk (§ 883 p. 430).

In these dialects we usually find, parallel to the Gothic reduplicated perfect, forms whose structure is apparently different; on which works have been brought out of late by Ljungstedt, Ottmann and Holz, whose titles are given in the footnote to page 383.1) The facts about O.H.G. are as follows:

- (1) Verbs with ou or  $\bar{o} = \text{Goth. } \acute{a}u$  in the present, and verbs with present  $uo = \text{Goth. } \bar{o}$ , have, instead of the Gothic dissyllabic reduplicated stem, a monosyllabic stem with eo, whence io ia ie. leof liof liaf lief 'I ran' leofun liofun from pres. loufu: Goth. hai-hláup hai-hláupun. stioz 'I pushed, knocked' stiozun from pres.  $st\bar{o}zu$ : Goth. stai-stáut stai-stáutun. (h)riof I called' (h)riofun from hruofu.
- (2) The others, instead of the Gothic dissyllabic reduplicated stem, show a monosyllabic stem with  $\bar{e}$ , which becomes  $ea\ ia\ ie\ (I\ \S\ 75\ Rem.\ 2\ p.\ 65)$ :
- (a) hiaz 'I was called' hiazun from pres. heizu: Goth. hai-háit hai-háitun. sciad 'separated' from sceidu: Goth. skai-skáiþ.
- (b) fiald 'folded' fialdun from pres. faldu: Goth. fai-falþ fai-falþun. hialt 'held' from haltu: Goth. hai-hald. wialt 'rules' from waltu: Goth. vai-vald. sialz 'salted' from salzu: Goth. sai-salt. fiang 'seized' fiangun from fāhu: Goth. fai-fāh fai-fāhun; the difference between the Gothic and Old High German, h:g, is explained by remembering that in accordance with the old difference in accent, the singular came to have h and the plural g (cp. § 882 p. 429). fial 'fell' from fallu for \*fal-nō, wial 'bubbled, boiled'

<sup>1)</sup> On Holz' attempt, see Holthausen, Anzeig. deutsch. Altert., 1891, p. 187; and Sievers, Paul-Braune-Sievers Beitr., xvi 252 ff. Ljungstedt's work is not accessible to me; his views are only known to me by reviews and citations.

wialun from wallu for \* $ual-n\bar{o}$ , see § 614 p. 151; l for ll because a long vowel precedes. spian 'I stretched' spianun from spa-nnu, see § 654 p. 188; n for nn has the same reason. iar 'ploughed' iarun (part. gi-aran) from er-iu 'I plough' (the perf. of Goth. arja is not found), see § 723 p. 253.

(c) liaz 'I let' liazun from lāzu: Goth. lai-lōt lai-lōtun. riat 'I advised' from rātu: Goth. rai-rōp. sliaf 'slept' from slāfu contrasted with Goth. sai-zlēp sai-slēp pres. slēpa.

Remark.  $s\bar{a}u$  'I sow' passed over to the weak conjugation; hence pret.  $s\bar{a}ta$  (part. gi- $s\bar{a}it$ ), not like Goth. sai- $s\bar{o}$ . See Braune, Ahd. Gr.  $^2$  § 351 Anm. 3 p. 249, § 359 Anm. 3 p. 254.

There can hardly be a shadow of doubt that some at least of these perfect formations, which are repeated to a great extent in the other West Germanic dialects and in Norse, have come from reduplicated forms such as we see in Gothic. But how this happened has not yet been clearly made out. The eo-preterite has been best explained, if explained be the word. It is probable that the type of this group arose from verbs which began with au-: 1st sing. \*e-auka (Goth. aiauk) became \* $e\bar{o}ka$  \*eoka (O. Icel.  $j\bar{o}k$ ); then on the analogy of \*eoka beside pres. \* $auk\bar{o}$  was formed beside \* $hlaup\bar{o}$  the perf. \*hleopa I run' (O.H.G. leof O. Icel.  $hlj\bar{o}p$ ), and so forth.

Ljungstedt regards this whole perfect class as being composed partly of Idg. reduplicated perfects, and partly of aorists and imperfects; for instance, he calls O. Icel. kom 'I came' (beside kvam Goth. qam) an original aorist.

§ 886. Perhaps the West-Germ. preterite of V  $dh\bar{e}$ - 'to place, do' is a reduplicated perfect: O.H.G. indic. 1st and 3rd sing. teta (2nd sing.  $t\bar{a}ti$ ) pl.  $t\bar{a}tum$   $t\bar{a}tut$   $t\bar{a}tun$  opt. 1st and 3rd sing.  $t\bar{a}ti$ ; O.Sax. 1st and 3rd sing. deda 2nd sing.  $ded\bar{o}s$  pl. dedun and  $d\bar{a}dun$  opt. dedi and  $d\bar{a}di$ ; A.S. dyde dydes(t) etc. like nerede, but pl. also  $d\bar{c}edon$ .

It is not clear whether this preterite is to be connected with the Idg. perfect (Skr. dadhāú), or the Idg. imperfect (Skr. ádadhāt Gr. ἐτίθη, see § 539 p. 99, § 545 p. 103), or both. In any case, however, there can be no comparing of the Brugmann, Elements. IV.

1st and 3rd sing. O.H.G. teta O. Sax. deda and the Skr. middle form dadhé.

The y of A.S. dyde is difficult. Sievers deduces an opt. \* $du-d-\bar{\iota}$ - (Paul-Braune-Sievers' Beitr., xvi 236). This would bring us to a weak preterite from a stem du-, as to which consult Wilmanns, Zeitschr. für d. Alt., xxxIII 425.

\*dēd- in the weak forms seems to be connected with -dēdum in the Gothic weak preterite. To explain how it got there, the following theory is less strained than others. We may suppose that Germanic once had a present answering to the Skr. dá--dh-a-ti Lith. de-d-ù (§ 540 p. 101, § 561 p. 110); then tātum was an ad-formate of gābum etc. The suggestions of Johansson (Kuhn's Ztschr. xxx 550) and Holz (as cited, 44) are unsatisfactory.

Remark. Collitz (Am. Journ. Phil. IX 51) and Johansson (as cited, p. 549) see in Goth. iddja 'I went' a 1st sing. perf. mid. = Skr. \* $\bar{\imath}y$ - $\acute{e}$  (cp. act.  $3^{rd}$  pl.  $\bar{\imath}y$ - $\acute{u}r$ ). But there never was any pr. Idg. perfect stem  $\bar{\imath}\dot{\imath}$ -, which fact alone wrecks the hypothesis; Skr.  $\bar{\imath}y$ - $\acute{u}r$  is an Aryan formation; see § 851 p. 399. On iddja, see § 478 p. 26, § 587 p. 128, § 592 p. 133.

§ 887. (II) We now turn to the Second chief class of Germanic Perfects, those which show no reduplication in any Germanic dialect. This class falls into two sections; (A) those which have no vowel variation within their own perfect system, as Goth.  $sk\bar{o}f$   $sk\bar{o}bun$  opt. 1<sup>st</sup> pl.  $sk\bar{o}beima$ ; and (B) those which have, as Goth. man munun muneima, qam  $q\bar{e}mun$   $q\bar{e}meima$ .

A part of these forms, what are called the Preterite-Presents, kept hold of the proethnic function of the perfect to express the present perfect, and did not become a historic tense; as Goth.  $\bar{o}g$  'I fear' áih 'I have' váit 'I know' man 'I think'. In this they are like Lat. memin $\bar{\imath}$  and  $\bar{o}d\bar{\imath}$ . As they were isolated in use, so they were exceptional in form. (1) In the Indicative, roots of the e-series, ending in a single consonant, lacked the  $\bar{e}$ -form; cp. Goth. man munun or skal skulun as contrasted with qam 'I came'  $q\bar{e}mun$ , stal 'I stole'  $st\bar{e}lun$ . (2) The present meaning demanded an infinitive and participle. The place of these was filled by thematic forms of present Class II, which in verbs that retained ablaut were taken from Class II B, e. g. áihan áihands

beside áih I have', vitan vitands beside váit. Of the forms taken from Class II B, some few had come down from pre-Germanic times; as vitan munan skulan ga-daúrsan (§ 532 p. 93 f.). The adj. un-agands 'fearless' is related to  $\bar{o}g$  'I fear' as us-anands 'exhaling' to us- $\bar{o}n$  'I exhaled'. (3) A past tense was needed for them. For this the 'Weak Preterite' was used, as Goth. vissa O.H.G. wissa wessa beside váit weiz, Goth. ga-daúrsta O.H.G. gi-torsta beside ga-dars gi-tar. If, as has been assuned, O.H.G. wiss-um -ut -un belong to the s-aorist, they must be related to weiz just as  $\bar{\eta} \sigma \mu \bar{\nu} \nu \bar{\eta} \sigma \tau \bar{\nu} \bar{\eta} \sigma a \nu \bar{\nu} \sigma a \nu$  to olda (§ 821 p. 358, § 827 p. 365, § 863 p. 411).

With the Preterite-Presents based upon the Idg. Perfect were associated a variety of Present stems:

Three or four new-classes: Goth. kun-nu-m O.H.G. un-nu-m O.Sax. \*dur-nu-m, to which were added, by analogy of the Perfect singular, the forms kann an darn; see § 646 p. 183 f.

Then Goth. O.H.G. mag 'I can, am able' pl. magun is probably a transformation of a present of Class II B \* $maz\bar{o} = \text{O.C.Sl.}$  moga 'I can' (§ 523 p. 87); it belongs to the root of Gr.  $\mu \bar{\eta} \chi o \varsigma$   $\mu \eta \chi a \nu \eta'$  Dor.  $\mu \bar{a} \chi a \nu \bar{a}$ , and must have been an orig. perfect \* $m\bar{o}g$  \* $m\bar{o}gun$ . Its transformation into a perfect is easily understood from its meaning. Beside magan magands were formed mag magun following áth átgun beside áthan áthands, and  $ga-m\bar{o}t-m\bar{o}tun$  beside  $-m\bar{o}tan$  - $m\bar{o}tands$ . 1) The form muz-, found in West-Germ. beside maz-, e. g. O.H.G. mugun beside magun, is due to later re-formation, as Osthoff shows (P.-B. Beitr. xv 213 ff.).

Remark. Osthoff (op. cit. pp. 217 f.) holds mag to be a genuine perfect, and assumes that \* $m\bar{o}g$  magun levelled out the strong stem. This view is contradicted by  $\bar{o}g$   $\bar{o}gun$  (beside un-agands)  $\acute{a}ih$   $\acute{a}igun$  (beside Skr.  $\bar{i}\dot{s}$ -)  $sk\bar{o}f$   $sk\bar{o}bun$  (beside skaban) and so forth, which all show levelling in favour of the singular stem.

<sup>1)</sup> Similarly, in the Rhine-Frankish dialect of Mod.H.G. the identity of inflexion in ich brauch(e) wir brauch(n) inf. brauche(n) pret. braucht(e) and ich muss wir müsse(n) inf. müsse(n) pret. musst(e) led to the coining of a 3rd sing. er brauch, instead of er braucht, parallel to er muss.

§ 888. Group II A. The unreduplicated perfects which had no gradation, with the single exception of mag (for which see above), show ai or  $\bar{o}$  in the root.

ai only in Goth. áih 'has' pl. áigun (by levelling also áig and áihun) O.H.G. pl. eigun (from the participial stem \*aiz-us-comes A.S. ēzesa ēzsa O.Sax. ēcso, see § 882 p. 430): Skr. mid īš-ē, see § 848 p. 391. As this Sanskrit form shews, Germanic has levelled in favour of the singular vocalism, áigun instead of \*īgun or \*igun. That áih has no reduplication (as af-aiáik staí-skáiþ etc. have, §§ 883 ff.) shows that this was lacking in pre-Germanic times, and makes the immediate connexion with the Aryan verb certain. Inf. áihan part. áihands are Germanic re-formates (cp. the thematic Skr. īš-a-tē Avest. is-a-itē, § 854 p. 404).

All other examples have  $\bar{o}$ , which is the vowel of the These perfects, if we look at Germanic alone, all belong to roots of an a- or o-series. Goth. skof 'scraped' skobun O.H.G. scuob scuobun O.Icel. skōf skōfo from pres. skaba scabu skef: Lat.  $sc\bar{a}b\bar{\imath}$  from  $scab\bar{o}$ . Goth.  $h\bar{o}f$  'raised'  $h\bar{o}fun$ (instead of \*hōbun) O.H.G. huob (instead of \*huof) huobun from pres. hafja heff(i)u: Lat. capiō. O.H.G. int-suab 'I marked' -suabun from pres. int-seff(i)u: Lat. sapiō. Goth. skōħ 'I hurt' skōpun from pres. skapja: cp. Gr. ά-σκηθής 'scatheless'  $(\eta = \bar{a})$ . Goth. us- $\bar{o}n$  'exhaled' - $\bar{o}nun$  from pres. us-ana: Skr.  $\bar{a}na$ , cp. Gr.  $\tilde{a}\nu\varepsilon\mu\sigma$ - $\varsigma$  'wind'  $\tilde{\eta}\nu\varepsilon\mu\tilde{\sigma}\varepsilon\varsigma$  'windy' ( $\eta$  for  $\bar{a}$ ). O. Icel.  $\bar{o}k$  'drove'  $\bar{o}ko$  beside pres. ek: Gr.  $\tilde{\eta}_{\chi \bar{e}}$   $\tilde{\eta}_{\gamma \mu \alpha \iota}$  ( $\eta$  for  $\bar{\alpha}$ ) Skr. āja. O.H.G. buoh 'baked' buohhun from pres. bahhu (Class II B) beside backu (for \*bak-nō Class XIII § 614 p. 152): Gr. πέφωγμαι pres. φώγω (Class II A). Pret.-pres. Goth. ōq 'fears'  $\bar{o}gun$  (2<sup>nd</sup> sing. conj.  $\bar{o}gs$  § 882 p. 430) beside un-agands 'fearless': O.Ir. -āgur 'fear' may also have been originally perfect.

A certain number of perfects of this group come from roots of the e-series. Goth.  $f\bar{o}r$  'drove'  $f\bar{o}run$  O.H.G. fuor fuorun from fara faru,  $\sqrt{per}$  Gr.  $\pi\varepsilon\rho\dot{a}\omega$  'I pass through'. Goth.  $m\bar{o}l$  'I ground' O.H.G. muol from mala malu,  $\sqrt{mel}$  O.Ir. melim

O.C.Sl. melją beside Armen. malem Lat. molō Cymr. malaf (§ 523 p. 86). Goth. grāf 'dug' O.H.G. gruob from graba grabu, V ghrebh- O.C.Sl. greba. Goth. sloh 'struck' slohun (instead of \*sloqun) O.H.G. sluoh (also sluog) sluogun from slaha slahu, V slek- sleg- O.Ir. sligim. O.H.G. gi-wuog 'mentioned' from gi-wahann(i)u (§ 623 p. 161),  $\sqrt{ueq}$  Gr. snos word'. In most, if not all, of the Verbs of this sort, the first step must have been for the present to get an a, and the next to form a perfect with ō on the analogy of skōf skōbun from skaba. See § 509, page 75. There is no need to suppose that  $f\bar{o}r$  and  $m\bar{o}l$  were formed thus in connexion with some present, if we suppose that they date from a period when this whole class of perfects still had the weak stem in the plural of the indicative, and so forth. At such a period, \*far- and \*mal- = \* $p\bar{r}$ - and \* $m\bar{l}$ - may have been the weak perfect stem. If so, then the sing.  $f\bar{o}r$  and  $m\bar{o}l$  were formed beside them just as in Greek μέμαλε took the place of \*μεμολε on the analogy of forms with  $\mu \varepsilon - \mu \alpha \lambda$ - (§ 859 p. 409); a step further, and we have  $f\bar{o}run$  and  $m\bar{o}lun$  following the singular.

§ 889. Some perfects of this class are based upon an extended root or a present stem which already has some characteristic (cp. §§ 847, 884, 891). O.H.G. spuon 'I enticed' from spanu (§ 614 p. 152); Mod.H.G. būk instead of Mid.H.G. buoch O.H.G. buoh following backe O.H.G. backu for \*bak-no (§ 888 p. 436). Goth. vohs O.H.G. wuohs 'I grew' from vah-s-ja wahsu (§ 657 p. 192). O.H.G. wuosc 'I washed' from wascu probably for \*uat-sko (§ 676 p. 209). Goth. stop O.H.G. -stuot stuont 'stood' from sta-nda sta-ntu 'I stand' (§ 634 p. 172, § 685 p. 216). O.H.G. luod from (h)la-du A.S. hla-de 'I load' (§ 689 p. 220).

§ 890. Group II B. Perfects which ever since proethnic Germanic have had vowel gradation in their root, but no reduplication, were formed from roots of the e-series. We divide them into two classes, (1) those in which the ablaut of the preterite present agrees with that in other tenses, (2) those

in which it does not. Most of the following examples have come down from the parent language, as we have seen above.

(1) Goth. báit I bit' bitun opt. 1st pl. biteima O.H.G. beig bizzun bizzīm O.Icel. beit bito bitem. Pret.-pres. Goth. váit 'I know' vitun O.H.G. weiz wizzun O.Icel. veit vito. Goth. -báuþ 'offered' -budun O.H.G. bōt butun O.Icel. bauð buðo. Pret.-pres. Goth. dáug 'valet' O.H.G. toug tugun.

Goth. band 'I bound' bundun O.H.G. bant buntun O.Icel. batt bundo. Goth. varp 'I became' waurpun O.H.G. ward wurtun O.Icel. vard urdo'). Pret.-pres. Goth. ga-dars 'dares' -daursun O.H.G. gi-tar -turrun.

- (2 a) Perfects with Preterite meaning. Goth. bar 'carried' bērun O.H.G. bar bārun O.Icel. bar bēro (bāru). Goth. qam 'came' qēmun O.H.G. quam quāmun O.Icel. kvam kvēmo (kvāmu). Goth. sat 'I sat' sētun O.H.G. saz sāzun O.Icel. sat sēto (sātu). Goth. brak 'I broke' brēkun O.H.G. brah brāhhun. Goth. frah 'asked' frēhun O.Icel. frā frēgo (frāgu). There are reformates following this class; one is Goth. baþ 'I bade' bēdun O.H.G. bat bātun from pres. bidja bitt(i)u, √ bheidh- (§ 722 p. 253).
- (b) Preterite-presents. Goth. skal 'shall' skulun O.H.G. scal sculun O.Icel. skal skolo. Goth. man 'thinks' munun O.Icel. man muno. Goth. ga-nah 'is enough' \*-naúhun O.H.G. gi-nah A.S. pl. ze-nuzon (probably akin to O.C.Sl. nesą 'I carry',  $\sqrt{ne\hat{k}}$ -).
- § 891. Numerous perfects of this class are made from roots already extended, or from characterised present stems (cp. §§ 847, 884, 889).

With n-suffix (§ 614 p. 151 f.). O.H.G. spurnun 'they trod, kicked' (sing. \*sparn) A.S. spearn spurnon from spur-nu. O.Sax. fragn 'I asked' frugnon A.S. fræzn fruznon (cp. 1st sing. ga-fregin in the Prayer of Wessobrunnen) from frig-nu friz-

<sup>1)</sup> Of the same sort is Goth. prask 'I threshed' pruskun O.H.G. drask druskun, which probably contains the present suffix -sko-. Cp. § 676 p. 209, and § 891.

-ne Goth. fraih-na. Goth. skáin 'appeared' skinun O.H.G. scein scinun from skei-na scī-nu; so too O.H.G. swein 'disappeared' from swī-nu etc. O.H.G. qual(l) 'welled up' quullun from quillu for \*quel-nō; so also hal(l) 'sounded, rang out' hullun from hillu for \*hel-nō, and other like forms.

With Nasal Infix (§ 634 pp. 170 ff.). Goth. sagg 'sank' suggun O.H.G. sank sunkun from sigga sinku,  $\sqrt{\text{seig-seig-}}$ . Goth. staga 'struck, knocked' stuggun from stigga, V steig-. O.H.G. chlamb 'climbed' chlumbun from chlimbu, ylej-p-. O.H.G. sprang 'sprang' sprungun from springu, O.H.G. scrant 'burst' scruntun from scrintu,  $\sqrt{spergh}$ -. sqer-dh-. — Goth. fanp 'found' funpun O.H.G. fand funtun from finha findu, as I conjecture from  $\sqrt{pet}$ . — Goth. vand 'turned' vundun O.H.G. want wuntun from vinda wintu, from wei-t-. The Goth. peiha O.H.G. dīhu 'I thrive', for \*penzō, which is connected with Lith. tenkù inf. tèk-ti (\$\sqrt{teq}\$-), had originally a perf. \*pany \*punyun, which is now represented only by A.S. dunzon (cp. part. ze-dunzen O.Sax. gi-thungan); the regular phonetic change of the present led to the formation of the perf. forms Goth. páih O.H.G. dēh following stáig beside steiga etc. (I § 67 Rem. 2 p. 57).

From Present stems in -nnō for -nuō and in -innō for -enuō (§ 654 pp. 187 f.). Goth. du-gann 'began' -gunnun O.H.G. bi-gan -gunnun from du-ginna bi-ginnu = Skr. hi-nva-ti. Goth. rann 'ran' runnun O.H.G. ran runnun from rinna rinnu = Skr. ri-nvāmi Idg. \*ri-nuō or = Idg. \*r-enuō. O.H.G. tran 'I separated myself' trunnun beside trinnu = Idg. \*dr-enuō.

Root with s-extension (§ 664 p. 197). Goth. -pans 'I pulled' -punsun O.H.G. dans dunsun from pin-sa din-su,  $\sqrt{ten}$ . O.H.G. bal(l) 'barked' bullun from billu = \*bhel-sō. Goth. fra-láus 'I lost' -lusun O.H.G. vir-lōs -lurun from -liu-sa -liu-su 'I lose'.

From the sk-Present O.H.G. ir-lisku 'I quench', the perf. ir-lask \*-luskun (§ 676 p. 208).

Root with t-extension (§ 685 p. 215 f.). O.H.G. flaht

'plaited' fluhtun from flih-tu; faht 'fought' fuhtun from flh-tu'). Goth. ga-vap 'bound' -vēdun O.H.G. wat wātun from ga-vida witu, ground-form doubtless \*ui-tó. Compare the perf. Goth. vand, which belongs to a t-present with nasal infix, p. 439.

Root with dh-extension (§ 698 p. 225). O.H.G. brat(t) 'I swung, jerked' bruttun A.S. bræzd bruzdon from brittu brez-de. Also with internal nasal O.H.G. scrant from sqer-dh-, p. 439.

Root with d-extension (§ 699 p. 225 f.). Goth. gáut 'poured' gutun O.H.G. gōz guzzun from giu-ta giu-zu. O.H.G. flōz 'flowed' fluzzun from fliu-zu. Goth. svalt 'was burnt up' svultun O.H.G. swalz swulzun from svil-ta swil-zu.

§ 892. Levelling between perfect singular and plural as we see it in Mod.H.G. biss 'I bit' following bissen, quoll 'welled up' following quollen, banden following band 'I bound', which is also seen here and there in Middle H.G., is comparatively rare in the old Germanic dialects; examples are A.S.  $n\bar{o}m$   $n\bar{o}mon$  contrasted with O.H.G. nam  $n\bar{a}mun^2$ ), O.Icel.  $\bar{o}f$   $\bar{o}fo$  instead of vaf  $\bar{o}fo = \text{O.H.G.}$  wab  $u\bar{a}bun$  (O.Icel. vefa O.H.G. weban 'to weave').

§ 893. We now have to examine in Group II (A) and (B) those forms which lack the reduplicating syllable.

The following perfects were always unreduplicated.

(1) Weak forms like Goth.  $s\bar{e}tun\ m\bar{e}tun\ q\bar{e}mun$ ; see § 848. 3 p. 393. The reason why they drove out of the field forms of the same type as Skr.  $pa-pt-ur\ s\bar{e}dur=*sa-zd-ur$ , was that in course of phonetic change the unity of the tense-system had been considerably destroyed; thus the reduplicated  $3^{rd}$  pl. of the Goth. mitan must needs become \*mintun (sing. mat), from Goth. saihvan the form must be \*sisk(u)un (sing. sahv), from Goth.  $qi\bar{p}an$  it must be \*qaihtun (sing.  $qa\bar{p}$ ), from O.H.G. jesan

<sup>1)</sup> Mid.H.G. pl. vlāhten vāhten, and even in O.H.G. brāstun, beside an earlier form brustun from bristu 'I break'. For the change in the perf. plural see Osthoff, Perf. 119.

<sup>2)</sup>  $n\bar{o}mon$  is regular, and drew the singular under the influence of  $f\bar{o}r$   $f\bar{o}ron$ .

it must be \*jīrun (sing. jas), and from O.H.G. lesen it would be \*lillun (sing. las). Thus the same difficulty had to be met here as was met in Sanskrit by the spread of the type  $s\bar{e}d$ - $y\bar{e}m$ - (§ 852 p. 401).

(2) The pret.-pres. Goth.  $\acute{a}ih$  and probably also  $v\acute{a}it$  which answers to Skr.  $v\acute{e}da$  and Gr.  $o\acute{t}\delta\varepsilon$ , see § 848 p. 391, § 888 p. 436.

Further, the following may be regarded as perfect forms originally unreduplicate:

- (3) Goth. fr-ēt -ētun O.H.G. az O.Icel. at, and
- (4) O.Icel.  $\bar{o}k$   $\bar{o}ko$ , Goth.  $\bar{o}n$  and  $\bar{o}g$ ; see § 848. 3 and 4, pp. 393 f.

As regards the Preterite-Presents in particular, we must remember that the  $3^{rd}$  pl. Goth. munun and ga-daúrsan were in all probability injunctive, as we may regard vitun (§ 508 p. 74 f.). The two former may not have been associated in one tense with man and ga-dars until the reduplication was quite lost in the singular.

If, again, we remember that among forms like  $sk\bar{o}f$  (Lat.  $sc\bar{a}b\bar{\imath}$ ) there may very well be some which were unreduplicate when they became part of the Germanic stock, it cannot seem strange that Germanic has lost its reduplication to such a great extent. Such forms as the perfect of  $h\acute{a}itan$  or valdan were exempted from the change, and kept their reduplication, simply because their present and perfect had the same root-vowels, and without the reduplication there would be no sufficient difference between them.

As in the Italic perfect system we find preterite forms of our Present Class II B (e. g. Lat. fid-i-t, § 867. 5 p. 414), so we do in West Germanic. From this group we cite the  $2^{nd}$  sing. like O.H.G. bizzi A.S. bite 'thou didst bite' (Skr.  $\acute{a}$ -bhid-a-s Lat. fid-i-t), O.H.G. zigi AS. tize 'thou didst draw' (Skr.  $\acute{a}$ - $di\mathring{s}$ -a-s), see § 532 p. 928; further perhaps those like O.H.G.  $m\bar{a}zi$  A.S.  $m\bar{c}e$  'thou measuredst' (Gr.  $\grave{\epsilon}$ - $\mu\acute{\eta}\acute{\delta}$ - $\epsilon$ -o), see § 514 p. 81. Such forms as these were at first quite rare. In proethnic W.Germ. they had become identical with the  $2^{nd}$  sing.

optative, whose ending \*-īz became -i, e. g. A.S. bite opt. for \*bitīz. And by analogy of these forms, which legitimately had both optative and indicative meanings, a large number of others, which originally were optative only and nothing more, took the indicative meaning too. An example is O.H.G. fiangi A.S. fenze. But in O.H.G. and O.Sax. the 2nd sing. opt. and indic. were differentiated afresh, -i being restricted to the indicative, and in the optative the ending -īs (-īst), used since proethnic Germanic beside \*-īz, being made proper ending: O.H.G. indic. bizzi opt. bizzīs(t), but A.S. bite opt. and indic. both. The reason why the old forms in -t (-p) preserved in Gothic and Norse, such as Goth. báist 'didst bite' gaft 'gavest', were driven out of the West Germanic speech, is doubtless chiefly this, - that the stem-final consonant which preceded the personal ending was so often changed, the form thus becoming isolated (cp. Gr.  $\pi \dot{\epsilon} \pi o \nu \vartheta a g$  etc. with -a g instead of  $-\vartheta a$ ).

This West-Germ.  $2^{nd}$  sing. pret. seems to belong entirely to unreduplicated present stems. (It seems impossible to prove that any old reduplicated forms like Lat. te-tig-i-t Gr.  $\varkappa \varepsilon$ - $\varkappa \alpha \delta$ -o-v-v0 are included amongst O.H.G.  $fiangi\ hiazi$  and that type.) But since they were absorbed into the Perfect system in West-Germanic, not before, we have no right to assume that they have at all aided in the tendency to drop the reduplicating syllable.

By analogy of the thematic present we have O.H.G. Alemann. eigamēs, wāramēs (cp. piramēs instead of pirum).

## Balto-Slavonic.

§ 894. The inroads into the Idg. Perfect system here took a direction opposite to their course in Keltic and Germanic. The Participle survived, while the Finite Verb disappeared.

One vestige of this has been left in Slavonic; the O.C.Sl.  $v \dot{e} d - \dot{e}$  'I know', answering to Skr.  $v \dot{e} d a$  Gr.  $o \dot{l} \delta a$  Goth.  $v \dot{a} i t$ , with the middle ending, which here as in Lat.  $(tutud - \bar{\imath})$  drove

out the active. This perfect was transformed into a present, giving vėmi 'I know' 3<sup>rd</sup> sing. vėsti; the 2<sup>nd</sup> pl. vėste opt. 1<sup>st</sup> pl. vėdimi imper. vėždi (which keep ė instead of i by levelling out all but the strong stem) may be real perfect forms; if so their present inflexion is due to the attraction of the other forms into the present system.

The Participial forms are all unreduplicated. Examples are Lith. kir̄t-ēs (pres. kertù 'I cut, strike'), O.C.Sl. črītŭ (pres. črīta 'I cut'): Skr. ca-krt-vás-. Lith. dĕg-ēs (degù 'I burn') O.C.Sl. žegū (žega 'I burn'): Skr. dēh-i-vás- dēh-úṣ-. Lith. dā--vēs (dử du 'I give') O.C.Sl. da-vũ (damī): Skr. da-di-vás-da-dā-vás-. Pruss. signā-uns beside signā-t 'to bless', O.C.Sl. želē-vũ beside želē-ti 'to wish', which must be compared with Gr. κεκοτηώς. See II § 136 pp. 445 f. Along with O.Ir. mīdar Goth. sētun go Lith. participles like séd-ēs (from sédu 'I sit, take my place'). Again, with Lat. ēdī Goth. fr-ēt goes the part. Lith. éd-ēs O.C.Sl. jad-ũ, and with Lith. fem. éd-us-i may be compared ēj-us-i as being the regular descendant of Idg. \*ēj-us-ī.

How the first-named participles, kirtes critic and the like, lost their reduplication, cannot be made out; the losses which the Perfect System of this group of languages had undergone before the historical period begins are too great to admit of this being done. But anyhow the reason was not regular phonetic change, any more than it was in Germanic.

The agreement of the initial syllable in Lith.  $\tilde{e}j$ - $\bar{e}s$   $ki\tilde{r}t$ - $\bar{e}s$  etc. and the connected present stems  $\tilde{e}j$ -o  $ki\tilde{r}t$ -o (§ 586 p. 126 f.) caused the coining beside  $d\tilde{e}$ -jo  $st\acute{o}$ -jo of the part.  $d\tilde{e}j\bar{e}s$   $st\acute{o}j\bar{e}s$ . Just so the agreement between mir- $\bar{e}s$  gim- $\bar{e}s$  etc. and mir-e gim-e (§ 593 p. 133) caused the coining beside em-e of the partic. em-es instead of \*im-es (Pruss. immus- O.C.Sl.  $im\tilde{u}$ ). Vice versâ, by analogy of participles similar to se-es, as se-es (from se-es (from se-es (from se-es) (from sees) (from se-es) (from se) (from se-es) (from se-es) (from se-es) (from se) (from se) (from se) (from se) (from se) (from se) (fr

#### PERIPHRASTIC FORMATIONS.

§ 895. We may notice here a number of periphrastic formations which were more or less intimately connected with the Verbal System. Some of them undoubtedly existed in the parent language, though at that time not one had become fused into a single word.

In the historical period, these syntactical groups, which for convenience we shall call phrases, are sometimes found in the shape of single words, as Lat. ferē-bam O.C.Sl. nesē-achū; sometimes they seem to be changing from phrase to word before our very eyes, as Skr. dātāsmi instead of dātā asmi; 1) sometimes they were still phrases, as Lat. factus sum, O.H.G. ward ginoman. Where the position of the auxiliary is not fixed as regards the verbal noun, coming either before or after it, the phrase could not fuse into one word.

The use of a Participle for the predicate, particularly the part. pret. middle or passive, with or without the auxiliary esor a synonym of it, is a usage which occurs all over the Indo-Germanic area; examples of this are Skr. iṣtá dēvátāh 'honoured are the gods' iṣtá dēvátā āsan 'honoured were the gods' (see Delbrück, Altind. Synt. 392 ff.; Spiegel, Altpers. Keilinschr.² § 68 p. 189). This predicative use of the participle was found in the parent language, especially when it was wished to lay stress on the duration of an action more than could be done by the simple forms of the finite verb. In several languages periphrases of this kind were permanent parts of some tense, where they were combined with simple forms, as Att. γεγραμμένοι εἰσί instead of γεγράφαται, Lat. āctus est (cp. Gr. ἦχται), Goth. gemēlip ist 'γέγραπται'.

§ 896. Sanskrit.

Beginning with the Brahmanas, we find a periphrastic future, consisting of a nomen agentis with the suffix -ter- (as dātár-

<sup>1)</sup> Compare Ital. canterò Fr. chanterai for Lat. cantare habeō, Serv. ubiću ('I will kill') = O.C.Sl. ubiti choštą, Pol. działalem -aleś etc. 'I have built') = działal jeśm, — jeś etc.

'dator') and the verb 'to be', but only in the 1st and 2nd persons. There is a difference in usage between this and the siô-future (§ 752 p. 273 f.), the latter being used only for something about to take place at a certain particular point of future time, without any reference to the intention or hope of the speaker. On the analogy of dātāsmi instead of dātā asmi we have 1st pl. dātāsmas instead of dātāraḥ smas etc. (cp. Lat. potis sumus, not \*potēs sumus), a certain token that the phrase has become a word. Middle forms are found as well, e. g. dātāsmahē. Compare II § 122 p. 385.

Again, it is not until the historical period that we see a productive type arising out of the Periphrastic Perfect, the union of a case inding in -ām with cakāra, āsa, or babhūva, as vidā cakāra 'I knew', gamayā cakāra 'I caused to go'. The outspread of this type was due to a lack which it supplied; for there was need of a historic preterite to perfects which had a present meaning, as vēda 'I know' bibhāya 'fears'. Such a preterite was also wanted by Causals and Denominatives, which originally had no simple perfect. Lastly, they were most desirable where present and perfect were not clearly distinguisht in form, as in ās- 'to sit'. Following vidām āsām and the like, forms like gamayām and bibhayām were derived from the present stem (pres. gamā-ya-ti bi-bhē-ti).

Remark. Since in such formations cakara is almost exclusively used in the older language, and babhúva never, Delbrück (Altind. Synt. 426 f.) infers that -am is the ending of the acc. sing. of an abstract noun in  $-\bar{a}$  (cp.  $bhid\hat{a}$  'split'). The accusative must have crystallised, much as the infinitive did, before dsa and babhdva could be used with it. But there is such a striking parallel in Lat. are facio and are fio (Deecke, Facere und fieri in ihrer Composition mit andern Verbis, Strassburg 1873), arē--bam, flā-bam, amā-bam and O.C.Sl. nesě-achŭ děla-achŭ, that we can hardly separate the  $-\dot{a}m$  of Sanskrit from the cases in  $-\bar{e}$  or  $-\bar{a}$  preserved in these forms.  $-\bar{e}$  and  $-\bar{a}$  must surely be instrumental; be it observed that the forms in -ē can often be connected with o-stems (op. III § 275 p. 176), and often with e-stems like Lat. quie-s Gr. γρή ομο-κλή (§ 578 p. 120), e. g.  $pl\bar{e}$ - in  $pl\bar{e}$ -bam. It may be that  $vid\tilde{a}m$  when used with  $cak \dot{a}ra$  is acousative; but when used with as- or  $bh\bar{u}$ - it may be instrumental. That  $vid\tilde{a}m$  might be instr. is shewn by O.C.Sl. rqkq(III § 276 p. 179) and Skr. pratarám (Hirt, Idg. Forsoh. 1 20) and the like. Compare too the 3rd sing. imper mid. vidām § 968.2.

§ 897. Armenian has several periphrastic formations; as the part. aor. (active or passive) in -eal coupled with em 'I am', e. g. gereal ē 'cepit, captus est' gereal ēr 'ceperat, captus erat' from gerel 'capere, to take prisoner'.

§ 898. Greek. Here we find as far back as we can go variants  $\gamma \acute{\epsilon} \gamma \varrho a \pi \tau \omega$  and  $\gamma \epsilon \gamma \varrho a \mu \mu \acute{\epsilon} \nu o \varsigma \ \acute{\epsilon} \sigma \tau \grave{\iota}$  with little or no difference in meaning; and in Attic, beginning about 400 B. C., the periphrastic form became obligatory, and that in  $-a \tau \omega$  and  $-a \tau \omega$  dropt out of use altogether:  $\gamma \epsilon \gamma \varrho a \mu \mu \acute{\epsilon} \nu o \iota \epsilon \grave{\iota} \sigma \grave{\iota}$  and  $\mathring{\eta} \sigma a \nu$ . In the other tenses and moods  $-a \tau \omega$  and  $-a \tau o$  had dropt in Attic long before, giving place to  $-\nu \tau \omega \iota$  and  $-\nu \tau o$ .

A future perfect, to express what will be completed in the future and will have enduring effects, could be formed only in the Middle and only from a few verbs; e. g. λελείψεται βεβλήσεται (§ 756. 6 p. 276). For the Active, and for such verbs as could not form this tense, a participle + ἔσται had to be used; as κατακεκονώς ἔσται had to be used; as κατακεκονώς ἔσται had to be used; τετελεσμένον ἔσται it will be accomplisht.

The periphrasis of the perfect by using  $\xi \chi \omega$  with a participle, as  $\kappa \varrho v' \psi \bar{\alpha} \varsigma \ \xi \chi \omega$  'I keep hidden' (Lat. abditum habeō), gained currency largely because certain verbs were without the simple perfect form; e. g.  $\xi \varrho \alpha \sigma \vartheta \epsilon i \varsigma \ \xi \chi \omega$  (Plato) from  $\xi \varrho \dot{\alpha} \omega$  'I love',  $\sigma \tau \eta' \sigma \bar{\alpha} \varsigma \ \xi \chi \omega$  (Soph.) from  $\xi \sigma \tau \eta \omega$  'I place' (because  $\xi \sigma \tau \eta \kappa \omega$  is intransitive).

Desideratives in -σείω at first used only the participle active, as ὀψείων 'wishing to see'. This form, as Wackernagel makes very probable, comes from ὄψει λών 'going out for to see' (Kuhn's Zeitschr., xxviii 141 ff.); similarly ξυμβασείων 'wishing to make a bargain' from ξύμβασις, ἀπαλλαξείων 'wishing to get rid of' from ἀπάλλαξις. When the phrase had become a single word, the Attic added Indicative, Conjunctive, and the other parts of the conjugation. Compare Lat. eō with the supine, as datum eō (the same in Umbrian, aseriato eest 'observatum ibit'), from which type of sentences sprang the so-called fut. inf. passive datum īrī (Kühner, Ausf. Gr. der lat. Spr., II 534 f.).

§ 899. Italic and Keltic. In both we see the present of bheu- 'to become' joined with a preceding infinitival word to express the future. Lat.  $\bar{a}r\bar{e}-b\bar{o}$   $vid\bar{e}-b\bar{o}$   $alb\bar{e}-b\bar{o}$ ,  $cub\bar{a}-b\bar{o}$   $fl\bar{a}-b\bar{o}$  plant $\bar{a}-b\bar{o}$ , (O.Lat.)  $sc\bar{v}-b\bar{o}$  aud $\bar{v}-b\bar{o}$ ,  $\bar{v}-b\bar{o}$  da- $b\bar{o}$ , Falisc.  $car\bar{e}-f\bar{o}$   $pip\bar{a}-f\bar{o}$ . O.Ir. no charub 'I will love' for \*-bhu- $\bar{o}$ , elsewhere stem \*-bhu- $\bar{a}$ -, as in 3<sup>rd</sup> sing. -carfa carfid; dolēciub 'I will relinquish' -lēicfea lēicfid.

The Umbr.-Samn. Perfects like Osc. aa-mana-ffed 'mandavit' contain the Idg. thematic aorist \*(e-)bhu-e-t, see § 874 p. 422 f. The pret. of Class X \*(e-)bhu-ā-m (§ 583 p. 123 f.) from the time of pr. Ital. made Imperfects, e. g. Lat. ārē-bam vidē-bam albē-bam plē-bam nē-bam dīcē-bam (in O.Lat. also a future like dīcē-bō), capiē-bam farciē-bam fīnīē-bam, cubā-bam flā-bam plantā-bam, (O.Lat.) scī-bam fīnī-bam, ī-bam da-bam, Osc. fu-fans 'erant'.

There is unquestionably some connexion between the first word in Latin phrases like āre faciō and the case-forms in  $-\bar{e}$  and  $-\bar{a}$  (instr. sing.) in the first part of the O.C.Sl. imperfect, vidē-achū dēla-achū; there is probably a connexion with such a form as Skr. vidām in vidā carati. See § 896 Rem., § 903. Following the lead of Lat. plantā-bō, we may derive O.Ir. no charub from \*carā-bō (carfid from \*carā-bāt(i), etc.). But there is no proof that a was long; and as the sacrist ro-char comes from \*carās-t (§ 840 p. 377), it is possible that \*carā-bō was the pr. Keltic form. Still, that the first member was originally a nomen actionis need not be doubted whichever theory we adhere to.

§ 900. In Italic the Idg. perf. mid. passive gave place to a periphrasis with sum and the to-participle: Lat. ortus sum, captus sum, plantātus sum, fīnītus sum, Umbr. screhto est 'scriptum est' screihtor sent 'scripti sunt', Osc. prúftúset 'probata sunt'. How firmly rooted in the verbal system this periphrasis became is clear from two facts. (Whether the same holds for Umbro-Samnitic we cannot say; there is too great dearth of material.) (1) As the act. fīnīvit meant both 'he has

ended and done with, and in narrative he put an end to, so finitum est, which properly meant it is ended and done with, got in addition the meaning it was ended; and finitum erat meant not only it was but it had been ended. Beside praeceptum est it is prescribed we get praeceptum fuit it was prescribed. (2) The other fact is the use of this periphrasis with deponents, where we see e. g. confessus sum made the perfect of confiteor for all purposes, and taking the same construction (II § 79 p. 219).

Just as in Attic the 3<sup>rd</sup> pl. γεγράφαται was driven out by γεγραμμένοι εἰσί; so in Latin — perhaps even in proethnic Italic — the old 2<sup>nd</sup> pl. middle (cp. Skr. bháradhvē Gr. φέφεσθε, § 1063) was superseded by a periphrasis with a participle: \*feriminē estis — Gr. φερόμενοί ἐστε, which in the historical period dropt its copula, and then the participial character of feriminē fell out of sight; see II § 71 p. 165. We may conjecture that \*feriminē erātis, \*feriminē essētis were also used. By and by this form buried itself in the present system, which it became part of; then its ending -minē became recognised for a personal suffix; and lastly we have ferāminē ferēminē ferēminē ferēbiminē ferēbāminē on the analogy of ferāmur ferēmur etc. to ferimur,

Old Latin had an indeclinable inf. fut. in -tūrum, as crēdō inimīcōs meōs dictūrum (C. Gracchus), which Postgate (Class Review, v 301) neatly explains as compounded of dictū and erum = Umbr. erom Osc. ezum 'esse'. To this crystallised infinitive esse was superadded, as dīxērunt omnia . . . prōcessūrum esse; and then, the apparent analogy of hoc prōcessūrum (esse) with hoc factum (esse) caused the form to be inflected as an adjective (o-stem), e. g. hanc rem prōcessūram (esse) etc. Similarly, as beside Gr. o'ψείων an indic. o'ψείω was formed (§ 898 p. 446), so beside mē datūrum (esse) we have e. g. datūrus sum.

Remark. The traditional interpretation, that  $dat\bar{u}rus$  is an extension of dator (cp. II § 122 p. 387), has been recognised for wrong by Kretschmer too (Kuhn's Zeitschr., XXXI 463 f.). He also connects the form with the supines in  $-\bar{u}$  and -um, but assumes the suffix to be -ro-, comparing Gr.  $log \bar{v}_0 c o - s$  from  $log \bar{v}_0 c o - s$ . Postgate's explanation I think the likelier.

In formation, as in meaning, there is no connexion between the verbal adj. in  $-t\bar{u}rus$  and the abstract noun in  $-t\bar{u}ra$ ; the latter has nothing future in it, and contains a secondary suffix  $-r\bar{a}$ . As regards Desideratives like  $parturi\bar{o}$  canturio, see § 768 p. 282, § 778.1 p. 301.

Further, Latin has the periphrastic inf. fut. passive, datum  $\bar{\imath}r\bar{\imath}$ , mentioned above in § 898 p. 446. The complete fusion of these two words is shown by the spelling -tuiri instead of -tum iri (see Brandt, Arch. Lat. Lexicogr. II 349 ff.; Schmalz, Fleckeisen's Jahrbb., 1892, pp. 79 f.).

In Umbro-Samnitic, we have the part perf. active (suffix -ues-) combined with an injunctive from es- 'esse' to make a future perfect, as Umbr. dersicust 'dixerit' Osc. fefacust 'fecerit'. See § 872 p. 421.

§ 901. Germanic. The Idg. perf. passive in its original meaning, that of a present perfect, used to describe what has been completed in the past and is now a finished result, has been superseded all through Germanic by the phrase made up of the part. pret. pass. + the auxiliary bin; e. g. Goth. gamēliþ ist ἡτέγραπται, it is written, O.H.G. ginoman ist it is taken; similarly pret. Goth. ana þammei sō baúrgs izē gatimrida vas 'ἐφ' οὖ ἡ πόλις αὐτῶν ψιοδόμητο, was built, stood builded, O.H.G. ginoman was it had been taken, was in that condition. Cp. Lat. scrīptum est it is written scrīptum erat 'it was written' § 900 p. 447 f.

The same Idg. form in its later function of a historic perfect was superseded by the same participle with the auxiliary ward (wurde), e. g. Goth. fralusans vas jah bigitans varp ' $\mathring{a}\pi o \lambda \omega \lambda \omega \mathring{c}$   $\mathring{r}\nu$   $\nu \alpha \mathring{c}$   $\eta \mathring{\nu} o \mathring{c} \vartheta \eta$ , was lost and has been found again', O.H.G. ginoman ward 'it was taken'.

Everywhere but in Gothic the present passive too had to be superseded by a periphrasis: O.H.G. ginoman wirdit or ist 'is being taken' (Goth. nimada).

In the Active, the preterite present meaning could no longer be clearly put by the old perfect, Goth. skaiskaip 'parted, divided' nam 'took' for example, as this had become a historic tense. Nor could it be put any better by the "weak" Preterite, as

Brugmann, Elements. IV.

Goth. vaúrhta 'worked' nasida 'saved'. This led to a periphrasis (not found in Gothic) of bin and habe with the preterite participle, as O.H.G. queman ist 'he has come, and is here' pret, queman was 'he had come and was here', funtan habēt 'he has found and possesses' pret. funtan habēta 'he had found and possessed'. The participle with haben was a true passive and belonged predicatively to the accusative object, cp. Lat. cognitam hanc rem habet and gr. κουπτον έγω 'abditum habeo' beside κρύψᾶς έχω (see Thielmann, Abhandlungen W. v. Christ dargebracht, München 1891, p. 298). The participle with the presents bin and habe was used later, in Upper and Middle German, as a simple narrative tense without any reference to the present (cp. Lat. finitum est 'it was ended' on the analogy of finivit 'ended'), whilst with the preterites war and hatte it had always served to express the pluperfect (cp. Lat. finitum erat 'it had been ended').

In Germanic the Idg. sio-future was lost, nor did this branch, as others did, usc certain conjunctive forms with future meaning only (as Lat.  $er\bar{o}$ ). For future events were used either perfect Present forms (see Streitberg, P.-B. Beitr. xv 119 ff.); or the living conjunctive, i. e. the Idg. optative (as Got. jah sijáina þō tva du leika samin 'nai ĕ oortai oi δύο εἰς σάρχα μίων); or thirdly, periphrases with auxiliaries which naturally pointed to the future. But the use of these last with dependent infinitive (Goth. haban, duginnan, skulan, O.H.G. scolan, muozan, wellen wollen) did not lead to any fixt type in the old Germanic dialects, and each auxiliary bore its own proper meaning. Only phrases with sollen and wollen gained by degrees a simple future sense. Besides these periphrastic turns there was an idiom made up by werden (Goth. vairpan O.H.G. werdan) with the present participle, which is found a few times, in Gothic, as jūs saurgandans vairbib vueis  $\lambda \nu \pi \eta \vartheta \eta' \sigma \varepsilon \sigma \vartheta \varepsilon$ , you shall be grieved'. This idiom in O.H.G. little by little won its way till all others had disappeared; but in Mid.H.G. the participle was exchanged for the infinitive.

§ 902. Baltic. In Lithuanian all the old middle forms which were used passively dropt out of use, and the reflexive with -si only partially did for the passive, as tep kalba-si instead of tep kalbamà 'so it is said'; hence a periphrasis was used for the passive in all tenses. To express habit or duration the pres. part. in -ama-s is used, as tai (yrà) sākoma 'that is being said, that is usually said', jis prakéikiams bùs nữ visữ 'he is constantly curst by all'. For completed action the participle in -ta-s is used; as jis (yrà) prakéiktas 'he is accurst', dùrys uždarýtos bùvo 'the door was shut'. But it is usual to avoid passive constructions and so to express the idea as to make the active do for it.

Active Preterites like viłkaŭ (§ 586 p. 126) and viriaŭ (§ 593 p. 133) combine the meanings of historic perfect and present perfect; as isz-áugo 'he grew up' and 'he is grown up'. If it is needful to make the latter meaning clear beyond a doubt, the part. pres. act. with esù may be used; as àsz (esù) iszáugēs 'I am grown up', àsz (esù) iszmókēs 'I have learnt', jis bùvo pavargēs 'he was impoverished'. This participle with buvaŭ also serves for a more exact expression of pluperfect time, cp. O.H.G. qeman was 'he had come' § 901 p. 450.

Wish is expressed by the Injunctive forms 1. pl. -bime 2. pl. -bite from 1/bheu- preceded by the Supine in -tum, as sùktum-bime. See § 727 p. 257. The 3<sup>rd</sup> sg. pl. and dual sùktū is without the auxiliary; for the 1<sup>st</sup> sing. we have sùkcziau sùkcze. There are a great many bye-forms of this mood in the dialects (see Schleicher, Lit. Gramm. 228 f.; Kurschat, Gramm. d. litt. Spr. 300 f.; Bezzenberger, Beitr. z. Gesch. d. lit. Spr. 212 ff.; Leskien-Brugmann, Lit. Volksl. u. Märch. 315 f.; for Lettic, see Bielenstein, Die lett. Spr. II 158 ff.); we cannot here enter into the history of these, which is sometimes very obscure.

§ 903. Slavonic. The Slavonic Imperfect is the imperf. \*jach $\bar{u}$  'eram' for \* $\bar{e}s$ -o-m (§ 510 p. 76) added to the Instrumental case of nomina actionis in  $-\bar{e}$  and  $-\bar{a}$ . To the first members of these compounds there are parallels in Italic

and Keltic, and doubtless in Sanskrit, as we have seen in § 896 Rem. p. 445, § 899 p. 447. O.C.Sl. vidě-achŭ 'I saw' like Lat. vidē-bam, oslabě-achŭ 'I became weak' like albē-bam, nesě-achŭ 'I carried' pečaachŭ 'I backed' for \*pekě-achŭ (I § 76 p. 65) like ferē-bam, borja-achŭ 'I fought' for \*borjě-achŭ (see as cited) like capiē-bam, laka-achŭ like plantā-bam.

For Present Perfect was used the pres. part. in -lū (II § 76 p. 212) with jesmī, as prišīlū jesmī 'I am come, I am here'. The same participle and běachū or běchū formed the Pluperfect, if need were to express this point of time exactly; as posūlalū běaše 'he had sent'.

As in Germanic, when the old sio- future was lost (cp. § 760 p. 278), future time was expressed either by the present of perfect verbs, or by a periphrasis consisting of Auxiliaries + dependent Infinitive. Such auxiliaries were in O.C.Sl. imami ('I have'), choštą ('I wish'), načiną ('I will begin'), all of which with others (Miklosich, Vergl. Gr. IV 862 ff.), including bądą ('I will, will be'), occur in other dialects. In some of the modern dialects, one or other of these verbs is used exclusively, just as werde with the infinitive in High German.

#### UNEXPLAINED FORMATIONS.

§ 904. A number of fertile tense types have now, with certain reservations, been compared with those of other languages, or explained as due to some analogy which has been pointed out within the same language; for instance the Greek z-perfect (§ 864 Rem. p. 412), or the Latin preterite in -vī and -uī (§ 875 p. 423). But there are many such types, characteristic enough in their own language, whose origin is still so dark that they cannot be brought in place amongst those already given. These may now be mentioned.

§ 905. Aryan. The  $3^{rd}$  sing. aor. pass. (also mid.) in -i, mostly with a in the root-syllable, in Vedic and Avestic, with or without augment like the other augmented tenses (as

usual, the unaugmented forms can have a conjunctive meaning). Examples: Skr.  $\acute{a}$ - $v\ddot{a}c$ -i  $v\acute{a}c$ -i

It has often been assumed that -i is identical with the ending of the 1<sup>st</sup> sing. mid. -i (as in  $\alpha$ -kr-i), just as  $-\bar{e}$  in the perfect did for both 1<sup>st</sup> and 3<sup>rd</sup> singular. The difference of vowel grade in the root syllable is generally compared with that in the 3<sup>rd</sup> sing. u- $v\hat{a}c$ -a: 1<sup>st</sup> sing. u- $v\hat{a}c$ -a. Compare § 1054.3.

§ 905°. The Armenian verb is permeated with analogical formations, which have largely destroyed the original structure of it. Specially difficult are the Conjunctive, Aorist, and Future forms characterised by -c-, such, for instance, as conj. pres. geriçem (for \*gerēçem) aor. gereçi (for \*gereaçi, 3rd sing. gereaç) fut. gereçic from gerem 'capio', where not only does c need further explanation (cp. § 672 pp. 204 f.), but also the vowels that go with it.

§ 906. In Irish, no explanation has been found for what is called the Secondary Present (indic. and conj. impf.),<sup>1</sup>) as no berinn  $2^{nd}$  sing. no bertha etc. The  $3^{rd}$  sing. no bered is perhaps for \*bhere-to = Gr.  $\varphi \not\in \varphi \varepsilon$ - $\tau o$ .

§ 907. In Germanic, explanation is still to seek for the much discussed Weak Preterite, 2) whose chief mark is a t-sound.

<sup>1)</sup> Windisch, Das ir. praes. secundarium, Kuhn's Zeitschr. xxvii 156 ff.

<sup>2)</sup> Begemann, Das schwache Präteritum der german. Sprachen, Berl. 1873. Idem, Zur Bedeutung des schw. Prät. der germ. Spr., Berl. 1874. Fr. Carter, On Begemann's Views as to the Weak Preterite of the Germanic Verbs, Transactions of the Am. Phil. Assoc. vi (1875) pp. 22 ff. Wickberg, Über den Ursprung der schwachen Präteritalbildung in den german. Sprachen, Lund 1877. Bugge, Das schwache german. praeteritum, Kuhn's Zeitschr. XXIII 523. Amelung, Die Perfecta der schwachen Conjugation, Zeitschr. deutsch. Altert. XXI 229 ff. Paul, Zur Bildung des schwachen Präteritums und Participiums, Paul-Braune's

This is found alongside of the so-called primitive Presents, as often as their part. pret. pass. is formed with the suffix -to-, as Goth. vairhta O.H.G. workta from vairkja wurk(i)u 'I work', Goth. pūhta O.H.G. dūhta from Goth. pugkja O.H.G. dunk(i)u 'I think', Goth. O.H.G. brāhta from brigga bringu 'I bring'. Next, the Preterite Present has also this preterite, as Goth. ga-dairsta O.H.G. gi-torsta from ga-dars gi-tar 'I dare', Goth. skulda O.H.G. scolta from skal scal 'I shall', Goth. munda from man 'I think', kunpa from kann 'I know, learn'. Lastly, it is found with all weak verbs, as Goth. nasida O.H.G. nerita from nasja neriu 'I save', Goth. salbōda O.H.G. salbōta from salbō salbōm 'I smear, anoint', Goth. habáida O.H.G. hapta habēta from haba habēm 'I have'.

In the Indicative, the dental was followed by  $\bar{e}$  sometimes and sometimes  $\bar{o}$ , as Goth.  $2^{\rm nd}$  sing.  $nasid\bar{e}s$  contrasted with O.H.G.  $nerit\bar{o}s$  (but also chi-minner $\bar{o}d\bar{e}s$  like O.Sax. habdes);  $1^{\rm st}$  and  $3^{\rm rd}$  sing. Goth. -da O.H.G. -ta; Norse Run.  $1^{\rm st}$  sing. worahto 'I made'  $3^{\rm rd}$  sing. wurte urte 'he made'; in the plural O.H.G. -tum -tut -tun (Alemann.  $-t\bar{o}m$   $-t\bar{o}t$   $-t\bar{o}n$ ), Goth.  $-d\bar{e}dum$   $-d\bar{e}du\bar{p}$   $-d\bar{e}dun$ . Opt. Goth.  $-d\bar{e}djau$   $-d\bar{e}deis$  etc., O.H.G. -ti  $-t\bar{i}s$  etc.

The connexion with the to-participle is unmistakable, if the treatment of the participial t under Verner's Law be borne in mind; e. g. Goth. kunpa like partic. kunpa, munda like partic. munda. But is does not follow that the dental of the weak preterite was always Idg. t. Not so; but forms with Idg. dh, d, or th may be included in this group, and the relation to the participle may be secondary. Indeed, there must be some

Beitr. VII 136 ff. Möller, Kunpa und das t-Präteritum, ibid. VII 457 ff. Sievers, Zur Flexion der schwachen Verba, ibid. VIII 90 ff. Collitz, Das schwache Präteritum des Germanischen, Am. Journ. Philol. IX 42 ff. = Bezzenberger's Beitr. XVII 227 ff. Johansson, Zur Flexion des schwachen Präteritums im Got., Kuhn's Zeitschr. XXX 547 ff. Other works are cited in those here enumerated.

<sup>1)</sup> For O.H.G. forah-ta 'feared', whose old participle is the adj. forah-t Got. faúhr-t-s 'timid', the present t must be taken into account (furiht(i)u Got. faúrhtja). See § 685 p. 216.

such forms in the group; for example, O.Sax. libda 'lived' from  $\sqrt{leip}$ - cannot have had Idg. t in the ending, and the partic. ge-libd must be instead of \*-lift and due to the analogy of the preterite.1) Just as the Latin Perfect included a variety of quite different tense forms, to which similar use has given the same inflexions, so the Weak Preterite in Germanic may have absorbed alien elements. That Goth. iddja (pl. iddjēdun) is the Sanskrit  $\acute{a}$ - $y\ddot{a}$ -m or perhaps its byeform  $iy\ddot{a}$ -m we have seen in § 478 p. 26, § 587 p. 128 (compare § 886 Rem. p. 434). Preterites of our Present Class I. may be included in the weak preterite, since e. g. Goth. mun-des2) vil-des may be equated with Skr. 2nd sing. mid. ma-thás (á-ma-thās) vy-thás  $(\acute{a}-v_T-th\bar{a}s)$ , compare Gr.  $\acute{\epsilon}-\tau\acute{a}-\vartheta\eta_S=Skr$ .  $\acute{a}-ta-th\bar{a}s$  § 503 p. 67. Again, O.H.G. wissun as an s-aorist may be compared with Gr. ἴσαν (§ 827 p. 365), and forms like salbō-ta may be compounds of the same kind as Lat. amā-bam O.C.Sl. děla-achū (§ 899 p. 447, § 903 p. 451 f.), having for the second member the preterite of  $dh\bar{e}$ - 'do' \*(e-) $dh\bar{e}$ -m, or the preterite  $\bar{a}$ -injunctive \*dh-ā-m (§ 507 p. 74, § 937).

§ 908. In Lithuanian, the growth of the Imperfect of habit in -davau is obscure; examples are piáu-davau 'I used to cut' 3<sup>rd</sup> sing. piáu-davo part. piáu-davēs (fem. -davusi), sùk-davau 'I used to twist', matý-davau 'I used to see'. The ending -avau recals baltavau pret. of baltaju 'I gleam white', and recals d in the present endings -d-inu and -d-au, treated in §§ 700 f. pp. 226 ff.

<sup>1)</sup> Nothing prevents our putting this re-formation of the participle back to proethnic Germanic; and so Goth. ga-hugd-s O.Sax. gi-hugd 'thought, reason, understanding' beside pret. O.Sax. hoyda hugda O.H.G. hocta part. O.Sax. gi-hugd O.H.G. ge-huct does not weigh against the connexion of Germ. hug- with Skr. šuc- (I § 439 p. 327, § 447 p. 332).

<sup>2)</sup> For Goth. mun-dēs = Skr. ma-thās compare some recent remarks by Streitberg, Zur Germ. Sprachgesch., 79.

#### FORMATION OF THE MOOD STEM.1)

#### INJUNCTIVE.2)

§ 909. Injunctive (or Spurious Conjunctive) is a name given to forms which look like unaugmented indicative forms belonging to a tense which is properly augmented; thus \*bhere-t = Skr. bhárat Gr.  $\varphi \dot{\epsilon} \varrho \epsilon$ , cp. imperf. á-bhara-t  $\ddot{\epsilon}$ - $\varphi \epsilon \varrho \epsilon$ . Injunctive forms therefore have the secondary personal endings.

In the parent language they had a very wide scope; perhaps these are really the oldest forms of the verb finite, which do not yet show in their form either distinction of time, or distinction of the ideas conveyed by the words indicative and conjunctive (wish, futurity). In historical times we find these used in three different ways:

<sup>1)</sup> L. Tobler, Übergang zwischen Tempus und Modus etc., see p. 33 footnote 1. S. H. A. Herling, Vergleichende Darstellung der Lehre vom Tempus und Modus, Hannover 1840. Wüllner, Die Bedeutung der sprachlichen Casus und Modi, Münster 1827. C. F. Nägelsbach, De vera modorum origine, Erlang. 1843. M. L. E. Rusén, Unde notiones modorum verbi sint repetendae, Upsala 1855. A. Bergaigne, De coniunctivi et optativi in Indoeuropaeis linguis informatione et vi antiquissima, Paris 1877.

R. Kohlmann, Über die Modi des griech. und des lat. Verbums in ihrem Verhältnis zu einander, Eisleben 1883.

Scheuerlein, Über den Charakter des Modus in der griechischen Sprache, Halle 1842. W. Büttner, Vom Optativus und Conjunctivus, I, Schweidnitz 1879.

W. Weissenborn, De modorum apud Latinos natura et usu, I, Eisenach 1846. Idem, Bemerkungen über die Bildung des Modus im Lat., Philologus I 589 ff. Works on the future perfect and the conjunctive perfect are given in the footnote to page 346.

Jellinek, Germanische Conjunctive, in: Beitr. zur Erklärung der germ. Flexion (Berl. 1891) pp. 94 ff.

<sup>2)</sup> The Author, Der sogen unechte Conjunct., Morph. Unt. III 1 ff. M. Bloomfield, On Certain Irregular Vedic Subjunctives or Imperatives, Am. Journ. Phil. v 16 ff. Thurneysen, Der ir. Imperativ auf -the, Idg. Forsch. I 460 ff.

(1) Indicative Present. Skr. Vcd. cōdaya-t 'he sets afire' and others (Delbrück, Altind. Syntax 354 f.). Gr. Dor. and Cypr. φέφε-ς 'thou bearest', Att. τίθη-ς 'thou placest'; cp. also the Author, Gr. Gr. 2 § 160 Anm. p. 185 on the present (timeless) use of the ind. aor., as in κάτθαν' όμῶς ὅ τ' ἀεργὸς ἀνηὸρ ὅ τε πολλὰ ἐρογώς.¹) Lat. vehi-s im-plē-s ī-s s-u-m (§ 528 p. 91). O.Ir. 2nd sing. -bir 'fers' for \*bhere-s 3rd sing. -beir for \*bhere-t. O.Icel. ero eru 'are' for \*iz-únÞ (§ 507 pp. 73 f., § 508 p. 74). Lith. bij-o-si 'he fears' for \*bhii-ā-t, jử sto 'he girds' for \*jōstā-t, Pruss. waitia 'he speaks' (§ 782. 4 p. 310); O.C.Sl. beretŭ 'fert' 3rd pl. beratŭ for \*bhere-t \*bhero-nt with the particle u (§§ 999 and 1026).

The only difference between these and the indic. forms in -ti -nti is that the latter have the particle i affixed; and this is apparently just what marked the new forms clearly out as present indicative (§ 973).

- (2) Iudicative Preterite. Skr. Ved. bhára-t 'he bore'. Gr. Hom. φέρε 'he bore'; special mention must be made of the Ionic frequentatives φεύγεσκον etc. (§ 673 p. 206), which regularly lack the augment. Lat. -bā-s Osc. 3<sup>rd</sup> pl. -fans, Lat. erā-s (§ 583 p. 124), Osc. kúm-bened 'convēnit' (§ 867. 5 p. 415). O.Ir. do bert 'he brought' for some middle form in -to (§ 506 p. 72 f., § 826 p. 364). O.H.G. bizzi 'thou didst bite' = Skr. (á-)bhid-a-s (§ 893 p. 441). Lith. bùvo 'he was'; O.C.Sl. tekŭ 'I ran'. Cp. § 483 p. 31 ff.
  - (3) Conjunctive.
- (a) Conj. = Wish. The 2<sup>nd</sup> pl. and 2<sup>nd</sup> aud 3<sup>rd</sup> dual were firmly rooted among the imperative forms as early as the parent language: Skr. bhára-ta 'ferte' bhára-tam bhára-tām, Gr. φέφε-τε φέφε-τον, Lat. agi-te; O.Ir. 2<sup>nd</sup> pl. beri-d; Goth. 2<sup>nd</sup> pl. bairi-þ (2<sup>nd</sup> dual baira-ts with primary ending); beside \*es-ti 'is' Skr. s-tá s-túm s-tám, Gr. ἔσ-τε ἔσ-τον, Lat. es-te;

<sup>1)</sup> The use of the augmented forms in the same way may be compared with the use of Skr.  $ag\bar{a}t$  instead of  $g\bar{a}t$  after  $m\bar{a}$  in the Maha-Bharata (Holtzmann, Gramm. aus dem Mahābh., 28).

s-Aorists Skr.  $avi\ddot{s}$ - $t\acute{a}$ -na (-na is a particle, see § 1010)  $avi\ddot{s}$ - $t\acute{a}m$   $avi\ddot{s}$ - $t\acute{a}m$  from  $\acute{a}v$ -a-ti 'he desires', Gr.  $\delta\varepsilon \iota \xi \alpha$ - $\tau \varepsilon$   $\delta\varepsilon \iota \xi \alpha$ - $\tau o \nu$  from  $\delta\varepsilon \iota \iota x$ - $\nu \bar{\nu}$ - $\sigma \iota$  'shows'. In the other persons the proethnic imperative has other formations.

But in some of the derived languages these other persons also are found with the sense of Wish; and here and there one of them does duty for some part of the imperative.

Skr. Ved. prá vōcam 'I will praise', dás 'give', jušata 'let him be pleased' 3<sup>rd</sup> pl. jušanta, and many more. Then we have as part of the Aryan imperative such forms as 3<sup>rd</sup> sing. Skr. bhárat-u Avest. barat-u 'ferto' 3<sup>rd</sup> pl. Skr. bhárant-u Avest. baran-tu 'ferunto', Injunctives + particle u (§§ 992. 2 and 1017).

Gr.  $2^{nd}$  sing. mid.  $\varphi \dot{\epsilon} \varrho so \varphi \dot{\epsilon} \varrho ov$  for \* $\varphi \dot{\epsilon} \varrho \varepsilon - \sigma o$  (cp. imperf.  $\dot{\epsilon} - \varphi \dot{\epsilon} \varrho \varepsilon o$ ),  $\beta \alpha \lambda o \tilde{v}$  for \* $\beta \alpha \lambda \dot{\epsilon} - \sigma o$  (on the accent of this form see § 958),  $\varphi \dot{\alpha} o$  from  $\varphi \eta - \mu i$  'I say', aor.  $\vartheta \dot{\epsilon} o \vartheta o \tilde{v}$  beside  $\dot{\epsilon} - \vartheta \dot{\epsilon} - \mu \eta v$  'I placed for myself', used as regular imperative forms. Rarely also the corresponding  $2^{nd}$  sing. act. as  $\dot{\epsilon} v \dot{\iota} - \sigma \pi - \varepsilon - \varepsilon$  beside  $\dot{\epsilon} v \dot{\iota} - \sigma \pi - \varepsilon$  'insece',  $\dot{\epsilon} \pi \dot{\iota} - \sigma \chi \varepsilon - \varepsilon$  beside  $\dot{\epsilon} \pi \dot{\iota} - \sigma \chi \varepsilon - \varepsilon$  'stop',  $\alpha \gamma - \varepsilon - \varepsilon$  ' $\alpha \gamma \varepsilon$ ,  $\varphi \dot{\epsilon} \varrho \varepsilon$  (Hesych.); cp. also § 932 on  $\vartheta \dot{\epsilon} \varsigma \varepsilon \varsigma \vartheta \dot{o} \varsigma$ .

Lat. sequere = gr.  $\xi \pi \varepsilon o$ , as regular imperative.

O.Ir. forms of the s-aorist, as comēir 'get up' for \*-rec-s-s, tair 'let him come' for \*-inc-s-t (§ 826 p. 363). Also the 2<sup>nd</sup> sing. imper. mid. in -the, as cluinte 'exaudi' beside indic. ro-chluinethar, aigde 'fear' beside -āgur, foilsigthe 'revela', since -the is the Skr. secondary ending -thās (§ 1051).

O.H.G.  $ni\ curi$  'noli' for \*kuz-i-z \* $\hat{g}$ us-e-s beside 2<sup>nd</sup> pl.  $ni\ cur$ -e-t; Goth. visa-m vaila ' $\varepsilon v' \varphi \rho \alpha v \vartheta \tilde{\omega}_{\mu \varepsilon v'}$ , O.H.G. fara-m (fara- $m\bar{e}s)$  'transeamus'.

Lith. te ne ei 'let him not go' for \*ei-t, tè-suka 'let him turn' te-māto 'let him see', 1) 1st pl. ei-mè 1st dual ei-và 'let us go' (§ 511 p. 77), O.C.Sl. bądą 'sunto' (also found bądątŭ 'erunt'), veli-te 'command ye' (also indic. veli-te 'ye command'), see § 955 Rem.

<sup>1)</sup> Since forms like suka mato were also used for pres. indic., it came about that indicative forms with primary endings, as eil(i), could be used with a "permissive" meaning; e. g. t'eil(i).

(b) Conj. = Future. Skr. Ved. ném (= ná īm) agha našat 'him no mischief will reach' (cp. Delbrück, Altind. Syntax 358). In Lithuanian, some dialects have forms of the s-aorist like dě-s-me 'we will lay' děste děsva děsta (§§ 828 f. pp. 365 f.).

#### CONJUNCTIVE.1).

§ 910. It has been pointed out (§ 489 pp. 47 f.) that in all the languages the same formative elements which mark what from its use is called the Conjunctive are also found in the Indicative. In this way we find used both -e- and -o-, the "Thematic Vowel", and also  $-\bar{a}$ - and  $-\bar{e}$ - ( $-\bar{o}$ -). It follows that these forms had originally a much wider use than they came to have afterwards; and it was only by degrees that some of then were appropriated to the Indicative and others for the Conjunctive. Even in the parent language the rule held good that forms with a thematic vowel were Conjunctive, where the Indicative was distinguisht by having none; whilst if the Indicative had a thematic vowel, the Conjunctive had the suffixes  $-\bar{a}$ - or  $-\bar{e}$ - ( $-\bar{o}$ -). If the Indicative itself had  $-\bar{a}$ - or  $-\bar{e}$ - $-\bar{o}$ - (Classes X and XI, §§ 578 ff. pp. 118 ff.), then Injunctive forms commonly served for the Conjunctive mood (§ 930).

Remark. As stems with -e- -o- and stems with - $\bar{a}$ - - $\bar{e}$ - (- $\bar{o}$ -) originally did for both Indioative and Conjunctive, we may suppose that

<sup>1)</sup> Moulton, The Suffix of the Subjunctive, Amer. Journ. of Philol. x 285 f.

Bartholomae, Indisch  $\bar{a}i$  in den Medialausgängen des Conjunctivs, Kuhn's Zeitsohr. xxvii 210 ff.

Joh. Paech, De vetere conjunctivi Graeci formatione, Breslau 1861. H. Stier, Bildung des Conjunctivs bei Homer, Curtius' Stud. II 125 ff. Stolz, Zum Conj. des griech. sigm. Aor., Idg. Forsch. II 153 ff.

Thurneysen, Der italokeltische Conjunctiv mit  $\bar{a}$ , Bezzenberger's Beitr. VIII 269 ff.

Bréal, Un mot sur les subjonctifs latins en am, Mém. Soc. ling., vi 409 ff. L. Job, Le subjonctif latin en -am, ibid. vi 347 ff. V. Henry Esquisses morphologiques III: Le subjonotif latin, Douai 1885. G. Curtius, Der lat. Conjunctiv des Imperfects, in his Stud. viii 460 ff. Corssen, Die syncopierten Futurformen auf -s im Umbr., Osk. und Volsk., in: Beitr. zur ital. Spraohk. 533 ff.

tense-stems of other kinds had the same double use. As a matter of fact this was so in the fullest sense wherever these stems had the secondary personal endings, that is, were Injunctive (§ 909). But even some forms with the primary endings and without these conjunctive suffixes are so used: Skr.  $2^{\text{nd}}$  sing.  $v\tilde{e}$ - $\tilde{s}i$  'thou comest near' and 'come near' ( $3^{\text{rd}}$  sing.  $v\tilde{e}$ -ti 'he comes near'),  $k\tilde{s}\tilde{e}$ - $\tilde{s}i$  'thou abidest' and 'abide thou' ( $3^{\text{rd}}$  sing.  $k\tilde{s}\tilde{e}$ -ti 'he abides') are two examples out of many (Delbrück, Altind. Verb. 31 and 34 f.), Avest. Gath.  $d\tilde{o}i\tilde{s}i$  'perceive thou', Gr. imper.  $2^{\text{nd}}$  sing.  $k\tilde{e}\tilde{s}i$  'lay thyself' for \* $k\epsilon\pi$ - $\sigma$ - $\sigma$ ai (§ 969. 2). Compare § 974 Rem. On the use of the Att. indic. forms  $\mu\iota\sigma\vartheta\sigma\tilde{o}i$ ;  $\mu\iota\sigma\vartheta\sigma\tilde{o}i$  for the conjunctive see § 923.

The Conjunctive has a simple Future meaning in addition to that of wish (in which I include deliberative and dubitative). Often these forms drop their other meanings in the separate languages, and have that of Future only, or chiefly. Then they are called future in the grammars, as are for instance Lat. erō vīderō.

In Armenian the Conjunctive formation appears to be entirely lost.

In Germanic and Balto-Slavonic it is lost all but a few scanty survivals, which will be given below. In both these branches the Optative took its place. First both these groups were used together (as in the Latin conjunctive, edā-mus agā-mus true conj. and edā-mus sī-mus optative); then the Optative won the day. Examples of Opt. forms used as Conj. in these languages are: Goth. paírhgaggáima 'διέλθωμεν, let us go through', ni maúrprjáis 'μη φονενσης'; te-sukē 'let him turn' (imperative) '), O.C.Sl. ne νũνedi nasũ νũ iskušenije 'ne nos inducas in tentationem, μη εἰσενέγκης ἡμῶς' etc.

We now come to details. The Conjunctive formations may be divided into two groups, according as the Indicative stem (I) ended in a consonant, as \*es-ti \*ei-ti \*rneu-ti, and contained the thematic vowel, as \*bhere-ti, or (II) ended in a long vowel, as \*e-stā-t \*plē-ti.

<sup>1)</sup> May also mean 'he may turn, he is to be allowed to turn'.

## I. CONJUNCTIVE WHERE THE INDICATIVE STEM ENDS IN A CONSONANT OR HAS A THEMATIC VOWEL.

#### A. Indicative Stem ends in a Consonant.

- § 911. The Conjunctive from these stems had in the parent language, and continued to have, the Thematic Vowel, as  $*e\underline{i}-e-t(i)$  (Skr.  $\acute{a}yati$   $\acute{a}yat$ ) beside Indic.  $*e\underline{i}-ti$  'goes'. The stemhad its strong form, the ablaut-syllable the 1st strong grade (e-grade in the e-: o-series): pres. conj.  $*e\underline{i}-e-t(i)$  beside indic.  $e\underline{i}-i$ -, \*r- $ne\underline{u}-e-t(i)$  (Skr. r- $n\acute{a}v$ -a-t(i)) beside indic. \*r- $ne\underline{u}$  \*r-nu-,  $*ste\underline{u}$ -e-t(i) (Skr.  $st\acute{a}v$ -a-t(i)) beside indic.  $*st\bar{e}\underline{u}$  \*stu- (§ 494 p. 54 f.); s-aor. conj.  $*qe\underline{i}$ -s-e-t(i) (Skr.  $c\acute{e}$ -s-a-t(i) Gr.  $2^{nd}$  pl. ret- $\sigma$ -e- $\tau$ e) beside indic. (e- $)q\bar{e}\underline{i}$ -s- \*(e-)qi-s- (§ 811 p. 348); perf. conj. \*te-te-e-t(i) (Skr. ta- $t\acute{a}n$ -a-ti) beside indic. \*te-to--\*te-tn-\*te-tv- (§ 843 p. 384).
- § 912. Pr. Idg. Conjunctives of this group have been touched upon frequently in our discussion of the Tense Stem. I therefore confine myself here to a few examples.

Present. Class I (§§ 492 ff.): \*és-e-t(i) beside \*és-ti 'is': Skr. ásat(i), Gr. 1st sing. ĕ-w (but ĕŋs ¬̅s etc. belong to B), Lat. (fut.) er-i-t. Class III (§§ 536 ff.): Skr. bi-bhar-a-t beside bi-bhar-ti 'bears', bī-bhay-a-t beside bi-bhē-ti 'fears'. Class V (§§ 555 ff.): Skr. ba-bhas-a-t beside bá-bhas-ti 'eats, devours'. Class VII (§§ 567 ff.): Skr. jan-ghán-a-t beside ján-ghan-ti intens. 'strikes, kills'. Class XV (§§ 625 f.): Skr. rinác-a-t beside rinák-ti 'lets go, makes empty'. Class XVII (§§ 638 ff.): Skr. r-náv-a-t beside r-nō-ti 'excites, sets in motion'. Class XIX (§§ 656): dvē-ṣ-a-t beside dvē-ṣ-ti 'hates'.

s-Aorist (§§ 810 ff.). Skr.  $n\acute{e}$ - $\mathring{s}$ -a-t(i) beside  $\acute{a}$ - $n\ddot{a}i$ - $\mathring{s}$ -am 'I feared', Gr.  $\tau \epsilon l$ - $\sigma$ - $\sigma$ - $\mu \epsilon \nu$  beside  $\mathring{\epsilon}$ - $\tau \epsilon \iota$ - $\sigma$ - $\alpha$  'I paid', Lat. (fut.)  $d\bar{x}x$ - $\bar{o}$  beside  $d\bar{x}x$ - $\bar{i}$ , O.Ir. for-tias 'subveniam' beside injunct. for- $t\bar{e}$  subveniat' (§§ 826 p. 363 f.). Gr.  $\epsilon l \delta$ - $\acute{\epsilon}$ - $\omega$   $\epsilon l \delta \tilde{\omega}$  (but  $\epsilon l \delta \tilde{\eta}_S$  etc. belong to B) beside  $\tilde{\eta}$   $\delta \epsilon \alpha$  'I knew' for \* $\eta$ - $F \epsilon \iota \delta$ - $\epsilon \sigma$ - $\alpha$ ,

Umbr. eest est 'ibit' beside Gr.  $\eta$ 'eiv 'I went' instead of \*ēi-es- $\eta$  (§ 836 pp. 372 ff.). Skr.  $b\delta dh$ -iṣ-a-t beside ind. 3rd pl. mid.  $\acute{a}$ -bōdh-iṣ-ata from budh- 'watch, notice',  $g\ddot{a}$ -siṣ-a-t beside ind. 3rd pl.  $\acute{a}$ -gā-siṣ-ur from  $g\ddot{a}$ - 'to sing'; add perhaps Gr. fut. \* $\iota$ 0\varepsilon\vare

Perfect (§§ 843 ff.). Skr. ta-t(i) beside ind. ta-t(i) beside ind. ta-t(i) beside ind. ta-t(i) beside of \* $\pi\epsilon$ - $\pi\epsilon i \vartheta$ - $\sigma$ - $\mu\epsilon \nu$  beside  $\pi$ (i)  $\epsilon$ 

§ 913. Aryan. The Thematic formation is fertile in Vedic, Avestic, and Old Persian. In later Sanskrit nothing remains but the 1<sup>st</sup> persons, which are now called 1<sup>st</sup> person Imperative.

The personal endings here as in the  $\bar{a}$ -conjunctive (§ 921) were in Sanskrit and Avestic sometimes primary and sometimes secondary; the Middle had the primary almost always (details may be seen in Delbrück, Altind. Verb. 191 ff.; Whitney, Skr. Gr. §§ 560 ff.; Bartholomae, Altiran. Verb. 130 f.). The few Old Persian forms which occur all show a primary ending. As to Skr. middle forms like  $krn\acute{a}v\bar{a}mah\bar{a}i$  instead of  $krn\acute{a}v\bar{a}mah\bar{e}$ , see § 922.

Further examples (cp. § 912). Present. Skr.  $k\acute{a}r-a-ti$  kar-a-nti Avest.  $1^{st}$  sing.  $car\bar{a}-n\bar{\imath}$  beside ind. Skr.  $k\acute{a}r-\check{s}i$  Avest.  $cor^e-\bar{p}$  from V qer- 'make'; Skr.  $\acute{a}y-a-t(i)$  Avest.  $ay-a-\bar{p}$  beside ind.  $\acute{e}-ti$  ae-iti from V ei- 'go'; Avest.  $anh-a-it\bar{\imath}$   $-a-\bar{p}$  O.Pers. ah-a-tiy Skr.  $\acute{a}s-a-t(i)$  beside ind. Skr.  $\acute{a}s-ti$  etc. from V es- 'esse'. In Sanskrit this Conjunctive formation is also found beside Indicatives with the suffix -i-, as  $br\acute{a}v-a-t(i)$  beside  $br\acute{a}v-\bar{\imath}-ti$  'speaks' (§ 574 p. 116). Skr. ju-hav-a-ti beside  $ju-h\acute{o}-ti$  'offers', Avest.  $ci-kay-a-\bar{p}$   $3^{rd}$  pl. cikaen = ci-kay-en

<sup>1)</sup> Compare for this Conj. W. Schulze, Kuhn's Zeitschr. XXIX 251.

beside Skr.  $ci-k\acute{e}-ti$  'observes, perceives'. Skr.  $yun\acute{a}j-a-t\bar{e}$  beside  $yun\acute{a}k-ti$  'yokes', Avest. 1st pl. mid.  $cina\rlap{p}-\bar{a}-mai\rlap{d}\bar{e}$  beside cinas-ti 'teaches'. Skr.  $kr-n\acute{a}v-a-t(i)$  Avest. 1st sing.  $ker^e-nav-\bar{a}-ni$  beside  $kr-n\acute{o}-mi$   $ker^e-nao-mi$  'I make'. s-Aorist. Skr.  $v\acute{q}-s-a-ti$  Avest.  $v\bar{e}ngh-a-it\bar{\imath}$  from  $\bigvee uen$  'win, get, conquer'. Skr.  $san-i\v{s}-a-t$  beside  $\acute{a}-s\bar{a}n-i\v{s}-am$  'won', Avest. 1st sing.  $x\v{s}nev-\bar{\imath}s-a$  from  $x\v{s}nu$  'join oneself'. Perfect. Skr.  $ja-gh\acute{a}n-a-t(i)$  beside  $ja-gh\acute{a}n-a$  from  $\bigvee ghen$  'strike, kill',  $mu-m\bar{o}c-a-t$  beside  $mu-m\acute{o}c-a$  from muc 'let go', Avest. 1st pl.  $\mathring{a}nh-\ddot{a}-ma$  beside  $\mathring{a}nh-a$  (Skr.  $\mathring{a}s-a$ ) from  $\bigvee es$  'esse' (but the form may also be connected with the  $3^{rd}$  sing.  $\mathring{a}nh-\bar{a}-\rlap{p}$ , under B).

Rarely we find a divergence in the Present from the rule of gradation which holds for this Conjunctive formation (§ 911 p. 461), as Skr. 3<sup>rd</sup> dual anj-a-tas beside 3<sup>rd</sup> pl. anáj-an (indic. anák-ti 'anoints, adorns') formed as though the indic. were \*ánk-ti. On the numerous analogical forms in the s-aorist, such as Skr. dfk-š-a-sē tār-iš-a-t, see § 815 p. 353 and § 839 p. 375.

For the  $\bar{a}$ -Conjunctive with an unthematic Indicative see § 921.

§ 914. Greek. The 1st sing. act. in  $-\omega$  is regular in all dialects and periods. With this exception, the Conjunctive with a long vowel proved a formidable rival to the thematic formation. The latter held its ground most tenaciously in the s-aorist.

Very little trace is left in the stem of the proethnic law of gradation (§ 911 p. 461).

Present. This Conjunctive is fertile only in the oldest poetical language. Hom,  $io_{\mu\epsilon\nu}$  instead of  $*\hat{\epsilon}(\underline{\iota})$ -o- $\mu\epsilon\nu$  and  $\hat{\iota}$ -o- $\mu\epsilon\nu$  from  $\epsilon\hat{\iota}$ - $\mu$  'I will go';  $\hat{\iota}$ -o $\mu\epsilon\nu$  is to be compared with Skr.  $\hat{\imath}$ -mahē (see § 493 p. 52, § 497 p. 56), or else it is due to the analogy of  $\Im \dot{\eta}$ -o- $\mu\epsilon\nu$   $\Im \dot{\omega}$ -o- $\mu\epsilon\nu$  and the like (cp. § 934 on Messen.  $\mathring{\eta}\nu\tau\mu$  Hom.  $\mu\epsilon\tau$ - $\mathring{\eta}\omega$ ). Hom.  $\varphi \Im \acute{\iota}$ - $\epsilon$ - $\tau\mu$  (instead of  $*\varphi \Im \epsilon(\underline{\iota})$ - $\epsilon$ - $\tau\mu$ ) beside  $\varphi \Im \acute{\iota}$ - $\tau \sigma$  'was destroyed',  $\mathring{\alpha}\lambda$ - $\epsilon$ - $\tau \omega$  beside  $\mathring{\alpha}\lambda$ - $\tau \sigma$  'he leapt' On the analogy of these were made similar Conjunctives for indic. stems in  $-\mathring{a}$   $-\bar{e}$  or  $-\bar{o}$ , as  $\sigma\tau \mathring{\eta}$ -o- $\mu\epsilon\nu$   $\Im \mathring{\eta}$ -o- $\mu\epsilon\nu$   $\Im \mathring{\omega}$ -o- $\mu\epsilon\nu$  (§ 934).

Some such conjunctives survived elsewhere, for instance in Attic, crystallized and used only for the Future;  $\tilde{\epsilon}\delta$ -0- $\mu\alpha\iota$  'I will eat' (cp. inf.  $\tilde{\epsilon}\delta$ - $\mu\epsilon\nu\alpha\iota$ , Skr. indic.  $\delta t$ -ti),  $\pi i$ -0- $\mu\alpha\iota$  'I will drink' (beside imper.  $\pi \tilde{\epsilon}$ - $\Im \iota$ ),  $\chi \dot{\epsilon}(F)$ - $\omega$  'I will pour' (beside indic.  $\tilde{\epsilon}$ - $\chi\epsilon(F)$ - $\alpha$   $\tilde{\epsilon}$ - $\chi\nu$ - $\tau o$ ).

Remark 1. In an Aeolic inser. (discussed by Meister, Anzeiger für idg. Spr.- und Altertumsk., I 203 f.) we have the  $3^{rd}$  pl.  $\tau \not\in \kappa \omega \sigma \iota$  with the meaning of Att.  $\tau \not\in \kappa \omega \sigma \iota$ . If the reading is true, we must grant it to be an instance of the o-conj. invading the domain of the long vowel. If so, we should have a right to question whether Homeric conjunctives like  $\sigma \tau \varrho \not\in \varphi \varepsilon \tau \omega \iota$  (in subord. clause after  $\sigma \tau \not\in \sigma \tau \varrho \not\in \varphi \varepsilon \tau \omega \iota$ ) ought really to be denied. These are collected by Stier in Curtius' Stud. II 138 f.; Curtius himself regards them as mythical (Verb, II  $^{2}$  87 ff.).

s-Aorist. There are many examples in Homer and other Homeric poets; as τείσομεν τείσετε, βιήσεω, ἀμείψετω. So there are in inscriptions of the 5th cent. B. c., from Ephesus, Teos, and Chios; as 3th sing. in -ει, ἀποκούψει, and 3th pl. ποήξοισιν (Att. πράξωσιν) with -οι- instead of -ον- by Lesbian influence (I § 205 p. 172). In Cretan we find such forms as 3th sing. δείξει. Then there are Epic imperatives such a ἄξ-ε-τε 'bring ye' ἄξ-ε-σθε ὄψ-ε-σθε 'see ye' (§ 833 p. 370), and the futures ἄξω ὄψομαι, which must not be separated from the imperatives; indeed the whole Greek s-Future may perhaps come from the Conj. of the s-aorist (§ 747 p. 269). Lastly, the 1st sing. εἰδέω εἰδῶ (2nd sing. εἰδῆς etc. goes under B) beside indic. ἤδεα 'I knew' for \*ή-Fειδ-εσ-α (§ 836 pp. 372 ff.).

Perfect. Survivals in Homer:  $\pi \varepsilon - \pi o i \vartheta - o - \mu \varepsilon \nu \stackrel{?}{\varepsilon} \delta - o - \mu \varepsilon \nu$ , see § 912 p. 462; mid.  $\pi \varrho o \sigma - \alpha \varrho \eta' \varrho \varepsilon - \tau \alpha \iota$  Hes. Op. 431 (Vat. 2  $\pi \varrho o \sigma \alpha \varrho \eta' \sigma \varepsilon \tau \alpha \iota$ ). Attic imper. like  $\kappa \varepsilon - \kappa \varrho \stackrel{?}{\alpha} \gamma - \varepsilon - \tau \varepsilon = \kappa \varepsilon - \chi \eta' \nu - \varepsilon - \tau \varepsilon$  (§ 854 p. 404).

Remark 2. It is strange that while Homer has  $\tau \epsilon i\sigma o\mu \epsilon \nu$  etc. he has no complementary conj. forms in  $-\epsilon \iota \varsigma -\epsilon \iota -o\nu \sigma \iota$ . We may conjecture that he really had, but that the symbols of the old alphabet,  $-EI \Sigma -EI -O \Sigma I$ , which had more than one value, were here misunderstood, and the forms disappeared,  $-\eta \varsigma -\eta \omega \sigma \iota$  being written instead.

Those conjunctives which are not used exclusively for future or imperative, are being attracted even in Homer to follow the

lead of those with long vowels, as  $i\omega\mu\epsilon\nu$ ,  $a\lambda\eta\tau\alpha$ ,  $\pi\epsilon\pi ol\theta\omega\mu\epsilon\nu$ . See § 923.

§ 915. Italic. Only found as a Future (cp. Att.  $\mathring{\epsilon}\mathfrak{d}$ -o- $\mu\alpha\iota$ , § 914).

Present. Lat.  $er\bar{o}$  er-i-s: Skr.  $\acute{a}s$ - $\bar{a}$ -ni Gr.  $\acute{\epsilon}$ - $\omega$ , see § 912 p. 461.

s-Aorist. Lat.  $d\bar{\imath}x-\bar{o}$   $d\bar{\imath}x-i-s$ ,  $fax-\bar{o}$  fax-i-tur,  $cap-s-\bar{o}$  and the like, Umbr. Osc. fust 'erit', Umbr. furent 'erunt' prupe hast 'ante piabit', Osc. deivast 'iurabit' (§ 824 p. 362). Umbr. eest est 'ibit' ferest 'feret', Osc. pert-emest 'perimet' (§ 837 p. 374). Lat.  $v\bar{\imath}der\bar{o}$   $l\bar{\imath}quer\bar{o}$ , then by analogy  $scider\bar{o}$   $totonder\bar{o}$   $d\bar{\imath}xer\bar{o}$  etc. (§ 841 pp. 378 f.). In the  $3^{rd}$  pl. of these future perfects, the ending \*-erunt, which was also the ending of the  $3^{rd}$  pl. indic. perfect, gave place to the optative ending -erint (beside  $1^{st}$  sing.  $v\bar{\imath}d-erim$ ), just as we find  $v\bar{\imath}der\bar{\imath}mus$  instead of  $v\bar{\imath}derimus$ ,  $v\bar{\imath}der\bar{\imath}tis$  instead of  $v\bar{\imath}deritis$ . Lastly, Lat.  $am\bar{a}ss\bar{\imath}turb\bar{a}ssitur$   $hab\bar{e}sso$ , for which infinitives were coined, as  $impetr\bar{a}ssere$ , on the analogy of capessere to  $capess\bar{o}$  (§ 842 p. 381).

In the Conjunctive use (Wish), only the  $\bar{a}$ - and  $\bar{e}$ -forms (B) remained fertile; these also spread into the thematic conjunctive, as Lat. e- $\bar{a}$ -s beside indic.  $\bar{\imath}$ -s,  $pl\bar{e}$ -r- $\bar{e}$ -s beside indic. Skr.  $\acute{a}$ - $pr\bar{a}$ -s-am.

§ 916. Keltic. s-aorist with meaning of Wish and more rarely of the Future; as from tiagim T step, go' the 1st sing. -tias, 3rd sing. tēs tēis, see § 826 p. 364.

§ 917. Germanic. Isolated Got.  $\bar{o}gs$  'fear thou' beside perf.  $\bar{o}g$  'fears' (§ 822 p. 430, § 912 p. 462).

### B. Conjunctive to a Thematic Indicative.

§ 918. These Conjunctives have for the Suffix long vowels, not subject to gradation,  $-\bar{a}$ - or  $-\bar{e}$ - ( $-\bar{o}$ -). These are the same

<sup>1)</sup> With this contamination compare the use of sim edim as conj. On the analogy of the fut. perf. vīderint itself we have erint poterint instead of erunt poterunt.

as in the Indicative, Gr.  $\tilde{\epsilon}$ - $\delta \rho$ - $\bar{\alpha}$ - $\nu$  Lat. pl- $\bar{e}$ -s, which also have no gradation; this has been pointed out in § 578 p. 119.

 $-\bar{a}$ - is a Conj. vowel in Italic, Keltic, Slavonic, Germanic (?);  $-\bar{e}$ - in Greek and Italic;  $-\bar{o}$ - in Greek.  $-\bar{e}$ - and  $-\bar{o}$ -  $(\varphi \dot{e} \varrho - \eta - \tau \epsilon \varphi \dot{e} \varrho - \omega - \mu \epsilon \nu)$  are connected closely (cp. Gr. indic.  $\zeta - \bar{\eta}$  and  $\zeta - \omega - \omega$ ,  $\psi - \bar{\eta}$  and  $\psi - \omega - \varrho \dot{o} - g$ ); but their distribution in the Greek system can hardly be original, through it is the same as  $-\bar{e}$ - and  $-\bar{o}$ - in the Indicative. It is likely that they just imitated the Indicative, differing only in length, for symmetry (cp. Arc. conj.  $\bar{\iota} - \sigma \tau \bar{a} - \tau \bar{o}$  beside indic.  $\bar{\iota} - \sigma \tau \bar{a} - \mu \bar{\iota} - \sigma \tau \bar{a} - \mu \epsilon \nu$ , Mess. conj.  $\bar{\tau} \dot{\iota} - \vartheta \eta - \nu \tau \bar{\iota}$  beside indic.  $\bar{\tau} \dot{\iota} - \vartheta \eta - \mu \bar{\iota} \dot{\iota} - \vartheta \varepsilon - \mu \epsilon \nu$  § 934). What was the quality of sound which became Aryan  $-\bar{a}$ - cannot now be seen. And as long as this remains dark, so long it will be unknown how the  $\bar{a}$ - and  $\bar{e}$ -  $(-\bar{o}$ -) formations were distributed in the parent language. No inference can be drawn from the different use in Latin of  $ag - \bar{a} - s$  and  $ag - \bar{e} - s$ .

Remark. From the form of the 1st sing. act. Ved.  $\acute{a}rc\bar{a}$  (3rd sing.  $\acute{a}rc-\bar{a}-t$ ) Avest.  $per^es-\bar{a}$  (3rd sing.  $per^es-\bar{a}-iti$ ) we may perhaps assume some direct connexion with the Greek formation ( $\varphi e_Q - w$  beside 3. sing.  $\varphi e_Q - \eta$ ); compare Lat. ag-a-m O.Ir. do-ber for \*ber- $\bar{a}-m$  O.C.Sl. bera for \*ber- $\bar{a}-m$ . The O.Lat. 1st sing. age may be for \*agō by qualitative assimilation with  $ag\bar{e}s$  etc.: \*agō beside  $er\bar{o}$  like Skr.  $\acute{a}rc\bar{a}$  beside  $br\acute{a}v\bar{a}$ .

Pr.Idg. Class II (§§ 513 ff.): Skr. bhár-ā-t(i), § 919. Gr.  $\varphi \not\in \varphi - \omega - \mu \in \nu$   $\varphi \not\in \varphi - \eta - \tau \in \mathcal{E}$ , Lat. (conj.)  $fer - \bar{a} - s$  (fut.)  $fer - \bar{e} - s$ , O.Ir. do-ber for \*ber-ā-m, beside indic. Skr. bhár-a-ti etc. from V bher- 'bear'; Skr. vid-ά-t(i) Gr. ἴδ-ω-μεν beside indic. Skr. a-vid-a-t 'found' Gr. ε/δ-ε iδ-ε 'saw' from Vueid-: Skr. bhuv- $-\bar{a}$ -ni Lat. fu- $\bar{a}$ -s Osc. fuid 'fuerit' (for \*fu- $\bar{e}$ -d) beside indic. Skr. á-bhuv-a-t Lat. (perf.) fu-i-t from  $\sqrt{bheu}$ - 'be, become'. Class IV (§§ 547 ff.): Gr.  $\gamma i - \gamma \nu - \eta - \tau \alpha \iota$  Lat.  $qi - qn - \bar{q} - s$   $qi - qn - \bar{e} - s$ beside indic. γί-γν-ε-ται gi-gn-i-t, Mid.Ir. gignid 'nascetur' groundform \*gi-gen-ā-ti (§ 544 p. 103) from √ ĝen- 'beget'. Class VI (§§ 561 ff.): Avest.  $ja-\gamma n-\bar{a}-p$  Gr.  $\pi \dot{\varepsilon}-q\nu-\omega-u\varepsilon\nu$  Mid.Ir. 1st pl. (fut.) gēnam for \*ge-gn-ā-m beside indic. ε-πε-φν-ε from  $\sqrt{ghen}$ -'strike, kill'; Avest. vaoc-ā-þ Gr. εἴπ-ω-μεν beside indic. Avest. vaoc-a-β Gr. ĕ-ειπ-ε Idg. \*(e-)μe-μq-e-t from √ μeq- 'speak'. Class XIII (§§ 607 ff.): Gr.  $\pi t^{\dagger} - \nu - \omega - \mu \varepsilon \nu$  from  $\pi t^{\dagger} - \nu \omega$  'drink'.

Lat. li-n-ā-s li-n-ē-s from indic. li-nō (cp. § 935). Class XVI (§ 627 ff.): Skr. sinc-å-s beside sinc-á-ti 'sprinkles' from √ seig-, Gr.  $\sigma \varphi i \gamma \gamma - \omega - \mu \varepsilon \nu$  from  $\sigma \varphi i \gamma \gamma - \omega$  'I tie, bind', Lat.  $j u n g - \bar{a} - s - \bar{e} - s$ from jung-ō. Class XVIII (§§ 648 ff.): Skr. inv-ā-t from *i-nva-ti* 'subdues, oppresses', O.Pers.  $k\bar{u}$ -nav- $\bar{a}$ -hy from a- $k\bar{u}$ --nav-a 'he made', Gr. Att. τίν-ω-μεν from τίνω 'I pay' for \* $\tau_{i}$ - $\nu F\omega$ , Lat. minu- $\bar{a}$ -s- $\bar{e}$ -s from mi-nu- $\bar{o}$ . Class XX (§§ 657 ff.): Avest. 3rd pl. baxš-å-nti from bax-ša-iti 'divides, receives as a share', Gr. αέξ-ω-μεν αὔξ-ω-μεν from αέκ-σω αὔκ-σω 'I increase',  $\tau \varrho \dot{\epsilon} - \omega - \mu \epsilon \nu$  from  $\tau \varrho - \dot{\epsilon}(\sigma) - \omega$  'I tremble, flee', Lat.  $v \bar{\imath} s - \bar{a} - s - \bar{e} - s$ from vīsō for \*vīt-sō. Class XXII (§§ 670 ff.): Skr. prch-ā-t Lat. posc-ā-s -ē-s beside pṛchá-ti posci-t from √ pṛck- 'ask, demand', Gr. φάσκ-ω-μεν from φά-σκω 'I inform, say' O.Ir. 1st pl. -nasc-a-m beside nascim 'bind' from \( \sqrt{nedh} \). Class XXIII (§ 678): Gr. διδάσχ-ω-μεν from δι-δά(χ)-σχιω 'I teach', Lat. disc-ā-s -ē-s from discō for \*di-tc-scō. Class XXIV (§§ 679 ff.): Gr. πέκτ-το-μεν from πέκ-τω 'I comb', Lat. pect-ā-s -ē-s from pec-tō. Class XXV (§§ 688 ff.): Gr.  $\pi \lambda \dot{\eta} \vartheta$ -ω-μεν from  $\pi \lambda \dot{\eta}$ - $\vartheta \omega$ 'I am full', ἔλδ-η-ται from ἔλ-δο-μαι 'I wish, desire', Lat. cūd-ā-s  $-\bar{e}$ -s from  $c\bar{u}$ - $d\bar{o}$ . Class XXVI (§§ 705 ff.): Skr. har-y- $\bar{a}$ -s Gr. χαίο-ω-μεν Osc. heriiad 'velit' beside Skr. hár-ya-ti χαίοω from V gher- 'take pleasure in'; Skr. pášy-ā-t(i) Lat. con- $-spici-\bar{a}-s$   $-\bar{e}-s$  beside  $p\acute{a}\dot{s}-ya-ti$   $-spic-i\bar{o}$  from  $\sqrt{spe\hat{k}}$ - 'see'; O.Ir. 3rd sing. do-lēcea beside -lēc-iu 'I let'. Class XXVII (§§ 728 ff.) Gr. γαργαίο-ω-μεν beside γαρ-γαίρω 'I swarm with', Lat, tin-tinni-ā-s -ē-s beside tin-tinn-iō. Class XXVIII (§§ 734 ff.): Skr. 2<sup>nd</sup> sing. mid. pyāyā-sē beside py-ā-ya-tē 'swells', Gr. ζώ-ω-μεν (Gort. 3rd pl. δώ-ω-ντι) beside ζ-ώ-ω 'I live'. Lat.  $-ple\bar{a}-s$  for  $*pl\bar{e}(\underline{i})-\bar{a}-s$  beside  $ple\bar{o}$  for  $*pl-\bar{e}-(\underline{i})\bar{o}$ ,  $vide\bar{a}-s$ for \*vidē(i)-ā-s beside videō for \*vid-ē-(i)ō (hiē-s for \*hiā(i)-ē-s? Class XXIX (§§ 742 ff.): Skr. beside  $hi\bar{o}$  for  $*hi-\bar{a}-(i)\bar{o}$ . prtan-y-ά-t from prtan-yá-ti 'fights', Gr. λαίν-ω-μεν from λαίνω for \*l(σ)ανμω 'I quicken, make alive'. Class XXX (§§ 766 ff.): Skr. apasy-ā-t from apas-yá-ti 'is active', vasūy-ā-t from vasū-yá-ti 'desires wealth', Gr. τεκταίν-ω-μεν from τεκταίνω 'I fashion' for \*τεκταν-μω, τιμά-ω-μεν τιμώμεν τιμά-η-τε τιμάτε 30\*

from  $v\bar{\iota}\mu\acute{a}-\omega$  'I honour',  $\varphi\iota\lambda\acute{\epsilon}-\omega-\mu\epsilon\nu$   $\varphi\iota\lambda\widetilde{\omega}\mu\epsilon\nu$   $\varphi\iota\lambda\acute{\epsilon}-\eta-\tau\epsilon$   $\varphi\iota\lambda\widetilde{\eta}\tau\epsilon$  from  $\varphi\iota\lambda\acute{\epsilon}-\omega$  'I treat as a friend', Lat.  $cust\bar{o}di$ - $\bar{a}$ -s- $\bar{e}$ -s from  $cust\bar{o}d$ - $i\bar{o}$ ,  $f\bar{\imath}ni$ - $\bar{a}$ -s- $\bar{e}$ -s from  $f\bar{\imath}ni$ - $\bar{o}$ , claude- $\bar{a}$ -s from claude- $\bar{o}$ , statu- $\bar{a}$ -s- $\bar{e}$ -s from statu- $\bar{o}$  ( $plant\bar{e}$ -s for \* $plant\bar{a}(i)$ - $\bar{e}$ -s? from  $plant\bar{o}$  for \* $plant\bar{a}$ - $(i)\bar{o}$ ). Class XXXII (§§ 788 ff.): Skr.  $y\bar{o}dh\acute{a}y$ - $\bar{a}$ -s Lat. jube- $\bar{a}$ -s from  $y\bar{o}dh\acute{a}y$ -a-ti 'involves in a fight' jube- $\bar{o}$  (§ 794 p. 329), Gr.  $\varphi o \varphi\acute{\epsilon}$ - $\omega$ - $\mu\epsilon\nu$   $\varphi o \varphi\check{\omega}\mu\epsilon\nu$  from  $\varphi o \varphi\acute{\epsilon}$ - $\omega$  'I wear'.

§ 920. In all the languages which have this Conjunctive, forms of the type are found in connexion with an unthematic Indicative; and it may be assumed that in the parent language itself both types of Conjunctive were sometimes used with the same verb, just as many verbs had thematic and unthematic inflexion in the Indicative and elsewhere. Skr. 3rd pl. ad-a-n Gr. ἔδ-ω-μεν Lat. ed-ā-s beside indic. Skr. át-ti Lat. ēst, cp. ind. Skr. ád-a-t (imper. 2nd sing. mid. ad-a-sva) Gr. šo-w Lat. ed-ō Goth. it-a from  $\sqrt{ed}$ - 'eat'. Skr. ás-ā-t 2nd pl. as-ā-tha Gr.  $\ddot{\varepsilon}$ -ω- $\mu$ εν beside Skr.  $\acute{a}$ s-ti Gr.  $\ddot{\varepsilon}$ σ- $\tau\iota$ , cp. Hom.  $\ddot{\varepsilon}$ -ο- $\nu$   $\ddot{\varepsilon}$ -ο- $\iota$   $\dot{\varepsilon}$ - $\dot{\omega}$ ν Lat. s-u-nt O.C.Sl. (O.Russ.) s-atī from V es- 'to be'. Skr. ay-ā-s ay-ā-t Lat. e-ā-s beside indic. é-ti i-t, cp. áy-a-tē Lat. e-ō e-u-nt from  $\sqrt{ei}$  'go'. For the long-vowel Conjunctive from the s-aorist, as Skr.  $m\acute{a}$ -s- $\bar{a}$ - $t\bar{a}i$  Gr.  $\delta\epsilon(\xi-\omega-\mu\epsilon\nu-\epsilon i\delta\xi-\omega-\mu\epsilon\nu$ Lat. es-s-ē-s ager-ē-s, thematic Indicatives like Skr. á-dik-š-a-t Gr.  $\xi$ -δει $\xi$ -ε  $\tilde{i}\xi$ -o- $\nu$  Lat.  $d\bar{\imath}x$ -i-t must be compared (§ 833) p. 369). So for Perfect forms like Skr. vā-vrdh-ā-ti Gr. λελήκη Osc. fefacid 'fecerit' we compare the thematic indic. Skr.  $\acute{a}$ -ca-kr-a-t Gr.  $\acute{\epsilon}$ - $\mu \acute{\epsilon}$ - $\mu \eta \varkappa$ -o- $\nu$   $\mu \acute{\epsilon}$ - $\mu \beta \lambda$ - $\epsilon$ - $\tau \alpha \iota$  Lat. te-tig-i-tvhe-vhak-e-d 'fecit' (§ 854 p. 403 § 865. 2 p. 413, § 866 p. 413 f., § 867. 5, 6, and 7 p. 414 f., §§ 872 f. pp. 420 ff.).

§ 921. Aryan. On the distribution of primary and secondary Personal endings see § 913 p. 462.

Further examples for the normal Conjunctive formation (cp. § 919). Skr.  $y\acute{a}j-\bar{a}-t\bar{e}$  Avest.  $yaz-\bar{a}-it\bar{e}$  beside  $y\acute{a}j-a-t\bar{e}$   $yaz-a-it\bar{e}$  'he honours with an offering'. Skr.  $bh\acute{a}v-\bar{a}-ti$  Avest.

 $2^{nd}$  sing. bav- $\bar{a}$  O.Pers. bav- $\bar{a}$ -tiy beside Skr.  $bh\acute{a}v$ -a-ti etc. 'becomes'. Avest.  $per^es$ - $\bar{a}$ -iti O.Pers. pars- $\bar{a}$ -tiy Skr.  $prch\acute{a}$ -t(i) beside Skr.  $prch\acute{a}$ -ti etc. 'asks'. Skr. many- $\bar{a}$ -t $\bar{e}$  Avest. many- $\bar{e}$ -it $\bar{e}$  O.Pers.  $2^{nd}$  sing. act. maniy- $\bar{a}$ -hy beside Skr.  $m\acute{a}n$ -ya-t $\bar{e}$  'thinks'. Skr.  $p\bar{a}r\acute{a}y$ - $\bar{a}$ -t(i) Avest.  $p\bar{a}ray$ - $\bar{a}$ -p beside Skr.  $p\bar{a}r\acute{a}ya$ -ti 'carries over'; O.Pers.  $2^{nd}$  sing. gauday- $\bar{a}$ -hy from gud- 'hide'.

Not uncommonly we find an a-Conjunctive to an unthematic Indicative (cp. § 920); here we must bear in mind that in Aryan the 1st persons of the Active and Middle were the same in the two Conjunctive series, 1st sing. act. Skr. -ā (-ā-ni) Avest. -a  $(-\bar{a}-ni)$  mid. Skr. and Avest.  $-\bar{a}i$ , 1st pl. Skr. act.  $-\bar{a}-ma$  mid. -ā-mahē (-ā-mahāi). (1) Present. Skr. ás-ā-t Avest. anh-ā--iti 2nd sing. anh-å beside Skr. ás-ti 'is', cp. O.Pers. 3rd sing. pret. aha i. e. āha, Skr. ay-ā-t Avest. ay-ā-b beside Skr. é-ti 'goes', cp. Skr. indic. áy-a-tē. Skr. 2nd pl. han-ā-tha Avest. jan-ā-b beside Skr. hán-ti 'strikes, kills', cp. indic. Skr. han-a-ti Avest. jan-a-iti. Skr. brav-ā-t Avest. 3rd pl. mid. mrav-ā-irē beside Skr. bráv-ī-mi Avest. mrao-mi 'I speak', cp. Avest. indic. mrav-a-itī. Skr. bi-bhar-ā-si beside bi-bhar-ti 'bears', cp. Avest. indic. bī-bar-ā-mi. Avest. 3rd sing. mid. vōi--vīd-ā-itē beside Skr. part. vē-vid-āna-s intens. of vid- 'find', cp. Avest. indic. naę-niż-a-iti (§ 570 p. 113). Skr. 3rd pl. yunaj--ā-n beside indic. yu-nák-ti 'yokes'. Skr. kr-náv-ā-t Avest. kerenavā-p O.Pers. 2nd sing. kūnavā-hy beside indic. Skr.  $kr-n\bar{o}-ti$  etc. 'makes', cp. indic. O.Pers.  $a-k\bar{u}-nav-at\bar{a}$  and the like, § 649 p. 185. (2) s-Aorist. Skr. 3rd sing. mid. mås-ā- $-t\bar{a}i$  beside indic. 1st sing. mid.  $\alpha$ -m $\bar{a}$ -s-i from  $m\bar{a}$ - 'measure', Avest. janh-ā-p beside conj. Gath. jēngh-a-itī from V gem-'go' (§ 814 p. 352), cp. the thematic Indicative Skr. á-dikṣ-a-t Avest. a-sas-a-p § 833 p. 369. (3) Perfect. Skr. vā-vydh--ā-ti beside indic. va-várdh-a from vardh- 'to grow', pa-prc-ā-si beside indic. 3rd pl. pa-prc-ur from parc- 'to mix', Avest. ånh-a-p beside indic. ånh-a from as- 'to be', cp. the thematic Ind. Skr.  $\acute{a}$ -ca-kr-a-t etc. § 854 p. 403.

§ 922. In Sanskrit an extra mark was added to the Middle of the  $\bar{a}$ -conjunctive; the final  $-\bar{e}$  of those persons that ended therewith was changed to  $-\bar{a}i$ , as  $-mah\bar{e}$  to  $-mah\bar{a}i$ . This came from the 1<sup>st</sup> sing., as  $bh\dot{a}r\bar{a}i$ , which was all that had it in pr. Idg. (§ 1042. 1).

First were formed 1st pl. bhárāmahāi 1st dual bhárāvahāi instead of \*bhárāmahē \*bhárāvahē, to distinguish conjunctive from indicative: so that bhárāmahāi answered to indic. bhárāmahē as bhárāi to indic. bhárē.

Next -mahāi and -vahāi took their place in other conjunctives which had no confusing indicative of the same form, both in  $\bar{a}$ - and a-conjunctives: e. g. aor.  $v\bar{o}c\bar{a}$ -vahāi beside indic. a- $v\bar{o}c\bar{a}$ -vahi ( $v\bar{o}c\bar{a}$ -vahi)  $3^{\rm rd}$  sing. a- $v\bar{o}c$ -a-ta from vac- 'to speak', pres.  $k_7m\acute{a}v$ - $\bar{a}$ -mahāi beside indic.  $k_7$ -mu-máhē. Amongst these we find also the older -mahē used, as in  $k\acute{a}r$ - $\bar{a}$ -mahē beside indic.  $\acute{a}$ - $k_7$ -ta from kar- 'to make',  $sani\S$ - $\bar{a}$ -mahē beside indic.  $\acute{a}$ -san- $i\S$ -ta from san- 'to get, gain'.

From the 1<sup>st</sup> pl. and dual  $-\bar{a}i$  next went on to the other persons of the  $\bar{a}$ -conjunctive:  $2^{\text{nd}} \sin g$ .  $-\bar{a}-s\bar{a}i$  beside  $-\bar{a}-s\bar{e}$ ,  $3^{\text{rd}} \sin g$ .  $-\bar{a}-t\bar{a}i$  beside  $-\bar{a}-t\bar{e}$ ,  $2^{\text{nd}} \text{ pl}$ .  $-\bar{a}-dhv\bar{a}i$  beside  $-\bar{a}-dhv\bar{e}$ ,  $3^{\text{rd}} \text{ pl}$ .  $-\bar{a}-nt\bar{a}i$ . In the Rig-Veda two such new forms, but only two, occur:  $yaj-\bar{a}-t\bar{a}i$  from yaj- 'to honour with an offering' and  $m\bar{a}day-\bar{a}-dhv\bar{a}i$  from mad- 'to enjoy'.

In the  $2^{nd}$  and  $3^{rd}$  dual the ending  $-\bar{a}i$  is not found. Here the endings were  $-\bar{a}ith\bar{e}$   $-\bar{a}it\bar{e}$ , in which  $-\bar{a}i$  on account of the  $2^{nd}$  dual  $tr\acute{a}s\bar{a}th\bar{e}$  (indic.  $\acute{a}-tr\bar{a}-s-ta$  from  $tr\bar{a}$  'to protect') must doubtless be regarded as also coming from the  $1^{st}$  sing. in  $-\bar{a}i$ : following  $bh\acute{a}r\bar{a}i$  beside indic.  $bh\acute{a}r\bar{e}$  were coined the conj.  $bh\acute{a}r\bar{a}ith\bar{e}$  and  $bh\acute{a}r\bar{a}it\bar{e}$  beside  $bh\acute{a}r\bar{e}th\bar{e}$  and  $bh\acute{a}r\bar{e}t\bar{e}$ . See Bartholomae, Kuhn's Zeitschr. xxvII 214 f.

Some few instances occur of a 3<sup>rd</sup> pl. in -antāi beside a thematic indicative; as vartantāi beside indic. várt-a-ntē 'vertuntur'. The origin of this form is clear: bhárāi bhárāvahāi are distinguisht from bhárē bhárāmahē bhárāvahē only by the ending, which suggested a symmetrical relation and caused -antāi to arise in place of -antē.

§ 923. Greek. Examples in § 919.

The Personal endings are nearly all primary. But in the  $3^{rd}$  singular many dialects (amongst others Arcadian and Cyprian) have  $-\eta$  for  $-\eta$ - $\tau$ , as  $\tilde{\epsilon}\chi\eta$ , instead of  $-\eta\iota$   $(-\eta)$ .

In the 3<sup>rd</sup> pl.  $\varphi \dot{\epsilon} \rho \omega \nu \tau \iota$  (Att.  $\varphi \dot{\epsilon} \rho \omega \sigma \iota$ )  $\varphi \dot{\epsilon} \rho \omega \tau \tau \iota$ ,  $\omega$  is not regular: there is the same analogical change as in  $\ddot{\alpha} \eta \nu \tau \alpha \iota$  instead of \* $\mathring{a} \dot{\epsilon} \nu \tau \alpha \iota$  cp. act.  $\ddot{\alpha} \dot{\epsilon} \iota \sigma \iota$  (I § 611 Rem. p. 462, IV § 582 p. 123).

In Attic the ending  $-\eta_S - \eta$  (§ 987.1, § 995) ran together with the indic.  $-\epsilon\iota_\zeta - \epsilon\iota$ , that is  $\varphi \dot{\epsilon} \varrho \eta_S$  and  $\varphi \dot{\epsilon} \varrho \epsilon\iota_\zeta$  had the same pronunciation; so too  $\varphi \iota \lambda \tilde{\eta}_S$  (for  $\varphi \iota \lambda \dot{\epsilon} \eta_S$ ) and  $\varphi \iota \lambda \epsilon \tilde{\iota}_S$  (for  $\varphi \iota \lambda \dot{\epsilon} \epsilon \epsilon_S$ ). And since after contraction  $\tau \bar{\iota} \mu \dot{\alpha} \eta_S \tau \bar{\iota} \mu \dot{\alpha} \eta$  became the same as  $\tau \bar{\iota} \mu \dot{\alpha} \epsilon_\iota \zeta \tau \bar{\iota} \mu \dot{\alpha} \epsilon_\iota$ , namely  $\tau \bar{\iota} \mu \tilde{q}_S$  and  $\tau \bar{\iota} \mu \tilde{q}_S$ , and since the 1st sing. in all verbs of this form was the same for both indic. and conj., —  $\varphi \dot{\epsilon} \varrho \omega \varphi \iota \lambda \tilde{\omega} \tau \bar{\iota} \mu \tilde{\omega} \varrho \omega \tilde{\omega} \tilde{\omega}$  — the result was that the indic.  $\mu \omega \sigma \vartheta o \tilde{\iota}_S \varepsilon \mu \omega \sigma \vartheta o \tilde{\iota}$  came to be used as conjunctive too.

It remains for the present a question whether the reverse be true, and the thematic conjunctive ever took the place of a long-vowel form; see § 914 Rem. 1 p. 464.

§ 924. Italic. The long-vowel Conjunctive drove out the Optative in thematic tenses (e. g.  $ag-\bar{a}-s$  is used as equivalent to both  $\check{a}\gamma\eta\varsigma$  and  $\check{a}\gamma o\iota\varsigma$ ), whilst in Germanic and Balto-Slavonic the Optative won the day (§ 910 p. 460). The short-vowel Conjunctive had a different fate. It remained only as the Future (§ 915 p. 465), and its conjunctive use (Wish, Deliberation, Doubt) passed either to the long-vowel series, for which see below, or to the Optative (as Lat.  $s-i\bar{e}-s$   $s-\bar{\epsilon}-s$  beside es-t).

The suffixes  $-\bar{a}$ - and  $-\bar{e}$ - are both found, and the personal endings are secondary: Lat. ag-a-m (like injunct. — pret. — -b-a-m),  $3^{rd}$  sing. Osc. pútíad fuid,  $3^{rd}$  pl. Osc. putíans herríns (but Osc. has also  $3^{rd}$  sing.  $tadait = *-\bar{a}(i)\bar{e}$ -ti, § 996).

On the spread of long-vowel forms in place of those with a short vowel, as in Lat.  $e-\bar{a}-s$   $es-s-\bar{e}-s$  Osc. fefacid, see § 920 p. 468.

§ 925. The  $\bar{a}$ -suffix appears in the Present only. To the forms cited in § 919 add the following. Lat. fu- $\bar{a}$ -s beside indic. fu-i-t. Lat.  $d\bar{\imath}c$ - $\bar{a}$ -s Osc. deicans 'dicant' beside indic. Lat.  $d\bar{\imath}c$ -i-t. Umbr. emantur 'emantur'. Lat. faci- $\bar{a}$ -s Umbr. fasia 'faciat' beside indic. fac- $i\bar{o}$ . Lat.  $f\bar{\imath}ni$ - $\bar{a}$ -s beside indic.  $f\bar{\imath}ni$ - $\bar{o}$  i. e.  $f\bar{\imath}ni$ - $i\bar{o}$ , claude-a-s beside indic. claude- $\bar{o}$  for \*claude- $i\bar{o}$ , claude- $i\bar{o}$ , claude- $i\bar{o}$ .

In Umbrian  $-i\bar{a}$ - spread from fasia and like forms to the  $\bar{a}$ -denominatives; hence kuraia 'curet' etaians 'itent'.

Lat.  $e-\bar{a}-s$  beside indic. i-t (like Skr.  $ay-\bar{a}-t$ ), whilst in the verbs est vult  $\bar{e}st$  the Optative ( $s-i\bar{e}-s$   $s-\bar{\imath}-s$ ,  $vel-\bar{\imath}-s$ ,  $ed-\bar{\imath}-s$  beside  $ed-\bar{a}-s$ ) added the conjunctive function to their own. The opt. of i-t may have been lost by the plural  $*i-\bar{\imath}-mos$  becoming  $*\bar{\imath}mos$ , and thus being identical with the indicative.

Remark. The only example of  $-\bar{a}$ - outside the Present would be Lat. dum-taxat, if Bréal be right in taking -taxat as the conj. of the s-aorist of  $tang\bar{o}$  (cp. opt. tax- $\bar{c}$ -s): 'done tetigerit, jusqu'à ce qu'il ait atteint', then 'jusqu'à (et non plus loin)' (Mém. Soc. Ling. v 35 f., Dict. étymol. p. 385). As in the whole area of Italic the s-aorist has only the  $\bar{c}$ -conjunctive (§ 926), it would be better to take -taxat as conj. of an indic. \* $tax\bar{o}$ , Class XX (§ 662 p. 197).

§ 926. The  $\bar{e}$ -suffix appears in all tense Stems.

(1) Present. Lat. (fut.) fer-ē-s capi-ē-s farci-ēs fīni-ē-s.¹) Umbr. heriiei 'velit' or 'volet' (cp. Osc. heriiad 'velit' § 919 p. 467).

The following may also be examples: Osc. deivaid 'iuret' for \*deivā( $\dot{i}$ )- $\bar{e}$ -t, tadait 'censeat' for \*tadā( $\dot{i}$ )- $\bar{e}$ -ti, sakahíter 'sacretur' for \*sakā( $\dot{i}$ )- $\bar{e}$ -ter; Lat.  $n\bar{e}s$  plantēs for \* $n\bar{a}(\dot{i})$ - $\bar{e}$ -s \*plantā( $\dot{i}$ )- $\bar{e}$ -s (indic. 1st sing.  $n\bar{o}$  plantō for \*- $\bar{a}$ -( $\dot{i}$ ) $\bar{o}$ ); similarly

<sup>1)</sup> These forms are wrongly explained in vol. I § 81 Rem. 3 p. 74 f.

stēs for \*stā( $\underline{i}$ )-ē-s (indic. 1st sing. stō for \*stā-( $\underline{i}$ )ō), by analogy of which would come  $d\bar{e}s$  (cp. § 946). The difference between plantēs and claudeās  $f\bar{\imath}ni\bar{a}s$  — the conj. suffix being in the one group  $\bar{e}$  and in the other  $\bar{a}$  — may be explained by remembering that \*plantā( $\underline{i}$ )-ā-s must become \*plantās, and a confusion with the indicative would result (compare § 930 sub fin.); the loss of \*claude( $\underline{i}$ )-ē-s (cp.  $f\bar{\imath}ni$ -ē-s plantēs), because it too would become \*claudēs like the indicative. But all these ē-forms may be optative: \*deivā- $\underline{i}$ ē-t \*plantā- $\underline{i}$ ē-s, \*da- $\underline{i}$ ē-s. If, as is possible, the origin of these forms is double, the intermingling of Conjunctive and Optative would be due to formal analogy as well as syntax. See § 946.

- (2) s-Aorist (cp. Skr.  $m\dot{a}$ -s- $\bar{a}$ -t $\bar{a}i$  Gr.  $\delta\varepsilon\dot{l}\xi$ - $\eta$ - $\tau\varepsilon$   $\epsilon\dot{l}\delta\dot{\epsilon}$ - $\eta$ - $\tau\varepsilon$  § 920 p. 468). Lat. es-s- $\bar{e}$ -s in-t $r\bar{a}$ -r- $\bar{e}$ -s im-pl $\bar{e}$ -r- $\bar{e}$ -s  $vid\bar{e}$ -r- $\bar{e}$ -s  $plant\bar{a}$ -r- $\bar{e}$ -s Osc. fusíd 'foret' Pelign. upsaseter 'operaretur' or 'operarentur' (§ 824 p. 362). Lat. ag-er- $\bar{e}$ -s  $gn\bar{o}sc$ -er- $\bar{e}$ -s, Umbr. ostensendi 'ostenderentur' for \*-tend-es- $\bar{e}$ -nt $\bar{e}$ r, Osc. herríns 'caperent' for \*her-es- $\bar{e}$ -nt (§ 837 p. 374). Lat.  $v\bar{u}d$ -is-s- $\bar{e}$ -s  $totondiss\bar{e}$ -s  $d\bar{v}xiss\bar{e}$ -s (§ 842 p. 381). Compare the short-vowel conjunctive-futures Lat. fax-i-tur  $v\bar{u}der$ -i-s Umbr. Osc. fust § 915 p. 465.
- (3) Perfect Forms (cp. Skr.  $v\bar{a}$ - $v_fdh$ - $\bar{a}$ -ti Gr.  $\lambda \varepsilon$ - $\lambda \eta \nu$ - $\eta$  § 920 p. 468) occur only in Umbro-Samnite, as in Latin the s-Aorist had intruded in place of the perfect forms. Osc. fefacid 'fecerit' hipid 'habuerit' fuid 'fuerit'; Osc. sakrafír 'sacraverint' Umbr. pihafei 'piaverint'; Osc. tríbarakattíns 'aedificaverint'. See §§ 872 f. pp. 420 f. Most of these forms may be regarded as belonging originally to a thematic aorist, as fuid to indic. Lat. fu-i-t = Skr. d-bhuv-a-t (see loc. cit.); if so they belong to (1).1)
- § 927. Keltic. For Irish examples see § 919. Only  $-\bar{a}$ -is proved as the Conjunctive suffix. Conjunct flexion, e. g. sing. do-ber, -berae -bere, -bera, pl. -beram -berid -berat based

<sup>1)</sup> In regarding the Umbro-Samnitic forms in this section as  $\mathfrak{F}$ -conj. I follow my pupil G. Bronisch. Meanwhile Bartholomae likewise explains sakahíter as a conj. like Gr.  $\delta\varrho\dot{\alpha}_{\gamma}$ - $\tau\alpha$ . (Stud. Idg. Spr., II 154, 185).

upon \*ber-ā-m -ā-si -ā-t, -ā-m- -ā-te -ā-nt(o); with primary endings, the "absolute"  $1^{st}$  sing. bera (certainly a new form),  $3^{rd}$  sing. berid, pl. bermme berthe berit. Similarly  $3^{rd}$  sing. dolēcea for \*leikyi-ā-t etc.

With the conj. -bera harmonised fully in inflexion -cara, beside indic. no charu for \*carā-iō, cp. Cymr. conj. 3<sup>rd</sup> sing. caro pl. carom caroch caront with o for ā. The conj. carā-may be for \*carā-jō, but may also be for orig. carā- (§ 930).

To the Present in -enim (Class XII, § 604 pp. 145 f.) the conjunctive was a series of forms without the nasal suffix. E. g. with crenim 'I buy' (from  $\sqrt{qrei}$ -) and benim 'I strike, cut' (beside O.C.Sl. bi-ti 'to strike') the conjunctives are  $3^{rd}$  sing. (ni-)cria for \*qrii-ā-t (cp. Gr.  $\pi ol-\omega-\mu au \pi ol-\eta-\tau au$ ) and (fom-)bia for \*bhii-ā-t. Compare Thurneysen in Kuhn's Zeitschr. XXXI 87 f. On the analogy of these, renim 'I sell' for \*pr-nā- $(\sqrt{per}$ -) had the conj. ni-ria made for it; levelling seems to have taken place between these two verbs in the indic. perfect too, though in the reverse direction (§ 878 p. 426 f.).

§ 928. Germanic. Only one form, and that very dubious; the 1st sing. bairau = O.Icel. bera beside the clear optatives Goth. bairāi-s bairāi etc.; this has hitherto been derived from \*berai-u Idg. \*bheroi-m (cp. I § 142 p. 126), which is called the "only tenable hypothesis" by Kluge, Paul's Grundr. I 381.1) According to Hirt (Idg. Forsch. I 206) the form comes from \*berō-m = Lat. feram, and -au must be pronounced -aú, that is as a single sound; similarly Goth. viljau O.H.G. wille would be derived from \*uel-i-ā-m, pr. Germ. \*uiliōn. Compare § 947.

§ 929. Slavonic.  $1^{st}$  sing. indic. bera for \*berām is a conj. form used as future, which displaced the old form in  $-\bar{o}$ 

<sup>1)</sup> I cannot agree to a recent criticism of this explanation, that it violates well establish laws of sound. i would drop between vowels in unaccented syllables, and u may have been contracted with the preceding a, before acc. \*frijond-u became frijond, if this form really so arose (see III § 219 p. 96). Others see the particle u in bairau (cp. Wiedemann, Lit. Prät. 159).

first in perfect verbs whose present served for the future. Compare § 955 on imperative pija-te and the like.

- II. CONJUNCTIVE WHERE THE INDICATIVE STEM ENDS IN A LONG-VOWEL.
- A. Indicative Stem ends in  $-\bar{a}$ ,  $-\bar{e}$   $\bar{o}$  without gradation.

§ 930. We have here the Conjunctive to our Present Classes X and XI (§§ 578 ff. pp. 118 ff.), that is, stems such as \*dr- $\bar{a}$ - 'to run' (Skr.  $dr\bar{a}$ -ti Gr.  $\dot{\epsilon}$ - $\delta\varrho\bar{a}$ - $\nu$ ), \*pl- $\bar{\epsilon}$ - 'fill' (Skr.  $\dot{a}$ - $pr\bar{a}$ -t Gr.  $\pi\lambda\tilde{\eta}$ - $\tau o$  Lat. im- $pl\bar{e}$ -s), \* $m\eta n$ - $\bar{e}$ - 'to think' (Gr.  $\dot{\epsilon}$ - $\mu\dot{a}\nu\eta$  Lith.  $min\dot{e}$ ), \*tak- $\bar{e}$ - 'to be silent' (Lat.  $tac\bar{e}$ -s O.H.G.  $dag\bar{e}$ -s), with which are grouped denominative stems without - $\dot{\varrho}o$ - like Lat.  $plant\bar{a}$ - ( $plant\bar{a}$ -mus) O.Ir.  $car\bar{a}$ - (no chara-m) Goth.  $salb\bar{o}$ -( $salb\bar{o}$ -m) Lith.  $j\dot{u}st\bar{o}$ - ( $j\dot{u}$ ' $st\bar{o}$ -me) Gr. Aeol.  $\tau\bar{\iota}\mu\bar{a}$ - ( $\tau\bar{\iota}\mu\bar{a}$ - $\mu\epsilon\nu$ ) (§ 769 pp. 283 ff.) and Perfects like Skr. ji- $jy\bar{a}\dot{u}$  Gr.  $\beta\epsilon$ - $\beta\dot{\iota}\eta$ - $\tau\alpha\iota$   $\beta\dot{\epsilon}$ - $\beta\lambda\eta$ - $\tau\alpha\iota$   $\tau\epsilon$ - $\tau\dot{\iota}\mu\bar{a}$ - $\tau\alpha\iota$  (§ 847 pp. 390 ff.).

The long vowels of these stems we have already identified with the conjunctive suffixes -a- and  $-\bar{e}$ -  $(-\bar{o}$ -), in § 578 p. 119 f. Thus the Conjunctive and Indicative had here originally the same stem.

In Aryan we get Injunctive forms with Conjunctive use; as Ved.  $pr-\dot{a}$ -s from  $pr-\ddot{a}$ - to fill. Forms with primary ending in conj. meaning do not occur, except  $pr\dot{a}$ -si 'let him fill', which however belongs to the group  $v\dot{e}$ - $\dot{s}i$   $k\dot{s}\dot{e}$ - $\dot{s}i$  etc. (§ 910 Rem. pp. 459 f.).

Greek. Messen.  $-\gamma \varrho \acute{\alpha} \varphi - \eta - \nu \tau \iota$  conj. of  $\dot{\epsilon} - \gamma \varrho \acute{\alpha} \varphi - \eta$  'it was written' 1st pl.  $\dot{\epsilon} - \gamma \varrho \acute{\alpha} \varphi - \eta - \mu \epsilon \nu$ ,  $-\sigma \kappa \epsilon \nu \acute{\alpha} \sigma \vartheta \eta - \nu \tau \iota$  beside  $\dot{\epsilon} - \sigma \kappa \nu \acute{\alpha} \sigma \vartheta \eta$  'was prepared'. Perf. Gortyn.  $\pi \dot{\epsilon} - \pi - \bar{\alpha} - \tau \alpha \iota$  beside indic.  $\pi \dot{\epsilon} - \pi - \bar{\alpha} - \tau \alpha \iota$  'he has gained, he possesses' from  $\dot{k} \psi - \bar{\alpha} - (\text{II § 117 p. 370 f.})$ , Ther.  $\pi \dot{\epsilon} - \pi \varrho - \bar{\alpha} - \tau \alpha \iota$  beside indic.  $\pi \dot{\epsilon} - \pi \varrho - \bar{\alpha} - \tau \alpha \iota$  'is sold', also conj. Heracl. ολκοδόμη-ται from ολκοδομέω 'I build', Gortyn.  $\dot{\epsilon} \sigma - \tau \epsilon \tau \dot{\epsilon} \kappa \nu \omega - \tau \alpha \iota$  beside (Att.)  $\dot{\epsilon} \kappa - \tau \epsilon \kappa \nu \nu \dot{\omega} \omega$  'I beget children'. For clearer distinction between conj. and indic. these forms followed the

analogy of our Ist conjunctive class: hence we have on the one hand forms with short conj. vowel, as Hom.  $\beta\lambda\dot{\eta}$ - $\epsilon$ - $\tau\alpha\iota$   $\tau\varrho\alpha\pi\dot{\eta}$ - $\sigma$ - $\iota\iota\epsilon\nu$   $\gamma\nu\dot{\omega}$ - $\sigma$ - $\iota\iota\epsilon\nu$   $\kappa\iota$ - $\chi\dot{\eta}$ - $\sigma$ - $\iota\iota\epsilon\nu$  (cp.  $\kappa\iota$ - $\chi$ - $\eta$ - $\iota\iota\iota$  § 594 p. 135), and on the other hand forms with long vowel, as Hom.  $\delta\alpha\mu\dot{\eta}$ - $\eta\varsigma$   $\gamma\nu\dot{\omega}$ - $\omega\sigma\iota$ , 1) contracted Att.  $\tau\varrho\alpha\eta\ddot{\eta}\varsigma$   $\tau\varrho\alpha\eta\ddot{\omega}\mu\epsilon\nu$   $\gamma\nu\ddot{\omega}\varsigma$   $\gamma\nu\ddot{\omega}\mu\epsilon\nu$ ,  $\mu\epsilon\mu\nu\ddot{\eta}\tau\alpha\iota$  Hom.  $\mu\epsilon\mu\nu\dot{\omega}\mu\epsilon\vartheta\alpha$ , Heracl.  $\epsilon\eta\iota$ - $\beta\ddot{\eta}$  for \*- $\beta\ddot{\alpha}\epsilon\iota$  or \*- $\beta\ddot{\alpha}\eta$ .

From Keltic we may cite the conj. of  $\bar{a}$ -verbs, as O.Ir. -cara for \*carā-t (cp. § 927 p. 474), and from Germanic the corresponding conjunctives, such as Goth. salbō  $-\bar{o}$ -s  $-\bar{o}$   $-\bar{o}$ -ma  $-\bar{o}$ - $\bar{p}$   $-\bar{o}$ -na O.H.G. salbo  $-\bar{o}$ -s  $-\bar{o}$   $-\bar{o}$ -m  $-\bar{o}$ -t  $-\bar{o}$ -n; also O.H.G. conj. habe  $-\bar{e}$ -s  $-\bar{e}$ -m  $-\bar{e}$ -t  $-\bar{e}$ -n beside indic. habēm  $-\bar{e}$ s etc., and Gr. conj.  $\gamma\rho\dot{\alpha}\varphi$ - $\gamma$ -vrai beside  $\dot{\epsilon}$ - $\gamma\rho\dot{\alpha}\varphi$ - $\gamma$ -uev. Similar Latin forms, \*plantā-m  $-\bar{a}$ -s etc., may have been the predecessors of plantem  $-\bar{e}$ s etc.; cp. § 926 p. 473.

# B. Indicative Stem has a Long Final Vowel, with Gradation.

§ 931. We have now to deal with the Conjunctive of Indicative Stems like  $*dh\bar{e}$ -  $*dh(\vartheta)$ - (Skr.  $\acute{a}$ - $dh\bar{a}$ -t  $\acute{a}$ -dhi-ta), \*dhi- $dh\bar{e}$ - \*dhi- $dh(\vartheta)$ - and \*dhe- $dh\bar{e}$ - \*dhe- $dh(\vartheta)$ - (Gr.  $\tau i$ - $\vartheta \eta$ - $\sigma i$   $\tau i$ - $\vartheta \varepsilon$ - $\tau \alpha i$   $\tau \dot{\varepsilon}$ - $\vartheta \varepsilon$ - $\tau \alpha i$ , Skr.  $d\acute{a}$ - $dh\bar{a}$ -ti da-dh- $m\acute{a}s$  da- $dh\bar{a}\acute{u}$  da-dh- $\acute{u}r$ ),  $*m_{7}$ - $n\ddot{a}$ -  $*m_{7}$ - $n(\vartheta)$ - (Skr.  $m_{7}$ - $n\acute{a}$ -ti  $m_{7}$ -n- $\acute{a}$ nti Gr.  $\mu \acute{a}_{9}$ - $\nu a$ - $\tau \alpha i$ ).

Two conjunctive types appear to be proethnic; one with the thematic vowel, which we may call the regular type, as Skr. da-dh-a- $t\bar{e}$  beside indic.  $d\acute{a}$ - $dh\ddot{a}$ -ti, and one with long

<sup>1)</sup> It is true there is nothing to prove that the forms Homer really used were not  $\delta \alpha \mu \dot{\eta} - \epsilon \iota \varsigma$   $\gamma \nu \dot{\omega} - o \nu \sigma \iota$ ; compare § 934, on conj. like  $\sigma \tau \dot{\eta} \eta \varepsilon$   $\sigma \tau \dot{\eta} \omega \sigma \iota$ . The absence of such forms as  $\delta \alpha \mu \dot{\eta} \omega \mu \iota \nu$   $\delta \alpha \mu \dot{\eta} \eta \tau \varepsilon$   $\sigma \tau \dot{\eta} \omega \mu \epsilon \nu$   $\sigma \tau \dot{\eta} \eta \tau \varepsilon$  in Homer is in favour of the short-vowel conjunctive.

<sup>2)</sup> But how are we to explain Goth. habau -ais -ai? That  $hab\bar{e}s$  in Gothic became habais ( $ai = long \ ai$ ) by simple action of regular change is to my mind as little proven as the identity of Goth. sijais and Lat.  $si\bar{e}s$ . The student may now refer to Streitberg, Zur Germ. Sprachgeschichte 73 f., who regards  $habais \ habai$  as optative with the suffix  $-i\bar{e}-$ .

vowel, as Skr.  $da-dh-\bar{a}-t\bar{a}i$ , Gr.  $\hat{\epsilon}\pi l-\sigma r-\omega-\mu\alpha\iota$   $\hat{\epsilon}\pi l-\sigma r-\eta-r\alpha\iota$  beside indic.  $\hat{\epsilon}\pi l-\sigma \tau\alpha-\tau\alpha\iota$ , Lat.  $si-st-\bar{a}-s$ . The latter are not independent of the fact that the Indicative so often has a thematic side by side with the unthematic series, thus Skr.  $da-dh-a-t\bar{e}$  beside indic.  $d\acute{a}-dh\bar{a}-ti$ ,  $da-dh-\bar{a}-t\bar{a}i$  beside indic.  $d\acute{a}-dh-a-ti$  (§ 562 p. 110 f.). Cp. conj. dy-a-t and  $ay-\bar{a}-t$  and the like (§ 920 p. 468).

§ 932. (1) Thematic Conjunctive Type.

Skr. da-dh-a-t 2<sup>nd</sup> dual  $d\acute{a}-dh-a-thas$  mid.  $da-dh-a-t\bar{e}$  beside indic.  $d\acute{a}-dh\bar{a}-ti$  'places'. 2<sup>nd</sup> dual mid.  $dh-\acute{e}th\bar{e}$  3<sup>rd</sup> sing. act.  $pr\acute{a}ti-dhat$  beside indic.  $\acute{a}-dh\bar{a}-t$ . mi-n-a-t beside indic.  $mi-n\acute{a}-ti$  'lessens, injures'. The forms with secondary personal ending, da-dh-a-t mi-n-a-t, may be regarded as injunctive to the thematic indic.  $d\acute{a}-dh-a-ti$   $\acute{a}-mi-n-a-nta$ ; -dh-a-t as injunctive is to be compared with  $\acute{a}da-t$  (§ 524 p. 88). Avest. 1<sup>st</sup> sing.  $x\check{s}t-\bar{a}$  (cp. indic. 3<sup>rd</sup> sing.  $paiti-\check{s}t\bar{a}-\bar{p}$  Skr.  $\acute{a}-sth\bar{a}-t$  from  $\checkmark$   $st\bar{a}$  'stare') may come in here as easily as under (2); cp. § 933.

Greek perhaps has specimens of this type of conjunctive in the imperative  $2^{nd}$  sing.  $\vartheta \acute{\epsilon} \varsigma$  (from  $\tau l \vartheta \eta \mu$ ) and  $\mathring{\epsilon} \varsigma$  ( $\mathring{\epsilon} \eta \mu \iota$ ). If so, their  $\varepsilon$  is not the same as  $\varepsilon$  in  $\mathring{\epsilon} - \vartheta \varepsilon - \mu \varepsilon \nu$ , which has displaced  $u = \text{Idg. } \vartheta$  (§ 493 p. 53); they would be on the same plane as  $\delta \chi - \acute{\epsilon} - \varsigma$ . On the model of  $\vartheta - \acute{\epsilon} - \varsigma$  (\*dh - e - s):  $\vartheta \acute{\epsilon} - \tau \varepsilon$  (Idg. \* $dh \vartheta - t e$ )  $\vartheta \acute{\epsilon} \varsigma$  beside  $\delta \acute{\epsilon} \tau \varepsilon$  would then be coined. Or are  $\vartheta \acute{\epsilon} \varsigma$   $\mathring{\epsilon} \varsigma$   $\delta \acute{\epsilon} \varsigma$  transformates of \* $\vartheta \widetilde{\eta} \varsigma$  \* $\mathring{\delta} \iota \widetilde{\zeta}$  (which would be injunctive like Skr.  $dh \acute{\epsilon} s$   $d \acute{a} s$ ) by levelling with  $\vartheta \acute{\epsilon} \tau \iota \iota$   $\vartheta \acute{\epsilon} \tau \varepsilon$  etc. (§ 909 p. 458).

§ 933. (2) Long-Vowel Conjunctive Type.

 beside indic.  $ger^ew$ - $n\bar{a}$ -iti 'grasps, comprehends', cp. indic. Skr. mg-n-a-ti (§ 598 p. 141, § 609 p. 149).

On the ending  $-\bar{a}$ - $t\bar{a}i$  see § 922 p. 470.

§ 934. Greek.  $\partial \pi' - \sigma \tau - \omega - \mu \alpha i \partial \pi' - \sigma \tau - \tau \alpha i$  beside indic.  $\partial \sigma' - \sigma \tau - \sigma \tau \alpha i$  'understands'.  $\partial \sigma' - \sigma - \sigma - \mu \alpha i$  beside indic.  $\partial \sigma' - \sigma - \sigma - \sigma \alpha i$  'can',  $\mu \alpha \rho - \nu - \omega' - \mu \epsilon \sigma \partial \alpha$  (Hesiod) beside indic.  $\mu \alpha \rho - \nu - \sigma - \tau \alpha i$  'fights', cp. opt.  $\mu \alpha \rho - \nu - \omega - \mu \alpha i$  (Od. 11. 513) and indic. like  $\pi \tau \alpha \rho - \nu - \mu \alpha i$  (§ 611 p. 149). Whether the Attic accent be  $\tau i \partial \sigma \mu \alpha i$  or  $\tau \iota \partial \sigma \mu \alpha i$  (for  $\tau \iota \partial \sigma \mu \alpha i$ ) cannot be decided; the grammarians contradict each other, and the MS. tradition is uncommonly inconsistent;  $\tau i - \partial - \omega - \mu \alpha i$   $\tau i - \partial - \eta - \tau \alpha i$  would answer to Skr.  $d\alpha - dh - \bar{\alpha} - t\bar{\alpha} i$ .

A second type is represented by forms like Messen.  $\tau i\vartheta \eta \nu \tau \iota$  beside  $\tau i\vartheta \eta \mu \iota$  T place, Arcad.  $\tilde{\iota} - \sigma \tau \bar{\alpha} - \tau \iota \iota$  Cret.  $\tilde{\iota}\vartheta \vartheta \bar{\alpha} \nu \tau \iota$  beside  $\tilde{\iota} - \sigma \tau \bar{\alpha} - \mu \iota$  T place, set up', Cret.  $\delta \dot{\nu} - \iota \bar{\alpha} - \mu \alpha \iota$  beside  $\delta \dot{\nu} - \nu \bar{\alpha} - \mu \alpha \iota$  it place, set up', Cret.  $\delta \dot{\nu} - \iota \bar{\alpha} - \mu \alpha \iota$  beside  $\delta \dot{\nu} - \nu \bar{\alpha} - \mu \alpha \iota$  it break, tear'. I assume that this type is due to imitation of such a conjunctive as  $-\gamma \rho \dot{\alpha} \varphi - \eta - \nu \tau \iota$  (§ 930 p. 475) — observe that in both series the optative formation had become the same in proethnic Greek, as  $\gamma \rho \alpha \varphi \epsilon i \eta \nu$  and  $\tau \iota \vartheta \epsilon i \eta \nu$ , see § 943; —  $\tau i \vartheta \eta \nu \iota \iota$ :  $\tau i \vartheta \eta \mu \iota$   $\epsilon \tau i \vartheta \eta \nu \iota$   $= \gamma \rho \dot{\alpha} \varphi \eta \nu \tau \iota$  :  $\epsilon \gamma \rho \dot{\alpha} \varphi \eta \nu$ ;  $\dot{\rho} \dot{\gamma} \gamma \nu \bar{\nu} \tau \alpha \iota$  like  $\dot{\nu} \mu \epsilon \nu \iota \iota \vartheta \eta \mu \iota$   $\epsilon \tau i \vartheta \eta \mu \iota$   $\epsilon \tau i \vartheta \eta \nu$   $= \gamma \rho \dot{\alpha} \varphi \eta \nu \tau \iota$  :  $\epsilon \dot{\gamma} \rho \dot{\alpha} \varphi \eta \nu$ ;  $\dot{\rho} \dot{\gamma} \dot{\gamma} \nu \bar{\nu} \tau \alpha \iota$  like  $\dot{\nu} \mu \epsilon \nu \iota \iota \vartheta \eta \mu \iota \iota$   $\epsilon \tau i \vartheta \eta \iota$  (II. 16. 243, from  $\dot{\epsilon} - \sigma \iota \eta - \nu$ ) like  $\pi \lambda \ddot{\eta} - \tau \iota$  drew near' (for  $*\pi \lambda \ddot{\alpha} - \tau \iota$ ). If Greek once had the conj.  $\bar{\alpha} - \sin f \dot{\alpha} \nu$ ,  $\bar{\imath} - \sigma \tau \bar{\alpha} - \tau \iota \iota$  might be compared with Lat.  $si - st - \bar{\alpha} - s$ .

<sup>1)</sup> The forms here treated have been wrongly explained in vol. I  $\S\S$  113 ff. pp. 106 ff.

Perhaps in Homeric times the forms used were στήεις στήσυσι φήεις. See p. 476 footnote 1.

Delph. δώ- $\eta$ , Boeot. καθ-ιστάει. Contracted Att. στῶ στῆς,  $i\sigma$ τῷ  $i\sigma$ τῆς, έστῷ  $i\sigma$ τῆς, έστῷ εστῆς, θῶ θῆς, δῷ δῆς.

The relation of  $\tau i \vartheta \eta \nu r \iota$  to indic.  $\tau i \vartheta \epsilon \nu \tau \iota$  produced in Messenian a conj.  $\tilde{\eta} \nu r \iota \iota$  'sint' beside indic.  $\tilde{\epsilon} \nu r \iota$ . With this must be grouped Hom.  $\mu \epsilon \tau - \epsilon \iota \omega$  (II. 23. 47), for which read  $\mu \epsilon \tau - \dot{\eta} \omega$  and place it parallel to  $\vartheta \dot{\eta} - \omega \dot{\epsilon} \varphi - \dot{\eta} \omega$ . Compare also § 502 p. 66 on  $\tilde{\epsilon} \mu \dot{\epsilon} \nu$  and  $\tilde{\epsilon} \mu \epsilon \nu$   $\tilde{\epsilon} \mu \epsilon r \omega$  and § 914 p. 463 on Hom.  $\tilde{t} o \mu \epsilon \nu$ .

§ 935. Italic. Lat. si-st- $\bar{a}$ -s cp. indic. si-st-i-t  $\sqrt{sta}$ -;  $ser\bar{a}s$  for \*si-s- $\bar{a}$ -s cp. indic. se-r-i-t  $\sqrt{s\bar{e}}$ -; red-d- $\bar{a}$ -s Osc. da-dad 'dedat' (da- prefix) cp. indic. Lat. red-d-i-t (the indic. forms  $d\bar{a}s$  dat may contain the same stem d- $\bar{a}$ - which with injunctive Flexion could also be indic. pres., cp. § 505 p. 71, § 909 p. 456 f.), Pelign. di-d-a 'det' Umbr. di-rs-a 'det' cp. indic. Vest. di-d-e-t 'dat'  $\sqrt{d\bar{o}}$ -. Compare § 493 p. 53, § 524 p. 88, § 550 p. 106, § 553 p. 107.

Lat.  $ster-n-\bar{a}-s$   $li-n-\bar{a}-s$  cp. indic. ster-n-i-t li-n-i-t. Compare § 603 p. 145.

§ 936. From Irish we may cite the Mid.Ir.  $2^{nd}$  sing. eba 'bibas', cp. indic. ibid for \*pi-b-e-ti  $\sqrt{p\bar{o}}$ -. Compare § 539 p. 100, § 554 p. 108.

§ 937. Germanic. In § 507 p. 74 it was pointed out as possible that O.Sax.  $d\bar{o}$ -m O.H.G. tuo-m 'I do' may represent the stem dh- $\bar{a}$ - of Lat.  $cond\bar{a}$ -s and be compared with Lat. indic. d- $\bar{a}$ -s (§ 935). The same stem as Conj. is seen in O.Sax. 1<sup>st</sup> 2<sup>nd</sup> and 3<sup>rd</sup> pl. dua-n O.H.G. 2<sup>nd</sup> pl. tuo-t 3<sup>rd</sup> pl. tuo-n.

#### OPTATIVE.1)

§ 938. The Optative of the Unthematic Indicative has for suffix in the Singular Active  $-i\bar{e}$ -  $-ii\bar{e}$ - (Strong form), in the Plural and Dual Active and in the Middle of all numbers  $-\bar{i}$ -

<sup>1)</sup> Th. Benfey, Über die Entstehung und die Formen des idg. Optativ (Potential) so wie über das Futurum auf sanskritisch syāmi u. s. w., Abhandl. der Gött. Gesellsch. d. Wiss. xvi 135 ff. J. Schmidt, Die

before consonants and -i--ii- before sonants (Weak forms). The Tense Stem had its Weak form. Thus from \*es-ti 'is': \*s- $i\bar{e}$ - \*s- $ii\bar{e}$ - 2nd sing. Skr. s-yá-s s-iyá-s O.Lat. s- $i\bar{e}$ -s, \*s-i-\*s-i- \*s-ii- 1st pl. Lat. s-i-mus 3nd pl. Skr. s-y-ir s-iy-ir O.Lat. s-i-ent. But the Optative of Thematic tense stems had in all persons of the Active and Middle -oi- before the personal ending; as \*bheroi- (Gr.  $\phi \acute{e} \rho oi$ -g  $\phi \acute{e} \rho oi$ -v) beside indic. \*bhere-ti 'bears' from  $\sqrt{bher}$ -. Probably -oi- is for -o-i- and this  $-\bar{i}$ - identical with that of \*s- $\bar{i}$ -; 2nd pl. \*bhero-i-i-te: \*s-i-te = loc. \*uoi/i0 (Gr. o/ixoi): \*i1 \*i2 \*i3 \*i3 \*i4 \*i5 \*i5 \*i6 \*i7. \*i1 \*i1 \*i2 \*i3 \*i5 \*i3 \*i4 \*i5 \*i5 \*i5 \*i5 \*i5 \*i5 \*i6 \*i7 \*i9 \*i1 \*i1 \*i1 \*i2 \*i1 \*i2 \*i3 \*i3 \*i4 \*i5 \*i5

The Personal endings of the Optative are Secondary. Compare  $\S$  942 Rem.

In Armenian and Irish 1) the Optative seems completely dead; in Italic the oi-type can no longer be traced. The commingling of optative and conjunctive has been described in § 910 p. 460.

### I. OPTATIVE WITH $-i\bar{e}$ - $-\bar{i}$ -.

§ 939. Pr.Idg.

Class I (§§ 492 ff.). \* $gm-i\bar{e}$ - \* $gm-\bar{i}$ - beside indic. \* $g\acute{e}m-ti$  'goes' (Skr.  $\acute{a}$ -gan): Skr.  $gam-y\acute{a}$ -t mid. 1\*t sing.  $gm-\bar{t}ya$ , A.S. cyme (Goth. \*tumjau). \*tumjau). \*tumjau0. \*tumjau1. \*tumjau2. \*tumjau3. \*tumjau3. \*tumjau4. \*tumjau6. \*tumjau9. \*

ursprüngl. Flexion des Optativs und der auf  $\bar{a}$  auslautenden Präsensstämme, Kuhn's Zeitschr. xxiv 303 ff.

G. H. Müller, De Graecorum modo optativo, Philologus XLIX 548 ff.
 Fr. A. Börsch, Hat die lat. Sprache einen Optativus? Marburg 1820.
 Loth, L'optatif, les temps secondaires dans les dialectes britanniques,
 Mém. Soc. Ling., v 133 ff.

F. Bech, Der umgelautete Conjunctivus praeteriti rückumlautender Zeitwörter, Germania xv 129 ff.

Miklosich, Imperativ [in Old Slovenian], Sitzungsber. d. Wien. Akad. LXXXI 132 ff. Oblak, Ein Beitrag zum slavischen Imperativ, Archiv slav. Phil. x 143 ff.

<sup>1) &</sup>quot;What the British conjunctive, in which i seems to be mixt up with  $\bar{o}$  (for  $\bar{a}$ ), really is, has not yet been made out. It may be partly derived from an optative of the s-aorist." (Thurneysen.) Compare also Loth, Mém. Soc. Ling. v 133 ff.

1st pl. Skr.  $\acute{a}$ - $bh\bar{u}$ -ma Gr.  $\acute{e}$ - $\varphi\bar{v}$ - $\mu\bar{e}\nu$  from  $\surd$   $bhe\bar{u}$ - 'be, become': Skr.  $bh\bar{u}$ - $y\acute{a}$ -t O.Pers. b- $iy\bar{a}$ , Gr. Cypr.  $\varphi\acute{v}_{L}\eta$ , 1st pl. Avest.  $buyam\bar{a}$  i. e.  $bviyam\bar{a}$  for \*bhu-ii- $\eta m$ - (§ 942). \*uid- $i\bar{e}$ -\*uid- $i\bar{e}$ - beside Skr.  $v\acute{e}d$ -mi from  $\surd$  ueid- 'see, know' (see § 493 p. 52): Skr. vid- $y\acute{a}$ -t Goth. 1st pl. vit-ei-ma. \*s- $(i)i\bar{e}$ -\*s-i-: Skr. s- $y\acute{a}$ -t s- $iy\acute{a}$ -t, O.Lat. s-ie-t 1st pl. O.Lat. and class. s- $\bar{e}$ -mus, O.H.G. 1st pl. s- $\bar{i}$ -m. \*d- $(i)i\bar{e}$ -\*d- $\bar{i}$ - beside Skr.  $\acute{a}d$ -mi 'esse': Skr. ad- $y\acute{a}$ -t Lat. ed- $\bar{i}$ -mus O.C.Sl. jad-i- $m\breve{u}$ ; in all three branches a strong root-form has taken the place of the weak.

Indicatives like \*é-dhē-t 'he placed' had two optative types, one having the "unaccented weak grade" of root (dh-) and the other the "weak grade with secondary accent" (dha-); compare the two forms of the root in Skr. d-ya-ti and  $da-ya-t\bar{e}$ , and the like (§ 707 p. 238). (1) \*dh-jē- \*dh-ī-: Avest. d-yā-þ Osc. da-did 'dedat' (-ī- from the plural), cp. redupl. Avest. daidyā-p mid. daidī-tā. (2) \*dhə-iē- \*dhə-i- (cp. \*bheroi- and Skr. superl. sthéštha-s 'the steadiest, most stable' for \*stə-is-to- II § 81 p. 244). Gr. pl.  $\vartheta \varepsilon \tilde{\imath} - \mu \varepsilon \nu$  do  $\tilde{\imath} - \mu \varepsilon \nu$  or a  $\tilde{\imath} - \mu \varepsilon \nu$  ( $\vartheta \varepsilon - \delta o - instead$  of and  $9\alpha$ - \* $\delta\alpha$ -, see § 493 p. 53), beside which we have  $9\epsilon i\eta\nu$ δοίην σταίην instead of \* $\vartheta \varepsilon_{-k} \eta_{-\nu}$  etc., like  $\vartheta^{\rm rd}$  pl.  $\varphi \varepsilon_{00} \varepsilon_{\nu}$  -οίατο instead of \*- $o(\ell)$ \varepsilon\nu - $o(\ell)$ \alpha\tau o following  $\varphi$ \varepsilon\rho(\mu)\varepsilon\nu etc. Skr. pl. \*dhēma 1) \*dēma \*sthēma (cp. precative dē-ṣ-ma § 942), whence sing.  $dh\bar{e}y\bar{a}$ -t  $d\bar{e}y\bar{a}$ -t sth $\bar{e}y\bar{a}$ -t instead of \*dha- $y\bar{a}$ -t etc. (cp. bhárēyam following bhárē-ma instead of \*bharāy-am § 951, and compar. sthéyas- following superl. sthéštha-s instead of \*sthā-yas- II § 81 p. 244), and hence again by further analogy pl. dhēyāma dēyāma sthēyāma like syá-ma following syá-t and like Gr. θείημεν following θείην (§ 945); the root syllable in

<sup>1)</sup> The  $2^{nd}$  pl. Ved.  $dh\bar{e}tana$ , R.V. VIII. 56. 5, x. 37. 12 (-tana as often instead of -ta, see § 1010), probably does not belong to this place; it is either a thematic form like Avest.  $2^{nd}$  sing.  $d\bar{o}i$ - $\check{s}$  Gr.  $\check{\epsilon}nt$ - $\mathfrak{I}ot$ 00  $-\mathfrak{I}ot$ 00  $\mathfrak{I}ot$ 00 or a new form coined beside  $dh\bar{e}hi$ 00 on the analogy of attana00 atta00 beside addhi1, itana1:14 beside i-i1,  $y\bar{a}tana$ 2  $y\bar{a}ta$ 4 beside  $y\bar{a}hi$ 1, and the like. The latter view is supported by Pali pres.  $dh\bar{e}mi$ 1  $dh\bar{e}si$ 2 etc. and  $d\bar{e}mi$ 1  $d\bar{e}si$ 2 etc., which undoubtedly are new formates complementary to the imperative  $dh\bar{e}hi$ 1 and  $d\bar{e}hi$ 1.

the presumptive form \* $dh\bar{e}$ -ma stands to that of 3<sup>rd</sup> sing. mid. da-dh- $\bar{i}$ - $t\acute{a}$  just as the indic. 3<sup>rd</sup> sing. mid. pret.  $\acute{a}$ -dhi-ta to the 3<sup>rd</sup> sing. mid. pres. dha-t- $t\acute{e}$ . It is uncertain whether Lat.  $d\bar{e}s$  comes from \*da- $(i)\bar{e}$ -s (§ 946), and whether O.H.G. 1<sup>st</sup> pl.  $st\bar{e}n$  is to be equated with Gr.  $\sigma\tau a\tilde{\iota}_{\mu\varepsilon\nu}$  (§ 947).

Remark. Others assume that Skr.  $dh\bar{e}y\bar{a}$ -t Gr.  $3ei\eta$  come from \* $dh\partial$ - $i\dot{e}\bar{c}$ -t. With this view, attractive enough at first sight, I cannot agree. The explanation, now put forward again by Jellinek (Beitr. zur Erklärung der germ. Flexion, p. 95), that  $bh\dot{a}r\bar{e}yam$  comes from Idg. \*bhero- $i\dot{z}$ -m, is proved by the evidence of Iranian to be wrong.

Class III (§§ 536 ff.). Skr.  $da-dh-y\hat{a}-t$   $da-d-y\hat{a}-t$  mid.  $da-dh-\bar{\imath}-t\hat{a}$   $da-d-\bar{\imath}-t\hat{a}$ , O.Sax. pl.  $ded-\bar{\imath}-n$  'we did' (beside  $d\bar{a}d-\bar{\imath}-n$ ), unless this form is to be put with the perfect (§ 886 p. 433), O.C.Sl.  $da-d-i-m\check{u}$  da-d-i-te (indic.  $da-d-et\check{u}$  'dant'); Gr.  $\tau_{i}-\vartheta_{\epsilon}-\bar{\imath}-\mu_{\epsilon}\nu$   $\delta_{i}-\delta_{i}-\bar{\imath}-\mu_{\epsilon}\nu$   $i-\sigma\tau a-\bar{\imath}-\mu_{\epsilon}\nu$  like  $\vartheta_{\epsilon}-\bar{\imath}-\mu_{\epsilon}\nu$  etc., see above Skr.  $bi-bhi-y\bar{a}-t$   $bi-bh\bar{\imath}-y-\hat{a}t$  beside  $bi-bh\acute{e}-ti$  'fears',  $bi-bh\gamma-y\bar{a}-t$  beside bi-bhar-ti 'bears'.

Class VII (§§ 567 f.). Skr.  $v\bar{e}$ -vi§- $y\bar{a}$ -t beside indic. v€- $v\bar{e}$ §-ti 'works, is active'.

Class XII (§§ 597 ff.). Skr.  $3^{rd}$  sing. mid.  $\frac{\dot{s}_{r}}{r}-\bar{\tau}-t\dot{a}$  beside  $\frac{\dot{s}_{r}}{r}-n\dot{a}-ti$  'shatters'. Gr.  $\frac{\dot{s}_{v}}{r}-n\bar{\tau}-t\dot{a}$  (beside  $\frac{\dot{s}_{v}}{r}-\tau -\tau a$  'is able') for \* $\frac{\dot{s}_{v}}{du}-n\bar{\tau}-\frac{\dot{s}_{v}}{r}-t$  stands to Skr.  $\frac{\dot{s}_{v}}{r}-\bar{\tau}-t\dot{a}$  as  $\tau \cdot \theta \cdot \bar{\epsilon} \bar{\tau} \tau = 0$  (on the accent see § 944) to  $\frac{dadh}{t}\dot{t}\dot{a}$ .

Class XV (§§ 625 f.). Skr.  $yu\bar{n}j$ - $y\acute{a}$ -t mid.  $yu\bar{n}j$ - $\bar{\imath}$ - $t\acute{a}$  beside  $yun\acute{a}k$ -ti 'yokes'.

Class XVII (§§ 638 ff.). Skr.  $\gamma$ -nu- $y\acute{a}$ -t mid.  $\gamma$ -nv- $\bar{\imath}$ - $t\acute{a}$  beside  $\gamma$ - $n\acute{o}$ - $t\acute{\imath}$  'excites, sets a-going', mid.  $a\acute{s}$ -nuv- $\bar{\imath}$ - $t\acute{a}$  beside  $a\acute{s}$ - $n\acute{o}$ - $t\acute{\imath}$  'attains'. Hom.  $\delta \alpha \iota v \bar{\nu} \tau \sigma$  for \* $\delta \alpha \iota$ -vv- $\iota$ - $\iota$ - $\tau$  beside  $\delta \alpha \acute{\iota}$ -vv- $\tau \alpha \iota$  'eats',  $3^{rd}$  pl.  $\delta \alpha \iota v \acute{\nu} \alpha \tau \sigma$  for -vv- $\iota$ - $\iota$ - $\iota$ - $\iota$  (§ 944). Goth. kunneima for \*kun-nv- $\bar{\imath}$ - Idg. \* $g\acute{\gamma}$ -nu- $\bar{\imath}$ - beside kun-nu-m 'we learn, know'.

Class XIX (§ 656). Skr. dviš-yā-t beside dvē-š-ti 'hates'.

s-Aorist (§§ 811 ff.). Skr. mid.  $dik \c = \bar{\imath} - ta$  beside 1st sing.  $\c a - dik - \c s - i$ , Lat.  $\c d\bar{\imath}x - \bar{\imath} - mus$  beside  $\c d\bar{\imath}x - \bar{\imath}$ ,  $\c deik - \c s$  how'; Skr. mid.  $\c ma - s - \bar{\imath} - ta$  Idg. \* $\c mn - s - \bar{\imath} - ta$ ,  $\c mn - \c s - i$  hink'; O.H.G.  $\c wiss - \bar{\imath} - m\bar{e}s$  'we knew' must be named here, if  $\c wiss un$  'they knew' is to be compared with Gr.  $\c i \sigma a \nu$  (§ 827 p. 365).  $\c es - A$  orist: Gr.  $\c s \cdot i \delta \in \bar{\imath} u \in \nu$  'we should like to know' for \* $\c f \in \bar{\imath} - \iota u \in \nu$  (cp. Lat.  $\c v \bar{\imath} - e - e - \iota u \in \nu$ ),  $\c \delta \in \bar{\imath} \in \bar{\imath} = \bar{\imath} - mus$  for  $\c - \sigma - \varepsilon \sigma - \iota - a \nu$  or  $\c - \sigma - \varepsilon \sigma - \iota - a \nu$  see § 944.  $\c s - A$  orist: Skr. 1st pl. mid.  $\c j a n - i \bar{\imath} - \bar{\imath} - mah i$  beside indic.  $\c a - j a n - i \bar{\imath} - ta$  from  $\c j a n - i \bar{\imath} - \bar{\imath} - mah i$  from  $\c p y \bar{a} - s - i \bar{\imath} - \bar{\imath} - mah i$  from  $\c p y \bar{a} - \bar{\imath} - \bar{\imath} - mus$  for \* $\c u \in \bar{\imath} - \bar{\imath}$ 

Perfect (§§ 843 ff.). \*ue-urt-iē- -ī- from vuert- 'vertere': Skr. va-vrt-yā-t 1st pl. mid. va-vrt-ī-mahi, Goth. vaurp-ei-ma (instead of reg. \*vaurdeima) O.H.G. wurt-ī-mēs. \*se-zd-(i)iē- -ī- from v sed- 'sedere': Skr. sēd-yā-t Avest. hazd-yā-p, cp. Goth. sēt-ei-ma. Skr. 3rd sing. mid. tś-ī-ta Goth. 1st pl. áig-ei-ma beside indic. tś-ē áih 'has something in his power' (§ 848 p. 391).

Often both types,  $-i\bar{e}$ - and -oi-, occur together, just as in the Indicative thematic and unthematic forms are found side by side, and as in the Conjunctive we see both long-vowel type and thematic. Examples are: Gr.  $\check{\epsilon}o\iota$  Lith.  $tes\check{e}$  beside  $\epsilon\iota\iota\iota\iota$  es-m 'I am', Avest. d- $\bar{o}i$ - $\check{s}$  Gr.  $\dot{\epsilon}n\iota$ - $\theta$ - $o\iota\tau$ 0 beside indic.  $d\bar{a}$ -p  $\check{\epsilon}$ - $\theta$ - $\epsilon$ - $\tau$ 0 from  $\sqrt{dh}\check{e}$ - 'place', Pruss. dais 'give' from  $\sqrt{d}\bar{o}$ -, Gr.  $\iota\iota\iota$ 0 beside  $\iota\iota$ 1 have experienced'.

§ 940. Aryan. In Sanskrit, the  $-y\bar{a}$ - of the sing. active is invariable for active plural and dual forms that have a personal ending with initial consonant; as  $s-y\acute{a}-ta$  instead of \* $s-\bar{t}-ta$  (Lat.  $s-\bar{t}-ts$ ),  $j\bar{n}\bar{a}-y\bar{a}-ta$  instead of \* $j\bar{n}\bar{a}i-ta$  (Gr.  $\gamma ro\tilde{\iota}-\tau\varepsilon$ ); in the Middle it is invariably absent. The same relation may be seen in Indicative stems like  $dh\bar{a}$ - (Idg. \* $dh\bar{e}$ -): as  $va-vyt-y\bar{a}-t$   $va-vyt-y\bar{a}-ta$  mid.  $va-vyt-\bar{\iota}-ta$ , so  $\acute{a}-d\bar{a}-t$   $\acute{a}-d\bar{a}-ta$  mid.  $\acute{a}-di-ta$  (§ 495 p. 55). In Avestic  $-y\bar{a}$ - preponderates for the plural active, as Gath.  $\acute{x}y\bar{a}-t\bar{a}$  = Skr.  $sy\acute{a}-ta$ ; but  $-\bar{\iota}$ - seems to occur, as in  $srv\bar{\imath}m\bar{a}$  i. e.  $sruv-\bar{\imath}-m\bar{a}$  beside imper.  $srao-t\bar{\imath}u$  = Skr.  $\acute{s}r\acute{o}-tu$  from  $\sqrt{kleu}$ - 'hear'.

Instead of the Skr. ending  $-\bar{\imath}ya$  of the 1st sing., as  $va-vyt-\bar{\imath}y-a$ , we should expect -ya or -iya following the -y-ur -iy-ur of the 3rd pl. active; indeed, the MS.  $\bar{\imath}$  of the Veda must often be read short for metrical reasons, as in  $i\bar{s}\bar{\imath}ya$  and  $r\bar{a}s\bar{\imath}ya$  Rig.-V. vii. 32. 18, and Avestic regularly has tanuya i. e. tanv-iy-a (Bartholomae, Handb. § 91 b p. 40). This  $-\bar{\imath}$ - came from the other middle forms; similarly we have  $bh\dot{a}r\bar{e}yam$  following  $bh\dot{a}r\bar{e}-\bar{s}$  etc., instead of \*bharay-am or \*bharāy-am (§ 951).

More examples to add to those given in § 939:

Class I. Skr.  $kr-iy\bar{a}-t$  beside  $\acute{a}-kar$  'he made',  $d\bar{i}r-y\bar{a}-t$ =  $*d\bar{r}$ - $i\bar{e}$ -t beside  $\acute{a}$ -dar 'he split, burst' (cp. below, Class VII Avest,  $dar^e$ -dairy $\bar{a}$ - $\bar{b}$ ), mid. vur- $\bar{i}$ -ta beside  $\acute{a}$ -vr-ta 'he chose'. Avest.  $jam-y\bar{a}-\bar{p}$  O.Pers.  $jam-\bar{\imath}y\bar{a}$  with jam- instead of gam-, which is preserved in Skr. gam-ya-t (mid. gm-īya) (I § 451 Rem. p. 334), cp. § 939 p. 480. Skr. han-yā-t Avest. jan-yā-p O.Pers. jan-iyā beside Skr. hán-ti 'strikes, kills' from \( \text{ghen-}; \) pr.Ar. \*jhan-jā-t instead of \*ghan- = \*gha-, with which we have the reg. mid. Skr. ghn-ī-ta Avest. yn-i-ta, but in Skr. following the active also han-ī-ta (I § 454 Rem. p. 335, II § 498 p. 57 f.). Skr. stu-yā-t mid. stuv-ī-tá Avest. stu-yā-þ beside indic. Skr. stāu-ti (stu-mási) Avest. stao-iti 'he praises'. Skr.  $i-y\bar{a}-t$  beside  $\dot{e}-ti$  'goes'. Skr.  $vxj-y\bar{a}-t$  beside  $\dot{a}-vark$  'he twisted together' (pres. vrnák-ti). Skr. uś-yá-t Avest. us-yā-b beside Skr. váš-ti Avest. vas-tī 'wishes' (uš-mási us-mahī). On Skr.  $d\bar{e}y\bar{a}$ -t Avest. d- $y\bar{a}$ -p and the like, see § 939 p. 481; on Avest. 2nd sing. da-yå, below, Class X.

Skr.  $br\bar{u}$ - $y\bar{a}$ -t mid. bruv- $\bar{\imath}$ - $t\acute{u}$  (Avest. mru- $y\bar{a}$ - $\not{p}$ ) beside  $br\acute{a}v$ - $\bar{\imath}$ -ti 'he speaks' Class IX (§ 574 p. 116).

Class III. Skr.  $ju\text{-}hu\text{-}y\acute{a}\text{-}t$  mid.  $1^{\text{st}}$  pl.  $j\acute{u}\text{-}hv\text{-}\bar{\imath}\text{-}mahi$  beside  $ju\text{-}h\acute{o}\text{-}ti$  'offers'. Avest.  $daidy\bar{a}\text{-}\rlap{p}$   $dai\rlap{p}y\bar{a}\text{-}\rlap{p}$  mid.  $daid\bar{\imath}\text{-}t\bar{a}$   $dai\rlap{p}\bar{\imath}\text{-}ta$  like Skr.  $da\text{-}dh\text{-}y\acute{a}\text{-}t$   $da\text{-}d\text{-}y\acute{a}\text{-}t$   $da\text{-}dh\text{-}\bar{\imath}\text{-}t\acute{a}$   $da\text{-}d\text{-}\bar{\imath}\text{-}t\acute{a}$ , § 939 p. 481.

Class VII. Avest. dar dairyā-p beside indic. Skr.

<sup>1)</sup> On the active singular forms with  $-\bar{\imath}$ , like  $s\bar{a}h\bar{\imath}b$ , which used to be wrongly taken as optative, see Bartholomae, Stud. Idg. Sprachg. II 157, 169.

 $d\acute{a}r$ -dar-ti intens. of dar- 'to split'; the ground-form may be \*- $d\bar{r}$ - $i\bar{e}$ -t, see § 568 p. 112.

Class X. Skr.  $y\bar{a}-y\bar{a}-t$  beside  $y-\hat{a}-t$  'goes'. Avest.  $p\bar{a}-y\bar{a}-p$  from  $p\bar{a}$ - 'protect' (§ 588 p. 129). The forms Skr.  $mn\bar{e}y\bar{a}-t$   $j\bar{n}\bar{e}y\hat{a}-t$  beside the regular  $mn\bar{a}-y\bar{a}-t$   $j\bar{n}\bar{a}-y\bar{a}-t$  (§ 939 p. 482) are adformates of such as  $dh\bar{e}y\bar{a}-t$   $sth\bar{e}y\bar{a}-t$  (Class I), just as Skr.  $jy\bar{e}\bar{s}tha-s$  'the mightiest' beside comp.  $jy\bar{a}-yas$ - is an adformate of  $sth\bar{e}\bar{s}tha-s$  (II § 81 p. 244); compare the precative  $j\bar{n}\bar{e}\bar{s}am$ , § 942. Levelling in the reverse direction is shown by Avest.  $d\bar{a}-y\bar{a}-\bar{p}$  beside  $d-y\bar{a}-\bar{p}$ .

Class XII. Skr. mid.  $pr-n-\bar{\imath}-t\acute{a}$  beside  $pr-n\acute{a}-ti$  'fills'; act.  $pr-n\bar{\imath}-y\acute{a}-t$  with the same  $-\bar{\imath}-$  as indic.  $pr-n\bar{\imath}-m\acute{a}s$ , see § 597 p. 141.

Class XV. Skr. rundh-yá-t mid. rundh-ī-tá beside runádh-mi 'I hold back, stay'. Avest. meraš-yā-þ, see § 626 p. 162.

Class XVII. Skr. kr-nu- $y\acute{a}$ -t mid. kr-nv- $\bar{\imath}$ - $t\acute{a}$  Avest.  $ker^e$ -nu- $y\~{a}$ -p beside kr- $n\acute{o}$ -ti  $ker^e$ -nao-iti 'makes, does'. Skr.  $a\acute{s}$ -nu- $y\~{a}$ -t  $a\acute{s}$ -nuv- $\bar{\imath}$ - $t\acute{a}$  Avest.  $a\acute{s}$ -nu- $y\~{a}$ -p beside  $a\acute{s}$ - $n\acute{o}$ -ti  $a\acute{s}$ -nao-iti 'attains'. Avest.  $1^{st}$  sing. mid. tanuya i. e. tanv-iy-a (beside Skr. tanviy-a), see p. 484.

Perfect. Skr. ja-gam-yā-t Avest. jaymyam i. e. ja-ym-iyam beside indic. Skr. ja-gám-a from V gem- 'go'. Skr. ri-ric-yā-t beside ri-rēc-a from ric- 'let loose'. Avest. va on yā-p beside

indic. 3<sup>rd</sup> pl. vaon-ar<sup>e</sup> from van- 'to gain', O.Pers. 3<sup>rd</sup> sing. ca-xr-iyā from kar- 'to make'.

§ 941. According to Bartholomae, Avestic has in the 1st pl. active forms with -ama for -nme: jam-y-ama (the 3rd sing. is jam-yā-þ, § 940 p. 484), buyamā i. e. bv-iy-amā (cp. tanuya § 940 p. 434) beside O.Pers. biyā for \*b(v)-iyā-t (Avest. 2nd sing. buyā 3rd sing. buyā-þ may also be derived from bv-iyā-, because of the Avestic mode of spelling). Following buyama we have 2nd pl. buya-ta: perhaps 2nd pl. dāya-ta springs from 3rd sing. dāyā-þ in the same way. A similar explanation is given of Skr. duhīyá-t beside 3rd pl. duhīyán; perhaps the ī of this 3rd pl. may be accepted as evidence that -ī-ma and -ī-ta once existed in the Sanskrit language (cp. middle -īy-a following -ī-thās etc.). See Benfey, Abh. Gött. Gesellsch. Wiss. Xvi 182 f., 197; J. Schmidt, Kuhn's Zeitschr. XXIV 318; Bartholomae, ibid. XXIX 274 f.

§ 942. The "Precative", as it is called, is a mood peculiar to Sanskrit. This is a optative with -s- between mood-suffix and personal ending; 1) in the middle, the 1st persons and the 3rd pl. could not take this form. Examples are act. sing. 1st  $bh\bar{u}$ -yá-s-am 2nd and 3rd -yá-s (2nd \*-yā-s-s 3rd \*-yā-s-t) pl. -yá-s-ma -yá-s-ta -yá-s-ur, mid. sing. 2nd muc- $\bar{\imath}$ - $\bar{\imath}$ -thās ma-s- $\bar{\imath}$ - $\bar{\imath}$ -thās  $y\bar{a}$ -sis- $\bar{\imath}$ - $\bar{\imath}$ -thās  $3^{rd}$  muc- $\bar{\imath}$ - $\bar{\imath}$ -ta etc.

Beside  $\acute{a}$ - $d\bar{a}$ -t 'gave',  $1^{\rm st}$  pl.  $d\bar{e}$ şma i. e. \* $d\bar{\sigma}$ -i-s-me (confirming the assumed \* $d\bar{e}$ -ma = Gr.  $\delta n\bar{\epsilon}$ - $\mu \epsilon \nu$ , see § 939 p. 481);  $3^{\rm rd}$  pl.  $sth\bar{e}$ -s-ur beside  $\acute{a}$ - $sth\bar{a}$ -t. To this the  $1^{\rm st}$  sing. is  $d\bar{e}$ şam  $sth\bar{e}$ şam.  $j\bar{n}\bar{e}$ şam (from  $j\bar{n}$ - $\bar{a}$ - 'know'):  $d\bar{e}$ şam =  $j\bar{n}\bar{e}$ y $\acute{a}$ -t::  $d\bar{e}$ y $\bar{a}$ -t, see § 940 p. 485.

The history and origin of the Precative are as yet unknown. But there must doubtless be a connexion between its s and the aorist s.

Remark. If the optative suffix is the same as the Root-determinative  $\bar{\imath},$  described in § 498 p. 61 and § 572 p. 114, it would be obvious to

<sup>1)</sup> Avest.  $t\bar{u}tuy\hat{u}$  is not a precative; see Bartholomae, Kuhn's Zeitschr. XXIX 561. On Skr. forms assumed to be precative, which do not have s just before the personal ending, see the same, p. 587.

assume the same connexion between Skr.  $d\bar{e}-\bar{\xi}-ma$  (\* $da-\bar{i}-\bar{\xi}-ma$ ) and Gr.  $J_0-\bar{i}-\mu\epsilon\nu$  as between Skr.  $d-grah-\bar{i}-\bar{\xi}-fa$  and  $d-grah-\bar{i}-f$ ; Skr.  $dj\bar{a}i-\bar{\xi}$  'thou didst drive' could be analysed \* $aj-\bar{a}-\bar{i}-\bar{\xi}$ , as the opt.  $dj\bar{e}-\bar{\xi}$  into \* $aj-a-\bar{i}-\bar{\xi}$ . Then the optative would be an Injunctive to the indicative with  $-\bar{i}-\bar{i}$ .

§ 943. Greek. Here we see  $-i\bar{e}$ - -i- always and only after sonant vowels, with which -i- is contracted.

The fact that Skr. forms like vid- $y\acute{a}$ -t gam- $y\acute{a}$ -t bi- $bh\gamma$ - $y\bar{a}$ -t da-dh- $y\acute{a}$ -t ri-ric- $y\bar{a}$ -t are missing in Greek as we have it, is easy to explain. The  $\acute{z}$  of  $-i\check{e}$ -m-i-ent etc. in proethnic Greek, together with the consonant preceding, formed sound-groups which disguised certain parts of the paradigm, and obscured their connexion with the rest. Thus  $^*i\check{\zeta}\eta\nu$  ( $^*iz\delta\eta\nu$ )  $^*i\delta\iota_{\mu\varepsilon\nu}$  beside  $o\check{l}\delta\alpha$   $^*i\delta$ - $_{\mu\varepsilon\nu}$ ,  $^*z\tau\alpha\nu\eta\nu$   $^*z\tau\alpha\nu\bar{\iota}_{\mu\varepsilon\nu}$  beside  $\dot{\varepsilon}$ - $x\tau\alpha$ - $_{\mu\varepsilon\nu}$ ,  $^*\beta\iota\sigma\sigma\eta\nu$   $^*\tau\iota\partial\bar{\iota}_{\mu\varepsilon\nu}$  beside  $\tau\dot{\iota}$ - $\partial\eta$ - $_{\mu\iota}$ ,  $^*\lambda\varepsilon\lambda\iota\sigma\sigma\eta\nu$   $^*\lambda\varepsilon\lambda\iota\tau\bar{\iota}_{\mu\varepsilon\nu}$  ( $^*\lambda\varepsilon\lambda\iota\pi\bar{\iota}_{\mu\varepsilon\nu}$ ) beside  $\lambda\dot{\varepsilon}$ - $\lambda\omega\pi$ -a, the regular forms, would be unrecognisable for the same kin.

§ 944. Class I. Hom.  $\varepsilon i\eta \nu$  'sim' for \* $\varepsilon \sigma_{-\ell} \eta_{-\nu}$  or trisyllabic \* $\varepsilon \sigma_{-\ell} \eta_{-\nu}$ , 3<sup>rd</sup> pl.  $\varepsilon i\varepsilon \nu$  for \* $\varepsilon \sigma_{-\ell} \varepsilon \nu$  or \* $\varepsilon \sigma_{-\ell} \varepsilon \nu$  (cp. Skr. s- $iy \hat{\sigma}_{-m}$  s- $iy \cdot \hat{u}r$  beside s- $y \hat{\sigma}_{-m}$  s- $y \cdot \hat{u}r$ ), 1<sup>st</sup> pl.  $\varepsilon i u\varepsilon \nu$  for \* $\varepsilon \sigma_{-\ell} \iota_{-\mu} \varepsilon \nu$  with intrusion of strong root (cp. § 502 p. 65). El.  $\varepsilon \bar{\alpha}$  for \* $\varepsilon \eta$  3<sup>rd</sup> pl.  $\sigma \nu \nu - \varepsilon \alpha \nu$  possibly for - $\varepsilon \varepsilon \nu$  answering to the Ion.  $\varepsilon i \varepsilon \nu$  (cp. I § 64 p. 51, § 72 p. 63, where  $\varepsilon \bar{\alpha}$  must be read and not  $\varepsilon i \bar{\alpha}$ , and IV §§ 952, 1020. 1 u).  $\varepsilon i$ - in Att.  $\varepsilon i \eta \nu$   $\varepsilon i \varepsilon \nu$  is either to be explained by the fact that the Greek ground-forms \* $\varepsilon \sigma \iota \eta \nu$  \* $\varepsilon \sigma \iota \varepsilon \nu$  were trisyllabic, or else if these were really \* $\varepsilon \sigma \iota \eta \nu$  \* $\varepsilon \sigma \iota \varepsilon \nu$  it must have come from  $\varepsilon i \iota \iota \varepsilon \nu$ , as  $\vartheta \varepsilon \iota \iota \eta \nu$  follows  $\vartheta \varepsilon \iota \iota \iota \iota \iota \iota$  and  $\varphi \varepsilon \iota \iota \iota \iota$  follows  $\varphi \varepsilon \iota \iota \iota \iota \iota \iota$  [§ 131 p. 118, IV § 939 p. 481).

On  $\theta \sin \eta \nu$  δοίην σταίην see § 939 p. 481. Of the same sort are  $q \sin \eta \nu$  φαῖμεν mid.  $2^{nd} \sin g$ .  $q \sin \eta \eta - \mu i$  T say.

Cypr.  $\varphi v_{\ell\eta}$ , see I § 130 p. 118: Skr.  $bh\bar{u}$ - $y\bar{a}$ -t, see § 939 p. 481. Hom.  $\dot{\epsilon}_{\varkappa}$ - $\delta v_{\mu \varepsilon \nu}$  (beside  $\ddot{\epsilon}$ - $\delta v$  'went in'  $\ddot{\epsilon}$ - $\delta v$ - $\mu \varepsilon \nu$ ) for \* $\delta v_{\ell}$ - $\mu \varepsilon \nu$  (like  $\sigma \tau a \tilde{\iota}_{\mu \varepsilon \nu}$   $\gamma v_{\ell} \tilde{\iota}_{\mu \varepsilon \nu}$ ) stands for \* $\delta v(f)$ - $\bar{\iota}$ - $\mu \varepsilon \nu$  or \* $\delta f$ - $\bar{\iota}$ - $\mu \varepsilon \nu$ ,  $3^{rd}$  sing.  $\delta v_{\eta} = *\delta v_{\eta}$  like  $\sigma \tau a t_{\eta}$  beside  $\sigma \tau a \tilde{\iota}$ - $u \varepsilon \nu$ . Cp.  $\delta a \iota v \tilde{\nu} \tau \sigma$   $\delta a \iota v \tilde{\iota} \tau \sigma$  Class XVII p. 488. Whether Hom.  $\varphi \vartheta \tilde{\iota} \tau \sigma$  (beside  $\ddot{\varepsilon}$ - $\varphi \vartheta \iota$ - $\tau \sigma$  'was destroyed' is regularly descended from \* $\varphi \vartheta \iota \chi$ - $\bar{\iota}$ - $\tau \sigma$ , which must be assumed as original, is a question; it may have been coined beside  $\ddot{\varepsilon} q \vartheta \iota \tau \sigma$  on the analogy of  $\delta \sigma \tilde{\iota} \tau \sigma$  to  $\ddot{\varepsilon} \delta \sigma \tau \sigma$ .

The Middle formation  $\dot{\epsilon}\mu$ - $\pi\lambda\tilde{\eta}\tau o$  (beside  $\pi\lambda\tilde{\eta}$ - $\tau o$  'filled itself') is to be compared with the  $3^{\rm rd}$  pl. indic.  $\ddot{\epsilon}\mu$ - $\pi\lambda\eta\nu\tau o$ : as this is a transformate of \*- $\pi\lambda\epsilon\nu\tau o$  on the analogy of  $\pi\lambda\tilde{\eta}\tau o$ , so  $-\pi\lambda\tilde{\eta}\tau o$  is instead of \*- $\pi\lambda\epsilon\tilde{\iota}\tau o$  (§ 582 Rem. p. 123). The same is true of  $\mu\epsilon\mu\nu\tilde{\eta}\mu\eta\nu$  × $\epsilon\kappa\tau\tau\tilde{\eta}\mu\eta\nu$ , p. 489.  $-\pi\lambda\tilde{\eta}\tau o$   $\mu\epsilon\mu\nu\tilde{\eta}\mu\eta\nu$ :  $\beta\lambda\epsilon\tilde{\iota}\mu\epsilon\nu$   $\delta\varrho\alpha\tilde{\iota}\mu\epsilon\nu$  =  $-\pi\lambda\eta\nu\tau o$   $\mu\epsilon\mu\nu\eta\tau\alpha\iota$ :  $\epsilon\tilde{\iota}\beta\lambda\epsilon\nu(\tau)$   $\epsilon\tilde{\iota}\delta\varrho\alpha\nu(\tau)$ .

Class XII. Apparently the only form found is  $\delta \dot{\nu} \nu \alpha \iota \tau \sigma$  from  $\delta \dot{\nu} \nu \alpha \iota \iota \alpha \iota$  i am able';  $\varkappa \iota \varrho \nu \alpha \dot{\iota} \eta \nu$  from  $\varkappa \iota \varrho - \nu \eta - \iota \iota \alpha$  i' mix' and the like may be left out of count.  $\delta \dot{\nu} - \nu \alpha - \iota - \tau \sigma$  beside Skr.  $\dot{s} r - \eta - \bar{\iota} - t \dot{\alpha}$  like  $\dot{\tau} \dot{\iota} - \vartheta \dot{\epsilon} - \iota - \tau \sigma$  ( $\tau \iota \vartheta \dot{\epsilon} \tilde{\iota} \tau \sigma$ ) beside  $d\alpha - dh - \bar{\iota} - t \dot{\alpha}$ .

Class XVII. Hom.  $\delta \alpha \nu \tilde{\nu} \tau \sigma$  (beside  $\delta \alpha / - \nu v - \tau \alpha \iota$  'cats') for  $-\nu v \ell - \tau \sigma$ , like  $\ell \kappa - \delta \tilde{\nu} \mu \epsilon \nu$ ; instead of \*- $\nu v (\ell) - \bar{\iota} - \tau \sigma$  or \*- $\nu \ell - \bar{\iota} - \tau \sigma$ , cp. Skr.  $a \dot{s} - n u v - \bar{\iota} - t \dot{\alpha}$  § 940 p. 485.  $3^{\rm rd}$  pl.  $\delta \alpha \iota \nu \dot{\nu} \alpha \tau \sigma = -\nu v \iota - \alpha \tau \sigma$ , like  $\delta \dot{\nu} \eta$  (p. 487).

s-Aorist. εἰδείην εἰδεῖμεν (beside ἤδεα 'I knew') for \*Fειδ--εσ-μη-ν or -εσ-μη-ν and -εσ- $\overline{\iota}$ -μεν, cp. Lat.  $v\overline{\iota}$ d-er- $\overline{\iota}$ -mus; Att. εἰδείην is to be explained in the same way as εἴην, page 487. On the optative of εἶμι 'I go' see § 836 p. 372 f.; the form ἰείην Il. 19. 209 may, like Plato's δεδιείην, be an adformate of εἰδείην, cp. ἰένωι δεδιένωι: εἰδένωι.

 $\delta \varepsilon \ell \xi \alpha - \mu \iota - \alpha \iota - \varsigma$  etc. is a new formation following the optative  $- \iota \iota - \mu \iota - \iota \iota - \varsigma$  etc., which sprang up when  $\alpha$  in the  $\sigma$ -aorist had spread beyond its proper sphere; cp. § 820 p. 357.

It is likely that the forms Hom. Att.  $\delta\epsilon l\xi\epsilon u\alpha \zeta$  - $\epsilon\iota\epsilon$  - $\epsilon\iota\alpha\nu$  Arcad.  $\delta\iota\alpha\kappa u\lambda bv$   $\delta\epsilon\iota$  and  $\tau bv$   $\delta\epsilon\iota$  (only preserved by Choeroboscus Dict. 565. 2, and by him called Aeolic) contain the endings  $-\sigma\epsilon\sigma-\iota-\eta$ - or  $-\sigma\epsilon\sigma-\iota\eta$ - and  $-\sigma\epsilon\sigma-\bar{\iota}$ -, see § 836 p. 374. The  $3^{\rm rd}$  pl.  $-\iota\alpha\nu$  stands to the ordinary  $-\iota\epsilon\nu$  ( $\epsilon\bar{\iota}\epsilon\nu$   $\theta\epsilon\bar{\iota}\epsilon\nu$ ) as indic. Boeot.  $\pi\alpha\varrho-\epsilon\bar{\iota}\alpha\nu$  to Dor.  $\bar{\eta}\nu$  for  $*\bar{\eta}(\sigma)-\epsilon\nu$ ;  $1^{\rm st}$  pl.  $-\sigma\epsilon\iota\iota\iota\epsilon\nu$  for  $*-\sigma\epsilon\sigma-\bar{\iota}-\mu\epsilon\nu$ . On the one hand,  $-\sigma\epsilon\iota\iota\iota\epsilon\nu$  occasioned a  $3^{\rm rd}$  sing.  $-\sigma\epsilon\iota$  on the analogy of  $-\sigma\alpha\iota$ :  $\sigma\alpha\iota\iota\epsilon\nu$  and  $-\sigma\iota$ :  $\sigma\iota\iota\iota\epsilon\nu$ ; on the other,  $-\sigma\epsilon\iota\alpha\nu$  produced complementary  $2^{\rm nd}$  and  $3^{\rm rd}$  sing.  $-\sigma\epsilon\iota\alpha\zeta$  - $\sigma\epsilon\iota\epsilon$  following indic.  $-(\sigma)\alpha\zeta$  - $(\sigma)\epsilon$  - $(\sigma)\alpha\nu$ , just as Avest. buya-ta follows buyama and Skr.  $duh\bar{\iota}\gamma\dot{\alpha}-t$  follows  $duh\bar{\iota}\gamma\dot{\alpha}n$  (§ 941 p. 486).

Remark. For the latter development  $(-\sigma \varepsilon \iota \alpha_{\varsigma} - \sigma \varepsilon \iota \varepsilon)$  there would be a second motive if there ever was a 1st pl. in \*- $\sigma \varepsilon \iota \alpha_{\iota} \iota \varepsilon \nu$ , answering to the Avest. jam-y-ama (§ 941 p. 486);  $-\sigma \varepsilon \iota \alpha_{\iota} \iota \iota \varepsilon \nu$ :  $-\sigma \varepsilon \iota \alpha_{\iota} \iota \varepsilon \nu$  as jamyama:  $srv \overline{\imath} m \overline{\alpha}$ . And  $-\sigma \varepsilon \iota \alpha_{\iota} \iota \varepsilon \nu$  would make it easier to understand the 3rd pl.  $-\iota \alpha \nu$  beside the usual form  $-\iota \varepsilon \nu$ .

Perfect. έσταίην έσταῖμεν beside ἔσταμεν 'we stand' like ἱσταίην ἱσταῖμεν beside ἵσταμεν. Mid. μεμνημην (beside μέμνη-μαι Dor. μέμνα-μαι 'I remember') κεκτήμην (beside κέκτη-μαι 'I have gained') instead of regular \*μεμναιμην \*κεκτειμην, like indic. 3<sup>rd</sup> pl. μέμνηνται κέκτηνται instead of \*μεμνανται \*κεκτενται, see p. 488.

With perfect stems having a final consonant the thematic optative is always found; as  $\pi \varepsilon \pi \delta r \vartheta \omega$ .

§ 945. In the Active of the Optative -ιη- constantly passed into the Plural and Dual, as εἴημεν beside εἶμεν, σταίημεν beside σταῖμεν, εἰδείημεν beside εἰδεῖμεν, ἑσταίημεν beside ἑσταῖμεν;

Homer has only one example of this sort, σταίησαν II. 17. 733. Compare Skr. syáma instead of \*s-ī-ma following s-yá-t § 940 p. 483.

§ 946. Italie. O.Lat. s-ie-m siēs siet s-ī-mus sītis s-i-ent beside indie. es-t; in elassical Latin the weak stem only is found, and we have sim sīs etc. The same levelling is seen in the sister dialects: Umbr. sir si sei 'sis' si 'sit' sins sis 'sint', Marruc. pacr-si 'propitius sis' or 'sit'. Lat. vel-i-m vel-ī-mus beside vul-t, with irregular strong root (ep. Skr. mid. vur-ī-ta), see § 505 p. 69. Similarly ed-i-m ed-ī-mus beside ēs-t from V ed- 'eat', see § 505 p. 70, § 939 p. 481. The reason why siem is the only optative with strong opt. suffix which survives in historical Latin is probably that its i earried the wordaeeent.

On the reason for the loss of the optative of i-t see § 925 p. 472.

Ose. da-did 'dedat' beside Avest. d-ya-p, ep. Marrue. -si 'sit'.

Lat. dem may be derived from  $*da-(\underline{i})\bar{e}-m$ , and stem from  $*sta-(\underline{i})\bar{e}-m$ ;  $d\bar{e}mus$  stemus for  $*da-(\underline{i})\bar{e}-mos$   $*sta-(\underline{i})\bar{e}-mos$  should be compared with Gr.  $\deltao(\hat{\eta}_{u\bar{e}\nu} \sigma \tau a(\eta_{u\bar{e}\nu}) (\S 945)$ . Lat. nem plantem may come from  $*(s)n\bar{a}-(\underline{i})\bar{e}-m$  \*planta-( $\underline{i})\bar{e}-m$ , Osc. deivaid from  $*de\underline{i}u\bar{a}-(\underline{i})\bar{e}-t$ , ep.  $\S 939$  p. 482. But all these forms, as we saw in  $\S 926$  p. 472, may be Conjunctive.

s-Aorist. Lat. dīxim axim, see § 824 p. 362. vīderim līquerim totonderim dīxerim, see § 841 p. 378. amāssim prohibēssim ambīssim, see § 842 p. 381. On the intrusion of such optative forms into the Future Perfect system, i. e. their Conjunctive, see § 915 p. 465.

 'they would become' Norse Run. van in 'they would be'. The history of the 1<sup>st</sup> sing. (Goth. -jau O.H.G. -i O.Icel. -a) is still obscure (cp. § 953 on Goth. nimau); in explaining Goth. -jau let it be remembered that j in viljau and j in viljau seem to be different (see below).

Present. A.S. cyme pl. cymen (from cuman 'to come') would be Goth. \*kumjau \*kumeima: Skr. gam-yá-t, see § 939 p. 480. Goth. viljau vilei-s etc., cp. Lat. vel-i-m § 505 p. 69; the 1st sing. viljau may with O.H.G. wille have been originally 1st sing. conj. to indic. O.H.G. willu 'I will' = O.C.Sl. velja, whose tense stem is also represented by Goth. viljan and viljands (§ 505 p. 69, § 716 p. 249, § 727 p. 259), cp. § 928 p. 474. O.H.G. sī 'I should be' pl. 1st sī-mēs sī-m 2nd sī-t 3rd sī-n beside is-t 'is': Skr. s-yá-m etc., see § 939 p. 481; Goth. sijau sijáis etc. (like baírau baíraís) is perhaps a transformation of the dissyllabic Idg. \*s-ijē-m etc. It is possible, that O.H.G. 1st pl. stēn gēn (sing. 1st and 3rd gē stē 2nd gēs stēs) are optative like Gr. σταῖμεν.

The following may be counted amongst those parts of the Preterite-Present system which are not really perfect. 1st pl. Goth. vit-ei-ma O.H.G. wizz-ī-mēs (Skr. vid-yá-t), Goth. mun-ei-ma, ga-daúrseima O.H.G. gi-turrīmēs see § 508 p. 74. Goth. kunneima O.H.G. kunnīmēs (beside Goth. O.H.G. kun-nu-m 'we learn, know' Class XVII) for \*¬g¬¬¬-1-like Skr. ¬¬¬¬¬-1-tá, see § 939 p. 482; similarly O.H.G. unnī-mēs beside indic. an 'I grant', N.-Ger. dürne beside indic. darn 'I dare', see § 646 p. 184.

Perfect. Goth. skai-skaid-ei-ma O.H.G. sciad-ī-mēs 1st sing. skai-skaid-jau sciadi beside indic. skai-skaip sciad 'I divided', similarly Goth. nēm-ei-ma O.H.G. nām-ī-mēs beside nam 'I took' etc. Similarly in the weak preterite (§ 907 pp. 453 ff.), as Goth. nasidēd-ei-ma O.H.G. nerit-ī-mēs. On O.Sax. dedīn 'they would do' sing. dedi (instead of regular \*did-) see § 939 p. 482.

The intermingling of 2<sup>nd</sup> sing. opt. and 2<sup>nd</sup> sing. indic. preterite of strong verbs has been discussed in § 893 p. 441 f.

§ 948. Balto-Slavouic.

Iu Baltic this optative cannot be traced. Pruss. dais 'give, let' imper. 2<sup>nd</sup> pl. daīti (read daiti) doubtless do not go with Gr. δοῖτε — dais would have to be an adformate of the plural — but are thematic like jeis jeiti idaiti, §§ 510 f. pp. 75 f., § 954.

§ 949. Slavonic offers but a few specimens, all with hortative force. O.C.Sl. 1st and 2nd pl. jad-i-mū i-te 1st and 2nd dual -i-vě -i-ta beside indic. jad-ętū 'they eat' (§ 510 p. 76): Skr. ad-yá-t Lat. ed-ī-mus, see § 939 p. 481. dad-i-mū etc. beside dad-ętū 'they give' (§ 546 p. 103 f.): Skr. mid. da-dh-ī-tá etc., see § 939 p. 482. věd-i-mū beside věstǔ 'he knows' 3nd pl. věd-ętū with the perfect stem uoid-, originally confined to the singular indicative, see § 894 p. 442 f. Side by side with this, from the same root, imperative vidi-mū 'videamus' etc.; the 2nd sing. viždī = Lith. veizdi, which must be explained with vidimū, proves it to be old and to belong to the Idg. present \*ueid-mi (§ 493 p. 52, § 510 p. 75); here ei = Slav. ī became the only suffix, as oi = Slav. č did in věstū.

The 2<sup>nd</sup> and 3<sup>rd</sup> sing, to these imperatives are jaždī daždī věždī and the already mentioned viždī. The ending -ī makes it probable that these should be derived from genuine imperative forms in \*-dhi. Their original shape was \*ězdī (cp. Skr. addhi), \*dāzdī (cp. Skr. dēhi daddhi Avest. dazdi) or \*dādī (= O.Lith. důdi), \*veždī and \*vīzdī (= O.Lith. veizdi, cp. Skr. viddhi Gr. ĭoɔi). Side by side with these stood the 2<sup>nd</sup> and 3<sup>rd</sup> sing. opt. \*ědiā \*dādiā etc. (= orig. \*ēd-iēs \*ēd-iē-t, \*dōd-iē-s etc.). By levelling arose \*čd-iī \*dādiī etc., which became the forms actually found, jaždī etc. 1) Compare I § 547 p. 401, 2) II § 962. The use of jaždī etc. for the 3<sup>rd</sup> singular has a parallel in 3<sup>rd</sup> sing. pri-jetū for the 2<sup>nd</sup> singular; see § 830 p. 367.

That e. g. ěždī jaždī are not simply contaminations of \*ězdī and \*èždā is shewn by the other Slavonic languages, which imply an older ending -džī. E. g. Pol. wiedz: O.C.Sl. věždī = Pol. miedza: O.C.Sl. mežda.

<sup>2)</sup> Here "\* $u\bar{e}zd\bar{i} = 0$ .Lith. veiz(d)i" is a misprint for "\* $u\bar{e}zd\bar{i} = \dots$ ".

## II. OPTATIVE WITH -oi-.

§ 950. The ending in the 1<sup>st</sup> sing. act. is -oi-m (§ 976. 3), in the 3<sup>rd</sup> pl. -oi-nt (1017. 1. b).

In all languages which have this optative at all it is a living and creative type.

For pr. Idg. a few examples will suffice. \*bheroi- beside \*bhér-e-ti 'bears', 2nd sing. \*bheroi-s 2nd pl. \*bheroi-te: Skr. bhárē-š -ta Gr. φέφοι-ς -τε Goth. baírái-s -ħ O.C.Sl. beri berĕ-te; Lith. 3rd sing. te-sukē beside sukù 'I turn'. \*uṛḡioi- beside \*uṛḡ-iḍ-ti 'works': Avest. verezyaḍ-ta Gr. ᾳάζοι-τε Goth. vaúrk-jái-ħ; Skr. 3rd sing. mid. sphāyē-ta beside indic. sphā-ya-tē 'increases, grows', O.C.Sl. 2nd sing. spēji 2nd pl. spēji-te beside spē-ja 'I succeed'. Skr. 3rd sing. pṛtanāyḗ-t beside pṛtanā-yá-ti 'he fights', Gr. 2nd sing. τīμάοι-ς τīμοῦς beside τīμάω 'I honour', A.S. 3rd sing. sealfie beside sealfie 'I salve, anoint', O.C.Sl. 2nd sing. lakaji beside laka-ja 'I trick, deceive'.

§ 951. Aryan. For examples see § 950. No examples of this optative occur in Old Persian, certainly a mere accident.

In Skr. 1st sing. act. bhárēyam 3rd pl. act. bhárēyur 1st sing. mid. bhárēya 2nd and 3rd dual mid. bhárēyāthām bhárēyātām, ē has taken the place of a (\*bharay-am etc.), coming from the other optative forms (bhárē-š etc.); in Avest. we still see 3rd pl. act. baray-en mid. 1st sing. Gath. vāuray-ā 3rd pl. baray-anta.¹) Compare Skr. vavṛt-īy-a instead of \*vavṛt-y-a § 940 p. 484, and possibly duhīyán instead of \*duh-y-an § 941 p. 486; also ábhūv-am instead of á-bhuv-am following á-bhū-š § 497 p. 57.

In the Brahmana and Sutra period verbs in -aya-ti sometimes show an opt. middle of the I<sup>st</sup> type, as  $v\bar{e}day-\bar{i}-ta$  beside  $v\bar{e}d\acute{a}ya-t\bar{e}$  'gives to know',  $k\bar{a}may-\bar{i}-ta$  beside  $k\bar{a}maya-t\bar{e}$  'wishes'. These must be connected with participles like  $v\bar{e}day\bar{a}na-s$  beside

<sup>1)</sup> If  $\bar{a}$  in open syllables represents Idg. o (I § 78 p. 68), we must assume pr. Ar. \*bhar $\bar{a}i$ -am \*bhar $\bar{a}i$ -an. In Avestic,  $\bar{a}$  will have been exchanged for a following the lead of these persons in which ai was tautosyllabic. Compare § 939 Rem. p. 482.

vēdaya-māna-s and such indic. forms as dhvanay-ī-t (cp. á-brav--ī-t, § 574 p. 116). Compare § 789 Rem. p. 321; Bartholomae, Stud. Idg. Spr. 11 71, 127.

§ 952. Greek. Examples given in § 950.

On the endings of the 1<sup>st</sup> sing.  $-o\iota-\mu\iota$   $-o\iota-\nu$  see § 979.3; of the 3<sup>rd</sup> pl.  $-o\iota\varepsilon\nu$  El.  $-o\iota\alpha\nu$  Delph.  $-o\iota\nu$ , § 1020.1.b.

Because of the formal agreement between σχοῖμεν (indic. ε-σχ-ο-μεν) φιλοῖμεν (indic. qιλοῦμεν for φιλέομεν) μισθοῖμεν (indic. μισθοῦμεν for μισθοῦμεν (indic. μισθοῦμεν διθοῦμεν (indic. ε-δο-μεν δί-δο-μεν), there arose in Ionic-Attic, and in Doric here and there, a new formation for the singular following Type I, σχοίην φιλοίην μισθοίην by analogy of δοίην διθοίην; but the old singular forms were not discarded (παρά-σχοιμι φιλοῖμι μισθοῦμι); similarly τῖμιψην beside τῖμιῷμεν (indic. τῖμιῶμεν for τῖμάομεν). A further consequence of this was the plural series φιλοίημεν etc., cp. σταίημεν complementary to σταίην, § 945 p. 489.

§ 953. Germanic. Goth. nimái-s nimái etc. O.H.G. nemēs neme etc., Goth. mid.-pass. 2<sup>nd</sup> sing. nimái-zau 3<sup>rd</sup> sing. nimái-dau with the indic. nima nimu 'I take': Gr. νέμοι-ς etc. The A.S. sealfie pl. sealfien may be compared directly with Skr. pṛtanāyé-t O.C.Sl. lakaji (cp. § 781. 1 p. 304), but O.H.G. salbōe -ōēs(t) -ōēm etc. beside salbo -ōs(t) -ōm etc. is a new formation (cp. Lith. pa-darai § 954), and so is habēe -ēēs(t) -ēēm beside habe -ēs(t) -ēm etc., see § 930 p. 476.

# § 954. Balto-Slavonic.

Lithuanian retains the 3<sup>rd</sup> sing. act. (used also for 3<sup>rd</sup> pl. and dual) and calls it a Permissive; e. g. te-sukē 'he may turn' beside indic. sukù, te-ateinë 'he may come' beside indic. ei-nù 'I go', te-vertē 'he may turn' for \*vertië (like 2<sup>nd</sup> sing. indic. pres. reflex. vertë-s for \*vertië-s, I § 147 p. 131) beside indic. vercziù. te-důdē 'he may give' beside indic. dů(d)-mi and dů'du (§ 546 p. 104) like tesë 'he may be' beside indic. es-mì and es-ù (§ 510 p. 76, § 939 p. 483). The Permissive to the Indic. in -au has the ending -ai in the old books, as te-darai beside darañ

'I make'. te-darai: te-sukē = 2nd sing. indic. daraī-s(i): sukē-s(i) (§ 991), i. e. the optative suffix ë (ai) is added to indic. stems in -ō (-ā) just in the same way as O.H.G. salhōe is formed on the analogy of bere (§ 953). We also find 1st pl. pa-praszaim (pa-praszaū 'I beg for, win over') and 2nd pl. žinait (žinaū 'I know'); Bezzenberger, Zur Gesch. der lit. Spr., 223. Furthermore, the oi- optative is a living type in Prussian, where it is used for the Imperative; e. g. imais immeis 'take thou' 2nd pl. imaiti, en-gaunai -gaunei 'let him receive'; to compare with Lith. tesē we have 2nd pl. seiti 'be ye', and again jeis 'go thou' pl. jeiti like Gr. ĭois (§ 511 p. 77), idaiti ideiti 'esset' beside Lith. ĕdu (§ 510 p. 76), dais 'give thou' 2nd pl. daīti like Avest. dōi-š (§ 948 p. 492). Similarly in Lettic 2nd pl. meti-t 'throw ye' we'lzi-t 'pull ye' mafgáji-t 'wash ye' lúkůji-t 'look ye'.

§ 955. The same optative type, like the other (§ 949 p. 492), is used for the Hortative (Imperative) in Old Church Slavonic. Sing. 2<sup>nd</sup> and 3<sup>rd</sup> beri (I § 84 p. 82) pl. 1<sup>st</sup> berĕ-mŭ 2<sup>nd</sup> -ĕ-te dual 1<sup>st</sup> -ĕ-vĕ 2<sup>nd</sup> -ĕ-ta from bera 'I carry, bear', dĕji -ji-mŭ -ji-te etc. (I § 84 p. 82) from dĕja 'I lay'. On the root syllable in rīci tīci pīci žīzi see § 534 p. 95 f.

Along with forms having -ji = -ioi—we get in the Old Bulgarian literature forms with -ja—for  $-j\check{e}$ — (cp. sto–jati for \*sto- $j\check{e}$ ti I § 76 p. 66); as pijate beside pijite from pija 'I drink', glagoljate beside glagoljite from glagolja 'I speak' (see Leskien Handb.<sup>2</sup> p. 138, Wiedemann Beitr. zur abulg. Conj. 27 ff.) So long as no such forms as \* $t\check{t}\check{e}$ ate instead of  $t\check{e}$ ate are found, it is likely that  $\check{e}$  comes from forms like ber $\check{e}$ te, ') and the group  $j\check{e}$  thus made, along with  $j\check{e} = Idg. i\bar{e}$ , became ja; more likely than Oblak's view (Arch. slav. Phil. x 143 ff.), that we have here orig.  $i\bar{e}$ , i. e. a conjunctive like Lat.  $capi\bar{e}$ -s (§ 926. 1 p. 472), pijate standing to pija in the same relation as Lat.  $capi\bar{e}$ -tis to capia-m (cp. § 929 p. 475).

<sup>1)</sup> Similarly in O.H.G., after ia in final syllables had become ie and then e, -an was replaced in the infinitive of the First Weak Conj. on the analogy of verbs without -j, e. g. nerian instead of older nerien following neman and similar infinitives.

Remark. Present Stems of Class XXVI, as velją veliši inf. velčti 'to command' (§ 727 pp. 257 ff.); of Class XXXI, as goštą gostiši inf. gostiti 'to entertain as a guest' (§ 782 pp. 308 f.); and of Class XXXII, as vraštą vratiši inf. vratiti 'to turn' (§ 807 pp. 343 f.) all have throughout their imperative -i-: veli velimū gosti gostimū vrati vratimū; from the Idg. optative forms which it is necessary to assume we should expect \*velji \*veljimū \*gostiji \*gostijimū \*vratiji \*vratijimū. The forms are then doubtless not optative at all, but Injunctive; and velimū velite are related to indic. velimū velite as bądą 'sunto' (§ 909 p. 458) to indic. bądątī (bądątū). Some might wish to take 2nd sing. veli for orig. \*velī, i. e. 2nd sing. imperative (cp. Lat. farcī § 958). Against this may be urged that chošti 'wish thou' is sometimes used in sentences which are not imperative (Leskien, Handb. 2 p. 143).

#### IMPERATIVE.1)

§ 956. The forms classed as Imperative in the various Indo-Germanic languages have all kinds of different origins.

(1) Some of them are Injunctive, as 2<sup>nd</sup> pl. dual Skr. bhára-ta bhára-tam Gr. φέρε-τε φέρε-τον, which were already well establisht in the imperative system of the parent language; Skr. 3<sup>rd</sup> sing. bhárat-u 3<sup>rd</sup> pl. bhárant-u (with the particle -u), Gr. 2<sup>nd</sup> sing. mid. φέρεο φέρον, O.Ir. 2<sup>nd</sup> sing. mid. cluinte 'exaudi' (§ 909 p. 458). (2) Conjunctive forms: Skr. 1<sup>st</sup> sing. pl. and dual, as 1<sup>st</sup> pl. act. bhárāma mid. bhárāmahāi; the 2<sup>nd</sup> and 3<sup>rd</sup> persons of the conj. are dropt in classical Sanskrit, and the 1<sup>st</sup> persons, which are kept, go with the Imperative system. (3) Optative forms: O.C.Sl. beri berěte (§ 955 p. 495). (4) Indicative forms: Skr. 2<sup>nd</sup> sing. vé-ši 'come

<sup>1)</sup> Thurneysen, Der idg. Imperativ, Kuhn's Zeitschr. xxvII 172 ff. Pott, Über die erste Person des Imperativs, Kuhn-Schleicher's Beitr. 150 ff.

Aufrecht, Über eine seltne Verbalform [Skr. addhaki 'eat away now' from addhi and the like], Zeitschr. Deutsch. Morg. Gesellsch., XXXIV pp. 175 f.

I. N. Madvig, De formis imperativi passivi, Kopenh. 1837 = Opusc. II 239 ff. J. N. Schmidt, Über den lat. Imperativ, Zeitschr. für d. Gymnasialw. 1855 pp. 422 ff. Ch. Thurot, De l'imperatif futur latin, Revue de phil., IV 113 ff.

Kern, Eine Imperativform im Got., Kuhn's Zeitschr. xvi 451 ff.

here', Gr.  $\lambda \xi \xi \alpha \iota$  'lay thyself' (§ 910 Rem. p. 459 f.). (5) Forms of the Verb Infinite: as Lat.  $2^{nd}$  pl.  $sequi-min\bar{\iota}$  (II § 71 p. 165). Lastly (6) some are forms which, so far as we can trace them, were never used for anything but the Imperative.

It is the last group, which I call the Genuine Imperative, that will concern us in the following pages. But along with them we shall include some others from the different languages whose origin has not been clearly made out, amongst which may be a few which properly belong to one of the other five groups.

#### I. THE PROETHNIC IMPERATIVE.

# A. Bare Tense Stem as 2nd sing. act.

§ 957. The forms which come in this section are such as Gr.  $7\sigma\tau\eta$  'place thou'  $\varphi\dot{\epsilon}\varrho\varepsilon$  'bear thou', which like the voc.  $\delta\varphi\iota$   $7\pi\pi\iota$  do without any personal suffix whatever. I regard the Idg. forms in -dhi (§ 959) and  $-t\bar{\upsilon}d$  (§ 963) and the Skr. forms in -sva (§ 968) as being nothing but extensions of these.

# (1) Unthematic.

Pr.I dg. Class I. \*e½ beside \*e½-ti 'goes': Gr. ἕξ-ει, Lat. ei  $\bar{\imath}$  ex- $\bar{\imath}$ , Lith. eĩ-k. \*dō beside \*é-dō-t 'he gave': Lat. ce-do (2nd pl. cette for \*ce-d(i)-te § 505 p. 71),¹) Lith. dử-k, cp. Gr. δί-δω (Class III). — Class X. Lat. hiā Lith. žió-k 'open thy mouth' beside indic. Lat. hiā-mus; on the same principle Lat. plantā O.Ir. car Goth. salbō Lith. dovanó-k (see below). Lat. vidē Lith. pa-vydě-k 'invide' beside indic. Lat. vidē-mus. Compare Gr. ἐγ-κίκρᾶ πίμ-πρη (Class XI). — Class XVII. Skr. stγ-ņu Gr. στό-ρ-νν beside indic. stγ-nō-ti (stγ-nu-más) στό-ρ-νν-σι 'sternit'.

Aryan. This formation is clear only in the XVII<sup>th</sup> Class in Sanskrit, where however -dhi or -hi is usually affixt, sṛ-nú

<sup>1)</sup> Others, not so well, take ce-do as a combination of two particles, 'here-wards, hither'. cette then is explained as derived from cedo as Slav. na-te from na. See Per Persson Studia Etymol., p. 71.

Brugmann, Elements. IV.

and *\$r-nu-dhi* 'hear thou' (§ 960); in the later language it was the rule to use -hi only where the root ended in a consonant.

In § 600 p. 143 I conjectured that  $grh\bar{a}n\dot{a}$  is  $*grh\bar{a}$  + the particle na, and that  $*grh\bar{a}$  comes from  $*-\bar{y}$ : cp. Att. κυίμνη.

Latin.  $\bar{\imath}$  ce-do, see above.\(^1\)) The forms  $fer\ \bar{e}s$  es can hardly belong to this group; it is more likely they are injunctive like vel = \*uel-s (§ 505 p. 69). — Class X. Besides  $hi\bar{a}$  plant\(\bar{a}\) we have  $fl\bar{a}$   $n\bar{a}$  dom\(\bar{a}\) port\(\bar{a}\) etc., and by analogy  $st\bar{a}$   $d\bar{a}$ , unless we must take  $st\bar{a}$  to be another form of Class I like ce-do (cp. Lith.  $st\acute{o}-k$ ). Others like  $vid\bar{e}$  (above) are  $impl\bar{e}$   $n\bar{e}$   $tac\bar{e}$  (on  $alb\bar{e}$ , see § 958).

Irish. car 'love thou' for cara, see above.

Germanic. Goth. salbō O.H.G. salbo 'anoint thou' doubtless from pr. Germ. \*salbō, like Latin plantā (above). But the forms actually used are not regular; -ō has been restored from the other imperative forms which had it, as 2<sup>nd</sup> pl. Goth. salbō-ħ O.H.G. salbō-t (cp. 1<sup>st</sup> sing. indic. pres. Goth. salbō, § 982.1). Similarly, O.H.G. habe 'have thou' (indic. habē-m), with its final vowel assimilated to ē in pl. habē-t.

Baltic. In Lithuanian, a particle  $-ki - k \ (-k\ddot{e})$  is always affixt to these imperatives. Whether the *i*-vowel represents the original ending of the particle is very questionable. It is usual to compare Lat.  $ce \ (ce-do \ si-c)$ , which is plausible.

<sup>1)</sup> fu in the Arval Song will be another if it means 'be thou', which is doubtful. Compare Pauli, Altital. Stud. IV 29 ff.

Class I. eī-k indic. eī-ti 'he goes': Gr. ἔξ-ιι Lat. ī. dử-k 'give thou' beside Skr. ά-dā-t (§ 493 p. 53): Lat. ce-do. dĕ-k 'lay thou' beside Skr. ά-dhā-t (see loc. cit.). bú-k 'be thou' beside Skr. ά-bhū-ma (§ 497 p. 56). — Class X. ne-bijóki-s 'fear thou not' beside bijo-s 'he fears'. žió-k beside žió-ju 'I open my mouth': Lat. hiā beside hiā-mus. jó-k beside jó-ju 'I ride'. kló-k beside kló-ju 'I spread out', minĕ-k beside mìnē 'he remembered'. lukĕ-k beside lukĕ-ju 'I wait a bit'. dovanó-k beside dovanó-ju 'I present', pāsako-k beside pāsako-ju 'I relate': cp. Lat. plantā. kĕtē-k beside kĕtē-ju 'I grow hard': cp. Lesb. φίλη. balnử-k beside balnử-ju 'I saddle': cp. Lesb. μύρω.

It is the rule that this whole Imperative formation takes its stem from the Infinitive. The reason is that some of the forms belonged to the aorist, whose stem differed from the present stem and agreed with the s-future etc., that is, the infinitive stem; the others then conformed to the same type. Hence we have vartý-k beside  $varta\~u$  'I turn',  $j\~u'sty-k$  beside  $j\~u'stau$  'I gird'. And similar imperatives are made for all thematic present stems: thus the relation between  $d\~u'-k$  and  $d\~u'-ti$  suggested an imper.  $v\`esk$  from  $v\`esti$  'to lead' (pres.  $ved\~u$ ),  $s\`uk(k)$  from  $s\~uk-ti$  'to turn' (pres.  $suk\~u$ ), and so forth.

As the original meaning of these singular forms with -k(i) was forgotten, a plural and dual was made from them thus:  $d\mathring{u}'kine \ d\mathring{u}'kite \ d\mathring{u}'kiva \ d\mathring{u}'kita$  from  $d\mathring{u}'ki \ d\mathring{u}'k$ , on which see § 463 Rem. p. 9.  $d\mathring{u}'ki-te: d\mathring{u}'k(i)$  as Lett. weddi-t: wedd(i) lead thou (cp. § 958).

§ 958. (2) Thematic.

Pr.Idg. \*bhére, from indic. \*bhére-ti 'bears': Skr. bhára Armen. ber Gr.  $\varphi \not\in \wp \varepsilon$  O.Ir. beir Goth. baír; Lat. age. Skr. ti-šth-a Lat. si-st-e, indic. ti-šth-a-ti si-st-i-t from  $\bigvee$  stā- 'stand'. Skr.  $g \nota cha$  Gr.  $g \nota o x \varepsilon$  beside  $g \nota$ -cha-ti from  $\bigvee$  gem- 'go'. Skr. namas-y $\nota$  indic. namas-y $\nota$ -ti 'honours', Gr.  $\tau \note \lambda \varepsilon \varepsilon$  from indic.  $\tau \varepsilon \lambda \varepsilon (\omega - \varepsilon \omega - \omega)$ , 'finish thou', for  $-\varepsilon \sigma$ - $\iota \omega$ ; Skr.  $g \nota$ -tu-y $\acutea$  indic.  $g \nota tu$ -y $\acutea$ -ti 'goes an errand', Lat. metue from metu o. Skr.  $s o a d \nota y a$  Goth. s a tei from indic.  $s o a d \nota y a$ -ti  $s o a t \nota t \nota t$ - $o a u s a t \nota t$ -o a u s a t-o a u s-o a u s

of V sed-'sit'; Gr.  $\varphi \delta \beta \varepsilon \varepsilon - \varepsilon \iota$ , indic.  $\varphi \delta \beta \varepsilon \omega - \omega \delta$ , 'scare thou off'. s-Aorist: Skr.  $n\bar{e}-\dot{\xi}-a$  beside conj.  $n\dot{e}-\dot{\xi}-a-t(i)$  from  $n\bar{\iota}$ - 'to lead', Gr.  $\delta \tilde{\iota} \sigma - \varepsilon$  beside conj. (fut.)  $\delta \tilde{\iota} \sigma \omega$  'I will bear or bring' (§ 833 p. 370).

Wherever io-presents of Class XXVI show -i- and -ī- in the indic. pres. beside -io-, these weaker grades are naturally found in the imperative too: Lat. cape for \*capi cp. indic. capi-s, farcī cp. indic. farcī-s, O.H.G. biti cp. indic. bitis 'thou prayest'; perhaps we may venture to add O.Lith. girdi, cp. ind. girdi-te 'ye hear'.

Aryan. Skr. *jīva* O.Pers. *jīvā* beside indic. Skr. *jīva-ti* 'lives'; Avest. *ja-sa* (Skr. *gá-cha*) beside indic. *ja-sa-iti* 'goes' (§ 671 p. 203).

Armenian. ber 'bring thou' beside bere-m aor. ber-i, ac 'lead thou' beside ace-m aor. ac-i, ker 'eat thou' beside aor. ker-i, tes 'see thou' beside aor. tes-i, arb 'drink thou' beside aor. arb-i.

Greek. ἄγ-ε 'age' from ἄγω 'ago'. κατά-σχε beside ἔ-σχ-ο-ν pres. ἔχ-ω 'I have'. τίμαε τίμα from τῖμάω -ω 'I honour', δούλοε -ον from δουλόω -ῶ 'I enslave' (cp. Lesb.  $\mu \nu \dot{\rho} \omega$  § 957 p. 498). There are a great many bye-forms of this class used as variants to others of the first class (§ 957), when the tense stem ends in  $-\bar{a}$   $-\bar{e}$  or  $-\bar{o}$ ; as Att. καθ-ίστα Dor. ἵστη for \*ἵσταε, Att. τίθει δίδον, Att. πίμ-πλα Dor. πίμ-πλη, Att. ἕσ-βα Dor. ἕμ-βη for \*βᾱε; similarly ὅμνν-ε. Perf. γέγωνε from γέ-γων-α γεγώνω 'I announce, say'.

The five words  $i\delta\dot{\epsilon}$   $\lambda u\beta\dot{\epsilon}$   $\dot{\epsilon}i\delta\dot{\tau}\dot{\epsilon}$   $\dot{\epsilon}i\delta\dot{\epsilon}$   $\dot{\epsilon}i\dot{\phi}\dot{\epsilon}$  have kept the accent which they had in pr. Idg. at the beginning of a sentence;  $\lambda i\pi\epsilon$  and the others with the same accent were originally enclitic (I § 669 p. 532, § 676 Rem. 1 p. 541). The corresponding middle imperatives  $i\delta o\bar{\nu}$   $\lambda u\pi o\bar{\nu}$  for  $-\dot{\epsilon}-(\sigma)o$  (§ 909 p. 458) have always the accent which they bore as first in a sentence, even when compounded,  $\pi \rho o\sigma - \lambda \alpha \beta o\bar{\nu}$  (but active  $\pi \rho o\sigma \lambda \alpha \beta \epsilon$ ).  $\ddot{\iota}-\Im \iota$  (contrast Skr. i-hi, § 959) is accented on the same principle as  $\lambda i\pi\epsilon$ , and so too  $\ddot{\iota}\sigma \Im \iota$   $\pi \bar{\iota}-\Im \iota$  and others; but  $\phi \alpha - \Im \iota$  is like  $i\delta\dot{\epsilon}$ , and also has a variant  $\phi \dot{\alpha} \Im \iota$ .

Italic. Lat. age. Whether albē monē are for \*albe( $\underline{i}$ )e \*mone( $\underline{i}$ )e is as doubtful as the derivation of albēs monēs from \*-e $\underline{i}$ e-s (§ 788 p. 319).

Lat. cape for \*capi,1) farcī, see above.

Keltic. O.Ir. ib Mod.Cymr. yf 'bibe' for \*(p)i-be.  $l\bar{e}ic$  for \* $l\bar{e}ci$  or  $-\bar{\imath}$ , see § 702. p. 229, § 719 p. 251.

Germanic. Goth. bair; in O.H.G. forms like hilf 'help thou' for \*hilfi are regular, but e. g. bir stands for \*biri (I § 662. 2 p. 520). O.H.G. neri 'make thou whole' for pr. Germ. \*naziii, see loc. cit.; Goth. nasei seems to prove that \*naziii had not yet become \*nazī in pr. Germ. (cp. nom. frijondi I § 660. 2 p. 515).

With Idg. -i O.H.G. hevi from heff(i)u 'I lift', biti from bitt(i)u 'I beseech', like Lat. cape for \*capi, see p. 500. But Goth. hafei instead of \*hafi \*haf follows nasei etc.

Balto-Slavonic. In O.Lith. and Lett. -i is found with presents like Lith. redù 'I lead', as O.Lith. redi ved Lett. weddi wedd, gawiléji 'I exult, shout for joy'. By the sound laws it is impossible to explain this as the 2<sup>nd</sup> sing. opt. (cp. Pruss. weddeis), or to assume that -i is -e weakened; and therefore

<sup>1)</sup> The forms fac and dic duc may have elided -e as haec for haece has. But the injunctive fer at the same time must have helped to make the short forms ourrent (§ 505 p. 68). [It is true Skutsoh has lately derived fer from \*fere, denying most distinctly that it comes from \*fer-s (Forschungen zu lat. Gramm. 55 ff.). But his reasons will not hold water. That ferre was originally a thematic present, and that forms like fert come by syncope of the thematic vowel, is bare assumption and nothing more. the scansion of ter as long by Plautus (Bacch. 1127) is taken as evidence of the older pronunciation \*terr (for \*ters, cp. Büoheler, Rhein. Mus. XLVI 236 ff.), and since the same poet has fer twice short and once long (Mil. 1343 a fér aequo ánimo), any candid enquirer will see in this a confirmation of my view rather than his. Why the MS. should be corrupt in fér aequo ánimo, and genuine in the two examples of fer short, as Skutsch says, there is nothing to show. If in Plautus' day people spoke -rr = -rs before a vowel, it is in the first degree probable that this was not done always, but that the form with r, which was right before consonants and at the end of a sentence, was sometimes used too. In any case Skutsoh ought to prove the contrary before unconditionally supporting the transposition fer animo aequo. To transpose is simple; it does not follow that it is necessary.]

I conjecture that -i is due to the analogy of forms like girdi, which answer to the Lat. cape (for \*capi) farcī etc., and are identical with the 2<sup>nd</sup> sing. indic. (vedi beside indic. ved-ì follows girdi beside indic. girdì); and that veizdi 'see thou', i. e. \*weid+dhi, helped to make the type current, -- perhaps we should add dû-di (§ 962). 1)

In O.C.Sl. the  $2^{nd}$  sing. veli (indic. veljq veli-si inf. veli-ti 'to command') may possibly be a form like Lat.  $farc\bar{\imath}$ . But it is no doubt better to regard it as injunctive, for \*- $\bar{\imath}$ -s; see § 955 Rem. p. 496.

# B. 2nd Person Singular in -dhi.

§ 959. Forms with this suffix occur in Aryan, Greek and Balto-Slavonic; they occur in Unthematic tense stems. Thurneysen (Kuhn's Zeitschr. xxvII 180) compares Skr. ádhi 'up!' (like Ger. auf! geh! 'up! go!'), with its variant dhi, like abhi with variant bhi; others again compare the infinitive endings -dhyāi Gr. -9ai, which is less credible. In both cases we may assume that the imperative type described in § 957 lies at the foundation of this.

-dhi is added to the Weak Stem.

Pr.Idg. Class I. \*i-dhi from \*ei-ti 'goes': Skr. i-hi Gr. i-9\(\text{i}\). Skr. \$\sin ru\-dhi\' Gr. \$\sin \lambda \tilde{\text{v}}\tilde{\text{orn}}\tilde{

<sup>1)</sup> With the change of \*vede to vedi following girdi etc. should be compared the change of O.C.Sl. 1st pl. pres. \*nesomŭ to nesemŭ following znajemŭ § 1008 sub. fin.; with the effect of veizdi which possibly helped, compare the change of O.C.Sl. imper. chošti 'wish thou' to choštī following viždī.

ὄμ-ν $\bar{v}$ -σι 'swears'. — Perfect. Skr. mumugdhí beside mu-mốc-a from muc- 'to let go', Gr. Hom. δείδιθι i. e. \*δέ-δFι-θι beside \*δέ-δFι-μεν 'we feared'.

§ 960. Aryan. Sanskrit has both -dhi and -hi. Of these -hi is used only after sonants, -dhi in Vedic after both sonants and consonants, in the later language after consonants only. See I § 480 p. 354, and von Bradke, Zeitschr. Deutsch. Morg. Gesell. XL 658 ff., where the variants -dhi and -hi (śrnudhi and śrnuhi for instance) are convincingly explained as dialectic bye-forms.

Class I. Skr. i-hi Avest. i- $\bar{d}i$  O.Pers. i- $d\bar{\imath}y$  beside indic. Skr. é-ti 'goes'. Skr. stu-hí Avest. stūiđi beside indic. Skr. stāú-ti 'praises'. Skr. kṛ-dhí beside ind. kár-ṣi from kar- 'to make'. Skr. ga-dhi ga-hi Avest. gaidī beside indic. Skr. á-gan from V gem-'go, come'. Skr. ja-hi Avest. jaidi O.Pers. ja-dīy beside indic. Skr. hán-ti from V ghen- 'strike'; the common groundform \*jha-dhi stood instead of regular pr. Ar. \*gha-dhi, I § 454 Rem. p. 335, and § 480 p. 354; in Sanskrit we also have han-dhi by re-formation. Beside Avest. Gath. zdī, to which a Skr. form \*dhi would correspond, Sanskrit has a variant ēdhi, for \*az-dhi, I § 591 p. 447. Similarly, with intrusive strong stem, we have Skr. addhi 'eat' (indic. átti) from Ved-: cp. O.C.Sl. jaždí § 962. — Classes III and Y. Skr. dhēhí and daddhi 'place thou' dēhi and daddhi 'give thou' Avest. dazdi beside indic. Skr. dá-dhā-ti dá-dā-ti, see § 540 p. 101. Skr.  $ci-k\bar{\imath}-hi$  beside  $ci-k\acute{e}-ti$  'observes, notices'.  $\acute{s}i-\acute{s}\bar{\imath}-hi$  and with strong stem śi-śā-dhi and śi-śā-ti 'whets, sharpens' (§ 538) p. 98). — Class VII. Skr. car-ky-dhi beside car-kar-ti 'remembers', nē-nig-dhi beside nē-nēk-ti 'washes'. — Class IX. Skr. stani-hi from stan- 'to thunder'. brū-hi and with strong stem bravī-hi beside brávī-ti 'speaks'.

Class X. Skr.  $v\bar{a}$ -hi beside  $v\acute{a}$ -ti 'blows'. Skr.  $p\bar{a}$ -hi O.Pers.  $p\bar{a}$ - $d\bar{\imath}y$  from Ar.  $p\bar{a}$ - 'to protect' (§ 588 p. 129).

Class XII. Skr. ś $\gamma$ - $n\bar{\imath}$ -hi from ś $\gamma$ - $n\acute{a}$ -ti 'breaks to bits, crushes' (§ 597 p. 141); sometimes the strong stem appears, as  $st\gamma$ - $n\bar{a}$ -hi. — Class XV. bhindhi from bhinád-mi 'I split',

prodhi from proák-ti 'mixes, mingles'. — Class XVII. Skr. kr-nu-hí Avest. ker'-nū-iði beside indic. Skr. kr-nó-ti 'makes', Skr. dhrš-nu-hí beside dhrš-nó-ti 'dares'; cp. § 957 p. 497 f.

s-Aorist. aviddhi instead of regular \*avīdhi (cp. I § 591 Rem. 1 p. 448), with indic. áviš-am from av- 'to favour, help'.

Perfect. Skr.  $pi-pr\bar{\imath}-hi$ , beside indic.  $pi-priy-\acute{e}$  pret.  $\acute{a}-pi-pr\ddot{e}-t$  from  $pr\bar{\imath}$ - 'to enjoy';  $\acute{s}u-\acute{s}ug-dhi$  beside indic.  $\acute{s}u-\acute{s}\acute{o}c-a$  from  $\acute{s}uc$ - 'to shine'.

§ 961. Greek. Class I.  $i\sigma\theta\iota$  be thou': Avest.  $zd\bar{\imath}$ , see I § 593 p. 450, § 626 p. 470; also  $i\sigma\theta\iota$  like pl.  $i\sigma\iota$ , see § 502 p. 66.  $\varphi\iota\iota-\vartheta\iota$  and  $\varphi\iota\iota-\vartheta\iota$  (on this double accentuation see § 958 p. 500) from  $\psi\eta-\iota\iota$  'I say': cp. Skr.  $bh\bar{\imath}-hi$  § 495 p. 55.  $\kappa\lambda\bar{\imath}-\vartheta\iota$ : Skr.  $i\tau\iota-dhi$ , cp.  $\Pi\iota\iota\iota-\kappa\lambda\dot{\imath}\mu\iota\iota-\iota-\iota$  § 498 p. 59.  $\pi\iota-\vartheta\iota$  'drink thou' beside conj. (fut.)  $\pi\iota\iota\iota-\iota\iota$  § 914 p. 464. — Class III.  $i\iota\iota-\vartheta\iota$  'be thou gracious' for  $i\tau\iota-\iota-\iota$ 0, also  $i\iota\iota-\vartheta\iota$ 1 on the type of Class XI; like the latter we find another, Hom.  $i\iota\cdot\partial\iota-\vartheta\iota$ 1.

Class X.  $\gamma\nu\tilde{\omega}-\vartheta\iota$  'learn thou, know'.  $\tau\lambda\tilde{\eta}-\vartheta\iota$  'endure thou'.  $\beta\tilde{\eta}-\vartheta\iota$  'go thou' Lac.  $\kappa\acute{a}-\beta\bar{\alpha}\sigma\iota$  (I § 495 p. 364).  $\phi\acute{\alpha}\nu\eta-\vartheta\iota$  'appear thou',  $\pi\varrho\varrho\dot{\nu}\vartheta\eta-\tau\iota$  'start off' (I § 496 p. 364). Of this class we have further  $\sigma\iota\tilde{\eta}-\vartheta\iota$  Lac.  $\check{\alpha}-\tau\iota\bar{\alpha}\sigma\iota$  (I § 566 p. 423), see § 495 p. 55. — Class XI.  $\iota'\lambda\eta-\vartheta\iota$ , see above,  $\dot{\epsilon}\iota\iota-\pi\iota\dot{n}\lambda\eta\vartheta\iota$  'imple'.

Class XVII. "ogrv-91 from "og-rv-01 'arouses'.

Perfect.  $\mathcal{E}$ -στα- $\mathcal{G}$ ι 'stand thou' beside indic.  $\mathcal{E}$ -στα- $\mu$ εν.  $\tau$ έ-τλα- $\mathcal{G}$ ι 'endure thou' beside  $\tau$ έ-τλα- $\mu$ εν.  $\pi$ έπισ $\mathcal{G}$ ι 'trust thou' (Aesch. Eum. 599, MSS.  $\pi$ έπεισ $\mathcal{G}$ ι) beside  $\pi$ έ-ποι $\mathcal{G}$ - $\alpha$   $\epsilon$ - $\pi$ έ-πι $\mathcal{G}$ - $\mu$ εν. Of the same kind are  $\tilde{\epsilon}$ λλα $\mathcal{G}$ ι  $\chi$ έχλν $\mathcal{G}$ ι, which I placed in Class V (§ 557 p. 109).

§ 962. Balto-Slavonic. O.Lith. veizdi veizd see thou' (by this analogy véizdmi instead of \*veid-mi) O.C.Sl. viždī instead of \*vizdī: cp. Skr. viddhi Gr. ioɔ. O.Lith. důdi důd 'give thou' may be Idg. \*dō-dhi, in which case it stands to dů'-k as Gr.  $\pi\tilde{\omega}$ - $\mathfrak{I}$  to  $\pi\tilde{\omega}$ ; O.C.Sl. daždī instead of \*da-dī = dů-di Class I, or instead of \*dazdī like Avest. dazdī, Class V. O.C.Sl. jaždī 'eat thou' instead of \*ězdī: cp. Skr. addhi. O.C.Sl. věždī instead of \*vězdī beside indic. vědě 'knows'. See I § 547 p. 400, IV § 949 p. 492.

#### C. The Forms with $-t\bar{o}d$ .

§ 963. These forms, for instance \* $uit^s$ -tod from  $\sqrt{ueid}$ -'see, know', \*bhére-tōd from √bher- 'ferre', served originally for the 2nd and 3rd persons of all numbers, as their use in Sanskrit indicates. Thus  $-t\bar{o}d$  was properly not a personal suffix at all; probably it was an affixt particle, the abl. sing. of the pronoun stem \*to- 'this, that' (Skr. tad), used in the sense of 'from there, then' (III § 424 p. 348). This theory suits the use of the forms in Sanskrit and Latin, where they are chiefly employed when the command is not to be straightway carried out, but only after a particular point of time, or under certain circumstances. Take, for example, vánaspátir ádhi tva sthāsyati tásya vittāt (Tāittirīya-Samhitā) 'the tree will fall on thee; beware of it'; tu velim saepe ad nos scribas; si rem nullam habebis, quod in buccam venerit scribito (Cic.). Greek also has often this manner of using it; but its use was much restricted by preference for the infinitival imperative.

The basis of this  $t\bar{o}d$ -series is the imperative type described under (A), §§ 957 f., of which it may safely be assumed that it was not originally restricted to the  $2^{\rm nd}$  singular, which it is most commonly used for: cp. Skr. kr-nu- $t\bar{a}d$  Gr.  $\sigma ro\rho - \nu \dot{\nu} - \tau \omega$  with kr-nu  $\sigma r \dot{\rho} \rho - r \dot{\nu}$ , Lat. im- $pl\bar{e}$ - $t\bar{o}$  with  $impl\bar{e}$ , Gr.  $\lambda \iota n \dot{\gamma} - \tau \omega$  Lat.  $lic\bar{e}$ - $t\bar{o}$  with  $vid\bar{e}$ , Skr.  $bh \dot{a} r a$ - $t\bar{a} d$  Gr.  $\phi \epsilon \dot{\rho} \dot{\epsilon} - \tau \omega$  Lat. vehi- $t\bar{o}$  with  $bh \dot{a} r a$ - $\phi \dot{\epsilon} \dot{\rho} \dot{\epsilon} vehe$ .

Remark. The arguments urged against this view by Windisch do not convince me (Ber. sächs. Ges. der Wiss., 1889 pp. 21 ff.).

# § 964. Pr.Idg.

(1) Unthematic Forms. Stems with gradation have the Weak grade. Class I. Skr. vittåd Gr.  $\iota \sigma \tau \omega$  beside Skr.  $v \dot{\epsilon} d - m i$  and  $v \dot{\epsilon} d - a$  from  $\sqrt{u e i d}$  'see, know' (§ 493 p. 52). Gr.  $\iota \sigma - \tau \omega$  Lat.  $e s - t \bar{\sigma}$  beside  $\iota \sigma - \tau \bar{\iota}$  es  $-t \bar{\iota}$  strong grade in the root as in  $\iota \sigma - \tau \bar{\iota}$  es  $-t \bar{\iota}$  et etc. Gr.  $\delta \dot{\sigma} - \tau \omega$  Lat.  $d a - t \bar{\sigma}$  beside  $\iota \sigma - \tau \omega$  from  $\sqrt{d \bar{\sigma}}$ . — Classes III and V. Skr.  $d h a - t - t \bar{a} d$  Gr.  $\tau - \theta \dot{\epsilon} - \tau \omega$ 

(2) The matic Forms. Skr. vaha-tād Lat. vehi-tō beside Skr. váha-ti 'vehit'. Skr. vōca-tād Gr. εἰπέ-τω beside á-vōca-t Gr. εἰ-ειπ-ε (§ 561 p. 110). Skr. rákṣa-tād beside rákṣa-ti 'protects'. Skr. pātaya-tād beside pātáya-ti 'makes fly', cp. Gr. mid. ποτείσθω § 966; Gr. φορεέ-τω φορείτω from φορέω 'I carry about with me, wear'.

§ 965. Aryan. No examples occur in Iranian. Sanskrit examples are given in § 964.

The forms in Sanskrit are most commonly used for the  $2^{nd}$  person singular, but are also found as  $3^{rd}$  sing. and as  $2^{nd}$  plural.

Since  $vaha-t\bar{a}d$  as  $2^{nd}$  pl. was associated with  $v\acute{a}ha-ta$  'vehite', a middle form  $vaha-dhv\bar{a}d$  was coined to complement  $v\acute{a}ha-dhvam$  ( $v\bar{a}rayadhv\bar{a}d$  in the Brahm. is the only form actually found). Compare Gr.  $q \epsilon \rho \dot{\epsilon} - \sigma \vartheta \omega$  § 966, Lat.  $fruimin\bar{o}$  § 967.

§ 966. Greek. Further examples (see § 964).  $\varphi \dot{\alpha}$ - $\tau \omega$  from  $\varphi \eta$ - $\mu \dot{\alpha}$  'I say';  $\ddot{\iota}$ - $\tau \omega$  from  $\varepsilon \ddot{\iota}$ - $\mu$  'I will go'.  $\dot{\iota}\dot{\varepsilon}\tau \omega$  from  $\ddot{\imath}$ - $\eta$ - $\mu \dot{\alpha}$  'I send forth'.  $\beta \lambda \dot{\eta}$ - $\tau \omega$  from  $\dot{\varepsilon}$ - $\beta \lambda \dot{\eta}$ - $\tau$  'I received a missile, was struck', Lesb.  $\tau \bar{\iota} \mu \dot{\alpha}$ - $\tau \omega$  from  $\tau \dot{\iota} \mu \bar{\alpha}$ - $\mu$  'I honour'.  $\dot{\omega} \vartheta \dot{\eta}$ - $\tau \omega$  from  $\dot{\omega} \vartheta \eta$ - $\mu$  'I press, oppress'.  $\delta \alpha \mu$ - $\tau \dot{\alpha}$ - $\tau \omega$  from  $\delta \dot{\alpha} \mu$ - $\tau \eta$ - $\mu$  'I tame'.  $\delta \varepsilon \iota \varkappa$ - $\tau \dot{\nu}$ - $\tau \omega$  from  $\delta \varepsilon \dot{\alpha} \varkappa$ - $\tau \dot{\nu}$ - $\tau \omega$  from  $\delta \varepsilon \dot{\alpha} \varkappa$ - $\tau \dot{\nu}$ - $\tau \omega$  from  $\delta \varepsilon \dot{\alpha} \varkappa$ - $\tau \dot{\nu}$ - $\tau \omega$  from  $\delta \varepsilon$ - $\tau \dot{\alpha}$ - $\tau \omega$  from  $\delta \varepsilon$ - $\tau \dot{\alpha}$ - $\tau \omega$  from  $\delta \varepsilon$ - $\tau \dot{\alpha}$ - $\tau \omega$  from  $\delta \varepsilon$ - $\tau \dot{\alpha}$ - $\tau \dot{\omega}$  from  $\delta \varepsilon$ - $\tau \dot{\alpha}$ - $\tau \dot{\omega}$  from  $\delta \varepsilon$ - $\tau \dot{\alpha}$ - $\tau \dot{\omega}$  from  $\delta \varepsilon$ - $\tau \dot{\alpha}$ - $\tau \dot{\omega}$  from  $\delta \varepsilon$ - $\tau \dot{\omega}$ - $\tau \dot{\omega}$  from  $\delta \varepsilon$ - $\tau \dot{\omega}$ - $\tau$ 

On the analogy of act.  $\varphi \not\in \varphi \varepsilon \tau \varepsilon$ : mid.  $\varphi \not\in \varphi \varepsilon \sigma \vartheta \varepsilon$  a middle  $\varphi \varepsilon \varphi \not\in \sigma \vartheta \omega$  was coined to complement  $\varphi \varepsilon \varphi \not\in \tau \omega$ ; this happened in

proethnic Greek. Compare Skr. vārayadhvād § 965, Lat. fruiminō § 967.

In Greek, the forms with  $-\tau\omega$  and  $-\sigma\vartheta\omega$  are regularly used for the  $3^{\rm rd}$  singular. The active form is used as  $2^{\rm nd}$  sing., with the additional suffix -s to make the person clear, in the word  $\dot{\epsilon}\lambda\vartheta\epsilon\tau\tilde{\omega}\varsigma$  ·  $\dot{\alpha}\nu\tau\dot{\iota}$   $\tau\sigma\tilde{\nu}$  ·  $\dot{\epsilon}\lambda\vartheta\dot{\epsilon}$ .  $\Sigma\alpha\lambda\alpha\mu\dot{\nu}\nu\omega$ , a gloss given by Hesychius; cp. § 987.1. The Corcyrean  $\phi\epsilon\rho\dot{\epsilon}\sigma\vartheta\omega$ ,  $3^{\rm rd}$  plural, may be taken as evidence that once  $\phi\epsilon\rho\dot{\epsilon}\tau\omega$  could be used for the plural. But another explanation is possible; that the coincidence of  $\delta\iota\delta\dot{\alpha}\vartheta\omega$   $3^{\rm rd}$  sing. and  $\delta\iota\delta\dot{\alpha}\vartheta\omega$  = \* $\delta\iota\delta\sigma\nu\sigma\vartheta\omega$   $3^{\rm rd}$  pl. caused the  $3^{\rm rd}$  sing.  $\phi\epsilon\rho\dot{\epsilon}\sigma\vartheta\omega$  to be used for the plural too.

The active and middle endings of the  $3^{rd}$  plural did not always correspond; thus Arcadian has act.  $-\nu\tau\omega$  mid.  $-(\nu)\sigma\vartheta\omega\nu$  ( $\zeta\bar{\alpha}\mu\omega'\nu\tau\omega$   $\epsilon\bar{\alpha}\alpha\lambda\alpha\sigma\alpha'\sigma\vartheta\omega\nu$ ). In this and similar cases the explanation is that it was attempted to distinguish the  $3^{rd}$  plural from the  $3^{rd}$  singular middle.

No certain explanation has been given for Lesb. 3rd pl. φέροντον φέρεσθον; see the Author, Gr. Gr.<sup>2</sup> 173, Windisch Ber. sächs. Ges. der Wiss. 1889 p. 20, O. Hoffmann Das Präsens der idg. Grundspr. 21. The medio-passive forms ἱστάνθω and

So the identification of Goth. bairandau with Gr. φερόντων (Hirt, Idg. Forsch. I 206) is wrong.

 $i\sigma\tau\acute{\alpha}\nu\vartheta$ ων, found in a late Boeotian and a late Phocian inscription, are re-formates instead of  $i\sigma\tau\acute{\alpha}\sigma\vartheta$ ων and  $i\sigma\tau\acute{\alpha}\sigma\vartheta$ ων by analogy of the active forms, made in order to clearly mark the  $3^{\rm rd}$  plural.

§ 967. Italic. The forms in  $-t\bar{o}d$  (Lat.  $-t\bar{o}d$   $-t\bar{o}$  Umbr. -tu Osc. -tud) were used for the  $2^{\rm nd}$  or  $3^{\rm rd}$  singular.

Class I. Lat.  $fert\bar{o}$  instead of \* $for-t\bar{o}$  like 2<sup>nd</sup> pl. fer-te instead of \*for-te; on Umbr. fertu 'ferto' see § 505 p. 69. Lat.  $ei-t\bar{o}$   $\bar{\imath}t\bar{o}$  Umbr. etu etu etu instead of \* $i-t\bar{o}d$ : Gr.  $\ddot{\imath}-\tau\omega$ ; cp. Lat. ei-te  $\bar{\imath}-te$  Pelign. ei-te instead of \*i-te =  $\ddot{\imath}-\tau\varepsilon$ . Umbr. futu futu 'esto': Gr.  $q\dot{v}-\tau\omega$ . Lat.  $es-t\bar{o}d$   $est\bar{o}$  Osc. estud estud Volsc. estu: Gr.  $\ddot{\imath}\sigma-\tau\omega$ , see § 964. 1 p. 505. — Class X. Lat.  $n\bar{e}-t\bar{o}$ ,  $in-tr\bar{a}t\bar{o}$ . Lat.  $hab\bar{e}-t\bar{o}$  Umbr. habetu habitu, Lat.  $lic\bar{e}-t\bar{o}d$   $lic\bar{e}-t\bar{o}$  Osc. líkítud licitud. Lat.  $port\bar{a}-t\bar{o}$  Umbr. portatu, Osc. deivatud 'iurato'. — Perfect. Lat.  $me-men-t\bar{o}$ : Gr.  $\mu\varepsilon-\mu\alpha'-\tau\omega$ . — Thematic. Lat.  $agi-t\bar{o}d$  Umbr. aitu aitu Osc. actud (I § 502 p. 368). Lat.  $s\bar{u}mi-t\bar{o}$  Umbr. sumtu. With Idg. i, Lat.  $faci-t\bar{o}$  Osc. factud.

These forms with -tōd were made the basis of new formations like the Greek. Here, as in Greek, we find forms with a plural characteristic, and medio-passive forms parallel to the active.

(1) A 2<sup>nd</sup> plural was made in Latin by adding -te (fer-te), as fertō-te agitō-te, which should be compared with Gr. 3<sup>rd</sup> pl. qερέτω-ν qερέτω-σαν: first arose \*fertōtte (cp. cette for \*ce-dite), and the double consonant was then thinned because of the preceding long vowel. Again, a 3<sup>rd</sup> pl. with -nt- makes its appearance, e. g. feruntō, suntōd suntō; probably this form has a similar history to Gr. φερόντω; the Umbrian formation does not correspond, which makes it very unsafe to suppose that the type originated at a time when Greek and Italic were still united.

In Umbrian the  $2^{nd}$  and  $3^{rd}$  plural are made by affixing -tu  $-t\bar{o}$  -ta (for  $-t\bar{a}$  I § 105 p. 98) to  $-tu = *-t\bar{o}d : futu-to$  'estote' etu-tu etu-to etu-ta 'eunto' fertu-ta 'ferunto'

habetu-tu habitu-to 'habento'. This  $-t\bar{a}$  may be either Lat. -te + some interjection (cp.  $\check{\epsilon}\bar{a}\sigma\sigma\nu$   $\check{a}$  Ar. Lysistr. 350,  $\kappa\alpha\tau\sigma\lambda\sigma\lambda\nu\check{\xi}\alpha\tau'$   $\check{a}$  Aesch. Ag. 1118,  $dring\hat{a}$  drinc Parsifal 220. 28), or an ending of the  $2^{nd}$  dual (cp. Lith. and O.C.Sl. -ta) which, like the dual ending -tis in Latin (§ 1013), got into the plural. First futu 'esto' had the  $2^{nd}$  pl. futu-to made for it, like Lat.  $agit\bar{o}$ -te from  $agit\bar{o}$ , and then since futu could be used for  $3^{rd}$  singular too, futu-to came to be used for the  $3^{rd}$  person (cp. O.C.Sl.  $2^{nd}$  sing.  $ja\check{z}d\check{z}$  used also for  $3^{rd}$  sing. § 949 p. 492). Still,  $-t\bar{a}$ , if it was a dual ending, may have been originally the ending of the  $3^{rd}$  person too (cp. O.C.Sl. -ta as  $3^{rd}$  dual, § 1040); in that case futu-to was originally a  $3^{rd}$  person form as well a  $2^{nd}$ .

Remark. The ending  $-t\bar{a}$  seems to all appearance to be used in its proper and original way in VI b 63 (= I b 21. 22)  $etato\ Iiovinur$  'itate Iguvini', and this  $-t\bar{a}$  medialised into  $-m\bar{a}$  (cp. -mu(d) following -tu(d), below) might be seen in  $arsmahamo\ caterahamo\ Iovinur$  'ordinamini centuriamini Iguvini' VI b 56 = I b 19. But I fear that it is only appearance. For in the first place this medialising would be very remarkable in itself; and secondly, it is natural to suppose that  $etato\ arsmahamo\ are\ shortened\ by\ dissimilation\ from\ *\varetit{e}t\varetit{ati\varetit{u}}-t\varetit{o}\ ('itatote')\ *arsmam\varetit{u}-m\varetit{o}\ , and\ that\ the\ latter\ has\ caused\ by\ analogy\ the\ shortening\ of\ *cater\varetit{am\varetit{u}}-m\varetit{o}\ which\ follows\ it.$ 

(2) Complementary to  $dat\bar{o}d$   $dat\bar{o}$   $dant\bar{o}$  there were formed in Latin dator dantor, like damur beside damus. There also arose a  $3^{rd}$  sing. in  $-min\bar{o}$  for the  $2^{nd}$  pl. in  $-min\bar{i}$  (II § 71 p. 165), as  $fruimin\bar{o}$   $f\bar{a}min\bar{o}$   $profit\bar{e}min\bar{o}$  beside  $fruimin\bar{i}$  etc.

Corresponding to the latter formation Umbr. has persnimu persnihimu 'precamino, supplicato', and the relation of pl. habituto 'habento' and habitu 'habeto' suggested a plural persnihimumo 'pecantor, supplicanto'. On the 2<sup>nd</sup> pl. arsmahamo caterahamo, see the last Remark. Osc. censamur 'censeinino, censetor' shows the mid.-pass. -r added to the mid.-pass. m-suffix. As regards the relation of the Umbr.-Osc. suffix -mo- to Lat. -mino-, see II § 72 p. 166.

#### II. SOME IMPERATIVE FORMS PECULIAR TO CERTAIN LANGUAGES.

§ 968. Aryan.

(1) The 2<sup>nd</sup> sing, mid. in pr. Ar. -sua. Skr. kṛ-ṣvá Avest. Gath. ker²-švā beside indic. 3<sup>rd</sup> pl. Skr. á-kr-ata from V qer'make'. Skr. īr-ṣvá Avest. ar²-šva beside indic. Skr. īr-tē from V er- 'set in motion' (§ 497 p. 57). Skr. dhatsvá Avest. dasva for \*datsva (I § 473. 2 p. 349) beside indic. Skr. dá-dhā-ti from V dhē- 'place'. Skr. jáni-ṣva (from V gen- 'gignere') vási-ṣva (from u-es- 'clothe') like stani-hi (§ 960 p. 503). Skr. váha-sva Avest. vaza-nuha beside Skr. váha-ti 'vehit', Gath. gūša-hvā beside gūša-itē 'hears', O.Pers. pati-paya-uvā 'take care' (I § 558 p. 415).

It can hardly be doubted that this middle form is an extension of the Imperative discussed in §§ 957 f. by means of the reflexive pronoun (III § 438 p. 370 ff.). -sva is the form which in Greek is the accusative,  $F\dot{\varepsilon}$   $\dot{\varepsilon}$ .

(2) The 3<sup>rd</sup> sing. and pl. mid. in -ām.¹) Skr. sing kṛ-ṇu-tấm pl. kṛ-ṇv-átām from kṛ-ṇố-ti 'makes', sing. dhattām pl. dadh-atām from dá-dhā-ti 'places'. Skr. sing. bhára-tām pl. bhára-ntām from bhára-ti 'fert', Avest. sing. ver<sup>e</sup>zya-tam from ver<sup>e</sup>zye-iti 'works', pl. jase-ntam (Skr. gácha-ntām) from jasa-iti 'goes', O.Pers. sing. varnava-tām beside Avest. ver<sup>e</sup>-nav-a-itē 'believes' (§ 649 p. 185).

<sup>1)</sup>  $-\bar{a}m$  is also seen in Avest.  $\bar{u}cqm$  'should be proclaimed'. Since in Skr.  $-\bar{a}m$  is found only with verbs whose  $3^{rd}$  sing. indic. shows the ending  $-\bar{e}$  beside  $-t\bar{e}$ , it is natural to assume (as my pupil Mr. E. Kleinhans has pointed out to me) that, say,  $duh\bar{a}m$  beside  $duh\bar{e}$  is due to the analogy of  $dugdh\bar{a}m$  beside  $dugdh\bar{e}$ .  $duhr\bar{e}$  would then have suggested the  $3^{rd}$  pl.  $duhr\bar{a}m$  (§ 1078.)

used with the imperative meaning. Then e. g. bháratām bhárantām may be a transformation of the injunctive bhárata bháranta, completed in proethnic Aryan, on the analogy of duhām etc. And, as we have seen already (§ 909 p. 458), the corresponding active forms bhárat-u bhárant-u are also based upon the Injunctive.

In Avestic - $t\bar{a}m$  passed over to the Optative, as d- $y\bar{a}$ -tqm from  $dh\bar{a}$ - 'to place' (Bartholomae, Ar. Forsch. II 63 ff.).

#### § 969. Greek.

- (1) The  $2^{\rm nd}$  sing, act. of the s-aorist in  $-\sigma\sigma\nu$ , as  $\delta\epsilon\tilde{\iota}\xi\sigma\nu$  from  $\tilde{\epsilon}\delta\epsilon\iota\xi\alpha$  'I showed'. The Syracusan dialect has  $-\sigma\nu$  in the thematic aorist as well:  $\lambda\alpha\beta\sigma\nu$  (not as Attic,  $\lambda\alpha\beta\dot{\epsilon}$ ). Its origin is obscure.
- (2) Among the possible explanations of the 2<sup>nd</sup> sing. mid. of the s-aorist, as δείξαι λέξαι, two in particular deserve attention. (a) λέξαι ('lay thyself') may be the 2<sup>nd</sup> sing. mid. \*λεκ-σ-σαι, connected with lénto for \*lento-to (§ 820 p. 357), and its primary personal ending may be compared with Ved. 2nd sing. act. vé-și 'come here' and like forms (§ 910 Rem. p. 459 f.). λέξαι would be to the injunctive λέξο, i. e. \* $\lambda$ εκ-σ-σο (also used for imperative), as Skr. prá-si 'fill thou' to the imper. injunct. prά-s. But since in the speaker's throught λέξο was associated with the system λέχτο λέχθαι etc., λέξαι because of its α was supposed to go with the α-forms ἐλεξάμην ἐλέξατο etc. (b) The other possibility is that this imperative was a Present form, that e. g. Eoou (V sed- 'sedere') was the middle to the Skr. imper. sát-si 'place thyself, sit', and ὄμοοξαι the 2nd sing. to Skr. mrš-té. Association of these with the s-aorist was easy when they were so completely isolated. Perhaps — there is nothing to prevent this either - forms of both kinds have been united to form our Aorist Imperative.
- § 970. Germanic. Unexplained forms: Goth. at-steigadau 'καταβάτω', láusjadau 'ὁνσάσθω', and liugandau 'γαμησάτωσαν'. The explanations offered for these may be seen collected by

Jellinek, Beitr. zur Erklärung der germ. Flexion, pp. 98 ff.; see further p. 507 footnote, and compare the medio-passive optative forms bairái-zau -dau -ndau in § 1052.

# SIGNS OF THE PERSONS, AND OF MIDDLE AND PASSIVE VOICE.1)

§ 971. The Personal endings served in the original language a double purpose: to distinguish Persons, and to distinguish the Active from the Middle or Passive Voice.

<sup>1)</sup> Fr. Müller, Sprachwissenschaftliche Beiträge zur Suffixlehre des idg. Verbums, Kuhn-Schleicher's Beitr. II 351 ff. Idem, Zur Suffixlehre des idg. Verbums I, Sitzungsber. d. Wien. Akad. XXXIV 8 ff., II, ibid. LXVI 193 ff. G. Curtius, Zur Erklärung der Personalendungen, in his Begemann, Zur Erklärung der Personalendungen, in: Stud. IV 211 ff. Zur Bedeutung des schwach. Präteritums der german. Sprachen 1874 The Author, Zur Geschichte der Personalendungen, Sayce, The Person-Endings of the Indo-European Morph. Unt. I 133 ff. Verb, Techmer's Zeitschr. f. allgem. Sprachw. I 222 ff. P. Merlo, Sulla genesi delle desinenze personali, Rivisti di filol. XII 425 ff., XIII 385 ff., M. Haberlandt, Zur Geschichte einiger Personalausgänge bei den thematischen Verben im Idg., Wien 1882. Windisch, Personalendungen im Griech. und Sanskr., Ber. d. sächs. Gesellsch. d. Wiss. 1889 pp. 1 ff. Bezzenberger, Die idg. Personalendungen -mā, -tā, -vā, in E. Sibree, First and Second Persons of the his Beitr. II 268 f. Indo-European Verb, The Academy XXVII (1885) pp. 190 f. Stier, Die 3. plur. praes. indicativi des verbi substantivi, Kuhn's Zeitschr. VII 1 ff. Benfey, Über einige Pluralbildungen des idg. Verbum, Abhandl. d. Gött. Gesellsch. d. Wiss. XIII 39 ff. V. Henry, La 3e personne du pluriel du parfait indo-européen, Mém. Soc. Ling. vi 373 ff. Windisch, Über die Verbalformen mit dem Charakter r im Ar., Ital. und Kelt., Leipz. 1887 (= Abhandl. der sächs. Ges. d. Wiss., phil.-hist. Cl., x 447 ff.). Misteli, Über Medialendungen, Kuhn's Zeitschr. xv 285 ff. 321 ff. A. Kuhn, Über das Verhältniss einiger secundären Medialendungen zu den primären, ibid. L. Parmentier, L'origine des secondes personnes φέρε(σ)αι, λύε(σ)αι, bhárasē, sequere, Mém. Soc. Ling. VI 391 ff. H. C. von der Gabelentz, Über das Passivum, Abhandl. der sächs. Gesellsch. d. Wiss. VIII 449 ff. Steinthal, Über das Passivum, Zeitschr. f. Völkerpsych. II 244 ff. Herm. Müller, De generibus verbi, Greifsw. 1864.

What the meaning of each particular personal suffix may have been we are not in a position to decide. Some of them may originally have been a personal pronoun affixt to the

Aryan. Bartholomae, Arica: Zur Bildung der 1. sing. praes. act., der 1. plur., der 3. sing. perf. act., Zur Flexion des Conjunctivs, Zur Bildung der 3. plur. praet. act., der 2. und 3. du. med., Kuhn's Zeitschr. XXIX 271 ff. Idem, Die 1. sing. opt. med. der thematischen Conjugation [of Aryan], Ar. Forsch. II 65 f. Th. Benfey, Über die Entstehung und Verwendung der im Sanskrit mit r anlautenden Personalendungen, Abhandl. der Gött. Ges. d. Wiss. xv 87 ff. J. Darmesteter, Des désinences verbales en us et des désinences verbales qui contiennent un r en sanskrit, Mém. Soc. Ling. III 95 ff. A. Bergaigne, Des troisièmes personnes du pluriel en -ram, ibid. III 104 f. Bartholomae, Indisch āi in den Medialausgängen des Conjunctivs, Kuhn's Zeitschr. xxvII 210 ff. A. J. Eaton, The Atmanepada in Rigveda, Leipz. 1884. Spiegel, Die 3. Person plur. des perf. red. med. im Althaktr., Kuhn's Zeitschr. xx 155 f. Bartholomae, Suffix ato und ato in den 3. pl., das Personalsuffix -tam im Opt. [in Avestic], Ar. Forsch. II 61 ff.

K. Burkhard, Die Personalendungen des griech. Verbums und ihre Entstehung, Teschen 1853. Bollensen, Über die 2. und 3. du. in den historischen Zeiten des Griech., Kuhn's Zeitschr J. Schmidt, Die Personalendungen  $-3\alpha$  und  $-\sigma\alpha\nu$  im Griech., ibid. xxvii 315 ff. F. Misteli, Über die erste Pers. Sing. Opt. Act. des Griech., Zeitschr. f. Völkerpsych. XII 25 ff. V. Henry. La finale primaire de 2e personne du singulier de voix moyenne en dialecte attique, Mém. Soc. Ling. vi 200 ff. Poppo, De Graecorum verbis mediis, passivis, deponentibus recte discernendis ac de deponentium usu, Frankf. a. d. O. 1827. Heurlin, De signifiactione verbis Graecorum mediis propria iisdemque a deponentibus discernendis, Lund 1852. L. Janson, De Graecorum verhis deponentibus vetustissimorum poetarum epicorum usu confirmatis, Festprogr. des Thorner Gymn., Thorn 1868. Kowaleck, Über Passiv und Medium vornehmlich im Sprachgebrauch des Homer, Danzig 1887.

Italic and Keltic. J. Rhys, The Passive Verbs of the Latin and the Keltic Languages, Transact. of the Philol. Soc. 1865 pp. 293 ff. H. Zimmer, Über das italo-keltische Passivum und Deponens, Kuhn's Zeitschr. XXX 224 ff.

Italic. Corssen, Osservazioni sulle desinenze personali del verbo italico, Rivista di filol 1V 478 ff. Idem, Zur Gestaltung der Personalendungen italischer Verba, in: Beitr. zur ital. Sprachk. pp. 564 ff. Speijer, tis 2° personne du pluriel, Mém. Soc. Ling. V 189. Idem, Désinences moyennes conservées dans le verbe latin (Parfait en  $-\bar{\iota}$  (- $e\dot{\iota}$ ), Singulier de l'impératif en -re), Mém. Soc. Ling. V 185 ff. Corssen, Zur ital. Passivbildung, in: Beitr. zur ital. Sprachk. pp. 562 ff. Conway, The Origin of the Latin Passive, illustrated by a recently discovered

It is not necessary that given forms shall originally have had the meaning which they actually convey in any language. Just as the Lat. -minī in sequiminī even in proethnic Italic was anything but a personal ending (see II § 71 p. 165), so many others which now do duty for personal endings may have had very different meanings originally. There is the highest probability in favour of what has been said in § 956 p. 496 f. regarding certain imperative suffixes. And again, it is hardly

inscription, Cambridge Philol. Society's Proceedings 1890, Dec. 4, pp. 16 ff. L. Ramshorn, De verbis Latinorum deponentibus, Leipz. 1830. J. G. Ek, De verbis deponentibus Latinorum iisdemque cum mediis Graecorum quodammodo comparandis, Lund 1835. Nölting, Das lat. Deponens, Wismar 1859. A. W. Jahnsson, De verbis Latinorum deponentibus, Helsingf. 1872. H. Ebel, Zur umbr. Conjugation, Kuhn's Zeitschr. v 401 ff. M. Bréal, La première personne du singulier en ombrien, Mém. Soc. Ling. 11 287 ff.

Keltio. Wh. Stokes, Die Endung der 1. pers. sg. praes. indic. act. im Neuirischen, Kuhn-Schleicher's Beitr. II 131 ff. Thurneysen, Der ir. Imperativ auf -the, Idg. Forsch. 1 460 ff. Wh. Stokes, Zum kelt. Passivum, Kuhn-Schleicher's Beitr. vII 467. Loth, La 2° personne du singulier du présent de l'indicatif actif (gallois ydd, cornique yth, armoricain ez ou es), Revue Celt. x 348 f.

Germanic. R. Kögel, Zum deutschen Verbum: Die Endung der ersten Person Pluralis und die Endung der zweiten Person Pluralis, Paul-Braune's Beitr. VIII 126 ff. A. Ludwig, Über die 2. sing. perf. ind. im German., Sitzungsber. der böhm. Gesellsch. d. Wiss. 1884 pp. 52 ff. J. von Fierlinger, Die II. ps. sg. perf. starker Flexion im Westgerm., Kuhn's Zeitschr. xxvII 430 ff. Idem, Ahd. -mēs, ibid. xxvII 189 f. J. Thorkelsson, Personalsuffixet -m i første Person Ental hos norske og islandske Oldtidsdigtere, Ark. för nord. fil. vIII 34 ff. H. Ebel, Das got. Passivum, ibid. v 300 ff. W. Uppström, Über das got. Medium, Germania xIII 173 ff.

Slavonic. The Author, Altbulg. beretŭ und beratŭ, Kuhn's Zeitschr. XXVII 418 ff. Miklosich, Die Personalsuffixe des Dualis [in Old Slovenian], Sitzungsber. d. Wien. Akad. LXXXI 125 ff.

possible to deny a connexion between the endings -nt -nti -nto etc. of the 3<sup>rd</sup> plural and the participal suffix -nt- (II § 125 pp. 394 ff., and IV p. 50 footnote 1).

§ 972. The etymological connexion of Middle and Active ending is quite obscure. What, for instance, is the connexion between  $3^{rd}$  sing. mid. Gr.  $-\tau \alpha \iota$  and  $3^{rd}$  sing. act.  $-\tau \iota$ ?

Remark. It is probable a priori that the Active endings as a class are the oldest. For these characterise an action simply, without the secondary meanings which the Middle Forms convey over and above those of the Active. On this principle we may regard the \*-medhai or \*-medhai of the 1st plural as an extension of the act. \*-me. \*-so \*-to \*-nto are doubtless extensions of the active \*-s \*-t \*-nt, and if a particle i were added to these, the former would become \*-sai \*-tai \*-ntai or \*-sai \*-tai \*-ntai, the latter \*-si \*-ti \*-nti. But in the 2nd pl. the middle Skr. -dhve-dhvam are obviously to be kept quite apart from the active -tha -ta. And who is to prove that \*-sai \*-tai did not become \*-si \*-ti by loss of accent, and \*-so \*-to become \*-s \*-t in the same way? This explanation is actually suggested by Begemann, Zur Bedeutung des schwachen Präteritums der german. Sprachen, p. 188, and Osthoff, Morph. Unt. IV 282.

For the Passive Voice there were originally no special and characteristic endings in the Indo-Germanic languages. All so-called passive forms in the verb finite are either middle or active.

§ 973. Each person, both Active and Middle, had in the parent language at least two endings.

Sometimes there is no possibility of tracing any connexion between these different endings, as between -ti and -e in the  $3^{rd}$  sing. active (Skr. pres.  $\acute{as}$ -ti and perf.  $\acute{as}$ -a). In particular, there were a number of special endings in the Perfect Indicative, whose origin, it would appear, was quite distinct from that of the endings in the other tenses and moods.

But the rest are obviously variant forms of the same thing. This is true of -mi and -m in the  $1^{st}$  sing. active, of -tai or -toi and -to in the  $3^{rd}$  sing. middle. The -i which distinguishes the active endings  $1^{st}$  sing. -mi  $2^{nd}$  sing. -si  $3^{rd}$  sing. -ti  $3^{rd}$  pl. -nti from -m -s -t -nt in the same persons, may, I suggest, be an affixt particle (perhaps implying present time). The same -i, forming a diphthong with a preceding  $-\alpha$ -vowel, is seen in the middle endings  $1^{st}$  sing. -ai or -ai (Skr. perf.  $tutud-\hat{e}$ ) and

 $-\bar{o}i$  (Skr. conj.  $k\gamma-n\acute{a}v-\bar{a}i$ ),  $2^{nd}$  sing. -sai or -sai,  $3^{rd}$  sing. -tai or -tai beside  $1^{st}$  sing. -a (Skr. pret.  $\acute{a}-dvi\check{s}-i$ ) and -o (Skr. opt.  $dvi\check{s}iy-\acute{a}$ ),  $2^{nd}$  sing. -so,  $3^{rd}$  sing. -to,  $1^{st}$  pl. -medha (Skr. -mahi Gr.  $-\mu s \mathcal{I}a$ ),  $3^{rd}$  pl. -nto. Other differences distinguish the endings of the  $1^{st}$  pl. act. Skr. -mas (-masi) and -ma, the endings of the  $2^{nd}$  and  $3^{rd}$  dual act. Skr. -thas -tas and -tam  $-t\bar{a}m$ , and so forth.

§ 974. Leaving aside the endings peculiar to the Indic. Perf. Act., the other personal endings are divided into Primary and Secondary; the 3<sup>rd</sup> sing. for instance has primary endings -ti active and -tai (-tai) middle, and secondary -t active and -to middle.

The Primary endings belong to the Indic. Pres. Active and Middle (Skr.  $d\acute{a}d\ddot{a}$ -ti dat- $t\acute{e}$ ), and include the  $s\acute{e}$ 0-future (Skr.  $d\ddot{a}sy\acute{a}$ -ti  $-t\ddot{e}$ ), and the Indic. Perf. Middle (Skr. dad- $\acute{e}$ ). But forms with a secondary ending (Injunctive) could also serve as indic. present, see § 909 p. 457.

The Secondary endings belong to the augmented Indic. Active and Middle (Skr.  $\acute{a}$ - $d\ddot{a}$ -t  $\acute{a}$ -di-ta,  $\acute{a}$ - $dad\bar{a}$ -t  $\acute{a}$ -dat-ta etc.), to the series which has such wide and varied use, the Injunctive Active and Middle (Skr.  $d\ddot{a}$ -t di- $t\dot{a}$  etc.), and to the Optative Active and Middle (Skr.  $dady\ddot{a}$ -t  $dad\bar{a}$ - $t\dot{a}$  etc.)

The Conjunctive varies, and takes both kinds.

Remark. Some light may be had from Irish syntax to explain why the Augment required secondary endings. The augment was an independent adverb (§ 477 pp. 24 f.); and we find in Irish double forms, one for Conjunct and one for Absolute use, e. g. 3rd sing. do-beir for \*-bere-t (secondary ending) and berid for \*bere-ti (primary). Probably the Irish usage in some degree reflects that of proethnio times, and we should suppose that in the parent language, while bhére-ti would be used alone, such a form as \*pro bhere-t would be used when the verb was coupled with a prefix. On this supposition, Skr. prá bharati is due to the analogy of independent bhárati, and vice versa Lat. véhis to that of the compounds, as ád-vehis. But this kind of variation cannot be assumed for all tenses and moods in the parent language (of course the perfect indicative active is always excepted). It certainly was not found in the optative, which in the existing languages always shows secondary personal endings. And notwithstanding Skr. 2nd sing. imper. vέ-ši and Gr. λέξαι (§ 910 Rem. p. 459 f.), we must not venture to allow it for imperative expressions.

§ 975. Amongst the suffixes of persons, r has a place to itself. It is found sometimes alone as a personal ending (as Skr.  $3^{rd}$  pl.  $cakr-\acute{u}r$ ), sometimes in conjunction with others (as Skr.  $3^{rd}$  pl. pres. duh-r- $at\bar{e}$  Lat.  $3^{rd}$  pl. sequo-ntu-r). As Italic and Keltic have it in almost all persons, and as the forms which contain it must be treated together, a special chapter will be given to it after the other endings have been discussed (§§ 1076 ff.).

#### ACTIVE ENDINGS.

#### 1<sup>ST</sup> PERSON SINGULAR.

- § 976. Proethnic Indo-Germanic.
- (1) -mi, Primary Ending for Unthematic Stems. \*és-mi 'I am': Skr. ásmi Arm. em Gr. εἰμὶ Alban. jam (for \*em \*esmi, § 493 p. 52) Goth. im Lith. esmì O.C.Sl. jesmǐ. Skr. ἀάdā-mi Gr. δίδω-μι 'I give'. Skr. ἐγ-ṇά-mi 'I break to pieces' Armen. bair-na-m 'I lift' Gr. δάμ-νη-μι 'I tame' O.Ir. glenim 'I remain hanging' (for \*gli-na-mi) O.H.G. gi-nō-m 'I gape'. Most languages came indepently to use this ending with Thematic stems: Skr. bhárāmi Armen. berem O.Ir. berim 'fero' O.H.G. wirdon 'I become' Serv, nesem 'I bear'.
- (2) -ō, the Primary Ending for Thematic Stems. \*bherō 'fero': Avest. Gath. ufyā 'I weave, extol' Gr. φέρω Lat. ferō O.Ir. as-biur 'effero, dico' Goth. baira Lith. vežù 'veho'. Future Avest. Gath. vax-šyā 'I will speak' Lith. dù'-siu 'dabo'. Conjunctive \*es-ō from indic. \*es-mi: Avest. Gath. anhā Skr. bráv-ā 'dicam' Gr. εω ω Lat. (fut.) erō. -ō also in the Greek long-vowel Conjunctive, as φέρω (pl. φέρω-μεν φέρη-τε), and the Aryan -ā seems to be identical in the forms Skr. árcā (3<sup>rd</sup> sing. árc-ā-t) Avest. Gath. per sā (3<sup>rd</sup> sing. per s-ā-iti), see § 918 Rem. p. 466.
- (3) -m (after sonants) and -m (after consonants) Secondary Ending for any Stem. \*bhéro-m: Skr. ά-bhara-m Gr. ἔ-φεφο-ν Lat. su-m O.C.Sl. nesũ 'bore'. Conj. Lat. fera-m O.Ir. do-ber

- O.C.Sl. berą (§ 929 p. 474). Skr.  $\acute{a}$ -yā-m 'I went' Gr.  $\check{\epsilon}$ - $\delta \varrho \bar{\alpha}$ - $\nu$  'I ran' Lat. era-m O.Ir. ba 'fui' Goth. i-ddja 'I went'. Opt. \*s- $(i)\dot{\varrho}$ -m 'sim': Skr. syā-m Gr.  $\varepsilon \check{\iota}\eta$ - $\nu$  Lat. sie-m si-m. \* $\bar{\epsilon}s$ -m 'eram' (before sonants also \* $\bar{\epsilon}s$ -m): Skr. ás-am Gr.  $\check{\eta}$ - $\alpha$ . s-Aorist Skr. á-cāi $\check{s}$ -am Gr.  $\check{\epsilon}$ - $\tau \varepsilon \iota \sigma$ - $\alpha$  from  $\bigvee q e \dot{\iota}$  'pay a penalty, etc.'. Opt. \* $bhero \dot{\iota}$ -m: Skr.  $bhar\bar{\epsilon}y$ -am.
- (4) -a in the indic. perf. \*uoid-a 'I know': Skr. véd-a Gr. οἶδ-α O.Ir. ro cechan 'cecini' Goth, váit.
- § 977. Aryan. (1) -mi. Skr. ás-mi Avest. ah-mi O.Pers. amīy. Skr. dádhā-mi 'I place' Avest. daāa-mi. Skr. ky-nō-mi 'I make' Avest. ker<sup>e</sup>-nao-mi.
- (2) The ending  $-\bar{a} = \text{Idg.} -\bar{o}$  is regular in the Gatha dialect of Avestic for the indic. present, as  $spasy\bar{a}$  'conspicio, I watch' (Bartholomae, Kuhn's Zeitschr. xxix 271 ff.). Independently both Sanskrit and later Avestic adopted the re-formation with -mi (§ 976. 1); as Skr.  $bh\acute{a}r\bar{a}mi$   $d\bar{a}sy\acute{a}mi$  late Avest.  $bar\bar{a}mi$  O.Pers.  $d\bar{a}ray\bar{a}m\bar{\imath}y$  (Skr.  $dh\bar{a}r\acute{a}y\bar{a}mi$ ). The reason for this innovation was that there were often parallel forms, one thematic and the other unthematic, as Skr.  $d\acute{a}-dh\bar{a}-ti$  and  $d\acute{a}-dh-a-ti$ , Avest.  $da-d\bar{a}-iti$  and  $da-\bar{p}-a-iti$ , and it was a recommendation for -mi with the thematic stem that by this the number of syllables became the same in all persons of the singular. Another thing which may have had some influence is that in the 1<sup>st</sup> sing. mid. indic. pres. of both classes the same ending (-ai) was used from the proethnic Aryan period.
- (3) The short-vowel (or thematic) conjugation and the long-vowel both show the endings  $-\bar{a}$  and  $-\bar{a}ni$  side by side; the former was proethnic Idg. (§ 976. 2 p. 517): Skr. Ved.  $brav\bar{a}$  Ved. and class.  $br\acute{a}v\bar{a}ni$  (3<sup>rd</sup> sing.  $br\acute{a}v-a-t$ ) Avest. mrava  $mrav\bar{a}ni$  (3<sup>rd</sup> sing. Gath.  $mrav-a-it\bar{\imath}$ ) beside indic. Skr.  $br\acute{a}v-\bar{\imath}-ti$  'speaks' 1<sup>st</sup> pl.  $br\bar{u}-m\acute{a}s$ ; Skr. Ved.  $v\bar{o}c\bar{a}$  (Gr.  $(f)\epsilon i\pi\omega$ ) Ved. and class.  $v\bar{o}c\bar{a}ni$  (3<sup>rd</sup> sing.  $v\bar{o}c-\bar{a}-ti$ ) beside indic.  $\acute{a}-v\bar{o}c-a-t$  (Gr.  $\acute{\epsilon}-(f)\epsilon i\pi\epsilon$ ) from vac- 'to speak', Avest.  $per^es\bar{a}$  (3<sup>rd</sup> sing.  $per^es-\bar{a}-iti$ ) beside indic.  $per^es-\bar{a}-iti$  'asks',  $az\bar{a}ni$  beside indic. az-a-iti 'agit'.

The origin of -ni is obscure. Perhaps we should connect

it with the Ar. -na of Avest.  $2^{nd}$  sing. bara-nā and the ending of the  $2^{nd}$  pl. -than-a -ta-na (§ 600 p. 143, § 1010). 1)

- (4) -m. Skr.  $\acute{a}$ -bhara-m Avest. barem O.Pers. abaram. Skr.  $\acute{a}$ -dadh $\bar{a}$ -m Avest. dad $\acute{a}$ -m. Optative Skr. dadh-y $\acute{a}$ -m Avest. dai $\acute{a}$ y $\acute{a}$ -m.
- (5) -m appears in Aryan regularly as -am, which we may consider the ante-sonant form (-mm). See I § 231 Rem. p. 196. -am seems to have been helped in beating \*-a = Gr. -a out of the field by various causes: in Skr. ά-han-am and other such by the existence of thematic and unthematic variants together (cp. ά-han-a-t § 498 p. 58); in ás-am ád-am by a wish to distinguish these from the perfect (ás-a ád-a); in the optative bhárēy-am, by a wish to distinguish active and middle (bharēy-a). Skr. á-brav-am Avest. mraom i. e. mrav-em 'I spoke'; Skr. ás-am O.Pers. ah-am 'eram'. Avest. diāaṣm i. e. diāay-em beside di-āaṣ-iti 'sees'. Skr. á-kṣār-ṣ-am (Gr. ε-φθειρ-α) from kṣ̄ar- 'to flow, pass away'. Optative Skr. bhárēy-am (not found in Iranian).
- (6) -a in the Perfect. Skr. véd-a Avest. Gath. vaed-ā
  'I know': Gr. οἶδα. On Skr. dadhāú see § 852 p. 402 f.
  - § 978. Armenian. Perfect -a not found.
- (1) -m = Idg. -mi. em 'I am' for \*es-mi § 501 p. 63. mna-m 'I remain, wait for 'jana-m 'I take pains' § 581 p. 122. ba-na-m 'I open' § 601 p. 144.  $je\dot{r}$ -nu-m 'I warm myself' § 642 p. 180.

This -m spread to the Thematic stems (§ 976.1), as berem 'fero'; e before the -m comes from the 2<sup>nd</sup> and 3<sup>rd</sup> singular (as in Serv. nesem, § 983), partly from the analogy of em. The same innovation is seen in the 3<sup>rd</sup> pl. beren, § 1019.

(2) The history of Idg. -m and -m is not clear. The ending -m is believed to occur in c.g. etu 'I gave' edi 'I placed' beri 'I bore'. Compare Bartholomae, Stud. Idg. Spr. 11 36 f.; Bugge, Kuhn's Zeitschr. xxxii 75.

What Mahlow suggests and Wiedemann approves (Lang. Voc. 162, Lit. Prät. 160) does not convince me in the least.

- § 979. Greek.
- (1) - $\mu$ i.  $\epsilon l \mu$  'I go': Skr.  $\epsilon mi$ .  $\alpha \eta \mu$  'I blow': Skr.  $v \dot{\alpha} mi$ . Lesb.  $\tau \dot{t} \mu \bar{\alpha} \mu$  'I honour': cp. Armen.  $j \alpha n \alpha m$  O.H.G.  $s \alpha l b \bar{o} m$ .
- (2) - $\omega$ .  $\check{\alpha}\gamma\omega$ : Lat.  $ag\bar{o}$ . Conjunctive  $\epsilon i\delta \acute{\epsilon}\omega$  - $\tilde{\omega}$  'sciam': Lat.  $v\bar{\imath}der\bar{o}$ . Conj.  $\varphi\acute{\epsilon}\varrho\omega$  'feram': cp. Skr. Ved.  $\acute{a}rc\bar{a}$ . In Homer the Conjunctive is extended by - $\mu\iota$ , a re-formation:  $\varkappa\tau\epsilon\acute{\iota}\nu\omega$ - $\mu\iota$  with indic.  $\check{\epsilon}\varkappa\tau\epsilon\iota\nu\alpha$ ,  $\dot{\epsilon}\vartheta\acute{\epsilon}\lambda\omega$ - $\mu\iota$  indic.  $\dot{\epsilon}\vartheta\acute{\epsilon}\lambda\omega$ , cp.  $\dot{\epsilon}\vartheta\acute{\epsilon}\lambda\eta\sigma\vartheta\alpha$  § 987 and  $\dot{\epsilon}\vartheta\acute{\epsilon}\lambda\eta$ - $\sigma\iota$  § 995.
- (3)  $-\nu$  for -m.  $\bar{\eta}\gamma_0-\nu$ : Skr.  $\acute{a}ja-m$ .  $\dot{\varepsilon}-\tau i\vartheta\eta-\nu$ : Skr.  $\acute{a}-dadh\bar{a}-m$ . Optative  $\vartheta\varepsilon i\eta-\nu$   $\tau i\vartheta\varepsilon i\eta-\nu$ : Skr.  $dadh-y\acute{a}-m$ .
- - $\alpha$  for - $\eta$ . Aorist  $\tilde{\epsilon}$ - $\chi \epsilon(F)$ - $\alpha$  'I poured',  $\tilde{\epsilon}$ - $\delta \epsilon \xi$ - $\alpha$  'I showed'. The opt. form \* $\varphi \epsilon \varrho o(\xi)$ - $\alpha$  which Skr. bhárēya-m leads as to expect, is lacking. In its stead we find  $\varphi \epsilon \varrho o\iota$ - $\mu\iota$ , which is undoubtedly a re-formation (- $o\iota \mu\iota$ : - $o\iota \varsigma$  like  $\tau i \vartheta \eta \mu\iota$ :  $\tau i \vartheta \eta \varsigma$ ), and one or two cases in Attic of  $\varphi \epsilon \varrho o\iota \nu$ , which stands to Skr. bhárāya-m as  $\tilde{\epsilon}$ - $\varphi \bar{\nu}$ - $\nu$  to  $\acute{a}$ -bhāv-am.
- (4)  $-\alpha=\mathrm{Idg.}$  -a in the Perfect.  $\delta \acute{\epsilon}\delta o \varrho \varkappa -\alpha$  'I have seen': Skr.  $dad\acute{a}r\acute{s}-a$ .
  - § 980. Italic. -mi and -a (Perfect) are not found.
- (1)  $-\bar{o}$ . Lat.  $ag\bar{o}$ : Gr.  $\tilde{a}\gamma\omega$ ; Umbr. sestu 'sisto'. Lat.  $plant\bar{o}$ ' for  $-\bar{a}$ - $(i)\bar{o}$ , Umbr. subocauu sobocau 'adoro' (-uu and  $-u = -\bar{o}$ ) 1). Conj. (fut.) Lat. er- $\bar{o}$ : Avest. Gath. anh- $\bar{a}$ ; cp. § 918 Rem. p. 466.
- (2) -m. Lat. Osc. s-u-m § 528 p. 91; add Osc. manafum, if it means 'mandavi', see § 874 p. 423. Lat. amā-bam: O.Ir. ba. Conj. Lat. ag-α-m. Opt. Lat. s-ie-m sim. -η seems to be lost.
  - § 981. Keltic.
- (1) -m aus -mi. O.Ir. cre-nim 'I buy' Mod.Cymr. pry-na-f for \*-na-mi § 604 p. 145. scaraim 'I separate, separate myself for \*scarā-mi, caraim 'I love' for \*carā-mi § 584 p. 125.

<sup>1)</sup> As the Umbr. inf. stiplo(m) 'stipulari' etc. shows the group  $\bar{a}o$  contracted in unaccented syllables (§ 1094.7), it apparently follows that subocau is a new form instead of \* $suboc\bar{o}$  by analogy of stahu 'sto' and the like.

Forms like *lēcim* (beside *-lēciu*) and *berim* (beside *-biur*) are re-formed on the model of the verbs in *-mi* above mentioned. Compare § 976.1.

Why is -m constantly doubled in Irish, thus shewing that the nasal was not spirant (mh) as in Cymric? This is no effect of the analogy of the Irish representative of Idg. \*es-mi 'I am' (with mm for sm); because am (never written amm) has no claim to be considered such (see § 506 p. 72). "Can it be true after all that Irish  $-\bar{a}m$ - when following the accent became -amm-?" (Thurneysen.)

- (2) Idg. -ō. biu 'I am': Lat. frō. no guidiu 'I beg'. -biur 'I bear': Lat. ferō. no charub 'I will love': cp. Lat. amā--bō. See I § 90 p. 85.
- (3) Idg. -m. ba 'fui' for \*bhu-ā-m: Lat. amā-bam (§ 584 p. 125). Conj. -ber 'feram' for \*bherā-m; the absolute form bera is analogical, and no ground-form can be inferred for it. Idg. -m seems to be quite lost.
- (4) Idg. -a in the Perfect. ro seslach 'I struck down' for \*se-slag-a: cp. Goth.  $sl\bar{o}h$ .

# § 982. Germanic.

(1) Idg. -mi is common in West Germanic. Goth. im O.H.G. b-im b-in 'I am' for \*es-mi (§ 507 p. 73). O.H.G. sestō-m 'sisto, I arrange' (§ 545 p. 103), salbō-m 'I anoint' (§ 585 p. 126), habē-m 'I have' (§ 592 p. 133), stā-m 'I stand' (§ 708 p. 240), ginō-m gei-nō-m 'I gape' (§ 605 p. 146).

Goth. salbō doubtless has not the secondary Idg. -m, but gets its ending from salbō-m -nd by analogy of baira: baira-m -nd. On Goth. haba see § 708 p. 238 f.

(2) Idg. -5. Goth. baira O.H.G. biru 'fero' O.Icel. heito-mk' I call myself', Goth. nasja O.H.G. neriu nerru 'I save'; on forms like O.H.G. hilfu see I § 661.2 p. 517. In High German dialects, especially Rhine Frankish, the -n of verbs in -mi has been spreading to the thematic class since the 11th century; e. g. wirdon gihun instead of wirdo gihu, and so too O.Low Fr. wirthon (cp. § 976.1).

- (3) Idg. -m. Goth. i-ddja 'I went': Skr. ά-yām; Goth. nasida O.H.G. nerita 'I rescued' Norse Run. tawido 'I made'. No trace is left of \*-un = -η; it must have been once used in the opt. Goth. bairau; the origin of this form (O.Icel. bera) is very uncertain, see § 928 p. 474.
- (4) Idg. -a in the Perfect. Goth. váit O.H.G. weiz 'I know': Skr. véd-a Gr. οἶδ-a.
  - § 983. Balto-Slavonic. -a (Perfect) is wanting.
- (1) -mi. Lith. es-mì O.C.Sl. jes-mì 'I am': on Lith. es-mù see § 510 p. 75. O.C.Sl. ima-mī 'I have' (§ 586 p. 127); reformation with -mī, bi-mī etc., see § 727 p. 257.

It is true the Lith. reflexive ending  $-m\ddot{e}-si$  ( $d\mathring{u}m\ddot{e}-si$ ,  $velm\ddot{e}-s$  § 511 p. 76) contains the middle ending  $-m\ddot{e}=Gr$ .  $-\mu a^t$  (cp. Pruss. asmai), 1) and by I § 664.3 p. 523 it follows that  $-m\acute{e}$  becomes  $-m\grave{i}$ . Still it does not follow that -mi must always come from  $-m\ddot{e}$ ; active and middle endings must have existed side by side, and only in the si-reflexive was  $-m\ddot{e}$  made regular on the strength of 1st sing.  $-\mathring{u}'-s:-\mathring{u}$ , 1st pl.  $-m\acute{e}-s:-me$ . Compare § 991 on  $d\mathring{u}si:d\mathring{u}s\ddot{e}-s$ .

In Servian -m(i) runs through all conjugations: first, beginning with the 13th century, -a-m, as čuva-m 'I protect' (cp. O.C.Sl. ima-mi); then -i-m, as hvali-m 'I praise' (cp. O.C.Sl. bi-mi); lastly -e-m, as nese-m 'I bear', which should be compared with Armen. bere-m (§ 978 p. 519), only mogu 'I can' and hoću 'I wish' kept fast to the old ending. The same is true of Slovenian.

- (2) Idg.  $-\bar{o}$  only in Baltic; Lith.  $suk\hat{u}$  'I turn'  $suk\hat{u}'-s(i)$  'I turn myself' (I § 664.3 p. 523),  $d\hat{u}'siu$  'dabo'. On the spread of -u to stems in orig.  $-\bar{a}$  and  $\bar{e}$ , as lindau, see § 586 p. 127, § 593 p. 133 f., § 991.1.
- (3) Idg. -m only in Slavonic. O.C.Sl. vezŭ 'I transported' for -o-m: Skr. váha-m, da-ch-ŭ 'I gave' (§ 833 p. 370). Con-

<sup>1)</sup> No help can be got from O.C.Sl. -mi instead of -mi, which some might be inclined to regard as another instance of middle ending. Miklosich eites it as a very rare variant (Vergl. Gr.  $111^2$  63).

junctive veza = Lat. veha-m as indic. pres., see § 929 p. 474. Idg. -m is quite gone.

#### 2<sup>ND</sup> PERSON SINGULAR.

- § 984. Proethnic Indo-Germanic. On the imperative -dhi, and imperatives without any personal ending like Skr. bhára, which we here disregard, see §§ 957 ff. pp. 497 ff.
- (1) -si, Primary ending. \*ei-si 'is': Skr. é-ši Gr.  $\epsilon \bar{t}$  for \* $\epsilon i$ -( $\sigma$ ). Skr.  $bh\acute{a}ra$ -si O.Ir. beri for \*bere-(s)i Goth. baíri-s 'fers'. Conj. Skr.  $bh\acute{a}r$ -a-si. O.Ir. cari 'amas' for \*cara-(s)i, Goth.  $salb\bar{o}$ -s 'thou anointest'.

From V es-'esse' two forms. 1. \*esi: Skr. ási Gr. ɛl for \* $\dot{\epsilon}(\sigma)\iota$  Alban.  $j\bar{e}$  for \*e(si) (G. Meyer, M. Hertz zum 70. Geburtstag, 1888, pp. 86 f.). 2. \*es-si: Armen. es Gr. Hom.  $\dot{\epsilon}\sigma$ -oì: On the relation of the two Idg. forms, see III § 356 Rem. p. 258. On Goth. is see § 990.1; on Lith. esì O.C.Sl. jesi, § 991.

- (2) -s, Secondary ending. \*e-stā-s from V stā- 'stare': Skr. á-sthā-s Gr. ĕ- $\sigma r\eta$ - $\varsigma$ ; Skr. á-yā-s Goth. i-ddjē-s 'wentest'. \*bhére-s: Skr. á-bhara-s Gr.  $\varphi$ έ $\rho$ ε- $\varsigma$  ĕ- $\varphi$ ε $\rho$ ε- $\varsigma$  Lat. ag-i-s O.Ir. do-bir O.C.Sl. veze; Goth.  $\bar{o}g$ -s 'fear thou'. Opt. \*bhero $\dot{i}$ -s: Skr. bhárē- $\dot{\xi}$  Gr.  $\varphi$ έ $\rho$ οι- $\varsigma$  Goth. baírái-s Pruss. imai-s 'take thou' O.C.Sl. ber $\dot{i}$ ; \*s- $(i)\dot{z}$ ē-s: Skr. syá-s Gr.  $\varepsilon$ č $\eta$ - $\varsigma$  Lat. siē-s  $s\bar{\imath}$ -s Goth. vitei-s 'scias'.
- (3) -tha in the ind. perf.: Skr. vét-tha Gr. οἶσθα 'knowest', O.H.G. qi-tars-t 'darest'.
  - § 985. Aryan.
- (1) -si. Skr. vák-ši Avest. vaši beside 3<sup>rd</sup> sing. Skr. váš-ţi Avest. vaš-ti 'desires'. Skr. dádhā-si 'placest', Avest. daāā-hi. Skr. bhára-si Avest. bara-hi. Conj. Skr. bhárā-si, Avest. barā-hi (also barāi with h dropt) O.Pers. vainā-hy 'videas'. Imperative Skr. sát-si 'place thyself, sit' see § 910 Rem. p. 459 f.

Skr. ási Avest. ahi Goth. ahy 'thou art', see § 984.1.

(2) -s. Skr. dhá-s á-dhā-s Avest. då from √ dhē- 'to place', Skr. ákar for \*a-kar-š 'madest', Avest. var\*š 'didst work' ground-form \*yerk-s, sąs 'didst say' ground-form \*kens-s (§ 493

- p. 52). Skr.  $\acute{a}$ - $dadh\bar{a}$ -s Avest.  $dad\bar{a}$ . s-Aorist Skr.  $\acute{a}j\bar{a}i\bar{s}$  for \* $\acute{a}$ - $j\bar{a}i\bar{s}$ - $\bar{s}$ ,  $\acute{a}$ ch $\bar{a}n$  for \*a-ch $\bar{a}n$ t-s-s see § 816 p. 354. Skr.  $bh\acute{a}ra$ -s  $\acute{a}$ -bhara-s Avest.  $bar\bar{o}$  O.Pers. gaudaya 'didst hide' (I § 558. 4 p. 415). Conj. Skr.  $\acute{a}s$ -a-s Avest. anh- $\bar{o}$ , Skr.  $bh\acute{a}r$ - $\bar{a}$ -s Avest. bar- $\bar{a}$ . Opt. Skr.  $bh\acute{a}r\bar{e}$ - $\bar{s}$  Avest.  $bar\bar{o}i$ - $\bar{s}$ , Skr.  $dadhy\acute{a}$ -s Avest.  $daipy\acute{a}$ .
- (3) -tha in the Perfect. Skr. véttha Avest. Gath. võistā (I § 475 p. 351), Skr. dadhā-tha Avest. Gath. dadā-pā.
- § 986. Armenian. es 'art': Gr. ἐσ-σὶ. Hence beres 'fers', like berem following em (§ 978 p. 519).

Remark. The ending -r found in many tenses and moods Bugge thinks he can explain as -s + particle \*ra = Gr.  $\delta \dot{a}$ , e. g. aor. ar-ar-er (pres.  $a\dot{r}$ -ne-m 'I make') = Gr.  $\tilde{\gamma}_{\ell}$ -a\varrho -\varepsilon -\varrho \varrho \varr

### § 987. Greek.

(1) -si. Only left in Hom. and Syrac.  $\dot{\epsilon}\sigma - \sigma i$  'thou art', with a variant  $\epsilon \bar{i}$  for  $*\dot{\epsilon}(\sigma)\iota$ , and in  $\epsilon \bar{i}$  'wilt go' for  $*\dot{\epsilon}i(\sigma)\iota$ . When the secondary ending - $\varsigma$  was added to these forms on the analogy of  $\varphi \dot{\eta} - \varsigma$  'sayest' and the like, arose the Hom. and Herod.  $\epsilon \bar{i} - \varsigma$  or  $\epsilon \ddot{i} - \varsigma$  'thou art' and Hesiod's  $\epsilon \bar{i} - \varsigma$  'thou wilt go'; in the same way was produced  $2^{\text{nd}} \sin \varrho$ .  $\dot{\epsilon} \lambda \vartheta \epsilon \tau \iota \tilde{\sigma} - \varsigma$ , § 966 p. 507.

φέρεις 'fers' either for \* $\varphi$ ερε(σ)ι = Skr. bhára-si with secondary -ς added (see the Author's Gr. Gr.² p. 145, and Fay in the Amer. Journ. Phil. xι 219 f.); or for Idg. \*bherēi-s (by I § 611 p. 461), a form like Skr. áj-āi-š (see footnote to page 61). The latter view, on which  $\varphi$ έρεις is really injunctive, is to my mind likelier, because it explains at the same time the  $3^{\rm rd}$  sing.  $\varphi$ έρει in the simplest way (§ 995). The conjunctive  $\varphi$ έρης sprang up by the side of  $\varphi$ έρεις because of the existence of  $\varphi$ έρητε beside  $\varphi$ έρετε.

(2) -s.  $\check{\epsilon}$ - $\beta\lambda\eta$ - $\varsigma$ : Skr.  $\acute{a}$ - $gl\bar{a}$ -s (§ 587 p. 127).  $\check{\epsilon}$ - $\tau i\vartheta\eta$ - $\varsigma$ : Skr.  $\acute{a}$ - $dadh\bar{a}$ -s.  $\mathring{\eta}\gamma\epsilon$ - $\varsigma$ : Skr.  $\acute{a}ja$ -s. Opt.  $\eta\dot{\epsilon}_{\varrho o i}$ - $\varsigma$   $\dot{\epsilon}_i\dot{\gamma}$ - $\varsigma$ . Observe the injunctive forms-with indicative present use, Dor. Cypr.  $\varphi\dot{\epsilon}_{\varrho e}$ - $\varsigma$  Att.  $\varphi\dot{\gamma}$ - $\varsigma$   $\dot{\epsilon}_i\dot{\gamma}$ - $\varsigma$  Lesb.  $\varphi i\lambda\eta$ - $\varsigma$  etc., § 909 p. 457.

- (3) -tha in the Perfect. Only two original forms are left: of  $\sigma \theta \alpha$ : Skr. véttha 'knowest' and  $\tilde{\eta} \sigma \theta \alpha$  from  $\dot{\epsilon} \sigma$  'to be'. The latter, which was afterwards used as imperfect (§ 858 p. 407), was the origin of many analogical forms, for instance  $\check{\epsilon} \varphi \eta \sigma \theta \alpha$   $\check{\eta} \omega \sigma \theta \alpha$   $\check{\tau} (\vartheta \eta \sigma \theta \alpha)$  conj.  $\dot{\epsilon} \vartheta \check{\epsilon} \lambda \eta \sigma \vartheta \alpha$  opt.  $\beta \check{\alpha} \lambda \omega \sigma \vartheta \alpha$   $\dot{\epsilon} \check{\tau} \eta \sigma \vartheta \alpha$ . of  $\sigma \vartheta \alpha \varsigma$  are of very doubtful authority before the Alexandrian age; of  $\sigma \vartheta \alpha \varsigma$  occurs in Herodas II 55. In the indic. perf.  $-\alpha \varsigma$  was usual instead of  $-\vartheta \alpha$ , e. g.  $\tau \check{\epsilon} \tau \varrho o \varphi \alpha \varsigma$ , also of  $\delta \alpha \varsigma$  beside of  $\sigma \vartheta \alpha$ ; this ending came from the aorist, and was recommended by the ease with which it could be added to consonant stems (§ 844 p. 386).
  - § 988. Italic.
- (1) -si cannot be traced. But since in the 3<sup>rd</sup> sing. \*-ti seems very early to have become -t (§ 996), nothing prevents our deriving Lat. es 'art' and ēs 'eatest' from \*essi and \*ētsi.
- (2) -s. Lat.  $v\bar{\imath}$ -s (§ 505 p. 69), vel for \*vel-s (loc. cit.); but in fer-s the -s is due to analogy.  $n\bar{a}$ -s  $n\bar{e}$ -s plant $\bar{a}$ -s  $vid\bar{e}$ -s,  $am\bar{e}$ -b $\bar{a}$ s. agi-s  $fare\bar{\imath}$ -s, Umbr. heris heri heri vis, vel' (p. 68 footnote, and § 715 p. 248). Conjunctive Lat. er-i-s  $v\bar{\imath}$ der-i-s, ag- $\bar{a}$ -s ag- $\bar{e}$ -s. Optative Lat.  $si\bar{e}$ -s  $s\bar{\imath}$ -s, Umbr. sir si sei 'sis'.
- (3) Idg. -tha in the Perfect. Lat.  $v\bar{\imath}dis-ti$  (inscr. also -tei) got its  $-\bar{\imath}$  either from the 1<sup>st</sup> sing. with the middle suffix  $-\bar{\imath}$ ; or else the middle ending existed in Italic in the 2<sup>nd</sup> person too (\*- $s\bar{\imath}$  for pr. Lat. \*- $sa\dot{\imath}$ ) and - $t\bar{\imath}$  got its - $\bar{\imath}$  from this, in the same way as - $\dot{s}i$  in O.C.Sl. bere $\dot{s}i$  is a mixture of active Idg. \*- $sa\dot{\imath}$  and middle Idg. \*- $sa\dot{\imath}$  or \*- $sa\dot{\imath}$  (§ 991).
- § 989. Keltic. -tha (Perfect) is lost. The ending of dechan 'cecinisti' is obscure.
  - (1) -si. O.Ir. beri 'fers' for \*bere-si (I § 576 p. 431).
- (2) -s. Injunct. comēir 'get up' for \*cóm-ecs-rec-s-s (§ 826 p. 363) -bir 'fers' for \*bere-s (I § 576 p. 431, § 657. 5 p. 508).

In the *a*-conjunctive, berae bere and do-berae -e for a supposed \*berāsi; remember that even in the indicative the primary -i kept on intruding more and more into the conjunct flexion: only a few verbs, as -bir, kept clear of it.

§ 990. Germanic.

(1) -si. O.Icel. ber-r = pr. Germ. \*biri-zi, O.H.G. biris= pr. Germ. \*biri-si; similarly O.Icel. tem-r 'tamest' kalla-r 'callest' pr. Germ. \*-zi, O.H.G. zemi-s salbō-s pr. Germ. \*-si. Whether Goth. bairi-s gatamji-s salbo-s have \*-zi or \*-si cannot be made out, as both pr. Goth. -z(i) and -s(i) must needs become -s (I § 660.5 p. 516). The breathed -s in West Germanic is thus explained: — in O.H.G. tuo-s gā-s, in O.H.G. and A.S. bis (ground-form \*bhu-i-si, with i dropt on the analogy of forms like tuos biris, cp. I § 661 pp. 516 ff.), and in the present of Class II B (§ 532 p. 93), the vowel before Still the breathed s would probably s had the word-accent. not have become general even so, but that the pronoun \*pä 'thou' so often adhered to the verb form, as in O.H.G. biristu, see I § 661 Rem. p. 519. Compare pr. Germ. -bi and -di in the 3rd singular, § 998.

Whether Goth. is 'thou art' be Idg. \*esi or \*essi is not clear (§ 984.1).

(2) -s: Goth. pr. Norse -z, pr. W.Germ. -z and -s. Goth. gatamidēs O.Icel. tamēter O.H.G. zemitōs A.S. temedes. O.H.G. zigi pret. 'thou didst accuse': Skr. á-diś-a-s § 893 p. 441, ni curi 'noli' § 909 p. 458. Goth. conj. ōg-s (fear thou') § 917 p. 465. Opt. Goth. bairái-s O.H.G. berē-s A.S. bere; O.H.G. sī-s 'mightst be', Goth. bitei-s O.H.G. bizzī-s A.-S. bite 'mightst bite', see § 893 p. 441. The constant use of affixt \*pŭ 'thou' partly caused the secondary ending to be kept in West Germanic.

The O.H.G. compounds biris-tu tuos-tu (see under 1.)  $zemit\bar{o}s-tu$   $s\bar{\imath}s-tu$   $biz\bar{\jmath}\bar{\imath}s-tu$  were misunderstood, and in the  $9^{th}$  century people began to regard them as birist+du (thu) and so forth. This was due to kanst beside kanstu. Some part of this mistake is due to bist, which got its t earlier from the preterite-presents. In the same way we explain A.S. birest beside bires, and the like.

(3) Idg. -tha in the Perfect. Goth. las-t 'thou didst pick' (pres. lisa) slōh-t 'didst strike' (pres. slaha) O.H.G. gi-tarst

'darest' (1st sing. gi-tar). By their analogy Goth.  $v\acute{a}ist$  O.H.G. weist 'knowest' (1st sing.  $v\acute{a}it$  weiz), Goth. qast 'didst say' (pres.  $qi\bar{p}a$ ) with st instead of regular ss. Further, Goth. bar-t 'didst bear' skal-t A.S. scealt 'shalt' instead of \*bar-p etc. See I § 553 p. 406. The sole example of pr. Germ. -pa = -tha is A.S. pres. ear- $\bar{d}$  ar- $\bar{d}$  'art', which must therefore be a transformate of pres. mid. \*ar- $p\bar{e}s$  = Skr.  $\bar{v}r$ - $th\bar{u}s$  (§ 509 p. 75).

In West-Germanic and Norse -t spread from the preterite present to the Present: O.H.G. bis-t O.Icel. es-t 'thou art', wil-t 'wilt, wishest'.

In West-Germanic, the Perfect as an historic tense exchanged the form with -tha for that of the thematic arrist, as O.H.G.  $zigi = \text{Skr. } \acute{a}\text{-}di\mathring{s}\text{-}a\text{-}s$ , whence followed intermixture with the optative perfect; see § 893 pp. 441 f.

- § 991. Balto-Slavonic. -tha (Perfect) is wanting.
- Idg. -si. Lith. ei-sì 'goest', důsi 'givest' for \*dů-t-si.
   Whether Lith. esì is to be compared with Skr. ási or Gr. ἐσ-σὶ
   984 p. 523) is still uncertain.

Starting from esì, -ì spread to the other verbs. di'di instead of di'si beside di'(d)-mi di'd-u, degì beside degmi degi, suki beside suki, verti for \*verti beside verczii, fut. di'si for \*di'si beside di'-siu. Further, \* $lind\bar{o}$ -i, which became lindai, beside  $3^{rd}$  sing. lindo which drew after it the  $1^{st}$  sing.  $lindou = *lind\bar{o}$ -u; this adoption of i and i by  $\bar{a}$ -stems took place first in the present, whence it passed to the preterite  $\bar{a}$ -stems because both had the same ending in the  $3^{rd}$  sing. and in the plural and dual (e. g. bivo 'he was' like lindo); from the  $\bar{a}$ -preterite, -i and -i then proceeded to the preterite with  $\bar{e}$ . See § 586 p. 127, § 593 p. 133, § 983. 2 p. 522. Another thing may have aided the change of disi to di'di; — disi was also the  $2^{rd}$  sing. future, 1) and thus also the present \*lindo-si (cp. O.C.Sl. ima-si) may have been exchanged for \*lindo-i, because the former agreed with the  $2^{rd}$  sing. future.

<sup>1)</sup> elsi 'is' and elsi 'ibis' are distinguisht by accent.

The Reflexive in Lithuanian has always the middle endings -së -ë, as desë-s (1st sing. dè(d)-mi § 546 pp. 103 f.), sukë-s vertë-s (for \*vertië-s, cp. te-vertë § 954 p. 494); similarly the old books have essie-gu i. e. esë-gu (-gu is a particle). In the same way we have Pruss. assai assei essei 'thou art' seggē-sai 'thou doest'. Still, although -ë had to become -ì anyhow by rule, we must not assume that all instances of -ì in the 2nd singular come from -ë. The truth is no doubt that both active and middle endings were in use together, and it was only in the si-reflexive, as we saw was the case with the 1st sing. -mi, that the middle ending became the rule; cp. § 983.1 p. 522.

Proethnic Slavonic had -šī = Idg. -si, e. g. in \*bere-šī 'fers': Little Russian, Mod.Sloven., Serv., and Czech bereš. Along with this it had the middle -sī = Idg. -saī -saī in verbs with -mi: O.C.Sl. jesi 'art' jasi 'eatest' dasi 'givest', Little-Russ. jesy jisy dasy Mod.Slov. si 'art', Serv. jesi 'art', Czech jsi 'art'. By contamination of -šī and -sī, O.C.Sl. bere-ši ima-ši etc.

(2) Idg. -s can no longer be traced in Lithuanian, but in Old Prussian it can, — opt. imai-s 'take thou'. O.C.Sl. aor. veze: Skr. váha-s, opt. vezi: Skr. váhē-š. As regards da 'gavest' for \* $d\bar{o}$ -s-s see p. 830 p. 367, where also the origin of the  $2^{\rm nd}$  sing.  $dast\tilde{u}$  instead of da is treated.

#### 3RD PERSON SINGULAR.

# § 992. Proethnic Indo-Germanic.

(1) -ti Primary ending. \*es-ti 'est': Skr. άs-ti Gr. ἔσ-τι Lat. es-t O.Ir. is Goth. is-t Lith. ẽs-ti ẽs-t O.C.Sl. (Russ.) jes-tǐ. Skr. dádā-ti Gr. Dor. δίδω-τι Lith. dû's-t(i) O.C.Sl. (Russ.) das-tǐ 'dat'. Skr. vá-ti Gr. ἄη-σι 'blows' Lat. ne-t planta-t O.Ir. carid 'loves' Goth. salbō-ħ 'anoints' O.C.Sl. (Russ.) ima-tǐ 'hat'. Skr. ἐχ-nά-ti 'breaks to pieces', Armen. bar-na-y 'lifts', Gr. δάμ-νη-σι 'tames', O.Ir. lenid 'catches hold' (for \*li-na-ti) O.H.G. gi-no-t 'gapes'. \*bhere-ti 'fert': Skr. bhára-ti Armen. berē Lat. agi-t O.Ir. beri-d Goth. bairi-ħ O.C.Sl. (Russ.) bere-tǐ. Conj. Skr. ás-α-ti 'sit' Lat. (fut.) er-i-t.

(2) -t Secondary ending. \*ēs-t 'erat': Skr. ás Gr. Dor. η̃ς; 
\*e-gem-t 'he went': Skr. á-gan Arm. e-kn; \*e-dhē-t 'he placed': Skr. á-dhā-t Armen. e-d. Skr. á-dadhā-t Gr. ἐ-τ/θη 'he placed'. 
Skr. á-yā-t Goth. i-ddja 'he went'. s-Aor. Skr. á-jāi-š 'he conquered' for \*-š-t, O.Ir. for-tē 'he must help' for \*steigh+s+t, O.C.Sl. da 'gave for \*dō-s-t. \*bhére-t: Skr. bhára-t á-bhara-t, Gr. φέφε ἔ-φεφε, Osc. kúmbened 'convēnit', O.Ir. pres. -beir O.C.Sl. veze 'vexit'. Conj. of s-Aor. Skr. jḗ-ṣ-a-t O.Ir. tēs tēis; long-vowel Conj. Skr. bhár-ā-t, Arcad.-Cypr. φέφ-η, Osc. deiva-i-d 'iuret' heriia-d 'velit', O.Ir. do-bera. Opt. Skr. s-yā-t Gr. εἴη O.Lat. sied O.H.G. sī wizzi; Skr. bhárē-t Gr. φέφοι Goth. baírái Lith. te-sukē 'turn' O.C.Sl. beri.

A combination of -t with the particle u produced the personal ending -tu. Skr. ás-tu 'esto' O.C.Sl. (Bulg.) jestŭ 'est', Skr. bhára-tu 'ferto' O.C.Sl. (Bulg.) beretŭ 'fert' (§ 909 p. 458). Cp. -ntu in the 3<sup>rd</sup> pl., § 1017.

(3) -e in the Perfect. Skr.  $v\acute{e}d$ -a Gr.  $o\acute{t}\delta$ - $\varepsilon$  Goth.  $v\acute{a}it$  'he knows'. Skr. ja- $gh\acute{a}n$ -a 'he struck, killed' O.C.Sl. ro ge-guin 'vulneravit, trucidavit'.

## § 993. Aryan.

- (1) -ti. Skr. ás-ti Avest. asti O.Pers. astiy. Skr. dádhā-ti Avest. dađā-iti. Skr. bhára-ti Avest. bara-iti, O.Pers. tarsa-tiy 'he fears'.
- (2) -t. Skr. á-dhā-t Avest. dā-Þ O.Pers. a-dā. Skr. ás Avest. ās 'erat' pr. Ar. \*ās-t. Skr. á-kar Avest. cor'-Þ 'made', Avest. cōiš-t 'announced' from ciš-. Skr. á-trnat = \*a-trnat-t beside pres. trnat-ti from tard- 'to pierce', Avest. cinas beside pres. cinas-ti 'teaches' (§ 626 p. 162). s-Aor. Skr. á-jāiš 'he conquered' = \*a-jāiṣ-t, ábhār 'he brought' = \*a-bhār-ṣ-t. Skr. á-bhara-t Avest. bara-Þ O.Pers. abara. Opt. Skr. han-yá-t Avest. janyāÞ O.Pers. janiyā, Skr. bhárē-t Avest. barōi-Þ.

For the laws which apply where a word ends in two or more consonants, see I §§ 647 ff. pp. 491 ff. When combined with -u (§§ 992. 2) the -t is always kept, cp. Skr. ás-t-u

Avest. as-t-u with Skr. ás Avest. ās, Skr. gán-tu Avest. Gath. jan-tū with Skr. á-gan, Skr. pṛṇák-tu with á-pṛṇak, iṣ-Aor. aviṣ-ṭu (§ 839 p. 376).

- (3) -a= Idg. -e in the Perfect. Skr.  $\acute{a}s$ -a Avest.  $\mathring{a}nh$ -a from  $\surd$  es- 'to be'. On Skr. pa- $pr\mathring{a}$  pa- $pr\~au$  Avest. da- $d\~a$  see § 852 p. 402 f.
  - § 994. Armenian. -e (Perfect) is wanting.
- (1) The t of -ti becomes i after vowels (Hübschmann, Arm. St. 174, above I § 360 p. 276).¹) berē 'fert' for \*bere-i \*bere-ti, barna-y 'lifts' for \*barna-ti, aλay 'grinds' for \*aλa-ti, xausi 'loquitur' for \*xausi-i -ti.
- (2) e-d 'he placed': Skr. ά-dhā-t. 'e-kn 'he came': Skr. ά-gan, Idg. \*e-gem-t.

The -r of the  $3^{\rm rd}$  sing. imperf., as  $ber\bar{e}r$ , is obscure; see § 986 Rem. p. 524.

- § 995. Greek.
- (1) -ti.  $\check{\epsilon}\sigma$ - $\tau\iota$ ,  $\check{\alpha}\eta$ - $\sigma\iota$ , Dor.  $\delta i\delta \omega$ - $\tau\iota$  Att.  $\delta i\delta \omega$ - $\sigma\iota$ .
- (2) -t dropt off (I § 652.5 p. 498). Dor. Arcad.-Cypr.  $\bar{\eta}_{\mathcal{S}}$  'erat'.  $\dot{\varepsilon}$ - $\tau i \vartheta \eta$ . Injunctive  $\tau i \vartheta \eta$  serves as indic. present in Lesbian, cp.  $2^{\text{nd}}$  sing. Att.  $\tau i \vartheta \eta$ - $\mathcal{S}$ .  $\check{\varepsilon}$ - $\varphi \varepsilon \varrho \varepsilon$ . Optative  $\epsilon \check{\iota} \eta$ ,  $\varphi \dot{\varepsilon} \varrho \omega$ . Conjunctive Arcad.-Cypr. and other dialects  $\varphi \dot{\varepsilon} \varrho \eta$ , like Skr.  $bh \dot{\alpha} r \bar{\alpha}$ -t.

The explanation of  $\varphi \acute{\epsilon} \varrho \epsilon_{\iota}$ , which cannot be derived from  ${}^*\varphi \acute{\epsilon} \varrho \epsilon_{\iota} \epsilon_{\iota}$ , depends on that of the  $2^{\rm nd}$  sing.  $\varphi \acute{\epsilon} \varrho \epsilon_{\iota} \epsilon_{\iota}$ . If  $\varphi \acute{\epsilon} \varrho \epsilon_{\iota} \epsilon_{\iota} = {}^*\varphi \acute{\epsilon} \varrho \epsilon_{\iota}(0)\iota + \varepsilon$ ,  $\varphi \acute{\epsilon} \varrho \epsilon_{\iota}$  has been coined as complementary on the model of  $\varphi \acute{\epsilon} \varrho \epsilon_{\iota} \epsilon_{\iota}$  is a form like Skr.  $\acute{a}j \bar{a}i - \check{\epsilon}$ , which I have preferred as more probable,  $\varphi \acute{\epsilon} \varrho \epsilon_{\iota}$  must go parallel to Skr.  $\acute{a}-\dot{s}ar a \dot{\iota}-\dot{t}$  'he broke to bits'; then \*bher  $\dot{\epsilon}i - \dot{t}$  was the ground-form. In any case it follows that  $\varphi \acute{\epsilon} \varrho \epsilon_{\iota}$  had the secondary ending. Conj.  $\varphi \acute{\epsilon} \varrho \eta$  is an ad-formate of  $\varphi \acute{\epsilon} \varrho \epsilon_{\iota}$ , as  $\varphi \acute{\epsilon} \varrho \eta \varsigma$  of  $\varphi \acute{\epsilon} \varrho \epsilon_{\iota} \varsigma$ . Compare § 987. 1 p. 524. In Epic dialect  $-\sigma_{\iota}$  spreads from the unthematic indicative to the

<sup>1)</sup> Not so Bartholomae (Stud. Idg. Spr. 11 27 f.), who holds that t just simply disappears between vowels.

last named conjunctive form, e. g.  $\dot{\epsilon}\vartheta\dot{\epsilon}\lambda\eta\sigma\iota$  instead of  $\dot{\epsilon}\vartheta\dot{\epsilon}\lambda\eta$ , cp.  $\dot{\epsilon}\vartheta\dot{\epsilon}\lambda\omega-\mu\iota$  § 979. 2 p. 520,  $\dot{\epsilon}\vartheta\dot{\epsilon}\lambda\eta\sigma\vartheta\alpha$  § 987. 3 p. 525.

(3) -e in the Perfect. of  $\delta$ - $\epsilon$ ,  $\gamma \acute{\epsilon}$ - $\gamma o \nu$ - $\epsilon$ .

§ 996. Italic. e (Perfect) is wanting.

The endings -ti and -t are nowhere left unchanged. It is assumed that in all Italic dialects they became -t and -d: these remain in Oscan; in Umbrian -t remains (but the spelling varies, and we sometimes find -t and sometimes nothing, just as happens with other final consonants), while -d is dropt; in Latin, -t became the only ending, although instances of -d are found in old inscriptions. But an explanation has yet to be found why the -i of -ti (as of -nti in the 3<sup>rd</sup> plural) has disappeared without leaving a single trace. Compare I § 655.7 p. 504.

- (1) -t representing Idg. -ti. Lat. es-t Umbr. est Osc. est ist. Lat. agi-t ama-t. Umbr. ti\(\text{ii}\) i decet' trebei-t 'versatur' habe habe 'habet'; Osc. faama-t 'habitat' sta\(\text{i-t}\) 'stat', Marruc. fere-t 'fert', Vestin. dide-t 'dat'.
- (2) -d representing Idg. -t. Thematic Preterite (§ 867 p. 414 f.): Lat. inscr. vhevhake-d 'fecit' fece-d; Umbr. řeře Osc. dede-d 'dedit' Osc. kúm-bene-d 'convēnit' aamanaffe-d 'mandavit' (§ 874 p. 422). Optat.: Lat. inscr. sie-d; Umbr. si si -sei 'sit', Osc. da-di-d 'dedat' Marruc. -si 'sit'. Long-vowel Conj. (cp. Skr. bhárā-t, O.Ir. -air-ema § 997. 2): Umbr. fašia 'faciat' kuraia 'curet' Osc. heriia-d 'velit', Umbr. heriiei 'velit' Osc. deivai-d 'iuret' Osc. fusí-d 'foret'; Osc. tadait like Skr. bhárā-ti, and Lat. mitat in the Duenos inscr., beside sied feced (unless we should read with Conway, Amer. Journ. Phil. x 452, mita(n)t).

In Latin -t early becomes the sole ending, fui-t  $am\bar{a}$ -bat sie-t si-t, like -nt in the  $3^{rd}$  pl. Something may be ascribed to sentence-position, which would sometimes cause a change of -d to -t (e. g. fuit tum for fuid tum).

§ 997. Keltic.

(1) Idg. -ti, whose vowel disappeared by I § 657. 1

- p. 506 f. O.Ir. is 'is' for \*es-ti (I § 516 p. 377). berid 'fert' for \*bere-ti. caraid 'amat' O.Bret. crihot 'vibrat' for -ā-ti.
- (2) Idg. -t dropt (I § 657.9 p. 509). co-tī 'donec veniat' for \*-t(o)-incs-t (§ 826 p. 364). no beir 'fert' for \*bere-t, no chara 'loves' for \*carā-t, hin-glen for \*-gli-na-t (cp. absol. glenaid 'remains hanging' for \*gli-na-ti). Conj. tēs tēis 'eat' for \*steiks-e-t, -air-ema 'suscipiat' for \*-emā-t, ro-chara 'amet' for \*carā-t.
- (3) Idg. -e: ro cechuin 'cecinit' for \*ce-can-e (I § 657.1 p. 505 f.

§ 998. Germanic.

- (1) -ti. Goth. O.H.G. is-t. After sonants, liquids and nasals pr. Germ. -pi or -āi according to the position of the word accent (I § 530 p. 386). Gothic has only -p, which may represent both -p(i) and -ā(i) (I § 660.5 p. 516), e. g. trudi-p 'steps' Class II B like Skr. tudá-ti, baíri-p 'fert' = Skr. bhárati. West Germanic has both forms, O.H.G. using -t = pr. Germ. -āi always, whilst A.S. has usually -ā = pr. Germ. -pi; O.H.G. biri-t hevi-t and the like (§ 720 p. 251) are regular and tuo-t analogical, A.S. dæā āize-ā (loc. cit.) regular and bire-ā analogical.
- (2) -t dropt in all Germanic dialects (I § 659.6 p. 513). Goth. i-ddja 'he went': Skr. á-yā-t. Goth. nasida O.H.G. nerita 'he preserved'. Optative Goth. bairái O.H.G. bere pr. Germ. \*bérai-ā; Goth. vaúrþi O.H.G. wurti 'he would become' pr. Germ. \*yurāi-þ.
- (3) -e, pr. Germ. -i in the Perfect. Goth. skai- $skái\bar{p}$  O.H.G. sciad 'he separated': Skr. ci- $ch\bar{e}da$ . In Gothic -i disappeared by universal rule. O.H.G.  $was\ nam$  and the like follow the lead of bant etc. (I § 661.2 p. 517). That the lost vowel had i-quality is still indicated, according to W. van Helten (P.-B. Beitr. XIV 282 f.), in the  $\bar{e}$  of words like O.Fris.  $w\bar{e}t$  'he knows' = Goth.  $v\acute{a}it$ , which is due to mutation.
  - § 999. Balto-Slavonic. -e (Perfect) is wanting.
  - (1) -ti in Baltic occurs only with a few unthematic stems;

in Old Russian both with these and with the thematic. Lith.  $\tilde{e}s$ -ti  $\tilde{e}st$  Pruss. ast (astits = asti tas 'est hic') O.C.Sl. (Russ.) jes-ti 'is'. Lith.  $e\tilde{\imath}$ -ti  $e\tilde{\imath}t$  Lett. i-t 'goes' Pruss.  $\bar{e}it$ . Lith.  $d\mathring{u}$ 'sti reflex.  $d\mathring{u}$ 'sti-s O.C.Sl. (Russ.)  $dast\tilde{\imath}$  'dat'. O.C.Sl. (Russ.) bere-ti': Skr.  $bh\acute{a}ra$ -ti.

(2) -t dropt in both branches (I § 663.3 p. 521). O.C.Sl. aor. veze: Skr. váha-t, s-aorist -ĕ 'ate' for \*ēts-t (1st sing. -ĕsŭ). Lith. injunctive used for indic. pres. and preterite: sāko 'says' bùvo 'was', tùri has'. Optative Lith. te-vežē O.C.Sl. vezi: Skr. váhē-t. Another example is Lith. věža 'vehit' for \*veža-t. The a of this form, and of the 2nd pl. věža-te and the 2nd dual věža-ta, came in from the 1st pl. věža-me and displaced e; this levelling was helped by present stems which had i all through, and those which had o in the plural, dual, and 3rd singular (tùri-me etc., sāko-me etc.); cp. O.H.G. Alemann. 2nd pl. bera-t, § 1015.

In Baltic the  $3^{rd}$  singular of all verbs served also for  $3^{rd}$  plural and  $3^{rd}$  dual. According to J. Schmidt (Kuhn's Zeitschr. xxv 595), the form  $yr\grave{a}$  'est' (from the V of Skr.  $\emph{$ir$-t\bar{e}$}$ , § 497 p. 57) was originally a substantive used predicatively ('existentia'), which did for all numbers; when this idiom became familiar, the  $3^{rd}$  singular of real verbs got to be used for all numbers alike. To my mind it seems likelier that the idiom is derived from that idiom of proethnic speech which allowed a neuter plural or dual subject to have a verb in the singular (cp. Homer's  $\delta o \tilde{v} \varrho \alpha \sigma \epsilon \sigma \eta \pi \epsilon$  and  $\delta \sigma \sigma \epsilon \delta \delta \epsilon \delta \psi e \nu$ ): this rule held in proethnic Baltic, and led by and by to using of the masculine or feminine plural in the same way.

In Lithuanian and Prussian, another ending besides these is found, namely -ai. Present Lith. pa-vystai 'withers' = pa-výst(a) and conjunctive (see § 909.3 a p. 457) te-lystai 'let him grow haggard' = te-lýst(a), Pruss. swintinai 'he sanctifies' = swintina (also -ei -e instead of -ai) turrei 'has' = turri. s-Future Lith. su-gausai 'he will or must get' = su-gaūs, turėsai 'he will or must have', in Prussian always used as conjunctive, as boūsai 'be he' dāsai 'let him give' (also -ei or

-e instead of -ai). All these forms with -ai can be used for the plural. I regard -ai as something originally independent which has attacht itself to the verb, the same which appears in the nom. sing. tasaī as compared with tas (III § 414 p. 336). Perhaps, however, it was not -ai but -sai (see loc. cit.).¹) In this case we must assume that it was first added to the future, which seems to have ended with -s = -s-t in proethnic Baltic (injunctive of the s-aorist), cp. § 828 p. 365 f.; and after the double s was thinned (\*būs-sai becoming \*būsai), -ai was mentally abstracted and then added to the present.

In Old Bulgarian we find instead of -tī the ending -tū i. e. -t + particle u (§ 909 p. 457), e. g. O.Bulg. jestū beretū, cp. 3<sup>rd</sup> pl. satū beratū. Perhaps proethnic Slavonic had jestī and beret(ŭ) corresponding to Lith. ēstī and vēža, and levelling took different directions in the dialects.

In Old Bulgarian  $-t\tilde{u}$  spread from the present to the aorist, and thus we have  $pri-jet\tilde{u}$  instead of -je; these aorist forms then came to be used for the  $2^{nd}$  singular. See § 830 p. 367.

#### 1<sup>ST</sup> PERSON PLURAL.

§ 1000. Proethnic Indo-Germanic. The different languages show a vast number of endings, the original distribution of which can only be partly made out. Judging from Sanskrit, with its primary -masi -mas, and secondary and perfect -ma; from Old Irish, with -mi -me in absolute flexion, -m in conjunct; and from Old High German, whose -mēs properly belonged to the indic. present (with -m in indic. preterite and the optative), we should regard the forms with a characteristic s as being the primary of proethnic speech. Whether the vocalic suffixes and those ending in a nasal

<sup>1)</sup> This -sai may be identified with the Goth. sai O.H.G.  $s\bar{e}$ , which Osthoff connects with Skr.  $s\bar{e}d = sai$  id 'that same' (P.-B. Beitr. VIII 311).

(such as Lith. -me and Gr. - $\mu \varepsilon \nu$ ) represent Idg. secondary and perfect suffixes respectively, is not clear.

- (1) Primary Forms.
- (a) -mēs -mos. Perhaps originally -més e. g. \*i-més 'imus', but \_\_\_\_\_ -mos e. g. \*bhéro-mos 'ferimus', cp. III § 228 p. 111 f. on the endings of the gen.-abl. sing. -es and -os. Skr. i-más bhárā-mas, Gr. Dor. ἴ-μες φέφο-μες, Lat. ₹-mus feri-mus, O.H.G. tuo-mēs bera-mēs. Perhaps we should add O.Ir. do-bera-m (for \*-mos), Czech js-me nese-me (for \*-mes) Serv. jes-mo plete-mo (for \*-mos).
- (b) -mesi -mosi, possibly for -mes -mos extended on the analogy of the other primary endings in -i. Skr. Ved. s-mási bhárā-masi. O.Ir. ammi 'sumus' for \*esmesi or \*s-es-mesi, berme for \*beromi \*beromesi; but phonetic law would permit us to assume for this language \*-mēsi (cp. above O.H.G. -mēs).
  - (2) Secondary or Perfect forms.
- (a) -mē -mō. Skr. á-bharā-ma bhárē-ma perf. vid-má; Ved. also -mā. Osc. manafu-m comes in too, if it is 1st pl. ('mandavimus'), see § 874 p. 422. Goth. vitum O.H.G. wizzum, opt. Goth. baírái-ma vitei-ma (for \*-mē or \*-mō). Lith. reflex. sùko-mė-s, with variant sùko-me. Perhaps also O.Ir. do-bera-m (for \*-mo), Czech js-me nese-me Serv. jes-mo plete-mo.
- (b) -mem -mom or -men -mon.\(^1\)) Gr.  $\dot{\epsilon}$ - $\varphi\dot{\epsilon}\varrho o$ - $\mu\epsilon\nu$   $\varphi\dot{\epsilon}\varrho o$ - $\mu\epsilon\nu$   $\dot{\epsilon}\sigma$ - $\mu\epsilon\nu$ , O.C.Sl. aor. neso-m\(\tilde{u}\). Perhaps also O.Ir. do-bera-m (for \*-mom \*-mon); but there is no trace of a final nasal. O.C.Sl. neso-my may be derived from  $-m\bar{o}m$   $-m\bar{o}n$ .
- § 1001. It is a difficult question how far the -m- of our ending, and likewise that of the middle ending Skr. -mahē Gr. - $\mu\epsilon \vartheta \alpha$ , had a sonant pronunciation (-mm-) in the parent language.

<sup>1) -</sup>mem -mom appear to deserve the preference to judge from Skr. -tam beside Lith. -ta O.C.Sl. -ta in the 2<sup>nd</sup> dual (§ 1031), and Skr. -tām beside O.C.Sl. -te -ta in the 3<sup>rd</sup> dual (§§ 1038 and 1040).

The following are cited from Avestic by Bartholomae (Kuhn's Zeitschr. XXIX 273 ff.):  $1^{st}$  pl. aor. jim-ama from  $\sqrt{gem}$ - 'go',  $1^{st}$  pl. pres. hišc-amaidē beside  $3^{rd}$  sing. act. hi-sax-ti (§ 540 p. 101), opt. jam-y-ama (§ 941 p. 486). For the Perf. examples are Avest. -ama in daidy-ama, Gr. -ame Goth. -um Lat. -imus O.Ir. -ammar, see § 844 p. 386. Lastly, for the Sigmatic aorist, Gr. - $\sigma \alpha \mu \epsilon \nu$  - $\sigma \alpha \mu \epsilon \sigma \alpha$  Lat. -simus, see § 820 p. 356, § 823 p. 361.

## § 1002. Aryan.

- (1) Primary -mas and -masi. Both are kept in Sanskrit, but in Iranian only the latter is found. Skr. s-más s-mási Avest. mahi O.Pers. a-mahy 'sumus'. Skr. bhárā-mas -masi Avest. barā-mahi O.Pers. pahyā-mahy ('dicimur').
- (2) Secondary and Perfect -ma, whose Vedic variant -mā may be compared with Goth. -ma Lith. -mē(-s). Skr. á-dhā-ma Avest. Gath. dā-mā from  $\lor$  dhē- 'to place', Skr. á-kar-ma O.Pers. a-kū-mā from  $\lor$  qer- 'make'; Avest. jim-ama (§ 1001). Opt. Skr. syā-ma Avest. x'yā-ma jam-y-ama (§ 1001), Skr. bhárē-ma Avest. baraē-ma. Further, the Aryan conjunctive always has -ma, by which the ind. and conj. pres. of thematic stems were distinguisht): Skr. bhárā-ma Avest. barā-ma. Perfect śu-śru-má su-sru-ma from  $\lor$  kley- 'hear'; Avest. daiāy-ama (§ 1001).

As in other languages, so in Sanskrit, the difference of primary and secondary endings was not strictly kept in the later language; thus we have in the Mahā-Bhārata imperf. a-pašyāmas 'we saw' and pres. pašyāma 'we see', and similarly 1st dual syāvas instead of syāva 'we both would be'.

§ 1003. Armenian. The ending of the indic. present suffix -mk is not clear; examples are ta-mk 'damus' bere-mk' 'ferimus'; Bugge (Beitr. zur etym. Erl. der arm. Spr., Christiania 1889, p. 44) derives -mk from -mes+v (the particle u), cp. III § 313 p. 212 on the case-suffix -k in dsterk mek etc. Still more obscure is the -k of other tenses, as of aor. tuak 'they gave'.

Remark. In explaining the endings of the 1st and 2nd plural (§ 1011) we must not forget the possibility of a personal pronoun being affixt, cp. Mod.Cymr. 1st pl. carwn Alban. 1st pl. jena § 1006. 2, O.Ir. 2nd pl. adib (§ 506 p. 72 f.). In considering the -ik of the 2nd plural, where i seems to come from t for -te, we must also remember that the 2nd pl. may have imitated the ending of the 1st plural, cp. O.Ir. berthi Lith. sùkate-s §§ 1014, 1016. Compare Hübschmann, Kuhn's Zeitschr. XXIII 12.

- § 1004. Greek. In Doric,  $-\mu\epsilon_S$  (primary) becomes universal. E. g.  $\varphi\epsilon_{\rho 0}$ - $\mu\epsilon_S$   $\iota\omega$ - $\mu\epsilon_S$   $\dot{\epsilon}$ - $\sigma\tau\dot{\alpha}\sigma\alpha\mu\epsilon_S$   $\dot{\alpha}$ - $\epsilon\sigma\tau\dot{\alpha}\lambda\kappa\mu\mu\epsilon_S$ . Elsewhere  $-\mu\epsilon\nu$  (secondary), as  $\varphi\epsilon_{\rho 0}$ - $\mu\epsilon\nu$  etc.
- § 1005. Italic. Latin has always -mus for \*-mos (primary), as  $\bar{\imath}$ -mus agi-mus  $s\bar{\imath}$ -mus momordimus. Examples of this person in the other Italic dialects are wanting, unless indeed Osc. manafum is 1st plural (see § 1000. 2 a p. 535).

### § 1006. Keltic.

- (1) Primary. O.Ir. -mi for \*-mesi (or -mēsi): ammi 'sumus' for \*esmesi or \*s-esmesi (§ 506 p. 72 f.), guidmi 'we beg' (1st sing. -guidiu). -mi became -me when the preceding syllable had no palatal vowel (1st and 2nd conjugations); thus berme for \*bero-mi \*bero-mesi, carme for \*carā-mi \*carā-mesi. Then comes confusion of various kinds; guidme beside guidmi, and tiagmi beside tiagme.
- (2) Secondary. O.Ir. -m for \*-mo or \*-mos, hardly for \*-mom \*-mon (§ 1000.1. a, 2. a and b., p. 535). Indic. pres. do-beram, no charam, do-lēcem, and so in the ā-conjunctive, -beram -caram.

The primary ending -mi, as the frequent spelling -mmi -mme shows, had a hard, not a spirant m. This was irregular in forms with orig. vowel before the personal ending, and is due to the analogy of ammi, where mm = sm. But Cymric shows -wn in the pres. indicative, as carun ('we will love'),

<sup>1)</sup> On the same principle, we find in Pali dadamha following amha for asma 'sumus', Prakrit citthamha -mho following amha -mho; and in Prakrit there is a 1st sing. gacchamhi instead of gacchāmi. As regards the 1st plural something may be put down to the influence of the s-aorist ending (Skr. -s-ma), cp. Pali apacamhā beside apacimhā (E. Kuhn, Beitr. zur Pāli-Gramm., 109; Torp, Die Flexion des Pāli, 47).

i. e. -wf + the personal pronoun n-, 1) and therefore had the regular spirant m; however, ym 'sumus' has hard m, for sm.

Of the secondary ending -m the reverse is true. O.Ir. do-beram and the like is never written -mm, and therefore was spirant. Cymric however has -m, not -f, except in the indic. present; as conj. carom. As regards this Cymric -m Thurneysen writes: "It is possible that other forms with -sm- (s-aorist and injunctive) may have had something to do with the matter. There are many traces of s-forms in British dialects, which have not yet been properly explained".

### § 1007. Germanic.

- (1) O.H.G.  $-m\bar{e}s = Idg. *-m\bar{e}s$  must, as the breathed -s shews, have originally belonged to the pr. Germ. unthematic present stems (cp. gā-mēs). It very soon spread to the hortative Injunctive, as bera-mes (with variant bera-m like Goth. baira-m, see § 909 p. 458), and then to the Indic. preterite, bārumēs, and then to the Optative, bārīmēs. Compare Braune, Ahd. Gramm.<sup>2</sup> pp. 223 f., and the works there cited.
- (2) Goth. -m = Idg. -me or -mo in vitum bērum baira-m. Goth.  $-ma = Idg. -m\bar{e}$  or  $-m\bar{o}$  in the optative: bairái-ma bērei-ma. The West-Germ. -m, O.H.G. wizzum bārum bera-m berē-m bārī-m, may be equivalent either to -m or to -ma in Gothic (I § 661.2 pp. 517 ff.).

## § 1008. Balto-Slavonic.

Lith. - $m\bar{e} = \text{Idg.} - m\bar{e}$  (§ 1002.2. a) before the reflexive -si and  $-s: sùko-m\dot{e}-s: sùka-m\dot{e}-s.$ The -me of sùko-me sùka-me ei-mè eamus' eī-me 'imus' may come from -me by I § 664.3. Perhaps however Idg. \*-me and \*-me have run p. 523. together into -me. The suffixes -ma -mo-s found in a few instances as variants of -me and -me-s (Bezzenberger, in his Beiträge, II 268), and Lett. ei-ma 'we go' and 'let us go', are a re-formation in agreement with the dual -va -vo-s (§ 1030);

<sup>1)</sup> The personal pronoun is added in this way in the Albanian dialect of Škodra; e. g. jena 'sumus' instead of jemi. See G. Meyer, M. Hertz zum 70. Geburtstag, 1888, p. 89.

so too in the 2<sup>nd</sup> plural there is contamination with dual forms (§ 1016). Lett. -mi(-s) is to be connected with Pruss. -mai (as-mai 'we are' turri-mai 'we owe, should'), as also 2<sup>nd</sup> pl. -ti(-s) with Pruss. -tai -tei -ti (as-tai es-tei as-ti 'ye are' druwē-tai 'ye believe' turri-ti 'ye should'): the diphthong comes from the 1<sup>st</sup> and 2<sup>nd</sup> singular (§ 983 p. 522, § 991 p. 528).

The following endings may be regarded as proethnic Slavonic.

- (1) -me = Idg. -mes or -me. Mod.Bulg. sme 'sumus' aor. nesoh-me. Little-Russ. dial. (in the Carpathians) vydy-me. Czech js-me 'sumus' jime 'edimus' nese-me opt. nesme.
- (2) -mo == Idg. -mos or -mo. Little-Russ. with the ind. present in -mi, jeś-mo jimo. Serv. and Mod.Sloven. also in other stems: Serv. jes-mo ijemo Mod.Slov. s-mo jēmo, Serv. and Mod.Slov. plete-mo opt. pleti-mo.
- (3) -mй = Idg. -mom or -mon. In O.C.Sl. this is the usual ending: jes-mй damй nese-mй aor. neso-mй opt. nesĕ-mй dadi-mй. So in Great-Russ.: nese-m dadi-m 'damus'; Little-Russ. nese-m opt. neśi-m; Pol. niesie-m (see below); Czech aor. nesecho-m imperf. nesjécho-m.
- (4) -my either from -mōm or -mōn (I § 92 p. 86 f.), or else modelled after my 'we' (cp. 1<sup>st</sup> dual -vě, as jes-vě, with vě 'we both', § 1030). O.Bulg. e. g. věmy beside věmŭ, vidi-my beside vidi-mŭ. Pol. wiemy, niesiemy beside niesie-m. East-Sorb. and Mod.Sorb. vémy.

It is uncertain how these endings were distributed in proethnic Slavonic. As regards -mo it should be observed that the accents justify an inference that it at first belonged, as it still does in Little-Russian, only to the indic. Present of verbs in -mi, and that it is only their analogy which produced Serv. plete-mo etc. The forms we find in modern dialects have been often affected by the fact that -mü ran into one with the -mī of the 1<sup>st</sup> singular; hence in Polish while niesiem exists beside niesiemy (1<sup>st</sup> sing. niosę), we have only wiemy (1<sup>st</sup> sing. wiem) and działamy (1<sup>st</sup> sing. działam).

Thematic. O.C.Sl. pres. nese-mŭ nese-vě as against aor. neso-mŭ neso-vě. The former follow the analogy of jo-stems such as znaje-mŭ -vě, where e is regular for o (I § 84 p. 80). In the aorist o remains, because there were no jo-stems in the aorist.

#### 2<sup>ND</sup> PERSON PLURAL.

§ 1009. Proethnic Indo-Germanic. Only in Aryan do we see a pair of endings, one primary and the other secondary, Skr. -tha and -ta (cp. 2<sup>nd</sup> dual -thas and -tam). All the forms of European languages can be derived from the single one Idg. -te. Still it must be admitted that much darkness still hangs over the tenues aspiratae in European languages (cp. I § 553 pp. 405 ff., II § 81 Rem. 2 p. 243, Bartholomae Stud. Idg. Spr. 1 44).

Again Aryan, and Aryan alone, shows a special perfect ending,  $-\alpha$ , which may be related to the Gr.  $-\tau\epsilon$  as Skr.  $-\bar{\epsilon}$  to Gr.  $-\tau\alpha$  in the  $3^{rd}$  sing. perf. middle, and may possibly be identical with the  $\alpha$  of the Sanskrit endings  $2^{nd}$  dual  $-\dot{\alpha}$ -thur  $3^{rd}$  dual  $-\dot{\alpha}$ -tur (§ 1038).

- (1) Primary Skr. -tha Gr. -τε etc. Skr. s-thá Gr. ἐσ-τὲ Lith. ẽs-te O.C.Sl. jes-te. Skr. bhára-tha Gr. φέρε-τε O.Ir. do-beri-d Goth. baíri-þ Lith. vēža-te O.C.Sl. bere-te.
- (2) Secondary Skr. -ta Gr. - $\tau\varepsilon$  etc. Pret. Skr.  $\acute{a}$ -vida-ta Gr.  $\epsilon \check{i} \delta \varepsilon$ - $\tau\varepsilon$  O.C.Sl. (aor.) nese-te. Hortative Injunct. Skr.  $bh\acute{a}ra$ -ta Gr.  $\varphi \acute{\varepsilon} \varphi \varepsilon$ - $\tau\varepsilon$  Lat. agi-te O.Ir. beri-d Goth.  $ba\acute{i}ri$ -p. s-Aor. Skr.  $\acute{a}$ - $dh\bar{a}$ -s-ta Gr.  $\acute{\varepsilon}$ - $\delta \varepsilon \acute{\varepsilon} \xi \alpha$ - $\tau\varepsilon$  Lith. (injunct. as fut.)  $d \check{e}$ -s-te O.C.Sl.  $d \check{e}$ -s-te. Opt. Skr.  $bh\acute{a}r\bar{e}$ -ta Gr.  $\varphi \acute{\varepsilon} \varphi o\iota$ - $\tau\varepsilon$  Goth.  $ba\acute{i}r\acute{a}$ -p O.C.Sl.  $ber \acute{e}$ -te.
- (3) Perfect Skr. -a Gr. -τε etc. Skr. vid-á Gr. ἴσ-τε O.Ir. gegnaid Goth. vitu-þ.
  - § 1010. Aryan.
- (1) Primary ending pr. Ar. -tha. Skr.  $bh\acute{a}ra$ -tha Avest. bara- $\bar{p}a$ . Skr. s-thá Avest. Gath. s-tā (cp.  $v\bar{o}ist\bar{a}$  = Skr.  $v\acute{e}ttha$  I § 475 p. 351).
- (2) Secondary ending pr. Ar. -ta. Skr. á-bhara-ta Avest. bara-ta. Opt. Skr. bhárē-ta Avest. bara-e-ta.

In Vedic we also meet with -thana and -tana, the latter very common with hortative forms: e. g. s-thána váda-thana i-tana punī-tána. -na is a particle, which, if my conjecture be right, is contained in other forms, namely 2<sup>nd</sup> sing. imper. Avest. baranā and Skr. grhāná (§ 600 p. 143), and which may be akin to the -ni of the Aryan 1<sup>st</sup> sing. conj. in -āni (§ 977.3 p. 518).

- (3) Pr. Ar. -a in the Perfect. Skr.  $ca-kr-\acute{a}$  (3<sup>rd</sup> sing.  $ca-k\acute{a}r-a$  'he made'), Avest.  $hanh\bar{a}n-a$  from han- 'to present, earn' (§ 852 p. 402).
- § 1011. Armenian. All tenses and moods have -k final; e. g.  $ber\bar{e}k$  'fertis' for \*bere-ik,  $a\lambda aik$  'molitis', aor. edik 'ye placed'. The i of -ik appears to be the same as t in -te; for further discussion refer to the Remark to § 1003, on page 536.
- § 1012. Greek. Always -τε: ἐσ-τὲ φέρε-τε φέρω-τε ἴστε τετρόφα-τε.

Remark. The  $-\Im \varepsilon$  of the Perfect forms Hom. ind.  $\pi \varepsilon \pi o \sigma \Im \varepsilon$  (Aristarchus  $\pi \varepsilon \pi a \sigma \Im \varepsilon$ ) imper.  $\varepsilon \gamma \varrho \eta \gamma o \varrho \Im \varepsilon$   $\varepsilon \gamma \omega \chi \Im \varepsilon$  is not the Skr. -tha, but a middle ending.

§ 1013. Italic. In Latin -te only in the hortative Injunctive (Imper.): fer-te agi-te.

Elsewhere -tis: es-tis agi-tis agā-tis sī-tis vīdis-tis. That the relation of agite to age produced agitis beside agis (Osthoff, Zeitschr. f. österr. Gymn., 1880, p. 70), is less probable than that -tis (earlier \*-tes) is really a dual ending (Skr. -thas Goth. -ts). Outside the imperative the forms with -te, which often elided their vowel, became too much like those of the 3rd singular; and so by the time that dual and plural had got confused and the feeling for the special dual sense of the endings in question was dulled, -tis was preferred to -te because it was clearer. Of course the relation of agite to age may have made it easier to use agitis as a plural of agis. In Lettic also, where as in Latin the dual number was discarded, the 2nd dual ei-ta remained in use as a plural form: 'ye go' and imper. 'go ye'. Compare further under § 967 p. 509, § 1034 on Umbr. futu-to 'estote', and § 1015 on O.H.G. beret fertis'.

On Pelign. *lexe*, which is apparently 2<sup>nd</sup> plural, see Thurneysen Rhein. Mus. xLIII 352.

§ 1014. Keltic. Ir. -d for -te in conjunct inflexion: do-berid 'datis', conj. of s-aorist for-tēsid 'succurratis, succurretis'. So in the imperative: berid 'ferte'.

The absolute forms have -thi for their ending (-the for -thi in the 2<sup>nd</sup> conjugation, as in 1<sup>st</sup> pl. -me for -mi, see § 1006 p. 537); e. g. ber-thi for \*berethi, lēcthi for \*lēcī-thi, carthe for \*carā-thi; by levelling, berthe (with a glance at berme too) lēcthe. This ending -thi is an imitation of -mi, as in Lithuanian sùka-tė-s imitates sùka-mė-s (§ 1016). 1) On adib 'estis', see § 506 p. 72 f.

§ 1015. As far as the Germanic sound-laws go, either -the or -te may be taken as the form to start from. The consonant fared precisely like that of the 3<sup>rd</sup> sing. ending -ti, see § 998.1 p. 532. Goth. indic. pres. bairi-p perf. bēru-p opt. bairái-p bērei-p like the 3<sup>rd</sup> sing. pres. bairi-p. O.H.G. ga-sihi-t 'ye behold' (Monsee or Mondsee "Fragments", see Braune Ahd. Gr.<sup>2</sup> p. 1) perf. bāru-t opt. berē-t bārī-t like 3<sup>rd</sup> sing. pres. biri-t.

In the indic. present O.H.G. originally had -i- for its thematic vowel; and this remains in ga-sihit and a few other forms from the authority just cited. Alemannic bera-t with -a- following the 1st and 3rd plural (cp. Lith. vēža-te § 999. 2 p. 533), which served to distinguish 2nd plural from 3rd singular.

The commonest in O.H.G. is the form beret. With Kögel (P.-B. Beitr. VIII 138) we may regard this as a dual form, either \*bhere-thos (Skr. bhára-thas Goth. baíra-ts), or \*bhere-tom (Gr.  $\varphi \not\in \varphi \varepsilon - \tau o \nu$ ), or \*bhere-tā (O.C.Sl. bere-ta); cp. §§ 1031 ff.

§ 1016. Balto-Slavonic.

Lith. -te and -t, as es-te veža-te (on -a- instead of -è-, see § 999.2 p. 533) pret. vežė-te. The ending -tė-s in the reflexive

<sup>1)</sup> Just in the same way \*faiz \*diz became faites dites in Old French by analogy of faimes and dimes (Neumann, Zeitschr. für rom. Phil., XIV 581, 584).

follows  $-m\dot{e}$ -s beside -me in the 1<sup>st</sup> pl. (cp. § 1014). The endings -to-s, sometimes found in place of  $-t\dot{e}$ -s, and -ta in Lett. ei-ta 'ye go' or 'go ye', are dual; just as -ma and -mo-s in the 1<sup>st</sup> plural of Lith., which sometimes take the place of -me and  $-m\dot{e}$ -s, and in Lett. ei-ma, have the dual vowel (§ 1008 p. 538 f.). On Lett. -ti-s and Pruss. -tai -tei -ti, see the same place.

Slavonic: -te: jes-te nese-te aor. nese-te de-s-te opt. nese-te.

#### 3rd PERSON PLURAL.

- § 1017. Proethnic Indo-Germanic. We here deal with the *nt*-suffix only. On Skr. perf. *vid-úr* and like forms see §§ 1076 f. and 1079.
- (1) After Consonants -énti -ént and -nti -nt, which appear to be related in the same way as -és and -s of the genitive singular. Compare footnote to page 50.
  - (a) -énti and -ént.

Primary -énti. \*s-énti 'are': Skr. s-ánti (Armen. en, cp. § 1019), Gr. Dor. èvrì Att. ɛiơì, Umbr. s-ent Osc. s-et s-et, O.Ir. it O.Cymr. int, Goth. s-ind. \*d-énti 'they eat'  $\sqrt{\phantom{a}}$  ed-: Skr. ad-anti O.C.Sl. (Russ.) jad-eti. \*mr-n-énti beside 3<sup>rd</sup> sing. \*mr-ná-ti 'crushes, grinds to dust' (§ 598 p. 141): Skr. mr-n-ánti. \*r-nu-énti beside 3<sup>rd</sup> sing. \*r-néu-ti 'excites' (§§ 638 f. pp. 176 f.): Skr. r-nv-ánti.

Secondary -ént. \*s-ént: Skr. s-án ás-an (cp. gm-án á-gm-an), with the particle u, s-ánt-u, Gr. Dor.  $\tilde{\eta}_{\nu}$  for \* $\tilde{\eta}(\sigma)$ - $\varepsilon_{\nu}$ , O.Bulg. jad- $\epsilon t$ - $\tilde{u}$  with the particle u (but cp. § 1026). Skr. á- $\dot{s}_{\tau}$ - $\dot{n}$ -an, á-su-nv-an. Opt. \*s-(i) $\dot{i}$ -ént 'may they be': Gr.  $\epsilon \tilde{t}$ - $\epsilon \nu$  O.Lat. si-ent; of the same kind, apparently, is Skr. duh- $\bar{t}_{\tau}$ -duh, see § 941 p. 486, § 951 p. 493.

(b) -nti and -nt.

Primary - $\eta ti$ . \* $d\acute{e}-d-\eta ti$  from  $\sqrt{d\bar{o}}$ - 'give': Skr.  $d\acute{a}d-ati$  O.C.Sl. (Russ.)  $dad-et\bar{i}$ . In Greek - $\check{\alpha}\sigma\iota$  for the Perfect, as  $\lambda\epsilon-\lambda\acute{o}\gamma\chi$ - $\check{\alpha}\sigma\iota$ .

Secondary -nt. The type  $*d\acute{e}-d-nt$  is preserved in Aryan only as embodied along with the particle u in the Skr.  $d\acute{a}-d-at-u$ .

In other cases \*-at in Sanskrit is replaced by -ur (a-da-d-ur), in Avestic by -an (da-d-en). Another form which comes in place here is the O.Bulg. dad-et-ŭ 'dant' (but cp. § 1026), and another is O.Sax. ded-un 'they did' from \( \sqrt{dhe}\)-, if it be a reduplicated imperfect (§ 545 p. 103, § 886 p. 433, § 1025). Then again some forms of the thematic agrist appear to have had -nt originally, as we are led to believe by Skr. part. nom. sing. dhákṣat; 1) and so perhaps O.C.Sl. -s-e, as daše, belongs to the same group, and O.H.G. wissun if it is rightly compared with Gr. "σαν (§ 827 p. 365, § 907 p. 455). Lastly, our suffix should be claimed for the oi-optative: \*bhéroi-nt, instead of which we have in Skr. bhárēy-ur Avest. baray-en Gr. φέροι-εν Goth. bairái-na.

(2) After Sonants, -nti and -nt.

Primary -nti. \*uē-nti 'they blow': Skr. vánti Gr. ἄεισι; Armen. ala-n 'they grind', Lat. ple-nt ama-nt, O.Ir. carit they love', Goth. salbō-nd, O.C.Sl. (Russ.) imatī 'they have'. Long-vowel Conjunctive: Avest. patå-nti Gr. Dor. φέρω-ντι Att. φέρωσι. \*bhero-nti 'ferunt': Skr. bhára-nti Armen. bere-n Gr. Dor. φέρο-ντι Lat. feru-nt O.Ir. berit Goth. baira-nd O.C.Sl. (Russ.) beratī.

Secondary -nt. Gr. έ-μιγε-ν έγνο-ν, O.Bulg. imat-ŭ 'they have' (with the particle u). Long-vowel Conj.: Skr. bhárā-n. Osc. deica-ns 'dicant'. \*bhéro-nt: Skr. bhára-n á-bhara-n, Gr. φέρο-ν έφερο-ν, O.C.Sl. bą for \*bhuo-nt (§ 525 p. 88) aor. nesą.

§ 1018. Arvan.

- (1) After Consonants Idg. -énti -ént and -nti -nt.
- (a) -énti and -ént.

Primary -énti = pr. Ar. -ánti. Skr. s-ánti Avest. h-enti O.Pers. h-atiy. Skr. y-ánti Avest. y-einti. Skr. grbh-n-ánti Avest. gerew-n-enti. Skr. yunj-anti Avest. merenc-inti (I § 94 p. 89). Skr. kr-nv-ánti Avest. kere-nv-anti.

Secondary -ént = pr. Ar. -ánt. Skr. s-án ás-an Avest. h-en O.Pers. ah-a, Skr. áy-an O.Pers. ay-a. Aor. Skr. gm-án

<sup>1)</sup> For the 3rd plural of the s-Aorist with vowel gradation (§ 811 p. 348 f.), it is necessary to assume the ending \*-s-ént.

 $\dot{a}-gm-an$  Avest.  $g^em-en$ ; with  $\bar{a}$ -stems of our Classes I and X Sanskrit adopted the ending -ur, as  $\dot{a}$ -sth-ur  $\dot{a}$ -g-ur from  $sth\bar{a}$ -and  $g\bar{a}$ -; but in Vedic there remain a few examples of -an, as  $vy-\bar{a}sthan$  (Bartholomae, Stud. zur idg. Sprachg. I 32 ff., II 64 ff.). Skr.  $\dot{a}$ - $\dot{s}_7$ -n-an  $\dot{a}$ - $yu\bar{n}$ -j-an  $\dot{a}$ - $k_7$ -nv-an. An Optative form of this kind is apparently Skr.  $duh\bar{v}y$ -an; otherwise we have Skr. s-y-ur and Avest. h-yan = \*s- $y\bar{a}$ -nt, no. (2).

# (b) -nti and -nt.

Primary -nti = pr. Ar. -ati. Skr.  $d\acute{a}-dh-ati$  Avest. Gath.  $da-d-ait\bar{\imath}$ , Skr.  $sa-\dot{s}c-ati$   $b\acute{\imath}-bhr-ati$   $d\acute{a}vi-dyut-ati$ . Cp. part. nom. pl.  $d\acute{a}-dh-at-as$  II § 126 p. 400. In the Avesta, -ati is usually exchanged for -anti, which showed the plural mark more clearly, as  $da-\bar{p}-enti$  (similarly in the part.  $da-\bar{d}-ant-$  instead of  $*da-\bar{d}-at-$ ); cp. mid.  $-ant\bar{e}$  instead of  $-ait\bar{e}$  § 1067. 1.

Secondary  $-\eta t = \text{pr. Ar. } -at$ , which remains in -at-u as Skr.  $d\acute{a}$ -d-atu 'danto', and also seems to be represented in its unextended shape by four Avestic examples from the Gathas, viz. da-d-ap za-za p  $j\bar{\imath}$ - $ger^ez$ -ap daidy-ap (Bartholomae, Kuhn's Zeitschr. xxix 280 ff., 291 f.), but elsewhere it is lost. It should be remembered that whilst -ati corresponds to -anti and -nti, -at stood in sharp contrast to -an and -n; and therefore -at did not suit the general types of  $3^{rd}$  pl. in the Aryan verb. In Sanskrit this is replaced by -ur, as  $\acute{a}$ -da-dh-ur  $\acute{a}$ -bi-bhar-ur, '1) s-aorist  $\acute{a}$ -mats-ur  $\acute{a}$ - $t\bar{a}$ ri $\ddot{s}$ -ur  $\acute{a}$ - $y\bar{a}$ si $\ddot{s}$ -ur (cp.  $\S$  1017. 1. b), opt.  $bh\acute{a}$ r $\bar{e}$ y-ur. But in Avestic we have -an, in the same way as we have -anti instead of -ati: da-p-en (cp. da-p-enti) opt. baray-en.

(2) After Sonants, Idg. -nti and -nt.

Primary -nti. Skr. vá-nti Avest. vå-nti. Skr. bhára-nti Avest. bara-inti O.Pers. baratiy, Skr. bhāráya-nti Avest. bāraye-inti. The long-vowel Conjunctive in Avestic has -nti and -n, as patå-nti and patan, but only -n in Sanskrit — páta-n.

Secondary -nt. This form retains its -t before the particle

<sup>1)</sup> Ved., abibhran I regard as a-bi-bhr-a-n, i. e. as a thematic form (§ 539 p. 99).

u: Skr. bhára-ntu Avest. bara-ntu 'ferunto' (§ 909 p. 458). Skr. á-bhara-n Avest. bare-n O.Pers. a-bara. The short-vowel conjunctive always has this ending: Skr. ás-a-n Avest. anhen. In place of \*a- $g\bar{a}$ -n (= Gr.  $\ddot{e}$ - $\beta\bar{\alpha}$ - $\nu$ , beside  $3^{rd}$  sing.  $\acute{a}$ - $g\bar{a}$ -t  $\acute{\epsilon}$ - $\beta\eta$ ) Sanskrit has  $\acute{a}$ -g-ur, and similarly  $\acute{a}$ -y-urinstead of \*a-yā-n (3rd sing.  $\acute{a}$ -yā-t), answering to the form  $\acute{a}$ -dh-ur = Avest. Gath. d-ar $\ddot{e}$ . But Avest. dan beside d-ar $\ddot{e}$ makes us infer such forms as  $*gan = \beta \alpha' - \nu$  (Idg.  $*g\bar{a}-nt$ )  $dan: d\bar{a}$ -ma following \*qan:  $q\bar{a}$ -ma — as in the optative, beside 1st pl. Gath.  $\dot{x}$ - $y\bar{a}$ - $m\bar{a}$  was coined 3rd pl.  $\dot{x}$ - $y\bar{e}$ -n = late Avestic h-yan (compare with this h-ya- $r^e$ , also with strong form of optative suffix).

As regards the 3rd pl. with -r (Skr. -ur Avest. -are -ares), see §§ 1076 f.

§ 1019. Armenian. The 3rd plural has -n always; this seems to represent a coincidence of -nti and -nt.

ala-n 'they grind' for \*ala-nti: cp. Lat. juva-nt. en 'sunt' for \*s-enti, but this must have been influenced by other forms of the paradigm (em es etc.), for by I § 63 p. 50 \*in was to be expected (cp. Bugge, Kuhn's Zeitschr. xxxII 71). beren 'ferunt' follows en like 1st sing. berem : em § 978. 1 p. 519.

etūn 'they gave', edin 'they placed', cp. Avest. da § 1018.2 above. But why not \*etn \*edn by I § 651.1 p. 497?

§ 1020. Greek.

- (1) After Consonants Idg. -énti -ént and -nti -nt.
- (a) -énti and -ént.

Primary -énti. Dor. ἐντὶ Att. εἰσὶ instead of \*έντι == Idg. \*s-énti with smooth breathing following εἰμὶ etc. 1)

Secondary -ent. Doric and other dialects  $\tilde{\eta}_{\nu}$  'erant' for \* $\tilde{\eta}(\sigma)$ - $\varepsilon r$ : Skr. s-án ás-an; cp. § 502 p. 65 on the 3<sup>rd</sup> sing.  $\vec{\eta}$  εν  $\vec{\eta}$ ν.  $\vec{i}$ e-Optative  $\vec{\epsilon}$ i - εν  $\vec{\epsilon}$ i δεί - εν τιθεί - εν; O.Lat.  $\vec{s}$ i - ent; on El. συν-έαν refer to § 944 p. 487.

(b) -nti and -nt.

Primary  $-nti = Gr. -\ddot{\alpha}\tau_i$ . Instead of \*7 $\sigma\tau$ - $\alpha\tau_i$  \* $\tau_i$ 9- $\alpha\tau_i$ 

<sup>1)</sup> elou 'eunt' in Theognis 716 is too uncertain to make it a ground for assuming pr. Gr. \* \( \text{\$\epsilon}\_{\epsilon} \text{\$\epsilon} \text{\$\text{\$\epsilon}} \text{\$\text{\$\epsilon}} \text{\$\text{\$\epsilon} \text{\$\epsilon} \text{\$\text{\$\epsilon}} \text{\$\text{\$\epsilon} \text{\$\text{\$\epsilon}} \text{\$\text{\$\epsilon}} \text{\$\text{\$\epsilon} \text{\$\text{\$\epsilon} \text{\$\text{\$\epsilon} \text{\$\epsilon} \text{\$\epsilon} \text{\$\text{\$\epsilon} \text{\$\epsilon} \text{\$\text{\$\epsilon} \text{\$\epsilon} \text{\$\epsilon} \text{\$\text{\$\epsilon} \text{\$\epsilon} \text{\$\e

\*δίδ-ατι (Skr. bibhr-ati dádh-ati) we find (Dor.) ίστα-ντι τίθε-ντι δίδο-ντι, as in (2). But -ατι is preserved in the perfect, as Dor. εθών-ατι (Hesych.), Phoc. ἱερητεύν-ατι Hom. λε-λόγχ-ασι, and I may suggest that this ending was taken from reduplicated present stems (cp. § 555 p. 108).

Secondary -nt = Gr.  $-\alpha$  is lost; all examples of secondary  $3^{rd}$  pl. took  $-\nu$ .  $\tilde{\varepsilon}-\nu_{\ell}-\partial\varepsilon-\nu$   $\tilde{\varepsilon}-\delta\iota-\partial\sigma-\nu$  like  $\tau(-\partial\varepsilon-\nu\tau_{\ell})$ . Similarly \* $F\varepsilon\tilde{\iota}\pi-\alpha(\tau)$  'they said' = \* $u\ell-uq-nt$  gave way to  $F\varepsilon\tilde{\iota}\pi\alpha\nu$ , thus following no. 2 (§ 557 p. 109). Again,  $-\alpha\nu$  got into the s-aorist, where originally either  $-\ell nt$  (with roots that had gradation), or -nt, seems to have been the ending; e. g.  $\tilde{\iota}\sigma-\alpha\nu$   $\tilde{\varepsilon}-\delta\iota\xi-\alpha\nu$  (instead of \* $F\iota\sigma\sigma-\varepsilon\nu$  \* $\tilde{\varepsilon}-\delta\iota\xi-\varepsilon\nu$ ?) \* $F\iota\iota\delta\varepsilon-\alpha\nu$  (instead of \* $F\iota\iota\sigma-\varepsilon\nu$  \* $\tilde{\varepsilon}-\delta\iota\xi-\varepsilon\nu$ ?) on the last see § 1021. The oi-optative took over the ending of the  $i\bar{\varepsilon}$ -optative:  $\varphi\dot{\varepsilon}\rho\sigma\iota-\varepsilon\nu$  instead of \* $\varphi\dot{\varepsilon}\rho\sigma\iota-\alpha$  following  $\varepsilon\tilde{\iota}\iota\nu$  (El.  $-\sigma\iota\alpha\nu$ , e. g.  $\pi\alpha\rho-\beta\alpha\dot{\iota}\nu\sigma\iota\alpha\nu$ , seems to have arisen by regular change from  $-\sigma\iota\varepsilon\nu$  as  $\sigma\nu\nu-\dot{\varepsilon}\alpha\nu$   $\dot{\varepsilon}\pi\iota-\vartheta\varepsilon\bar{\iota}\alpha\nu$  from \* $-\varepsilon\epsilon\nu$   $-\vartheta\varepsilon\iota\iota\nu$ ); side by side with which Delphic has  $\varphi\dot{\varepsilon}\rho\sigma\iota-\nu$ , analogical like mid.  $\varphi\dot{\varepsilon}\rho\sigma\iota-\nu\tau\sigma$  (§ 1068).

# (2) After Sonants Idg. -nti and -nt.

Primary -nti. ἄεισι 'they blow' for \*ἀFη-ντι: Skr. νά-nti; Lesb. φίλεισι 'they love' δίψαισι 'they thirst': Lat. ple-nt vide-nt juva-nt. Conj. Dor. φέρω-ντι Att. φέρωσι (§ 923 p. 471). Dor. El. N.-W. Gr. φέρο-ντι Att. φέρονσι.

Secondary  $-nt = \text{Gr.} -\nu$ .  $\tilde{\epsilon}-\delta\varrho\tilde{\alpha}-\nu$   $\tilde{\epsilon}-\tau\lambda\tilde{\alpha}-\nu$   $\tilde{\epsilon}-\gamma\nu\sigma-\nu$   $\tilde{\epsilon}-\mu\nu\gamma\epsilon-\nu$   $\tilde{\epsilon}-\gamma\nu\omega\sigma\vartheta\epsilon-\nu$  for  $*\tilde{\epsilon}-\partial\varrho\bar{\alpha}-\nu\tau$  etc., whence also  $\tilde{\epsilon}-\psi\tilde{\nu}-\nu$ .

The vowel before the personal ending is sometimes long instead of short. The reason is undecided. Examples are Hom.  $\mu u\acute{\nu} \vartheta \eta \nu$  Cret.  $\delta \iota \varepsilon \lambda \acute{\varepsilon} \gamma \eta \nu$  Hom.  $\check{\varepsilon} \varphi \bar{\nu} \nu$ .

Remark. In Morph. Unt. I 72 f., I assumed in agreement with G. Meyer and others that the long vowel was taken from other forms of the paradigm, as for instance it must be explained in  $\pi \lambda \tilde{\eta} \nu \tau \sigma$   $\tilde{\alpha} \eta \nu \tau \alpha \sigma$  and other like them. Solmsen now tries to make out a case for believing that  $-\eta \nu -\omega \nu$  etc. arose at the sentence-end, and that  $\tilde{\epsilon} \lambda \epsilon \gamma \epsilon \nu$  replaced the regular in-sentence form \* $\tilde{\epsilon} \lambda \epsilon \gamma \epsilon \nu \tau$  on the analogy of  $\tilde{\epsilon} \lambda \epsilon \gamma \eta \nu$  (Bezz. Beitr. xVII 329 ff.).

These endings  $-\nu\tau\iota$  and  $-\nu$  spread to all stems with 35\*

gradation that ended in -a,  $-\bar{e}$ , or  $\bar{o}$ .  $\tau i - \vartheta \varepsilon - \nu \tau i$   $\varepsilon - \tau i - \vartheta \varepsilon - \nu$   $\varepsilon - \vartheta \varepsilon - \nu$  ),  $\delta i - \delta o - \nu \tau i$   $\varepsilon - \delta i - \delta o - \nu$  (cp. 1. b). Dor.  $\varphi \alpha - \nu \tau i$  Att.  $\varphi \bar{\alpha} \sigma i$ ,  $\varphi \dot{\alpha} - \nu$ .  $\delta \dot{\alpha} \mu \nu \bar{\alpha} \sigma i$  ( $\delta \alpha \mu \nu \bar{\alpha} \sigma i$ ) for \* $\delta \alpha \mu - \nu \alpha - \nu \tau i$  instead of \* $\delta \alpha \mu - \nu - \varepsilon \nu \tau i$ . By analogy  $\dot{\phi} \dot{\eta} \gamma \nu \bar{\nu} \sigma i$  ( $\dot{\phi} \eta \gamma \nu \bar{\nu} \sigma i$ ) for \* $F_0 \eta \gamma - \nu \nu - \nu \tau i$  instead of \* $F_0 \eta \gamma - \nu \nu (F) - \varepsilon \nu \tau i$ .

§ 1021. The ending  $-\alpha\nu$ , which developed first in Greek (§ 1020.1.b), spread widely and was the model for many innovations.

(1)  $-\alpha\nu$  instead of  $-\varepsilon\nu$  and instead of  $-\alpha$  became usual in the Indicative of stems which did not end in  $-\bar{\alpha}$ ,  $-\bar{\epsilon}$ ,  $-\bar{\epsilon}$ . Some have been already mentioned:  $\varepsilon \bar{\ell} \pi - \alpha\nu$ ,  $\bar{\ell} \sigma - \alpha\nu$   $\varepsilon - \delta \varepsilon \bar{\ell} \xi - \alpha\nu$  \* $F \varepsilon \iota \delta \varepsilon - \alpha\nu$  (by analogy, the ind. perf.  $\gamma \varepsilon - \gamma \sigma \nu - \alpha\nu$  § 844 p. 386). So Boeot.  $\pi \alpha \varphi - \varepsilon \bar{\iota} \alpha\nu$  for \* $-\eta(\sigma) - \alpha\nu$  (I § 72 p. 63) from  $\sqrt{\phantom{\alpha}} es$  'to be', Hom. Aeol.  $\varepsilon \chi \varepsilon \nu - \alpha\nu$  (§ 504 p. 67 f.) and others. Also opt.  $\delta \varepsilon \ell \xi \varepsilon \iota \alpha\nu$  instead of \* $\delta \varepsilon \iota \xi \varepsilon \iota - \varepsilon \nu$  as we should expect (§ 944 p. 489).

In the tendency which exchanged  $-\varepsilon \nu$  for  $-\alpha \nu$  the middle ending  $-\alpha \tau \sigma$  may have had some influence, e. g. in  $\tilde{\varepsilon} \chi \varepsilon \nu \alpha \nu$  (instead of  $*\tilde{\varepsilon} - \chi \nu - \alpha \nu$ ), beside which there once was a  $3^{\rm rd}$  pl. middle  $*\tilde{\varepsilon} - \chi \nu - \alpha \tau \sigma$  (cp.  $3^{\rm rd}$  sing.  $\tilde{\varepsilon} - \chi \nu - \tau \sigma$ ).

That  $-\varepsilon \nu$  remains in the Opt., as  $\tau \imath \vartheta \varepsilon \tilde{\imath} - \varepsilon \nu$ , must be put down to the strong stem  $\tau \imath \vartheta \varepsilon \imath \eta -$  (cp.  $\check{\varepsilon} \mu \nu \gamma \varepsilon \nu : \check{\varepsilon} - \mu \nu \gamma \eta -$ ,  $\check{\varepsilon} \tau \imath \vartheta \varepsilon \nu : \check{\varepsilon} - \tau \imath \vartheta \gamma -$ ). Then  $\tau \imath \vartheta \varepsilon \tilde{\imath} - \varepsilon \nu$  propped up  $\varphi \varepsilon \rho \circ \iota - \varepsilon \nu$  despite the mid.  $\varphi \varepsilon \rho \circ \iota - \alpha \tau \circ$ .

(2) \* $\tilde{\eta}$ - $\alpha\nu$  'erant' (Boeot.  $\pi\alpha\varrho$ - $\epsilon\tilde{\iota}\alpha\nu$ ) under the influence of  $\tilde{\eta}\sigma$ - $\tau\epsilon$   $\tilde{\eta}\sigma$ - $\tau\sigma\nu$   $\tilde{\eta}\sigma$ - $\tau\eta\nu$  became  $\tilde{\eta}\sigma$ - $\alpha\nu$ , which may be compared with  $\tilde{\epsilon}\sigma$ - $\mu\tilde{\epsilon}\nu$  (§ 502 p. 65). Similarly  $F\epsilon$ ( $\delta\epsilon\sigma\alpha\nu$   $\tilde{\eta}\delta\epsilon\sigma\alpha\nu$  depend upon a lost \* $F\epsilon$ ( $\delta\epsilon\sigma$ - $\tau\epsilon$  (§ 836 p. 372); the form was once \* $F\epsilon$ ( $\delta\epsilon$ - $\alpha\nu$  (cp. § 1020.1.b). Then the ending  $-\sigma\alpha\nu$  became familiar, and was detached as a type, beginning partly with these, and partly with  $\sigma$ -aorists of the form  $\tilde{\epsilon}\pi\eta\tilde{\epsilon}\alpha\nu$  (to whose system once belonged \* $\tilde{\epsilon}\pi\tilde{\alpha}\kappa\mu\epsilon\nu$  \* $\tilde{\epsilon}\pi\tilde{\alpha}\kappa\tau\epsilon$ , see § 820 p. 357); examples are  $\tilde{\epsilon}$ - $\varphi\alpha$ - $\sigma\alpha\nu$   $\tilde{\epsilon}$ - $\tau$ ( $\theta\epsilon$ - $\sigma\alpha\nu$   $\tilde{\epsilon}$ - $\theta\epsilon$ - $\sigma\alpha\nu$   $\tilde{\epsilon}$ - $\tau$ ( $\theta\epsilon$ - $\sigma\alpha\nu$   $\tilde{\epsilon}$ - $\theta\epsilon$ - $\sigma\alpha\nu$   $\tilde{\epsilon}$ - $\tau$ ( $\theta\epsilon$ - $\tau$ ) $\tau$ ( $\theta\epsilon$ - $\tau$ ) (Hellenistic also  $\tilde{\epsilon}\lambda$ ( $\theta$ ) $\sigma$ ( $\theta$ )  $\tilde{\epsilon}$ (

<sup>1)</sup> Although we must assume Idg. \*dh-ént \*é-dh-ent, we can hardly venture to say that the Greek form is derived straight from this ground-form.

plpf.  $\xi$ - $\sigma \alpha - \sigma \alpha \nu$ , opt.  $\varepsilon \tilde{\iota} \eta - \sigma \alpha \nu$ , imper.  $\varepsilon \sigma \tau \omega - \sigma \alpha \nu$ . The wider use of  $-\sigma \alpha \nu$  was assisted by a wish to make the number of syllables the same in  $1^{st}$   $2^{nd}$  and  $3^{rd}$  plural  $(\varepsilon \varphi \alpha \sigma \alpha \nu : \varepsilon \varphi \alpha \omega \varepsilon )$ .

(3) On the analogy of  $l\sigma r\alpha - \nu$  to  $l\sigma r\alpha - \nu r\iota$ ,  $\tilde{\epsilon} - r\iota \vartheta \epsilon - \nu$  to  $r\iota \vartheta \epsilon - \nu r\iota$ ,  $\tilde{\epsilon} - \delta \iota \delta o - \nu$  to  $\delta \iota \delta o - \nu r\iota$ , a primary  $-\alpha \nu r\iota$  sprang up as complement to  $-\alpha \nu$ . Beside  $*\bar{\eta}\alpha\nu$  'erant' then stands the pres. Ion.  $\tilde{\epsilon}\bar{\alpha}\sigma\iota$ ; we also have  $l\bar{\alpha}\sigma\iota$  'eunt',  $\varrho\eta \gamma\nu\nu' - \bar{\alpha}\sigma\iota$ . Beside  $l\bar{\sigma}\alpha\nu$ , the pres. (perf.)  $l\bar{\sigma}\sigma\bar{\alpha}\sigma\iota$   $l\bar{\sigma}\sigma\bar{\alpha}\iota$  'sciunt' Dor.  $l\bar{\sigma}\alpha\nu\tau\iota$  (§ 863 p. 411). Also perf.  $l\bar{\sigma}\epsilon - l\bar{\sigma}\epsilon$   $l\bar{\sigma}\epsilon$   $l\bar{\sigma}\epsilon$ 

Doubtless something is due to the analogy of the middle  $-\alpha \tau \alpha \iota$ , as  $\dot{\varrho} \eta \gamma \nu \dot{\upsilon} - \dot{\alpha} \sigma \iota$ : \* $\dot{\varrho} \eta \gamma \nu \dot{\upsilon} - \alpha \tau \alpha \iota$  (like  $\dot{\varepsilon} \dot{\varrho} \dot{\upsilon} - \alpha \tau \alpha \iota$  § 1068. 1.  $\alpha$ ),  $\tau \dot{\varepsilon} \tau \dot{\varrho} \dot{\alpha} \varphi - \dot{\alpha} \sigma \iota$ :  $\tau \dot{\varepsilon} \tau \dot{\varrho} \dot{\alpha} \varphi - \alpha \tau \alpha \iota$ . For the Perfect cp. also the ending  $-\dot{\alpha} \tau \iota$ , § 1020. 1. b.

(4) Following  $\tilde{t}$ - $\alpha \sigma \iota$  beside  $\tilde{t}$ - $\mu \epsilon \nu$ ,  $\dot{\rho} \eta \nu \nu' - \bar{\alpha} \sigma \iota$  beside  $\dot{\rho} \dot{\eta} \gamma \nu \nu - \mu \epsilon \nu$ ,  $\delta \epsilon \delta \iota - \bar{\alpha} \sigma \iota$  beside  $\delta \dot{\epsilon} \delta \iota - \mu \epsilon \nu$  sprang up  $\tau \iota \vartheta \dot{\epsilon} - \bar{\alpha} \sigma \iota$   $\delta \iota \delta \dot{\delta} - \bar{\alpha} \sigma \iota$  \* $\iota \sigma \tau \dot{\alpha} - \bar{\alpha} \sigma \iota$  is  $\tau \ddot{\alpha} \sigma \iota$  is  $\tau \ddot{\alpha} \sigma \iota$  as  $\vartheta^{rd}$  pl. to  $\tau \iota \vartheta \epsilon - \mu \epsilon \nu$  side- $\mu \epsilon \nu$  for  $\alpha - \mu \epsilon \nu$ , Hom.  $\beta \epsilon \beta \dot{\alpha} - \bar{\alpha} \sigma \iota$  Hom. Att. \* $\dot{\epsilon} \sigma \tau \dot{\alpha} - \bar{\alpha} \sigma \iota$  1)  $\dot{\epsilon} \sigma \tau \ddot{\alpha} \sigma \iota$  to  $\beta \dot{\epsilon} \beta \alpha - \mu \epsilon \nu$ , Boeot.  $\partial \epsilon \dot{\delta} \dot{\sigma} - \alpha \nu \vartheta \iota$  (on the  $\vartheta$  see § 1068). Similarly Boeot.  $\dot{\alpha} \nu - \dot{\epsilon} \vartheta \epsilon \alpha \nu$  ( $\ddot{\epsilon} \vartheta \epsilon \iota \alpha \nu$   $\ddot{\epsilon} \vartheta \iota \alpha \nu$ ), by which form the number of syllables in the  $\vartheta^{rd}$  plural was made to agree with the  $\vartheta^{rd}$  plural (as with  $\vartheta \sigma \iota \nu = \iota \iota$ ), see no. 2. above).

Remark. These imperf.  $\hat{\epsilon}\nu$ -epariosoev aor.  $\hat{\epsilon}\delta$ oύκαεν  $\hat{\epsilon}\nu$ -εβείκαϊν  $\hat{\epsilon}\tau$ αίξαϊν are not yet properly explained. If their  $-\epsilon\nu$   $-\iota\nu$  = pr. Gr.  $-\epsilon\nu$ , their model must have been \* $\hat{\gamma}_{-}^{2}$ - $\epsilon\nu$  'erant' (§ 1020.1. a)  $\epsilon\hat{\iota}_{-}$ - $\epsilon\nu$  φέροι- $\epsilon\nu$ ; if again  $-\epsilon\nu$  ( $-\iota\nu$ ) is regular in Thessalian for  $-\alpha\nu$  (Prellwitz, De dial. Thess., 9), they fall into line with Boeot.  $\hat{\epsilon}\mathcal{F}\epsilon$ - $\alpha\nu$  mentioned above. Solmsen conjectures that the endings  $-o\nu$   $-\alpha\nu$  were pronounced  $-o\eta$   $-\alpha\eta$ , to get an equal number of syllables with the 1st and 2nd plural, and that  $-o\epsilon\nu$   $-\alpha\epsilon\nu$   $-\alpha\iota\nu$  are various attempts to write these sounds (Bezz. Beitr. xVII 336).

Late Greek new forms in the 3rd pl. are treated by Buresch in the Rhein. Mus., XLVI 193 ff.

§ 1022. Italic. In Umbro-Samnitic the endings \*-nti and \*-nt become -nt and -ns respectively, and are thus kept distinct. But in Latin the primary ending -nt was made universal in

<sup>1)</sup> This uncontracted form is wanting in Epic, because it did not suit the daotylic metre.

prehistoric times in the same way, though earlier, as the primary -t can be seen before our eyes usurping the place of the secondary -d (§ 996 p. 531). The form quotiens: Skr. kiyat (III § 225 p. 106) makes it probable that Latin once had Umbr.-Samn. -ns = Idg. \*-nt.

The complete disappearance of -i from -nti in Italic is remarkable; the same thing in seen with the ending -ti (§ 996 p. 531).

Along with -ns Latin must once have had a sentence doublet -n, if Johansson is right in saying that O.Lat. danunt is really \*dan + the ending of legunt which it took by analogy (Akadem. afhandl. til Prof. S. Bugge, pp. 29 ff.); compare § 1023 on sēder-unt, and the O.H.G. and A.S. sind-un instead of sind, § 1025. Similarly ex-plēnunt prōd-īnunt would stand for \*plen \*in (cp. the form int beside eunt, formed complementary to īmus ītis as sint was to sīmus sītis, instead of sient). The same -n may perhaps be the ending of Umbr. staheren 'stabunt'.

Remark. I will not pass unmentioned Danielsson's conjecture (in Pauli's Altital. Stud. III 148) that -ns originally belonged to the indic. perfect only, and that -s is the same as we see in Avest. -areš (§ 1077). Compare further Johansson, Bezz. Beitr. XVIII 49.

- (1) The post-consonantal Idg. -énti -ént and -nti -nt run together into -ent(i) -ens in Italic.
  - (a) -énti and -ént.

Primary -énti = Ital. -ent(i). Umbr. s-ent Osc. set set 'sunt'.

Secondary -ént = Ital. -ens. Opt. Lat. si-ent instead of \*si-ens; new form sint following sī-mus sī-tis, so also Umbr. sins sis with the secondary ending kept. Lat. vīderint like sint.

(b) -nti and -nt.

Primary -nti = Ital. -ent(i). Since in Umbr.-Samn. the orig. -o-nt(i) has disappeared and given place to -ent(i) (see below), we may assume as 3<sup>rd</sup> pl. to di-d-e-t 'dat' (§ 553 p. 107) the form \*dident, which would be a parallel to Skr. dá-d-ati.

Secondary -nt = Ital. -ens seems to be lost.

## (2) After Sonants -nti or -nt.

Primary -nti Ital. -nt(i). Lat. ple-nt fla-nt vide-nt ama-nt, Umbr. furfant 'februant'. Hence by analogy Lat. da-nt like Gr.  $\xi$ -do- $\nu$  § 1020 p. 548, i-nt (beside eu-nt). Lat. feru-nt su-nt: Skr. bhára-nti O.Russ. satř. Thematic Conjunctive Lat. eru-nt.

Secondary -nt = Ital. -ns, instead of which Latin has the primary -nt. Osc. fu-fa-ns 'erant' Lat. amā-ba-nt. Conj. Umbr. dirsa-ns dirsas 'dent' Osc. deica-ns 'dicant', Lat. dīca-nt; Osc. herri-ns 'caperent' tribarakatti-ns 'aedificaverint', Lat. age-nt agere-nt. Also, with -n for -nt, Lat. ex-plen-unt etc. according to Johansson's explanation, for which see above p. 550.

In Umbr.-Samn. often -ent, where -ont is expected. Osc. filet 'fiunt'. Thematic Conjunct. of the s-Aor.: Umbr. furent 'erunt' Osc. censazet 'censebunt' (§ 824 p. 362), and these served as the model for fut. pf. Umbr. benurent 'venerint' Osc. tribarakattuset 'aedificaverint' (§ 872 p. 421). Of the same kind are perhaps Umbr. eitipes 'decreverunt' Osc. prufattens 'probaverunt', cp. the thematic 3rd sing. prufatted (§ 867 p. 416, §§ 872 f. pp. 420 ff.). The spread of -ent (-ens) was probably not due to the solitary form sent; probably there also existed \*ed-ent 'they eat' O.Russ. jad-eti, forms of the XIIth Present Class in -n-ent = Skr. -n-ánti, of the XVIIth in -nu-ent = Skr. -nv-ánti (-nuv-ánti), and again the form \*did-ent = Skr.  $d\acute{a}d$ -ati (see above, 1. b).

§ 1023. The Perfect in Latin shows the endings -erunt -ērunt and -ēre; to which we must add from inscr. ded-rot ded-ro C. I. L. 1 173, 177, and some other forms which have been gathered by Deecke (De redupl. Lat. lingu. praeterito, Though it is natural enough to derive -erunt, pp. 17 f.). beside -is-tis -is-tī, from \*-is-ont(i) (§ 841 p. 378), still the r of these 3rd pl. endings is doubtless connected in some part at least with the Skr. -ur, Avest. -are, Skr. mid. -re, and others of like nature (§§ 1076 ff.). With the extension of the -r-form by -ont compare Skr. -r-anta -r-atē -r-ata (on the form -r-an, which looks as though it were most closely connected, refer to § 1078.8). That there is no doubt of its being a middle -r-form extended by the active nt-suffix is shewn by the 1st sing. tutud-ī (§ 1044), which has the middle ending. For further conjectures I refer to Osthoff, Perfect 210 ff., 609 f.; Windisch, Über die Verbalformen mit dem Charakter R, pp. 47 f.; Henry, Mém. Soc. Ling. vi 373 ff.; Zimmer, Kuhn's Zeitschr. xxx 281 ff.; Schweizer-Sidler and Surber Lat. Gramm. 12 139; Stolz, Lat. Gr. 2 372 f.; Bartholomae, Stud. Idg. Spr. n 195 ff.

## § 1024. Keltic.

Primary Ending. Idg. -énti remains in O.Ir. it O.Cymr. int 'they are' for pr. Kelt. \*s-enti, see footnote to II p. 196 (in the light of which I § 243.3 p. 202 must be corrected). Elsewhere only Idg. -nti. O.Ir. berit: Gr. φέρο-ντι. carit for \*carā-nti: cp. Lat. ama-nt. Conjunctive berit: Lat. fera-nt; cp. Mid.Cymr. gwelo-nt 'videant'. lenit 'they hold' for \*lina-nti, as Gr. δάμνασι (δαμνασι) for \*δαμ-να-ντι (§ 1020 p. 548), instead of Idg. \*-n-énti.

Side by side runs the Conjunct inflexion: indic. do-berat, in the oldest glosses -ot is still found, as tu-thegot = later do-thiagat 'they go away'; no charat 'amant'; conj. do-berat. Whether these are descended straight from forms in Idg. -nt (\*bero-nt \*cara-nt \*berā-nt), or are middle forms with the Idg. ending -nto, has not been made out (see I § 657.1 p. 506, and § 82.1 p. 76); the second alternative however seems better. Zimmer, who identifies -berat with Gr. φέρο-ντο, explains the active function of this form by supposing that berit represents a confluence of two, \*bero-nti and \*bero-ntai (Kuhn's Zeitschr. xxx 236).

- § 1025. Germanic.
- (1) After Consonants, -énti -ént and -nti -nt.
- (a) Primary -énti = pr. Germ. -inpi. Goth. sind O.H.G. sint 'they are' for pr. Germ. \*sindi, which is either the unaccented form of the word (cp. I § 669 p. 534) or has taken the place of the regular \*sinbi = Goth. \*sinb O.H.G.

- \*sind on the analogy of bairand berant; O.H.G. also sint-un sind-un (O.Sax. and A.S. sind-un) with an additional ending following 1st pl. birum 2nd pl. birut. Secondary -ént is quite lost.
- (b) Primary -yti is lost. Secondary -yt = Germ. -un is perhaps original in O.Sax. ded-un 'they did' O.H.G. wissun 'they knew' (§ 1017.1.b p. 544). -un is always found in the 3<sup>rd</sup> pl. of both strong and weak Perfect, and also sometimes in the Present: e. g. Goth. skaiskaid-un bēr-un O.H.G. sciad-un bār-un, Goth. nasidēd-un O.H.G. nerit-un, Goth. vit-un O.H.G. wizzun (§ 508 p. 74), O.Icel. er-o er-u 'they are'. Perhaps these endings have been under the influence of the middle \*-undai \*-unda = Idg. -ytai -yto, which we may assume to have lasted down to proethnic Germanic.
  - (2) After Sonants -nti and -nt.

Primary -nti. Goth. salbō-nd O.H.G. salbō-nt, O.H.G. habē-nt. Goth. baira-nd O.H.G. bera-nt; instead of the latter, Frank. berent, formed doubtless like the 1<sup>st</sup> pl. beremēs (instead of beramēs) under the combined influence of the 2<sup>nd</sup> plural beret (§ 1035) and present stems with -io- (suoche-mēs -nt).

Secondary -nt. Perhaps it is old in O.H.G. conj. salbō-n like O.Ir. -carat 'ament' (§ 930 p. 476). Further, \*-nt, but not original, in all optatives, as O.H.G. s-ī-n bār-ī-n, which are to be compared with Lat. s-i-nt instead of s-i-ent (it is hardly likely that sīn is for \*s-ii-inp = Idg. \*s-ii-ent), and O.H.G. berē-n (instead of Idg. \*bhéroi-nt), which falls in line with Gr. qéqou-v (§ 1020. 1. b p. 547). Gothic in the optative shows -na, salbō-na bērei-na bairái-na; and the -n of Old Swedish must come from -na (cp. Kock, P.-B. Beitr. xv 244 ff.), while the W.-Germ. -n may possibly have once been followed by a vowel, now lost. This -na displaced -n = Idg. \*-nt on the analogy of the 1st plural -ma (§ 1007. 2 p. 538). I suggest that in the 1st plural of these forms there were first two parallel suffixes -ma and -m, and that this fact produced -na beside -n; then the fuller form won the day in all persons.

§ 1026. Slavonic1). The variation of (O.Russ.) -nti

<sup>1)</sup> In Baltic, the 3rd singular did for 3rd plural too; see § 999 p. 533.

- and (O.Bulg.)  $-nt\ddot{u}$  (= nt + particle u) ran parallel to that of  $-t\ddot{u}$  and  $-t-\ddot{u}$  in the  $3^{rd}$  sing., see § 999 p. 532 f.
- (1) After consonants, -énti -ént and -nti -nt, both running into -eti -e.
- (a) Primary -énti = -ęti. O.C.Sl. (Russ.) jad-ęti: Skr. ad-anti. Secondary -ént in O.Bulg. jad-ęt-ŭ (but cp. below).
- (b) Primary - $\eta ti = -eti$ . O.C.Sl. (Russ.) dad-eti: Skr.  $d\acute{a}d-ati$ . Secondary - $\eta t$  in O.Bulg.  $dad-et-\check{u}$  like Skr.  $d\acute{a}d-at-u$  (but cp. below) and perhaps in the -e of s-Aorists, as O.C.Sl.  $da\check{s}e$  (§ 1017. 1. b p. 543 f.
  - (2) After sonants, -nti and -nt.

Primary -nti. O.C.Sl. (Russ.) imatī beside 3<sup>rd</sup> sing. ima-tī, beratī satī znajatī.

Secondary -nt. Aor. O.C.Sl. nesa, injunct. ba for \*bhu-o-nt (§ 523 p. 87), bada (§ 909 p. 458). With the particle u, O.Bulg. imatŭ beratŭ satŭ znajatŭ.

On smrideti -etu for \*-inti \*-int-u, see § 637 Rem. p. 176.

If in proethnic Slavonic the *mi*-presents had -ntī, the rest -ntŭ (jadętī — beratŭ), and if levelling took place in different directions in the several dialects (cp. § 999 p. 534 on -tī and -tŭ in the 3<sup>rd</sup> singular), O.Bulg. jadętŭ could not be brought in evidence for Idg. -ént (1. a), nor O.Bulg. dadętŭ for Idg. -nt (1. b).

#### 1ST PERSON DUAL.

- § 1027. Proethnic Indo-Germanic. The suffix began with *u* and shows in its ending some kinship with the 1<sup>st</sup> plural suffixes beginning with *m*-. It can only be traced in Aryan, Germanic, and Balto-Slavonic.
- (1) Primary forms -ues -ues and -uesi -uesi. Skr. s-vás bhárā-vas, Avest. Gath. us-vahī (3<sup>rd</sup> sing. vaš-tī 'wishes'). Also doubtless Goth. baírōs salbōs, cp. § 1029.
- (2) Secondary or Perfect forms -uĕ -uĕ. Skr. á-bharā-va. Goth. opt. bairái-va; perf. bēru for \*bēru-u(i) or -u(a), possibly for \*bēr-uui or -uua with a form of suffix that makes a parallel to -nume -numo (= Goth. -um?); cp. § 1001 p. 535. Lith. pret. sùko-va refl. -vo-s, O.C.Sl. aor. vezo-vè (but cp. § 1030).

§ 1028. Aryan. In Sanskrit only -vas and -va, in Avestic only -vahī and -va are found. That Sanskrit has no -vasi, Avestic no -vō, may be considered an accident. For examples see § 1027; I add Avest. injunct. jvāva i. e. jīvā-va from Ar. jīv- 'to live' (Bartholomae Handb. § 91 a Anm. 4, p. 40).

§ 1029. Germanic.

The primary form appears to occur in Goth. bairōs (3<sup>rd</sup> sing. bairi-p) salbōs (3<sup>rd</sup> sing. salbō-p), cp. 1<sup>st</sup> pl. O.H.G. -mēs. salbōs perhaps for \*salbō-us (cp. Streitberg, Die germ. Compar. auf -ōz-, p. 9 as against I § 181 Rem. p. 159). Instead of bairōs we should expect \*bairāus. To assume an Idg. ground-form \*berōues on the strength of Goth. bairōs, as Streitberg does (Zur germ. Spr., 108) seems to me to be open to criticism.

Secondary forms. Opt. Goth. bairái-va like 1st pl. bairái-ma. Perf. bēru see § 1027; similarly Norse Run. waritu for \*writ-u 'we both scratched, or wrote'.

A neat conjecture is that of van Helten (P.-B. Beitr. xv 472), who sees a 1<sup>st</sup> dual injunct. acrist in O.Sax. wita 'come along', very well' orig. 'tendamus', for \*wita-w-. Compare 1<sup>st</sup> pl. A.S. wuton 'come along' § 532 p. 94.

§ 1030. Balto-Slavonic.

Lith.  $\tilde{e}s$ -va sùka-va reflex. sùka-vo-s, cp.  $2^{nd}$  dual sùka-ta sùka-to-s.  $-v\bar{o}$  is a secondary ending like  $-m\dot{e}$  (- $m\dot{e}$ -s-me) in the 1st plural. But  $-v\bar{o}$  is doubtless not = Idg. \*- $u\bar{o}$  (for which we ought rather to have  $-v\hat{u}$ ), but a transformation of the Idg. secondary endings on the analogy of the  $2^{nd}$  dual (cp. Slav. -va below).

O.C.Sl. -vě: jes-vě veze-vě aor. vezo-vě opt. vezě-vě. As representing Idg. \*-uē we expect -vi (cp. mati 'mother' I § 76 p. 66). There seems therefore to have been an imitation of vě 'we two' (cp. § 1008 p. 539 on 1st pl. -my). The ending -va, rare in O.C.Sl., more common in Mod.Slov. and Czech, I prefer to regard as an imitation of -ta (2nd dual) than as representing Idg. \*-uō (cp. above Lith. -va). In Mod.Slovenian, which has -vě and -va both, a difference of gender has developed between them, because it so happened that there were feminine words

like race (III § 286 p. 194) and masculines like vluka (III § 285 p. 193), and ve and va were grouped accordingly (cp. what is said of -te in § 1036).

#### 2<sup>ND</sup> PERSON DUAL.

- § 1031. Proethnic Indo-Germanic.
- (1) Primary ending something like \*-thes \*-thos; observe that the aspirate rests on the authority of Aryan only; the same is true of the 2<sup>nd</sup> plural (§ 1009 p. 540). Skr. s-thás bhára-thas. Lat. es-tis agi-tis (cp. § 1034). Goth. baíra-ts (cp. § 1035).
  - (2) Secondary or Perfect forms.
- (a) -tā. Lith. pret. sùko-ta reflex. -to-s, O.C.Sl. aor. veze-ta. And, no doubt, Umbr. futu-to 'estote' (§ 1034).
  - (b) -tom (also -tem?). Skr. ά-bhara-tam. Gr. έ-φέφε-τον.
- § 1032. Aryan. Skr. primary -thas: s-thás bhára-thas; secondary -tam: ás-tam á-bhara-tam. The Avestic forms in -þō and -tem, which answer to these, are used for the 3<sup>rd</sup> dual.

On Skr. -áthur in the Perfect, see § 1038.

§ 1033. Greek. The secondary ending  $-\tau o \nu$  drove out the primary in prehistoric times (cp. the levelling out of all but  $-\mu \varepsilon \nu$  in the 1<sup>st</sup> plural, § 1004 p. 537): pret.  $\vec{\eta} \sigma - \tau o \nu \vec{\epsilon} - \varphi \dot{\epsilon} \varphi \varepsilon - \tau o \nu$ , pres.  $\vec{\epsilon} \sigma - \tau \dot{o} \nu \varphi \dot{\epsilon} \varphi \varepsilon - \tau o \nu$ .

A consequence of the use of  $-\tau o\nu$  for both  $2^{\rm nd}$  and  $3^{\rm rd}$  dual in primary tenses was that the same was done in historic tenses, where  $-\tau o\nu$  belonged properly to the  $2^{\rm nd}$  dual and  $-\tau \bar{\alpha}\nu$  (Ion.-Att.  $-\tau \eta\nu$ ) to the third. Thus we get  $\epsilon \varphi \epsilon \rho \epsilon \tau \sigma \nu$  for both persons, and by similar reasoning  $\epsilon \varphi \epsilon \rho \epsilon \tau \tau \nu$  for both also.

§ 1034. Italic. Lat. es-tis agi-tis agē-bātis sī-tis are probably dual forms; see § 1013 p. 541.

The secondary ending -tā may have taken plural use in Umbrian forms like *futu-to* 'estote', for which see § 967 p. 509, and § 1040.

§ 1035. Germanic. The primary ending is represented by Goth. -ts, which at the same time acted as secondary:

baira-ts (-a- instead of -i-, cp. O.H.G. 2<sup>nd</sup> pl. bera-t § 1015 p. 542) perf. bēru-ts opt. vilei-ts. On the -t of -ts — for which \*-ps would be expected — see I p. 406 footnote 1, Kluge in Paul's Grundr. 1 324 (§ 10.1.b), and Johansson Kuhn's Zeitschr. xxx 554 f.

The O.H.G. 2<sup>nd</sup> pl. bere-t 'fertis', which cannot be explained as being for Idg. \*bere-t(h)e, may be a dual form. As far as sound-laws go, it may be compared with any of these three, Skr. bhára-thas bhára-tam or O.C.Sl. bere-ta, see § 1015 p. 542.

§ 1036. Balto-Slavonic.

Lithuanian has the secondary ending -ta (reflexive  $-t\bar{o}-s$ ) = Idg.  $-t\bar{a}$  as its only form: suko-ta, suka-ta (instead of \*suke-ta, see § 999.2 p. 533),  $\tilde{e}s-ta$ .

So also Slavonic: aor. veze-ta opt. veze-ta pres. veze-ta jes-ta. A few instances of  $-t\check{e}$  are found, as also in the  $3^{rd}$  dual, probably in imitation of  $-v\check{e}$  in the  $1^{st}$  dual; so by reverse attraction -va is found instead of  $-v\check{e}$  (§ 1030 p. 555).  $-t\check{e}$  in the  $2^{nd}$  and  $3^{rd}$  dual is used where the subject is feminine, as we saw in the case of  $-v\check{e}$  (loc. cit.).

## 3rd Person Dual.

§ 1037. Proethnic Indo-Germanic. This person is only preserved in Aryan, Greek, and Slavonic (as regards Lithuanian see § 999 p. 532 f.), which makes it difficult to determine what suffixes were used in the parent language. The only thing certain is that  $-t\bar{a}m$  is nothing but secondary: Skr.  $ds-t\bar{a}m$  Gr.  $\eta\sigma-\tau\eta\nu$ .

§ 1038. Aryan.

Primary ending pr. Ar. -tas: Skr. bhára-tas Avest. bara-tō. Avest.  $y\bar{u}i\bar{d}ya$ - $p\bar{o}$  'they both fight' shows the  $2^{nd}$  dual ending.

Secondary, pr. Ar.  $-t\bar{a}m$ . Skr.  $a-bhara-t\bar{a}m$ . In Avestic always -tem, the ending of the  $2^{nd}$  dual, as  $\bar{a}i-tem$  'they both went', just as in Greek we see -rov in place of  $-\tau\bar{a}v$  (§ 1039).

In the Perfect pr. Ar. -airr, Skr. -átur Avest. -atar<sup>e</sup>: Skr. ca-kr-átur sēd-átur da-d-átur; Avest. yaet-atar<sup>e</sup> (from yat- 'to stretch, strive to reach'), beside this Gath. vaocātar<sup>e</sup> (from vac-

'to speak'), where  $\tilde{a}$ , we may conjecture, comes from the middle suffix -āitē (maman-āitē). The r-ending is undoubtedly borrowed from the 3rd pl. in -rr (Skr. -ur Avest. -are, § 1077), and the Skr. -áthur of the 2nd du., e.g. cakr-áthur, is due to the use of both -thas and -tas (cp. O.C.Sl. pri-jetŭ as 2nd and 3<sup>rd</sup> Person § 830 p. 367). The a of -atur appears to be that of the 3rd sing. and 2nd plural perfect.

§ 1039. Greek. Primary -τον: ἐσ-τον φέρε-τον. Secondary -ταν and τον: ησ-την έ-φερέ-την and ησ-τον έ-φέρε-τον. Cp. § 1033 p. 556.

§ 1040. Slavonic. -te and -ta are variants without any distinction: O.C.Sl. pres. and aor. veze-te and -ta, opt. veze-te and -ta. -te may be derived from \*-tes, cp. Skr. -tas. Whether -ta originally belonged to the 3rd dual or was the ending of the 2nd dual is not clear. Perhaps -ta must be identified with Umbr. -tā in etu-ta 'eunto', see § 967 p. 508. As regards a third form -te (used with a fem. subject), see § 1036 p. 557.

#### MIDDLE ENDINGS.

#### 1<sup>ST</sup> PERSON SINGULAR.

- § 1041. Proethnic Indo-Germanic.
- (1) Primary endings there appear to be two:
- (a) -mai or -mai in unthematic stems: Gr. "ι-στα-μαι δί-δο-μαι, Lith. reflex. vel-më-s(i) Pruss. as-mai 'sum'.
- (b)  $-\bar{o}i$  in thematic stems (vgl.  $-\bar{o}$  in the active). Skr. thematic Conjunct. kṛ-ṇáv-āi (3rd sing. kṛ-ṇáv-a-tē). Norse Run. haite O.Icel. heite 'I bid, call'. The same ending in the long-vowel Conj.: Skr. bhárāi (cp. § 918 Rem. p. 466).
  - (2) The Secondary endings are quite obscure:
- (a) Unthematic Stems. Skr. á-dviš-i doubtless for -2  $(\acute{a}-dvi\check{s}-i:di-dvi\check{s}-\acute{e}=1^{\rm st}\ {\rm pl.}\ -mahi\ {\rm Gr.}\ -\mu\varepsilon\vartheta\alpha:-mah\bar{e})\,,\ {\rm but}$ opt. dvišīy-á bhárēy-a. Gr. έ-δό-μην δι-δοί-μην φεροί-μην (Dor. -μαν), recalling the Suffix of the 2nd sing. -thes beside act. -tha.
  - (b) Thematic Stems. Skr. ά-bhar-ē. Gr. ἐ-φερό-μην.
  - (3) -ai or -ai in the Perfect, is doubtless connected with

the -a of Skr.  $dvi\tilde{s}iy$ -á and the -i = -ə of Skr. á- $dvi\tilde{s}$ -i (cp. § 1054.3). Skr. tutud-é. Lat. tutud-ī. O.C.Sl.  $v\check{e}d$ -é. § 1042. Aryan.

(1) Primary ending. The -ai of the thematic Conj. is old: Skr.  $m\acute{a}n-\bar{a}i$  Avest. Gath.  $m\bar{e}n-\bar{a}i$  beside indic. Skr.  $\acute{a}-ma-ta$ , s-Aor. Skr.  $mq-s-\bar{a}i$  Avest. Gath.  $m\bar{e}ngh-\bar{a}i$  beside indic. Skr.  $\acute{a}-mq-s-ta$ , Skr.  $kr-n\acute{a}v-\bar{a}i$  beside indic.  $kr-nu-t\acute{e}$ . Also  $-\bar{a}i$  in the long-vowel Conj.: Skr.  $bh\acute{a}r\bar{a}i$  Avest.  $bar\dot{a}i$ . So there was once indic. pres. \* $bhar\bar{a}i$  (cp. active indic. Avest.  $ufy\bar{a}$  Gr.  $\varphi\acute{e}\rho\omega$  like conj. Avest.  $anh\bar{a}$  Gr.  $\acute{e}\omega$  Lat.  $er\bar{o}$  and conj. Skr.  $\acute{a}rc\bar{a}$  Gr.  $\varphi\acute{e}\rho\omega$  § 976. 2 p. 517), which was exchanged even in pr. Aryan for \* $bhara\acute{e}=$  Skr.  $bh\acute{a}r\bar{e}$  Avest.  $bar\bar{e}$  following the  $-a\acute{e}$  of the unthematic Indicative, and the analogy of  $-sa\acute{e}-ta\acute{e}$  etc., for the purpose, I would suggest, of distinguishing the conj. and indic. moods.

Instead of  $-\bar{a}i$  in the conj. Avestic has sometimes  $-\bar{a}n\bar{e}$ , a new formation based upon the active  $-\bar{a}ni$  and its termination imitating the middle -t as compared with act. -ti etc., e. g.  $var^e \bar{s} an\bar{e}$  beside  $3^{rd} \sin g$ .  $var^e \bar{s} - a - it\bar{e}$  (s-aorist of varz- 'to work'),  $yaz\bar{a}n\bar{e}$  (beside  $yaz\bar{a}i$ ) with  $3^{rd} \sin g$ .  $yaz\bar{a}-it\bar{e}$  (from yaz- 'to offer').

Aryan  $-a\underline{i}$  in the non-thematic indic. present: Skr. bruv- $\underline{e}$  Avest. mruy $\underline{e}$  i. e. mruv- $\underline{e}$  beside  $3^{rd}$  sing.  $br\overline{u}$ - $t\underline{e}$  mr $\overline{u}$ - $t\bar{e}$ , Skr. duh- $\underline{e}$ , Avest.  $\gamma n$ - $\underline{e}$  ( $\sqrt{ghen}$ - 'strike, slay'). This  $-a\underline{i}$  I regard as borrowed from the perfect in place of orig. \*-ma $\underline{i}$  (vice versa we have in Greek perf.  $\delta \underline{e} \delta o$ - $\mu a u$  following pres.  $\delta \underline{i} \delta o$ - $\mu a u$ ), just as in the  $3^{rd}$  sing. Skr.  $-\overline{e}$  (§ 1055), and in the  $3^{rd}$  pl. Skr.  $-r\overline{e}$  (§ 1078.1), came from the perfect to the non-thematic present.

(2) Secondary ending. Thematic Skr. á-bharē Avest. a-barē O.Pers. a-takšaiy (from takš- 'to shape, make all right').

Unthematic. In the Indicative Ar. -i for - $\vartheta$ : Skr.  $\acute{a}$ -duh-i  $\acute{a}$ -kr-i, Avest. Gath. aoj- $\bar{\imath}$  (from aoj- 'to speak'), s-aorist Skr.  $\acute{a}$ -ruts-i, O.Pers. a-dars-iy (from dar- 'to hold'). But in the Optative Ar. -a: Skr.  $tanv\bar{\imath}y$ - $\acute{a}$  Avest. tanuya i. e. tanviy-a from tan- 'to stretch' (§ 940 p. 485), Skr.  $bh\acute{a}r\bar{e}y$ -a Avest. Gath.

 $v\bar{a}uray$ - $\bar{a}$  (from var- 'to choose'), Avest. mainya for \*manyay-a (I § 643 p. 482) = Skr.  $m\acute{a}ny\bar{e}y$ -a.

- (3) Pr. Ar. -ai in the perfect: Skr.  $\dot{s}u-\dot{s}ruv-\dot{e}$  Avest.  $susruy\bar{e}$  i. e.  $su-sruv-\bar{e}$  from  $\sqrt{kleu}$  'hear'.
- § 1043. Greek. Primary -μαι; on the analogy of δίδο--μαι ἄρνν-μαι we get φέρο-μαι φέρω-μαι and perfect δέδο-μαι τέτυγ-μαι, etc.

Secondary (Dor.) - $\mu \bar{\alpha} \nu$ : ἐδιδό- $\mu \eta \nu$  ἐδεικνί- $\mu \eta \nu$  ἐδειξά $\mu \eta \nu$  τετύγ- $\mu \eta \nu$  τιθεί- $\mu \eta \nu$  φεροί- $\mu \eta \nu$ .

§ 1044. Italic. Only the perfect Idg. -ai or -oi remains, but it loses its middle meaning: Lat. tutud-ī: Skr. tutud-ē, ded-ī: Skr. dad-ē (§ 867 p. 414). Perhaps we should explain revertī beside revertor, assēnsī beside assentior as due to the originally middle force of -ī.

§ 1045. Germanic. Idg. -ōi (§ 1041.1.b) in O.Icel. heite heiti 'I bid, call', beside Goth. háita.

Remark. I cannot agree with Jellinek's conjectures in his Beitr. zur Erklärung der germ. Flexion, 1891, pp. 70 ff.

In Gothic the 3<sup>rd</sup> sing. háitada does duty for the 1<sup>st</sup> sing. too; so also A.S. hātte is 3<sup>rd</sup> and 1<sup>st</sup> sing., cp. Goth. 3<sup>rd</sup> and 1<sup>st</sup> pl. háitanda. On this use of the 3<sup>rd</sup> person for the 1<sup>st</sup> see Jellinek in the work just cited, pp. 103 ff.

§ 1046. Balto-Slavonic.

In Baltic Idg. -mai or -mai remains: Lith. reflex. velmë-s(i) (§ 511 p. 76), Pruss. as-mai 'I am'. Cp. § 983 p. 522.

The perfect  $-a\underline{i}$  or  $-a\underline{i}$  occurs in the single form O.C.Sl. v e d - e 'I know'.

## 2<sup>ND</sup> PERSON SINGULAR.

§ 1047. Proethnic Indo-Germanic.

(1) Primary ending -sai or -sai. Skr. bhára-sē, Gr. φέρεαι φέρη, Goth. baíra-za; thematic Conj. Skr. ma-s-a-sē Gr. βιή-σ-ε-αι (Theogn.), long-vowel Conj. Skr. bhár-ā-sē Gr. φέρηαι φέρη. Skr. da-t-sé dha-t-sé, Gr. δί-δο-σαι τί-θε-σαι, Lith. důsi desë-s O.C.Sl. dasi.

The same ending in the Perfect: Skr. da-di- $š\acute{e}$  ri-rik- $š\acute{e}$ , Gr.  $\delta\acute{e}$ - $\delta o$ - $\sigma \alpha \iota$   $\lambda \acute{e}$ - $\lambda \epsilon \iota \psi \alpha \iota$ .

- (2) Secondary endings -so and -thēs, the latter connected with perf. act. -tha (§ 984.3 p. 523), and recalling Gr. - $\mu\bar{\alpha}\nu$  (§ 1041.2 p. 528). Originally it would seem that -so belonged only to thematic and -thēs only to unthematic stems.
- (a) -so. Avest. bara-nha, Gr. φέρεο φέρου ἐ-φέρεο ἐ-φέρου,
   Lat. sequere. Possibly also Idg. -se, see § 1082.1.
- (b) -thēs. Skr.  $\acute{a}$ -di-thās, Gr.  $\acute{\epsilon}$ - $\acute{o}\acute{o}$ - $\Im\eta_{\mathcal{G}}$ . s-Aor. Skr.  $\acute{a}$ - $\acute{s}$ rami $\acute{s}$ - $\acute{t}$ hās from  $\acute{s}$ ram- 'to grow tired' Gr.  $\acute{\epsilon}$ - $\varkappa\rho\varepsilon\mu\acute{a}\sigma\Im\eta_{\mathcal{G}}$  from  $\varkappa\rho\acute{\varepsilon}\mu\alpha$ - $\mu\alpha$  'I hang'. O.Ir. cluin-te 'exaudi'.
- $\S$  1048. Aryan. On -sua in the imperative see  $\S$  968 p. 510.
- (1) Primary ending, pr. Ar. -sai. Skr.  $bhára-s\bar{e}$  Avest.  $bara-nh\bar{e}$ . Conj. Skr.  $prch\bar{a}-s\bar{e}$  Avest.  $per^{e}s\mathring{a}-nh\bar{e}$ ; on  $-s\bar{a}i$  in the Skr. conjunctive, see § 922 p. 470. Skr.  $br\bar{a}-\check{s}\bar{e}$   $kr-nu-\check{s}\bar{e}$ , Avest.  $raos\bar{e}$  beside  $3^{rd}$  sing. injunct. Gath.  $raost\bar{a}$  (from rud-'to grow'). Perfect Skr.  $dadi-\check{s}\acute{e}$ .
- (2) In the Secondary endings Sanskrit and Avestic do not go together; the former has only pr. Ar. -thās, the latter only pr. Ar. -sa. Skr. á-kỹ-thās á-dhat-thās á-dhūnu-thās janiṣ-ṭhās, opt. vāvṛdhī-thás bhárē-thās, pret. á-bhara-thās. Avest. a-yaṣa--nha (cp. Skr. á-yacha-thās), Gathic aoyžā beside 3<sup>rd</sup> sing. aogēdā (I § 482 p. 356), då-nhā (but Skr. á-dhi-thās), opt. daiāī-ša baraṣ-ša (but Skr. dadhī-thās bhárē-thās).

# § 1049. Greek.

- (1) Primary ending  $-\sigma \alpha \iota$ .  $\tilde{\eta} \sigma \alpha \iota$  'thou sittest' for \* $\tilde{\eta} \sigma \sigma \alpha \iota$  (§ 494 p. 54), δίδο- $\sigma \alpha \iota$  δάμ- $\nu \alpha \sigma \alpha \iota$ .  $\varphi \varepsilon \rho \varepsilon \alpha \iota$   $\varphi \varepsilon \rho \eta$ , 1) conj.  $\varphi \varepsilon \rho \eta \alpha \iota$   $\varphi \varepsilon \rho \eta$ . Perf.  $\gamma \varepsilon \gamma \rho \alpha \psi \alpha \iota$  δέδο- $\sigma \alpha \iota$   $\iota \varepsilon \mu \nu \eta \sigma \alpha \iota$ . That the  $2^{\rm nd}$  sing imper. of the s-Aorist, as  $\lambda \varepsilon \xi \alpha \iota$ , comes in here, we saw in § 910 Rem. p. 460, § 969. 2 p. 511.
- (2) Of the two secondary endings,  $-9\eta\varsigma$  holds its ground in the Present of Classes I and X and in the s-Aorist, as  $\dot{\epsilon}$ - $\delta\acute{o}$ - $-9\eta\varsigma = \text{Skr. } \acute{a}$ -di- $th\bar{a}s$  (3<sup>rd</sup> sing.  $\ddot{\epsilon}$ - $\delta o$ - $\tau o = \text{Skr. } \acute{a}$ -di-ta)  $\dot{\epsilon}$ - $\tau \iota \acute{a}$ - $\theta \eta\varsigma = \text{Skr. } \acute{a}$ - $k\check{s}a$ - $th\bar{a}s$  (3<sup>rd</sup> sing.  $\ddot{\epsilon}$ - $\tau \iota a$ - $\tau o = \text{Skr. } \acute{a}$ - $k\check{s}a$ -ta),  $\dot{\epsilon}$ - $\beta \lambda \dot{\eta}$ - $\theta \eta\varsigma$

36

<sup>1)</sup> On the supposed middle forms in  $-\varepsilon_i$ , see Meisterhans Gramm. d. att. Inschr. 2 131, the Author, Gr. Gr. 2 p. 147.

(3<sup>rd</sup> sing.  $\ddot{\epsilon}$ - $\beta\lambda\eta$ - $\tau o$ ),  $\dot{\epsilon}$ - $\mu\epsilon\dot{l}\chi\partial\eta_S$  (3<sup>rd</sup> sing.  $\ddot{\epsilon}$ - $\mu\epsilon\iota\iota\iota\tau o$  for \* $\dot{\epsilon}$ - $\mu\epsilon\iota\iota\iota$ - $\sigma$ - $\tau o$ . On these forms is founded the whole "Weak" passive aorist  $\dot{\epsilon}$ - $\delta o\partial\eta$ - $\nu$  etc. See § 589 pp. 130 f.

The only suffix which remained in living use was  $-\sigma o$ ; and this, as in Avestic, spread to unthematic stems.  $\dot{\epsilon}$ - $\varphi \dot{\epsilon} \rho \varepsilon o v$ , injunct. imper.  $\varphi \dot{\epsilon} \rho \varepsilon o v$ .  $\dot{\epsilon}$ - $\theta \varepsilon o v$ . (beside  $\dot{\epsilon}$ - $\tau \dot{\epsilon}$ - $\theta \gamma s$ ), injunct. imper.  $\theta \dot{\epsilon}$ - $\delta v v$ .  $\dot{\delta}$ - $\delta v v$  for \* $\dot{\delta}$ - $\delta v v$ . ( $\dot{\epsilon}$ - $\delta \dot{\epsilon}$ ), opt.  $\theta \dot{\epsilon}$ - $\delta \dot{\epsilon}$ ).

The  $\sigma$  of  $-\sigma \omega$  and  $-\sigma \omega$  of course dropt in pr. Greek after vowels (I § 564 p. 420 f.). In Attic on the analogy of forms such as  $\gamma \dot{\epsilon} \gamma \rho \alpha \psi \omega$  i  $\dot{\epsilon} \gamma \dot{\epsilon} \gamma \rho \alpha \psi \omega$ , the  $\sigma$  was restored in the perfect, pluperfect, and unthematic present and imperfect, with a very few exceptions of which one is  $\dot{\epsilon} \delta \dot{\omega} \nu \omega$ :  $\delta \dot{\epsilon} \delta \sigma \omega \omega$  ideas if  $\dot{\epsilon} \delta \dot{\omega} \delta \sigma \omega$  is  $\dot{\epsilon} \delta \dot{\omega} \delta \sigma \omega$  in  $\dot{\epsilon} \delta \dot{\omega} \delta \omega$  in place in  $\dot{\epsilon} \delta \dot{\omega} \delta \omega$  in particular, side by side with  $\dot{\delta} \dot{\omega} \nu \omega \sigma \omega$  in  $\dot{\epsilon} \omega \dot{\epsilon} \omega \omega$  in the arrivation in  $\dot{\epsilon} \omega \dot{\epsilon} \omega \dot{\epsilon} \omega \omega$ . The arrivative verywhere kept clear of this tendency: Att.  $\dot{\epsilon} \partial \omega \dot{\epsilon} \dot{\delta} \dot{\epsilon} \dot{\delta} \omega$ .

In later times, the vulgar dialect used  $-\sigma\alpha\iota$  with thematic stems as well, e. g. in the N.Test.  $\pi\iota$  so  $\alpha\iota$ .

§ 1050. Italic. Latin keeps -so in the form -re (I § 81 p. 73): — seque-re: Gr. επε-ο, rē-re vidē-re fābulā-re, conj. sequā-re.

Side by side with -re there is a variant -ris, found everywhere except in the imperative; e.g. sequeris. The reason for this formation, which is analogical, is that agis and age were associated as being both second person. In the older language, -re is still commoner than the other.

As regards sequere sequeris the student may further compare the remarks in § 1082 on Osc. vincter.

Inscriptions also have -rus, as spatiarus ūtārus. I offer the following conjecture as to this ending. We may suppose that at the time when \*spatiā-so was the form, a suffix \*-so-r arose answering to \*-to-r -tur in the 3<sup>rd</sup> singular,¹) and that

<sup>1) \*-</sup>so-r \*-rur beside \*-so -re like O.Ir. -the-r beside -the (§ 1051).

\*-rur changed to -rus following -ris. This I think more probable than supposing that -ris changed to -rus on the analogy of -ur and -tur. Compare further p. 577 footnote.

§ 1051. Keltic. Irish retains Idg. -thēs.

-the for \*-thēs in the injunctive with imperative function, as cluin-te 'exaudi'; this is found almost exclusively with verbs which are altogether or mostly deponent in flexion. See § 909 p. 458.

-ther, made up of -the + the deponent suffix -r, appears in the conjugation of deponents; e. g. pres. indic. -sechther 'sequeris' conj. -sechther 'sequeris'. In the s-aorist \*-s-thēs became -sse, and with -r -sser; as ro-sudigser from sudigin 'pono', like Skr. janiš-thās.

§ 1052. Germanic. Here only -sai can be traced, Goth. -za (cp. III § 263 Rem. p. 165 f., Hirt, Idg. Forsch. I 217):  $salb\bar{o}$ -za cp. Gr. perf.  $\tau\epsilon$ - $\tau t \mu \eta$ -oa. Lat. injunct. pres.  $am\bar{a}$ -re; baira-za (a as the thematic vowel, as in  $3^{rd}$  sing. baira-da, comes from the plural bairanda in all probability): cp. Gr.  $\phi \dot{\epsilon} \rho \dot{\epsilon}$ -a.

The ending -zau in opt. bair'ai-zau is, like -dau in the  $3^{\rm rd}$  sing. and -ndau in  $3^{\rm rd}$  plural, obscure. Compare imper. at-steigadau liugandau, § 970 p. 511.

§ 1053. Balto-Slavonic. Here also the only suffix is -sai, with active meaning.

In Lithuanian, it occurs with unthematic verbs, as  $des\ddot{e}(-s)$  for \* $det-s\ddot{e}$ : Skr.  $dhats\acute{e}$ ; Pruss.  $segg\bar{e}-sai$  'thou doest'. See § 991 p. 528.

In Old Church Slavonic, also with verbs in -mi, as dasi 'givest' for \*dō-t-sai: Skr. datsé. See ibid.

#### 3RD PERSON SINGULAR.

§ 1054. Proethnic Indo-Germanic.

(1) Primary ending -tai or -tai. Skr. ás-tē Gr. ήσ-ται. Skr. γ-nu-té Gr. ὄρ-νν-ται. Gr. ἄη-ται Lesb. ποίη-ται τίμα-ται Goth. salbō-da. Skr. bhára-tē Gr. φέρε-ται Goth. baíra-da. The matic Conjunct.: Skr.  $kar-a-t\bar{e}$   $m\acute{q}-s-a-t\bar{e}$  Gr.  $\varphi \vartheta i-s-\tau \alpha i$ ἀμείψ-ε-ται. Long-vowel Conjunct.: Skr. manyā-tē Gr. μαίνη-ται.

(2) Secondary ending -to. Skr. a-di-ta Gr. ε-δο-το Latda-tu-r. Skr. d-stō-ṣ-ṭa Gr. ἔμεικτο for \*ε-μεικ-σ-το. Opt. Skr. dadhī-tá Gr. τιθεῖ-το Lat. duī-tu-r, Skr. bhárē-ta Gr. φέροι-το. Skr. ά-bhara-ta Gr. έ-φέρε-το Lat. agi-tu-r. Conj. Lat. ferā--tu-r O.Ir. do-berthar.

-to also in Venetian: zo-to 'έδοτο', zonas-to 'έδωρήσατο, donavit'. See p. 53 footnote 2. In Armenian Bugge-(Idg. Forsch. 1 440) sees -to in the -v of the 3rd sing. aor. II mid., as cnav 'natus est' for \*ĝeno-to, cp. 3rd pl. cna-n § 1066. I also conjecture -to in such forms as Lith. rims-ta. see footnote to p. 216.

On the strength of Osc. -ter beside Lat. -tur = -to+r, e. g. vincter 'vincitur', we should perhaps assume another Idg. form -te beside -to (and similarly in the 3rd pl. -nte beside -nto), see § 1082.

(3) -ai or -ei in the Perfect: Skr. ca-kr-é da-dh-é.

In § 1041. 3 p. 560 I said that -ē in Skr. 1st sing. di-dviš-é is doubtless connected with  $-i = -\theta$  in the 1st sing.  $\alpha$ -dviš-i. If so, we must connect  $-\bar{e}$  in  $3^{rd}$  sing.  $didvi\check{s}-\acute{e}$  with -i in  $3^{rd}$  sing. aor. mid. pass., as ai.  $d-v\bar{a}c-i$ ; all the more because the root-vowel so strikingly recals the Skr. 3rd sing. perf. act. (u-vác-a). Compare § 905 p. 453.

- Aryan. As regards  $-\bar{a}m$  and  $-t\bar{a}m$  in the § 1055. Imperative, see § 968.2 p. 510.
- (1) Primary ending Ar. -taj. Skr. vás-tē Avest. vas-tē (from vas- 'to clothe oneself'), Skr. dhatté Avest. Gath. dazdē (I § 482 Rem. 1 p. 356). Skr. bhára-tē Avest. baraitē O.Pers. gauba-taiy 'is called'. Conj. Skr. yam-a-tē Avest. yamaitē (from yam- 'cohibere'), Skr. yáj-ā-tē Avest. yazāitē O.Pers. gaubā-taiy; on -tāi in the Skr. Conj. see § 922 p. 470.
- (2) Secondary ending Ar. -ta. Skr. á-brū-ta Avest. Gath. mrū-tā, Skr. á-ha-ta O.Pers. a-ja-tā. s-Aor. Skr. á-prašta Avest. Gath. fraštā from  $\sqrt{prek}$ - (§ 814 p. 352). Skr. á-bhara-ta Avest. bara-ta O.Pers. a-naya-tā 'was led'.

Opt. ai. bruvī-tá Avest. Gath. mrvī-tā Skr. dadhī-tá Avest. daipī-ta, Skr. bhárē-ta Avest. barae-ta.

(3) Perfect Ar.  $-a\underline{i}$ . Skr.  $da-dhr-\overline{e}$  Avest. Gath.  $d\overline{a}-dr-\overline{e}$ , Skr.  $da-dh-\overline{e}$  Avest.  $dai\overline{d}-\overline{e}$ . The -i of Skr.  $a-v\overline{a}c-i$  Avest. Gath.  $a-v\overline{a}c-\overline{i}$  may be regarded as in some degree the secondary ending of this  $-a\underline{i}$ ; see § 1054. 3.

It is not uncommon to find Ar. -tai and -ai interchanging, in consequence of the close connexion between Present and Perfect. Thus on the one hand we have Skr. t̄ṣ-t̄ē instead of t̄ṣ-ē̄ (Avest. is-ē̄, Goth. act. áih, § 848.1 p. 391).¹) On the other hand, Skr. bruv-ē̄ Avest. mruyē̄ i. e. mruvē̄ instead of mrū-tē mrūtē̄, Skr. śṛṇv-ē̄ instead of śṛṇu-tē̄. There is the same confusion in the 3<sup>rd</sup> pl. (§ 1078.1). Compare also act. nō-nav-a beside nō-navī-ti § 850 p. 398. There is nothing to prevent forms like Skr. bruv-ē̄ from being called an unreduplicated perfect.

- § 1056. Greek. On the imper.  $-\sigma \vartheta \omega$  see § 966 p. 506 f.
- (1) Primary ending -ται (Boeot. -τη Thess. -τει I § 96 p. 90). ὅστα-ται φέρε-ται, conj. ἀμείψε-ται φέρη-ται. Arcad. -τοι instead of -ται, but (notwithstanding O. Hoffmann, Die griech. Dial. I 180 f.) this comes from the analogy of -το.

Even in pr. Greek perf.  $\delta \epsilon \delta \delta \sigma - \tau \alpha \iota \pi \epsilon \pi \nu \sigma \tau \alpha \iota$  following the present (cp. Skr.  $\tilde{\tau} \tilde{s} - \tilde{t} \tilde{e}$  instead of  $\tilde{t} \tilde{s} - \tilde{e}$  § 1055. 3), just as  $\delta \epsilon \delta \sigma - \mu \alpha \iota$  follows  $\delta i \delta \sigma - \mu \alpha \iota$  (§ 1043 p. 560).

(2) Secondary ending -το (Cypr. -τυ I § 80 p. 71): ἵστα-το ἐ-φέρε-το, opt. τιθεῖ-το φέροι-το.

§ 1057. Italic. Here we have -to with -r. Lat. da-tu-r: Gr.  $\delta \acute{o}$ - $\tau o$ . sequi-tu-r: Gr.  $\epsilon \pi \epsilon$ - $\tau o$ . As to Osc. -ter see § 1054. 2 p. 564, § 1082.

§ 1058.2) Keltic. Probably only -to.

First in the 3rd sing. of the t-preterite, as O.Ir. as-bert

<sup>1)</sup> Compare the change of Upper-Germ. er weiss to er weisst and of O.Fris. āch 'he has' (= got. áih) to ācht.

<sup>2)</sup> Whoever assumes with Zimmer that the  $3^{rd}$  pl. act. berit represents both \*beronti and mid. \*berontai (see § 1024 p. 552) may also regard  $3^{rd}$  sing. sechidir and  $3^{rd}$  pl. sechitir as representing -tai + r and -ntai + r.

dixit', which is followed by 1st sing. -burt etc. after -t became part of the stem; see § 506 pp. 72 f.

Next, in the middle ending -thar for -to+r, as conj. doberthar: Lat. ferā-tur.

§ 1059. Germanic. Only -tai remains. Goth. háita-da A.S. hatte for \*haita-dai, Goth. salbo-da. See § 1045 p. 560. -a- is the thematic vowel, as in the 2<sup>nd</sup> sing. háita-za § 1052 p. 563.

The ending -dau in Goth. opt. bairái-dau (also used as 1st sing.) is obscure. Compare bairái-zau, loc. cit.

## 1<sup>ST</sup> PERSON PLURAL.

§ 1060. Proethnic Indo-Germanic. We may suppose that -medhai or  $-medhai = Skr. -mah\bar{e}$  is the Primary, and medha = Skr. -mahi Gr.  $-\mu \varepsilon \vartheta \alpha$  the Secondary ending, e. g. pres. Skr. bhárā-mahē pret. Skr. ά-bharā-mahi Gr. ἐ-φερό-μεθα. Compare § 973 p. 515 f.

Goth. bairanda is doubtless 3rd pl. and not for \*bira-mda \*-midai (§ 1071).

As to -mmedhai (Avest. hišc-amaiđē), answering to act. -mmes, see § 1001 p. 535 f.

- § 1061. Aryan. Skr. -mahē -mahi with h = dh is to be explained like the imper. ending -hi beside -dhi, see § 960 p. 503.
- (1) Primary ending Skr. -mahē Avest. -maidē. Skr. bhárā--mahē Avest. barā-maiāē. Conj. Skr. sanišā-mahē Avest. cinabā-maidē (beside cinas-ti 'he teaches' § 626 p. 163); on Skr. conj. forms like yájāmahāi see § 922 p. 470.

The same ending in the Perfect: Skr. mumuc-máhē.

(2) Secondary ending Skr. -mahi Avest. Gath. -maidī. Skr. á-yuj-mahi, s-Aor. Skr. á-ga-s-mahi (from gam- 'to go') Avest. a-mēhmaidī (from man- 'to think', § 815 p. 353). Opt. Skr. bhárē-mahi Avest. barōi-maidī.

In late Avestic -maide is also used as secondary (just the opposite in Greek, § 1062), e. g. opt. barōi-maidē.

§ 1062. Greek. Only - $\mu\epsilon\vartheta\alpha$ , the secondary ending, is kept, and used for both primary and perfect suffix as well as secondary.  $\delta\varrho$ - $\nu\dot{\nu}$ - $\mu\epsilon\vartheta\alpha$   $\varphi\epsilon\varrho\dot{o}$ - $\mu\epsilon\vartheta\alpha$ ,  $\dot{\epsilon}$ - $\varphi\epsilon\varrho\dot{o}$ - $\mu\epsilon\vartheta\alpha$ ,  $\varphi\epsilon\varrho\dot{o}$ - $\mu\epsilon\vartheta\alpha$ , perf.  $\pi\epsilon\pi\dot{\nu}\sigma\mu\epsilon\vartheta\alpha$ .

Homer.  $-\mu\varepsilon\sigma\vartheta\alpha$  with  $\sigma$  by analogy of  $-\sigma\vartheta\varepsilon$   $-\sigma\vartheta\sigma\nu$   $-\sigma\vartheta\eta\nu$ .

Remark. V. Henry (Mém. Soc. Ling. VI 73 f.) thinks that Greek once had in the active  $\varphi \dot{\epsilon} \varrho o \mu \epsilon \varepsilon$ : \* $\dot{\epsilon} \varphi \dot{\epsilon} \varrho o \mu \epsilon$ , and at this period the type  $\varphi \dot{\epsilon} \varrho \dot{\sigma} \mu \epsilon \sigma - \vartheta \alpha$  was produced on the analogy of  $\dot{\epsilon} \psi \dot{\epsilon} \varrho o \mu \epsilon - \vartheta \alpha$ ; after that  $-\mu \epsilon \sigma \vartheta \alpha$  was employed as secondary as well as primary.

Aeol.  $-\mu\varepsilon\vartheta\varepsilon\nu$ , only known through the grammarians, appears to be modelled upon  $-\mu\varepsilon\nu$  ( $-\mu\varepsilon\vartheta\varepsilon\nu$ :  $-\mu\varepsilon\nu = -\sigma\vartheta\varepsilon$ :  $-\tau\varepsilon$ ). Compare  $3^{\rm rd}$  pl. Thess.  $-\nu\vartheta\varepsilon\iota-\nu$  § 1068.

#### 2<sup>ND</sup> PERSON PLURAL.

§ 1063. Proethnic Indo-Germanic. All that can be fairly inferred from Ar. -dhuai (primary) -dhuam (secondary) and Gr. - $\sigma\vartheta\varepsilon$  (both) is that the original ending contained dh. It is phonetically possible to derive Gr. - $\sigma\vartheta\varepsilon$  from \*- $\sigma\vartheta\varepsilon$ . The original ending of the suffix may perhaps be that shewn by Aryan. It is possible that Gr. - $\sigma\vartheta\sigma\nu$  was orig.  $2^{nd}$  plural (- $\sigma\vartheta\sigma\nu$  = Skr. -dhvam), and turned into a dual because of the dual meaning of  $\phi\varepsilon\varepsilon\tau\sigma\nu$ ; after which - $\sigma\vartheta\varepsilon$  was made for the plural to match - $\tau\varepsilon$ .

Remark. The  $\sigma$  of  $-\sigma\vartheta\varepsilon$  is the most obscure part of this suffix. Three explanations are possible.

- (1) The suffix originally began with -zdh-, which became Gr.  $-\sigma\theta$ -. In Aryan z dropt between consonants, and the type thus produced became general.
- (2) It orig. began with -dh. Then Gr.  $\tilde{\gamma}_{\sigma} \vartheta_{\varepsilon} \pi \dot{\varepsilon} \pi v \sigma \vartheta_{\varepsilon}$  come straight from it. In mentally analysing these forms,  $\sigma$  was conceived to be part of the suffix; whence  $\varphi \dot{\varepsilon}_{\varphi \varepsilon \sigma} \vartheta_{\varepsilon}$  etc. On this supposition it remains doubtful whether such forms as  $\ddot{\varepsilon}_{\sigma \pi \alpha \varrho} \vartheta_{\varepsilon} \ \ddot{\varepsilon}_{\sigma \tau \alpha \ell} \vartheta_{\varepsilon} \ \pi \varepsilon \varphi \dot{v} \ell \alpha \chi \vartheta_{\varepsilon}$  still have the orig. suffix, without the intrusive  $\sigma$ , or whether they once had  $\sigma$  and it disappeared as it regularly would.
- (3) There was a double suffix, with initial -zdh- or -dh-; and each of the two types was preferred by certain languages.

Compare Bartholomae, Rhein. Mus. xLv 153.

- $\$  1064. Aryan. On Skr. -dhvād imper., see  $\$  965 p. 506.
- (1) Primary ending Ar. -dhuai -dhuuai: Skr. -dhvē, also -dhuvē in Vedic, Avest. -duyē i. e. -duvē. Skr. ang-dhvē

(from anák-ti 'he smears, anoints') Avest. Gath. mer ng duy ē (from marc- 'to destroy', § 626 p. 162). Conjunctive Skr. kāmáyā-dhvē; as regards -dhvāi in the conj., see § 922 p. 470.

The same ending in the Perfect: bubudhi-dhvé.

- (2) Secondary ending. Ar. -dhyam -dhuyam: Skr. -dhvam, also -dhuvam in Vedic, Avest. -đwem -dūm (I § 159 p. 142). Skr. á-bhara-dhvam Avest. bara-đwem. Avest. s-aorist Gath. Þrā-z-dūm from trā- 'to push through' (§ 813 p. 351).
- § 1065. Greek. Always - $\sigma \vartheta \varepsilon$ , see § 1063.  $\varphi \acute{\varepsilon} \varrho \varepsilon \sigma \vartheta \varepsilon \tilde{\eta} \sigma \vartheta \varepsilon$   $\acute{\varepsilon} \varphi \acute{\varepsilon} \varrho \varepsilon \sigma \vartheta \varepsilon$   $\varphi \acute{\varepsilon} \varrho \omega \sigma \vartheta \varepsilon$ . Perfect  $\pi \acute{\varepsilon} \pi v \sigma \vartheta \varepsilon$ .

Perf. πέφανθε beside 1<sup>st</sup> sing. πέφασμαι 3<sup>rd</sup> sing. πέφανται is doubtless a transformation of \*πέφασθε on the lines of ἔσπαρθε beside ἐσπαρθαι; see § 862 p. 411.

## 3<sup>RD</sup> PERSON PLURAL.

- § 1066. Proethnic Indo-Germanic.
- (1) After consonants -ntai or -ntai and -nto.
- (a) Primary ending - $\eta tai$  or - $\eta t \partial \dot{\chi}$ . Skr. ás-atē Gr. Hom.  $\ddot{\eta}$ -a $\tau \alpha \iota$ , Skr. dá-dh-atē pu-n-até ta-nv-até.
- (b) Secondary ending - $\eta$ to. Skr. ás-ata Gr. Hom.  $\tilde{\eta}$ -ato. Skr. á- $k\gamma$ - $\eta v$ -ata, s-Aor. á- $d\gamma k$  end. Opt. Gr.  $\gamma$  evol-ato.
  - (2) After sonants -ntai or -ntai and -nto.
- (a) Primary ending -ntai or -ntai. Skr. bhára-ntē Gr. φέφο-νται Goth. baíra-nda. Thematic Conj. Skr. ma-s-a-ntē Gr. Hom. ἐπ-εντύνο-νται (ἐπ-εντύνω 'I arrange'). Long-vowel Conjunctive Avest. hacå-ntē Gr. ἕπω-νται. Gr. δίζη-νται Lesb. προ-νόη-νται τίμα-νται Goth. salbō-nda.
- (b) Secondary ending -nto. Skr. ά-bhara-nta Gr. έ-φέρο-ντο
   Lat. feruntu-r O.Ir. do-bertar. Conj. Lat. fera-ntu-r O.Ir. do-bertar. Gr. έμ-πλη-ντο Lat. im-ple-ntu-r planta-ntu-r.

-nto is conjectured by Bugge (Idg. Forsch. 1`440) in the -n of the Armen. 3<sup>rd</sup> pl. aor. II mid., as cna-n 'nati sunt' for \*gena-nto.

On account of Oscan forms of the  $3^{rd}$  plural like karanter 'pascuntur' beside Lat. -ntur = -nto + r, we should perhaps

assume an Idg. form -nte beside -nto -nto (similarly in the 3<sup>rd</sup> sing. -te beside -to), see § 1082.

- (3) Perfect. What connexion there is between the Aryan forms, as Skr. du-duh-ré ja-gm-i-ré, and O.Ir. do-mēn-atar (Gr. τετράφ-αται) is still a riddle. See §§ 1076 ff.
- § 1067. Aryan. On the Imperative in  $-at\bar{a}m$  - $nt\bar{a}m$  see § 968 p. 510.
  - (1) After sonants Ar. -atai -ata.
- (a) Primary ending -atai. Skr. vás-atē, indh-até indh-átē, Avest. mer nc-aitē.
- (b) Secondary ending -ata. Skr. á-gm-ata á-tanv-ata, Avest. Gath.  $dar^es$ -atā ( $\sqrt{der\hat{k}}$ -).

In Avestic -aitē -ata as a rule gave way to -antē -anta, which mark the plural number better; cp. act. dap-enti as contrasted with Skr. dádh-ati § 1018. 1. b p. 545. E. g. ånhantē dadentē verenvaintē (Skr. ás-atē dádh-atē vṛṇv-átē), mravanta (3rd sing. mrao-tā mrū-ta), opt. barayanta.

As regards O.Pers. ahatā 'erant' it is impossible to say whether it ought to be spelt with a nasal or not (I § 197 Rem. p. 166).

- (2) After sonants Ar. -ntai -nta.
- (a) Primary ending -ntai. Skr. bhára-ntē, Avest. bara-ntē. Short-vowel Conjunctive Skr. na-s-a-ntē (from nam- 'to bend, bow oneself'), long-vowel Avest. yazā-ntē. On -ntāi in the Skr. Conjunctive see § 922 p. 470.
- (b) Secondary ending -nta. Skr.  $\acute{a}$ -bhara-nta, Avest. yaze-nta O.Pers. a-barat $\bar{a}$  (read  $abarant\bar{a}$ ).
- (3) In the Perfect we have an r-ending, Skr.  $-r\bar{e}$  Avest.  $-r\bar{e}$ , see § 1078. 1. Observe that in Sanskrit this ending crept into the Present like the  $-\bar{e}$  of the  $3^{rd}$  sing. (§ 1055. 3 p. 565). e. g. duh- $r\acute{e}$  sunv-i- $r\acute{e}$ .
- § 1068. Greek. On imper.  $-\sigma \vartheta \omega$   $-\sigma \vartheta \omega \nu$  see § 966 p. 506 f.
  - (1) After consonants -αται -ατο.
  - (a) Primary ending -αται. Hom. ή-αται for \*ήσ-αται,

κέ-αται for \*κεμ-αται (variant κείαται with κει- following κεῖ-μαι etc., see I § 130 p. 117 f.), εἰρύ-αται.

(b) Secondary ending - $\alpha \tau o$ . Hom.  $\ddot{\eta}$ - $\alpha \tau o$  κεί- $\alpha \tau o$  εἰρύ- $\alpha \tau o$ . Opt. Hom. and elsewhere γενοί- $\alpha \tau o$  επι- $\varphi \rho \alpha \sigma \sigma \alpha i$ - $\alpha \tau o$  επι- $\sigma \tau \alpha i$ - $\alpha \tau o$ , whose diphthongs o1 and  $\alpha i$ 2 are to be explained like κεί- $\alpha \tau \alpha i$ 3 (§ 944 p. 487).

-αται -ατο are special favourites in the Perfect system, where they occur even in Attic prose; e. g. τετεύχ-αται γεγράφ-αται ε-τετάχ-ατο (cp. § 898 p. 446).

Instead of \* $\tau\iota\vartheta$ - $\alpha\tau\alpha\iota$  \* $\delta\iota\delta$ - $\alpha\tau\alpha\iota$  (Skr.  $d\acute{a}$ -dh- $at\ddot{e}$ ) we have  $\tau\iota'\vartheta$   $\epsilon$ - $\nu\tau\alpha\iota$   $\delta\iota'\delta\sigma$ - $\nu\tau\alpha\iota$  (2), as act.  $\tau\iota'\vartheta$   $\epsilon$ - $\nu\tau\iota$  instead of \* $\tau\iota\vartheta$ - $\alpha\tau\iota$  (§ 1020. 1. b p. 547).

- (2) After sonants -νται -ντο.
- (a) Primary ending -νται. φέρο-νται. Conj. φέρω-νται. δίζη-νται Lesb. προ-νόη-νται.
- (b) Secondary ending - $\nu\tau o$ .  $\dot{\epsilon}$ - $\varphi \dot{\epsilon} \rho o$ - $\nu\tau o$ .  $\pi \lambda \tilde{\eta}$ - $\nu\tau o$  = \* $\pi \lambda \bar{\alpha} \nu$ - $\tau o$  pres.  $\pi \epsilon \lambda \dot{\alpha} \zeta \omega$ ,  $\dot{\epsilon} \mu$ - $\pi \lambda \eta$ - $\nu\tau o$  from  $pl\bar{e}$  'fill'.

Of the same kind are perf.  $\mu \dot{\epsilon} \mu \nu \eta - \nu \tau \alpha \iota$   $\delta \epsilon \delta \delta \delta \nu \lambda \omega - \nu \tau \alpha \iota$   $\dot{\epsilon} - \mu \dot{\epsilon} \mu \nu \eta - \nu \tau \sigma$ .

Wherever a long vowel precedes -νται -ντο it was previously short, as it should be (I § 611 p. 461). Compare opt. -πλήτο μεμνήμην § 944 p. 488. With φέρωνται cp. act. φέρω-ντι § 923 p. 471.

Both  $-\alpha\tau\alpha\iota$   $-\alpha\tau\sigma$  and  $-\nu\tau\alpha\iota$   $-\nu\tau\sigma$  overstep their proper boundaries in one or more dialects. In Ionic the former pair are applied to stems in  $\bar{a}$ ,  $\bar{c}$ , or  $\bar{o}$ ; as Hom.  $\beta\epsilon\beta\lambda\dot{\eta}$ - $\alpha\tau\alpha\iota$   $\beta\epsilon\beta\lambda\dot{\eta}$ - $\alpha\tau\alpha\iota$  instead of  $\beta\epsilon\beta\lambda\eta$ - $\nu\tau\alpha\iota$   $\beta\epsilon\beta\lambda\eta$ - $\nu\tau\sigma$ , late Ion.  $\pi\epsilon\pi\sigma\nu\epsilon\dot{\alpha}\tau\alpha\iota$  (for  $-\eta\alpha\tau\alpha\iota$ ) and  $\tau\iota\vartheta\dot{\epsilon}$ - $\alpha\tau\alpha\iota$   $\delta\iota\dot{\delta}$   $\dot{\epsilon}$ - $\alpha\tau\alpha\iota$ , ep. act.  $\tau\iota\vartheta\dot{\epsilon}$ - $\alpha\sigma\iota$  (§ 1021.4 p. 549). On the other hand,  $-\nu\tau\alpha\iota$   $-\nu\tau\sigma$  are added to stems in i and u in Attic and elsewhere, sometimes in Ionic itself; e. g.  $\kappa\epsilon\bar{\iota}$ - $\nu\tau\alpha\iota$   $\dot{\epsilon}$ - $\kappa\epsilon\iota$ - $\nu\tau\sigma$   $\dot{\lambda}$ - $\nu\tau\sigma$   $\dot{\alpha}$ - $\nu\nu$ - $\tau\iota$  (should be  $*\dot{\alpha}$ - $\nu\nu$ - $\alpha\tau\alpha\iota$ , ep. Skr.  $\alpha\dot{\epsilon}$ - $nu\nu$ - $\alpha\dot{\epsilon}$   $\dot{\epsilon}$   $\dot{\epsilon$ 

Boeotian and Thessalian have  $\vartheta$  in place of  $\tau$  in the  $3^{\rm rd}$  plural endings, as Boeot. ἐστροτενά $\vartheta\eta$  (= Ion. ἐστρατενάται) ἐβάλον $\vartheta$ ο Thess. ἐγένον $\vartheta$ ο; and Boeotian has  $\vartheta$  in the active endings too, καλέον $\vartheta$ ι διδόαν $\vartheta$ ι. It may be suggested that  $\vartheta$  came in from the middle endings  $-\mu \varepsilon \vartheta \alpha$  and  $-\sigma \vartheta \varepsilon$ , and in Boeotian had spread from the  $3^{\rm rd}$  pl. middle to the  $3^{\rm rd}$  pl. active.

In Thessalian we get  $-\nu\vartheta\varepsilon\iota$ - $\nu$  as a primary ending, in which  $-\nu$  probably came from the active; cp. § 1062 p. 567 on  $-\mu\varepsilon\vartheta\varepsilon\nu$ . Example:  $\dot{\varepsilon}\varphi\alpha\nu\gamma\rho\dot{\varepsilon}\nu\vartheta\varepsilon\nu$ .

§ 1069. Italic. Here we have -nto +-r. Lat. feru-ntur ama-ntur, Umbr. ema-ntur 'emantur'. On Osc. kara-nter see § 1066. 2. b p. 568.

§ 1070.¹) Keltic. Here too we have -nto+r, as O.Ir. do-bertar 'dantur': Lat. feru-ntur. Beside this -nto without -r is possibly contained in do-berat 'dant', see § 1024 p. 552.

§ 1071. Germanic. -ntai or -ntai in Goth. baira-nda salbō-nda, used for both 1st and 2nd plural (cp. § 1060 p. 566).

An obscure form is -ndau in the opt. bairái-ndau (also used for both 1st and 2nd plural); cp. § 1052 p. 563.

## PERSONS OF THE DUAL MIDDLE.

§ 1072. 1st Person. Aryan alone has any special suffix; Skr. prim. -vahē sec. -vahi, which if we judge by -mahē -mahi will be derived from \*-uedhai or \*-uedhai and \*-uedha. E. g. bhárā-vahē opt. bhárē-vahi; on -vahāi in Conjunctive forms like sacāvahāi see § 922 p. 470.

Greek.  $-\mu\varepsilon\vartheta o\nu$ , only found in rare instances and questionable at that, is doubtless a transformation of  $-\mu\varepsilon\vartheta a$  made to match the ending of  $-\sigma\vartheta o\nu$ .

§ 1073. 2<sup>nd</sup> and 3<sup>rd</sup> Person. Here there is hardly anything to do but to present the facts. Aryan alone shows suffixes that can have any claim to be regarded as original.

§ 1074. Aryan. Skr. primary 2nd dual -āthē 3rd dual -ātē,

<sup>1)</sup> See footnote 2 to § 1058 p. 565, above.

secondary  $2^{nd}$  dual  $-\bar{a}th\bar{a}m$   $3^{rd}$  dual  $-\bar{a}t\bar{a}m$  in unthematic stems. Indic. pres.  $dvi\S-\bar{a}th\bar{e}$   $-\bar{a}t\bar{e}$ , imperf.  $\acute{a}-dvi\S-\bar{a}th\bar{a}m$   $\acute{a}-dvi\S-\bar{a}t\bar{a}m$ . It has the primary endings in the Perfect,  $cakr-\acute{a}th\bar{e}$   $-\acute{a}t\bar{e}$ . In Avestic the same stems have the secondary  $3^{rd}$  dual  $-\bar{a}tem$  = pr. Ar. \*- $\bar{a}tam$ : a-srv- $\bar{a}tem$  von sru- 'hear'. In Vedic are other secondary endings,  $-\bar{\imath}th\bar{a}m$   $-\bar{\imath}t\bar{a}m$ :  $2^{nd}$  dual injunct. aor.  $tr\acute{a}$ -s- $\bar{\imath}th\bar{a}m$   $3^{rd}$  dual indic. aor.  $\acute{a}$ -dh- $\bar{\imath}t\bar{a}m$ .

Skr. primary  $2^{nd}$  dual  $-\bar{e}th\bar{e}$   $3^{rd}$  dual  $-\bar{e}t\bar{e}$ , secondary  $2^{nd}$  dual  $-\bar{e}tham$   $3^{rd}$  dual  $-\bar{e}t\bar{a}m$  in thematic stems. Indic. pres.  $bh\acute{a}r\bar{e}th\bar{e}$   $bh\acute{a}r\bar{e}t\bar{e}$ , imperf.  $\acute{a}$ - $bhar\bar{e}th\bar{a}m$   $\acute{a}$ - $bhar\bar{e}t\bar{a}m$ . On the Conjunctives  $bh\acute{a}r\bar{a}ith\bar{e}$   $bh\acute{a}r\bar{a}it\bar{e}$  see § 922 p. 470. In Avestic there is a  $3^{rd}$  dual indic. pres.  $vaen\bar{o}i\bar{p}\bar{e}$ , answering to the form of the Skr.  $2^{nd}$  dual; but injunct.  $3^{rd}$  dual jasaetem.

Rarely Skr.  $-th\bar{e}$  etc. without any preceding vowel in the ending itself. Skr.  $2^{nd}$  dual indic. perf.  $ci-k\acute{e}-th\bar{e}$ ,  $3^{rd}$  dual indic. pres.  $patya-t\bar{e}$  conj. aor.  $yam-a-t\bar{e}$ ,  $2^{nd}$  dual injunct.  $d\bar{\imath}-dh\bar{\imath}-th\bar{\alpha}m$ . Similarly Avest.  $3^{rd}$  dual indic. perf.  $dazd\bar{e} = *dha-dh+ta\dot{\imath}$ .

See further details in Bartholomae, Kuhn's Zeitschr. xxix 283 ff.; Jackson, Amer. Or. Soc. Proceed., Oct. 1889, p. clxv.

§ 1075. Greek. Indic. pres.  $2^{nd}$  dual  $\varphi \acute{\epsilon} \varrho \acute{\epsilon} - \sigma \vartheta o \nu$   $3^{rd}$  dual  $\varphi \acute{\epsilon} \varrho \acute{\epsilon} - \sigma \vartheta o \nu$ , imperf.  $2^{nd}$  dual  $\mathring{\epsilon} - \varphi \acute{\epsilon} \varrho \acute{\epsilon} - \sigma \vartheta o \nu$  ( $\mathring{\epsilon} - \varphi \acute{\epsilon} \varrho \acute{\epsilon} - \sigma \vartheta o \nu$ )  $3^{rd}$  dual  $\mathring{\epsilon} - \varphi \acute{\epsilon} \varrho \acute{\epsilon} - \sigma \vartheta o \nu$  ( $\mathring{\epsilon} - \varphi \acute{\epsilon} \varrho \acute{\epsilon} - \sigma \vartheta o \nu$ ) answering to the active  $\varphi \acute{\epsilon} \varrho \acute{\epsilon} - \tau o \nu$  etc., see § 1033 p. 556, § 1039 p. 558. Possibly  $\varphi \acute{\epsilon} \varrho \acute{\epsilon} - \sigma \vartheta o \nu$  was originally  $2^{nd}$  plural (§ 1063 p. 567), and caused  $-\sigma \vartheta \bar{\alpha} \nu$  to be made on the model of  $-\tau \bar{\alpha} \nu$ .

# ARYAN, ITALIC, AND KELTIC ENDINGS WITH R.1)

 $\S$  1076. In this section we discuss those endings of the Aryan, Italic, and Keltic branches which consist of, or contain, the suffix -r.

Remark. It is not impossible, but certainly it is unlikely, that the r which we noticed in the  $2^{\rm nd}$  and  $3^{\rm rd}$  singular in Armenian has the same origin (§ 986 Rem. p. 524).

<sup>1)</sup> These have been more fully treated by Windisch and Zimmer in their essays cited on pages 512 and 513.

Italic and Keltic are very much alike in these endings. Aryan is quite different; and it has not yet been shewn which best represents the parent language, or how the present variation came about. Perhaps r was originally a perfect suffix; for the perfect has peculiar endings in other of its persons. But whether r properly belonged to the  $3^{rd}$  plural, or denoted an indefinite subject or subjects, such as one says, one comes, or what, it is at present quite impossible to say. Certain r-forms in both Italic and Keltic appear to belong to the separate history of those branches.

I shall not indulge in any speculations as to the earliest value of this r. The latest discussion may be seen in Johansson's paper, Bezz. Beitr. xvIII 49.

§ 1077. Aryan shows it almost exclusively in the 3<sup>rd</sup> plural (exceptions are the 2<sup>nd</sup> and 3<sup>rd</sup> dual perf. act. in -athur -atur in Sanskrit).

The Active voice has it in the 3<sup>rd</sup> pl. perfect, agrist, and optative, with exception of the 2<sup>nd</sup> and 3<sup>rd</sup> dual perfect.

First as regards the usage in the  $3^{rd}$  plural. Here -r sometimes is the only personal suffix and sometimes it is combined with s. Tracing the forms back to proethnic Aryan, we get four:

- (1)  $-r = \text{Avest.} -r^e$ : opt.  $hy\bar{a}-r^e$  'sint', a later re-formate with the strong opt. suffix  $-y\bar{a}$  (§ 1018.2 p. 546).
- (3)  $-r\check{s} = \text{Avest.} -r^{e}\check{s}$ : opt.  $daipy\bar{a}-r^{e}\check{s}$ , a new form like  $hy\bar{a}-r^{e}$  (1).
- (4)  $-r\check{s} = \text{Avest.} -er^e\check{s}$ : perf.  $cik\bar{o}it-er^e\check{s}$  (§ 850 p. 397, § 852 p. 402). This form may also be the origin of Skr. -ur, compare gen. abl. Skr.  $m\bar{a}t\acute{u}r$  with Avest.  $ner^e\check{s}$  III § 235 pp. 125 f.

Exceptionally Skr. -ur appears in the indic. present as well, as duh-ur 'they milk'. But this formation,  $3^{rd}$  pl. mid. duh-re and

3rd sing. mid. duh-é, may if you will be called an unreduplicated perfect. In any case duh-úr does not justify our assuming that r originally belonged to the indic. present.

The combinations Skr. -atur Avest. -atar in the 3rd dual. and Skr. -athur in the 2nd dual, are without doubt peculiar to Aryan; see § 1038 p. 557 f.

- § 1078. In the Middle and Passive r is found only with the 3rd plural, and only combined with other elements, added after it, which usually appear as middle and passive suffixes in other connexions.
- (1) -raj in the 3rd pl. perf., and by analogy in the 3rd pl. present, is proethnic in Aryan. Skr. du-duh-ré da-dh-ré, pres. or unreduplicated perf. duh- $r\acute{e}$  (cp. duh- $\acute{u}r$  § 1077); Skr.  $\acute{s}\acute{e}$ - $r\ddot{e}$ Avest.  $sae-r\bar{e}$   $s\bar{o}i-r\bar{e}$  'they lie' (cp.  $3^{rd}$  sing.  $\dot{s}\dot{a}y-\bar{e}$  beside  $\dot{s}\bar{e}-t\bar{e}$ ). In Sanskrit  $-r\bar{e}$  is generally preceded by -i-= Idg. -a-, regularly so in Vedic with a long stem-syllable (cp. § 844 p. 385), as īś-i-ré ja-jn-i-ré (cp. Avest. vaoz-i-rem under 2.); so also pres. *śrnv-i-ré* (cp. 2<sup>nd</sup> sing. *śrnv-i-*ș*é* § 853 p. 403). -irē became a new suffix and in classical Sanskrit was the only one used for the Perfect, as duduh-irē cikriy-irē (pres. śay-irē beside \$\frac{\sigma}{e}-rat\bar{e}\$). By analogy of forms like duduh-r\bar{e} and like jajn-iré we have in Vedic duduh-riré jagrbh-riré, and others.

In Avestic -re passed into the a-Conjunctive: anha-re beside indic. ās-tē 'sits'.

Ar. -rai seems to have the same relation to act. -r (- $\tau$ ) as -ntai to -nt, 3rd sing. -tai to -t and the like.

(2) Further, -ram in the augmented preterite is pr. Aryan, as å-drš-ram a-srg-ram, Avest. vaoz-i-rem (§ 844 p. 385, § 854 p. 403). -ram is usually compared with the middle ending of 2<sup>nd</sup> pl. -dhvam.

The following r- suffixes appear in Sanskrit only.

- (3) -ra in augmented preterite: á-duh-ra. á-duh-ra: duh-ré  $= \acute{a}$ -duh-ata : duh-até (duh-átē).
- (4) -ratē and -rata: pres. duh-ratē šé-ratē, opt. mas-ī-rata bharē-rata.
  - (5) Isolated: -ranta in  $\acute{a}$ -va-vrt-ranta.

- (6) -rām and (7) -ratām in the Imperative: duh-rām and duh-ratām. Cp. duh-átām § 968.2 p. 510. Lastly
- (8) -ran in the augmented preterite, as a-va-vrt-ran a-ca-kr-i-ran  $a-dr\dot{s}-ran$   $a-\dot{s}\bar{e}-ran$ , and in the Optative, as  $a-d\bar{u}-ran$   $bh\dot{a}r\bar{e}-ran$ . That the ending -an is the same as -an in the active (for \*-ant) I cannot regard as proved at all. It may be some element not found elsewhere as a personal suffix, of like character with -s in the Avestic active ending  $-r^e\dot{s}$ .

§ 1079. As regards the r-suffixes in Italic and Keltic, the first remark to be made is that not one of them can be confidently held to have originally had an active meaning. All of them may be explained as originally deponent or passive (cp. § 1081 sub fin.).

The Latin suffixes of the  $3^{rd}$  pl. indic. perf. -erunt - $\bar{e}$ runt - $\bar{e}$ re (with dedrot etc.) are at least in some degree akin to the Aryan r-forms. This has been already pointed out as likely in § 1023 p. 551. But there is no need to believe that the Latin forms have any such basis as the Aryan active forms of the  $3^{rd}$  plural perfect. Since the  $1^{st}$  sing.  $tutud-\bar{\iota}$  was properly middle, the  $3^{rd}$  plural may be derived from a middle type like that of Skr.  $-r\bar{e}$  -ra.

The remaining r-forms in Italic and Keltic fall into two groups.

 $\S$  1080. (I) Forms in Umbro-Samnitic and in Keltic where r appears to be the only personal suffix.

The Umbro-Samnitic forms seem best translated by aid of the indefinite one or they. Umbr. pihafei(r) 'let them have appeased', Osc. sakrafír (with últiumam for object) 'let them have consecrated' (§ 874 p. 422, § 926.3 p. 473). Umbr. ferar 'let one carry', ier 'one will go' possibly for \*ier-er i. e. \*e(i)-es-er (§ 837 p. 374), benuso(r) 'one will have come' (§ 872 p. 421). With Zimmer and Conway, I formerly regarded these as 3<sup>rd</sup> plural active (Ber. sächs. Ges. der Wiss., 1890, pp. 214 ff.). But, as we infer from a comparison of sakrafír with sakrim fakiiadon the other Oscan inscr. of the same kind (Rhein. Mus. XLIII 557 f.), they may be 3<sup>rd</sup> singular

deponent. Compare the active and deponent imperatives with -tu and -mu, used with indefinite subject in the ritual rules of the Iguvine Tables; and the Avest. 3rd sing. zazan-ti 'one trains, breeds' and others like it (Bartholomae, Ar. Forsch. II 82): and a great deal of illustrative matter may be found in Miklosich's essay on Sentences without a Subject (Subjectlose Sätze, 2<sup>nd</sup> ed. 1883). There is a third possibility. They may be 3rd singular passive, answering to Latin impersonal constructions (legitur 'one reads, they read'); Osc. sakrafír últiumam would exactly correspond to Lat. legitur Vergilium, legendum est Vergilium (see Weisweiler, Lat. part. fut. pass., pp. 70 ff.). The last view is best; it is best supported by Keltic, as will now be shewn.

These Umbro-Samnitic forms run on parallel lines with the Keltic 3rd sing. passive; e. g. O.Ir. do-berar 'datur' (also -berr because of the two r's, but this syncope is not otherwise found - we only have -canar, for example; Zimmer, Kuhn's Zeitschr. xxx 252 takes a different view), whose absolute bye-form berir, like the 3rd pl. bertir beside do-bertar (§ 1082), I believe to be a new Keltic developement; imper. berar 'should be brought', Mod.Bret. quemerer (i. e. \*com-berer) 'is taken', Mod.Cymr. ni chenir 'there will be no singing'. Zimmer's view that these Keltic r-forms, like the Umbrian and Oscan, are 3rd plural active, has not enough to support it.

Remark 1. Zimmer's attempts to prove that the active indefinite idiom with one is kept in Britannic (loc. cit., pp. 237 ff.) fail, according to Thurneysen. "They are proved to fail by the single fact that in expressions like 'he is killed' or 'one kills him' the pronoun which is the object can be left out, even in Cymric, thus shewing that the person is regarded as the subject. Furthermore, Zimmer forgets that the passive preterite to the r-forms in Britannic, as in Irish (and in Italic), is represented by the part. passive with -to-. This indicates that the r-form was regarded as a real passive, possibly in proethnic Keltic (or, if you will, in Italo-Keltic)."

Remark 2. If we assume these Italo-Keltic r-forms to be 3rd sing. deponent or passive, the question arises whether their -r came from \*-ro, a form which may have stood to the middle ending \*-to in much the same relation as Pali 3rd pl. socarē 'they trouble themselves' to Skr. šocantē.

§ 1081. (II) r in combination with other personal endings,

active and middle, which always precede it (cp. Skr. 2<sup>nd</sup> and 3<sup>rd</sup> dual -athur -atur § 1077 p. 574).

These forms may be either deponent or middle in Latin. In Keltic, however, these two moods were distinguisht in form; for in the deponent conjugation, r runs through all persons except the  $2^{nd}$  plural, but the passive forms only the  $3^{rd}$  singular and plural with such suffixes.

It is possible that once, in proethnic Italo-Keltic, r was used only with middle endings; that in this use it came to be a mediopassive sign; and that it was afterwards added to middle or active endings with the effect of making them middle or passive.

§ 1082. (A) r added to Middle endings.

(1) Italic and Celtic 3<sup>rd</sup> pl. -nto+r. Lat. depon. sequi-tur sequo-ntur sequā-tur sequa-ntur etc., pass. agi-tur agu-ntur etc. Umbr. e. g. emantur 'emantur'. O.Ir. depon. -sechethar 'sequitur' -sechetar 'sequontur' perf. do-mēnatar 'putaverunt', pass. do-bertar 'dantur, dentur'; in the 3<sup>rd</sup> sing. indic. pass. this ending is shown only in the 2<sup>nd</sup> and 3<sup>rd</sup> Conjugations in Irish, as no charthar 'amatur' do-lēicther 'linquitur' (1<sup>st</sup> Conjug. doberar, conjunct. -berar and -berthar).¹) The absolute forms sechidir 'sequitur' sechitir 'sequontur' bertir 'feruntur, ferantur' carthir 'amatur' lēicthir 'linquitur' etc. are analogical like berir 'fertur' (§ 1080 p. 576).

No satisfactory explanation has been given of the Umbr.-Samn. endings with e-vowels, which answer to Lat. -tur -ntur. Osc. vincter 'vincitur' sakarater 'sacratur' sakahiter 'sanciatur' comparascuster 'consultus erit' karanter 'pascuntur', Pelign. upsaseter 'operaretur' or 'operarentur', Marruc. ferenter 'ferantur'. Umbr. herter herte herti hertei 'oportet' ostensendi 'ostenderentur'; for the form emantur, see above. The Oscan forms had undoubtedly a short e; and I venture to conjecture that parallel to -to -nto there were Idg. forms -te -nte (cp. 1st pl. -mo(s) -me(s), -mom -mem, § 1000 p. 535).2) Umbr. hertei points

<sup>1)</sup> See footnote 2 to § 1058, page 565.

<sup>2)</sup> If this be correct, there would be no need to derive the -re of Lat. sequere (cp. Gr. \$\pi\_{ne-o}\$) from Idg. \*-so; it might be derived from Brugmann, Elements. IV.

to  $\bar{e}$ . Very well — we may suppose that there were variants  $-t\bar{e}$   $-nt\bar{e}$  beside -te -nte, as we saw  $-m\bar{e}s$  beside -mes in the 1<sup>st</sup> plural (loc. cit.). But herter is used in such a way that we may believe it to be conjunctive; and then we are led to ask whether its  $\bar{e}$ , and that of ostensendi (-i for  $-\bar{e}$ ), be not the conjunctive suffix  $-\bar{e}$ -, which could easily creep into the personal ending when there was such a form as \*ferē-r (cp. ferar).

Remark. On Zimmer's view of these Umbro-Samnite forms (Kuhn's Zeitsohr. xxx 277), which I regard as wrong, see Buck, Der Vocalismus der osk. Sprache pp. 79 f.

- (2) Latin forms of the  $2^{nd}$  singular, like *spatiatrus* possibly contain \*-ru-r = \*-so+r. See § 1050 p. 562.
- (3) In Oscan censamur 'censemino, censetor' r is seen combined with the Umbr.-Samn. mid.-pass. suffix \*- $m\bar{o}d$ . -d was exchanged for -r. See § 967 pp. 508 f.
- (4) O.Ir. -ther in the  $2^{nd}$  sing. of deponent verbs, e. g. -sechther 'sequeris', is derived from -the = Idg. \*-thēs, which is preserved without -r in the imperative type cluin-te. See § 1051 p. 563.
  - § 1083. (B) r added to Active endings.
- (1) Italic and Keltic 1<sup>st</sup> sing. \*-ōr, in Keltic only deponent. Lat. sequor O.Ir. -sechur 'sequor', Lat. gradior O.Ir. -midiur 'iudico', pass. Lat. feror capior. Lat. ferar beside Act. feram, ferrer beside act. ferrem; -r takes the place of -m.

Remark 1. It is of course not certain that \*- $\bar{o}r$  is the active  $-\bar{o}+r$ . It may be that Italo-Keltic had the 1st sing. mid. \* $seq\bar{o}i$  (§ 1041.1.b p. 558), and that this was transformed to \* $seq\bar{o}r$ , as in Oscan \*- $m\bar{o}d$  \*-mud became -mur (§ 1082.3).

(2) Italic and Keltic 1st pl. \*-mor, in Keltic only deponent. Lat. sequimur sequāmur sequāmur ferimur etc., O.Ir. -sechemmar 'sequimur, sequamur' perf. do-mānammar 'putavimus'. Whether \*-mor was transformed to \*-mos by exchanging -s for -r, or whether it was an extension of \*-mo (cp. § 1000. 2. a p. 535), is doubtful. mm instead of m in Irish is due to the active forms ammi bermmi etc. (see § 1006 pp. 537 f.).

Idg. \*-se. ūtāris would be related to ūtārus as Oso. vincter to Lat. vincitur Compare § 1050, page 562.

(3) In the Irish deponent perfect we have  $1^{st}$  sing.  $do-m\bar{e}nar$   $2^{nd}$  sing.  $do-m\bar{e}nar$  beside the active forms  $1^{st}$  sing. cechan for \*ce-can-a  $2^{nd}$  sing. cechan (§ 981.4 p. 521, § 989 p. 525). In  $3^{rd}$  sing.  $do-m\bar{e}nair$  beside act. cechuin the non-palatal pronunciation of the n is a difficulty. Is this due to the analogy of other persons of the perfect, or because  $-g\bar{e}nair$  comes from \* $ge-gn\bar{a}$ -?

Remark 2. Neither Italic nor Keltic have an r-form in the  $2^{nd}$  plural. Latin has  $sequimin\bar{\imath}$  ferimin $\bar{\imath}$  (see II § 71 p. 165). The Irish deponents have the active ending, as -midid beside -midiur,  $do-m\bar{e}naid$  beside  $d\bar{o}-menar$ .

# PERIPHRASTIC MIDDLE IDIOMS (REFLEXIVE).

§ 1084. In several languages, where the Idg. Middle (Skr. bhára-tē Gr. φέρε-ται) either dwindled or quite died out, its place was filled by the combination of the Active (or some Middle form degraded until it could not be distinguisht from the active) and an Oblique Case of the pronoun which answered to the active form in question, and which referred to it.

From a comparison of Sanskrit and Greek we may believe that this roundabout idiom was general at the time when the Idg. Middle was still in living use. For in Greek and Sanskrit both periphrastic reflexive and middle are used side by side; and this is true, both when the contrast between the subject and object is important, that is, when there is a contrast with some other person, which makes it necessary to lay stress on the person implied by the middle form; and also when the cases are not clearly shown by the middle, or where this could be understood as a passive, so that there was every need to make the expression as clear as possible. Thus we have Skr. yád yajamānabhāgá prāšnáty ātmánam ēvá prīnāti (Taitt. Sah. I 7. 5. 2) 'when he eats his share of the offering, he gets new life in himself' (otherwise it is his task to quicken others), néd ātmána vā pṛthivī vā hinásāni (Satap.-Brāhm. I 2. 4. 7)

'that I may not destroy either myself or the earth', Gr. ἐμοὶ δὲ δέκ' ἔξελον οἴω (Od. 9. 160) 'but for myself alone I chose ten (goats)', ἀποκρύπτω ἐμαυτόν 'I hide myself' beside ἀποκρύπτομαι 'I hide for myself' or 'I am hidden'. Often enough we find the middle used with the reflexive pronouns, as tābhir vāi sā ātmānam āprīnīta (Tāitt.-Sah. v 1. 8. 3) 'therewith he enjoyed himself', sā yajāām ātmāna vyàdhatta (Māitr.-Sah. I 9, 3) 'he changed himself into the offering', η κακῶσαι ἡμᾶς ἢ σφᾶς αὐτοὺς βεβαιώσασθαι (Thuc. I. 33. 3), ὅτι Ξενοφῶν βούλεται ἑαυτῷ ὄνομα καὶ δύναμιν περιποιήσασθαι (Xen. An. v 6, 17). Cp. Lith. bùrna sáu prausiǔ'-s(i) § 1086.

§ 1085. The next step is represented in Italic and Keltic. Here the original Middle had got mixt up very much with the r-deponent (§§ 1081 ff.). E. g. Lat. sequitur O.Ir. -sechethar 'sequitur' = Skr. sácatē Gr. ἕπεται, Lat. re-minīscor O.Ir. do-muiniur 'I think' = Skr. mányatē. But it partly gave place to the periphrastic reflexive, Lat. dedecore se abstinebat (ἀπείχετο), gloriam sibi peperit (ἐπορίσατο, ἐπτήσατο), mecum reputo (σκοποῦμαι, λογίζομαι), O.Ir. no-m-moidim 'glorior' (Wb. 14°), lit. 'I pride myself', act r-an-glana 'si emundaverit se' (Wb. 30°). In Latin this idiom is often hardly distinguishable from the deponent, as immiscemus nos rei and immiscemur, castris se effundunt and effunduntur, relaxat se and relaxatur.

§ 1086. Next come Germanic and Balto-Slavonic, where the Idg. Middle with middle meaning had died out in prehistoric times. — In Gothic the forms remain but have passive meaning; in Balto-Slavonic there are forms of the 1<sup>st</sup> and 2<sup>nd</sup> sing. middle in the place of active forms, see § 1046 p. 560, § 1053 p. 563, and footnote to page 216 above. — Here then the Periphrastic Reflexive is regularly used in place of the Idg. Middle.

Remark. Regularly so used, but not always. Sometimes the Active form alone does duty for the Idg. middle, as Goth. ga-nisip 'he gets happily through, finds protection or health' as against Skr. násatē Gr. réeta. Lith. sekù 'I follow' against Skr. sácatē Gr. fata (Lat. sequitur O.Ir. -sechethar), O.C.Sl. minją 'I think' as against Skr. mányatē (O.Ir. do-muiniur). In Gothic, verbs in -nan may represent the old Middle, as

and-bundnip 'he lets himself go, gets free, sets off' beside pass. and-bindada 'he is released' act. and-bindip 'he sets free'. There are more of the kind.

Gothic gavandja mik O.H.G. gi-went(i)u mih 'I turn myself towards, converto me, convertor, return'. Goth. skama mik O.H.G. scamēm mih 'I am ashamed'. Goth. ōg mis 'I fear' (for myself). O.H.G. furht(i)u mir, the same. Goth. gaginand sik 'they gather together', reflex. In Norse, about the 8th century, the pronoun affixt itself firmly to the verb in a contracted shape (-sk for sik, dat. -ss for -sex). Then -sk and -ss were used for the 1st and 2nd persons as well as the third. However, in the oldest period we do find a 1st sing. -mk (for mik), as heito-mk 'I call myself' (where the ending -ō is kept, though it drops with heit 'I call'). This Norse type, much altered and obscured by sound-change and analogy, was also used as a passive. Compare Noreen, Aisl. und Anorw. Gramm. pp. 185 ff.; Paul's Grundriss I 518 ff.; Specht, Das Verbum Reflexivum und die Superlative im Westnord. (Acta Germ. III 1), Berlin 1891.

In Lithuanian -si (for \*së) became a universal reflexive, and coalesced with the verb, being used for all persons. was originally only locative or dative, but afterwards came to be used for the accusative (III § 447 p. 385). -si at the end of words has now generally become -s. kelů'-s(i) I raise myself, get up' 2<sup>nd</sup> sing. kelë-s(i), and so forth.  $bija\tilde{u}$ -s(i) 'I fear'. džiaugiů'-s(i) 'I enjoy myself'. bùrną prausiů'-s(i) 'I wash my face'. Also bùrna sáu prausiù'-s(i), like Gr. περιποιήσασθαί τι ξαντώ (§ 1084 p. 580). mùsza-s(i) 'they struck each other'. When a verb has a prefix, si stands between prefix and verb, as pa-sì-kelu 'I raise myself, rise' (dial. also pa-sì-kelù-s). Compare Lett. bistu-s 'I fear' (in folk-poetry -si sometimes survives, and has not yet become -s); Pruss. grīki-si 'they fall into sin' (III § 447 p. 385), with a variant -sin, obviously the accusative case, as etlāiku-sin 'let him abstain, forbear'. In O.C.Sl. we see the acc. see answering to Pruss. -sin as a (Continued on p. 594.)

[Here follow Tables of the Verb Finite pp. 582-593.]

# 1. Ind. pres. and imperf. act. of Present Class. I.

Tables of the Appendix to

	Pr.Idg.	Sanskrit	Avestic	Armenian	Greek
Sing. 1.	*és-mi: 'I am'	ás-mi	a h - m i	e m	εὶμὶ
2.	*ési:	á s i	ahi		εῖ, εῖ-ς (εἴ-ς)
	*és-si:			es	ê σσì
3.	*és-ti:	ás-ti	as-ti	ē	ἔσ-τι ἐσ-τὶ
Plur. 1.	$*s-m\overset{*}{e}s(i)$ (*s-mos(i)):	s-más s-mási	mahi	ēmk	Dor. είμες, Ion. είμεν, Att. έσμεν
2.	*s-té (*s-thé):	s-thá	s <b>-</b> t ā	ēĶ	εσ-τè
3.	*s-énti:	s-ánti	h-enti	en	είσι, έασι
Dual. 1.	*s-ues(i) (*s-uos(i)):	s-vás	*xw-ahi		[Dor. εἶμὲς etc.]
2.	*s-tés (*s-thés):	s-thás			ἐσ <b>-τὸ</b> ν
3.	?	s-tás	s-tō		ἐσ−τὸν
Sing. 1.	*ểs-m(*ếs-mm): 'I was'	ấs - a m	O. Pers. ah-am	$ar{e}i$	$\vec{\eta} \propto \vec{\eta}, \vec{\eta} \nu$
2.	*és-s:	ās, āsī-š	* ā s	ēir	ήσθα
3.	*és-t:	ás, ásī-t	ās (as)	ēr	Dor. $\eta_{\mathcal{G}} \left[ \widetilde{\eta} \varepsilon \nu \ \widetilde{\eta} \nu \right]$
Plur. 1.	*és-s-mĕ(m) *és- -mĕ(m) (-mŏ(m)):	ás -m a	a - h -m a	ēak	ημεν
2.	*é-s-te *és-te:	ás-ta		ēiĶ	$ \vec{\eta} \sigma - \tau \varepsilon,  \vec{\eta} \tau \varepsilon $
3.	*é-s-ent *és-ent:	ás-an (s-án)	O. Pers. ah-a (Avest. h-en)	ēin	Dor. ην, Boet. είαν, Att. ησαν
Dual. 1.	*é-s-ųĕ *és-ųĕ(-ųŏ):	ấ s - v a			[] [] []
2.	*é-s-tom *és-tom (-tem?):	ás-tam			$\vec{\tilde{\eta}} \sigma - \tau \circ \nu , \vec{\tilde{\eta}} \tau \circ \nu [\vec{\tilde{\eta}} \sigma - \tau \circ \nu ]$
3.	*é-s-tām *és-tām:	ấs - t ã m			$\begin{bmatrix} \vec{\eta} \sigma - \tau \eta \nu, \ \vec{\eta} \tau \eta \nu \ [\vec{\eta} \sigma - \tau \nu] \end{bmatrix}$

<sup>1)</sup> When any of the forms here given under a certain heading belong to the place assigned them in meaning alone, while their ending belongs to a different person, they are enclosed in square brackets [ ].

§§ 492 -- 1086.

Latin	Irish	Gothic	O.H.G.	Lith.	O.C.S1.
sum	am	i m	b-im	es-mì	jes-mĭ
es, ēs	at	is (§ 990. 1)	(bis bist)	esi (991. 1)	jesi
es-t	is	is-t	is-t	ēs-ti ēs-t	O.Russ, jes-tž O.Bulg. jestŭ
sumus	ammi	sijum	b-irum b-iru- mēs	ēs-me	jēs-mй -my, Mod.Bulg.s-me Serb. jes-mo
[es-tis]	adi-b	sijuÞ	b-irut	ës-te	jes-te
sunt, Umbr.	it	s-ind	s-int	[esti Est]	O.Russ. sątī, O.Bulg. sątŭ
		siju		€s-va	jes-vě
2nd pl. es-tis		sijuts		€s-ta	jes-ta
		[s-ind]		[ēs-ti ēs-t]	jes-te, jes-ta
pres. ēs (?)					
					nesĕ-as-te
		,			
		-		12.11	
					nesě-as-ta
					nesě-as-te

Spaced Type implies that the inflexion of any given form may be regarded as derived straight from that of the parent language.

# 2. Ind. pres. and injunct. (pret.) act. of Present Class X.

	Pr. Idg.	Sanskrit	Avestic	Armenian	Greek
Sing. 1.	*uē-mi 'I blow'	v ấ - m i	vā-mi	mna-m 'I remain'	ἄη-μι
2.	*ųē-si:	v <b>á</b> - s i	v ā - h i	mna-s	ăη-ς
3.	*yē-ti:	$v \stackrel{.}{\alpha} - t i$	vā-iti	m n a y	α̃η-σι
Plur. 1.	*ųē-mĕs(i) (-mos(i)):	vā-más-mási	vā-mahi	mna-mlč	Dor. ἄη - μες, Att. ἄη-μεν
2.	*uē-te (-the):	$var{a}$ - $thd$		mnayk	ἄη-τε
3.	*yė-nti:	vá-nti	vå-nti	m n a - n	ฉี่ยเงิน
Dual. 1.	*ųē-ųes(i) (-ųos(i)):	v ā - v á s	v ā - v a h i		[Dor. ἄη-μες, Att. ἄη-μεν]
2.	*uē-tes (-thes):	$v\bar{a}$ - $th\dot{a}s$			<b>ἄη-τον</b>
3.	5	vā-tás			ἄη-τον
Sing. 1.	*(e-)ųē-m:	á - v ā - m	v ą m		αη-ν, ξ-δοκ-ν
2.	*(e-)ųē-s:	á - v ā - s	v å		άη-ς, ἔ-δρα-ς
3.	*(e-)yē-t:	$\dot{a}$ - $v$ $\bar{a}$ - $t$	v ā <b>þ</b>		αη, ἔ-δρα
Plur. 1.	*(e-)ųē-mĕ(m) (-mŏ(m)):	á - v ā - m a	vā-ma		ἄη-μεν, ἔ-δο≅- μεν
2.	*(e-)ųē-te:	á - v ā - t a	v ā - t a		άη-τε, ἔ-δρα-τέ
3.	*(e-)uē-nt:	á-v-ur	vąn		ἄε-ν, ἔ-δρα-ν (ἄη- σαν, ἔ-δρα-σαν)
Dual. 1.	*(e-)ųē-ųė̃ (-ųŏ̃):	$d - v \bar{a} - v a$			[ลีท-นะข, รั-อิอุล-นะข]
2.	*(e-)uē-tom (-tem?):	á - v ã - t a m			äη-τον, ἔ-δοά-τον [ἀή-την, ἐ-δοά-την]
3.	*(e-)uē-tām:	$d - v \bar{a} - t \bar{a} m$			αή-την, έ-δοά-την [αη-τον, έ-δοά-τον]

Latin	Irish	Gothic	O.H.G.	Lith.	O.C.81.
pleō, nō	scarimm 'I se- parate'	mitō 'I measure'	m e z z ō - m	lindau 'I put somewhere'	ima-mĭ'I have
plē-s, nās	scari	mitō-s	mezzō-s	lìndai	ima-ší
ple-t, na-t	scarid	mitō-Þ	m e z z ō - t	lìndo	O.Russ. i m a - tš, O.Bulg. ima-tū
plē-mus, nā- mus	scarmme, -sca- ram (?)	mitō-m	m e z z ō - m ē s, -ō-n	lìndo-me	ima-mŭ
[plē-tis, nā-tis]	-scarid, $scarthe$	m it ō - Þ	m e z z ō - t	lìndo-te	ima-te
ple-nt, na-nt	scarit	mitō-nd	mezzō-nt	[lìndo]	O.Russ. im q t i O.Bulg. im q t i
	AAAA	mitōs (?)		lìndo-va	ima-vě
2. pl. plē-tis, nā-tis		mitō-ts		lìndo-ta	ima-ta
		[mitō-nd]		[lindo]	ima-te, ima-ta
- b a - m	ba 'fui'	iddja 'I went'		miniau'I remem- bered', buvau 'I was'	
- b ā -s		id djēs		mineī, buvaī	bě 'eras'
-ba-t	b a	iddja		mìnė, bùvo	b ě
-bā-mus				mìnė-me, bùvo-me	
[-bā-tis]				mìnė-te, bùvo- te	
-ba-nt, umbr. -f a - n s				[mìnė, bùvo]	
				m i n ė - v α, b ù - v ο - v α	
2. plbā-tis				mìnė-ta, bùvo-ta	
				[mìnė, bùvo]	

# 3. Ind. praes and inj. (pret.) of Present Class II.

	Pr. Idg.	Sanskrit	Avestic	Armenian	Greek
Sing. 1.	*bhérō 'I bear':	bhárāmi	barā, barāmi	berem	φέρω
2.	*bhére-si:	bhára-si	bara-hi	beres	φέρεις
3.	*bhére-ti:	bhára-ti	bara-iti	b e r ë	φέςει
Plur. 1.	* $bh\acute{e}ro-mos(i)$ (- $m\breve{e}s(i)$ ):	b h d r ā - m a s - m a s i	barā-mahi	beremk	Dor. φέρο-μες, Att. φέρο-μεν
2.	*bhére-te (-the):	bhára-tha	b a r a - <b>p</b> a	berēk	φέρε-τε
3,	*bhéro-nti ;	bhára-nti	bara-inti	beren	φέρουσι
Dual 1.	$*bh\acute{e}ro-uos(i) \ (-ues(i)):$	b h á r a - v a s	barā-vahi		[Dor. φέρο-μες, Att. φέρο-μεν]
2.	*bhére-tes (-thes):	bhára-thas			φέρετον
3.	P	bhára-tas	bara-tō [baraÞō]		φέρετον
Sing. 1.	*(é-)bhero-m :	á-bhara-m	bare-m	beri	έ-φερο-ν
2.	*(é-)bhere-s:	á-bhara-s	barō	berer	ĕ-φε ę ε - ς
3.	*(é-)bhere-t:	á - b h a r a - t	b ar a - <u>Þ</u>	e-ber	έ-φερε
Plur. 1.	* $(\dot{e}$ - $)bhero$ - $m\ddot{v}(m)$ : $(-m\ddot{e}(m))$ :	$\dot{a} - b h \dot{a} r \bar{a} - m a$	b a r ā - m a	berak	έ-φέρο-μεν, Dor. έ-φέρο-μες
2.	*(é-)bhere-te:	á-bhara-ta	bara-ta	berēk	ξ-φέρε-τε
3.	*(é-)bhero-nt:	á-bhara-n	bare-n	berin	έ-φερο-ν
Dual 1.	*(é-)bhero-uo (-uĕ):	á-bharā-va	barā-va		[έ-φέρο-μεν, Dor. έ- φέρο-μες]
2.	*(é-)bhere-tom (-tem?):	á-bhara-tam			ε - φερε - τον [ε-φερέ την]
3.	*(é-)bhere-tām:	á-bhara-tām	[bara-tem]		ε - φερέ-την [έ-φέςε τον]

Latin	Irish	Gothic	O H.G.	Lith.	O.C.Sl.
a g ō	-biur	baira	biru	vežů 'veho'	berq
agi-s	beri	bairi-s	biri-s	vežì	Little Russ. etc. bere-š, O.C.Sl. bere-ši
a g i - t	beri-d	bairi-p	biri-t	v <b>ē</b> ža	O.Russ.bere-ti O.Bulg.bere-ti
a g i - m u s	ber-mme, -ber- am(?)	baira-m	bera-mēs	vēža-me -mė-s(i)	bere-тй etc. (§ 1008)
[agi-tis]	-berid, berthi berthe	bairi-p	biri-t.bera-t [bere-t]	věža-te -té-s(i)	bere-te
agu-nt	berit	baira-nd	bera-nt	[vēža]	O.Russ. ber ąt i O.Bulg. ber at i
		bairōs		vēža-va -vo-s(i)	bere-vě
2nd pl. agi-tis		baira-ts	2. pl. bere-t	$v\tilde{e}\check{z}a$ - $ta$ - $t\bar{o}$ - $s(i)$	bere-ta
		[baira-nd]		[vēža]	berete, bere-ta
					vezŭ 'vexi'
pres. agi-s	presbir				veze
scidi-t,Osk.kúm bene-d	presbeir			praes. <i>vēža</i>	veze
scidi-mus	pres b e r a m(?)			praes. vēža - m e - m ė - s(i)	vezo-mŭ etc. (§ 1008)
					veze-te
					v e z q
				praes. věža-va -vo-s(i)	vezo-vě
					veze-ta
					veze-te, veze-ta

# 4. Indic. perf. act.

		Pr. Idg.	Sanskrit	Avestic	Greek
Sing.	1.	*ĝe-ĝón-a? *ĝe-ĝen-a? 'genui', *uóid-a? *uéid-a? 'I know':	jα-jån-a[jα-jän-a], véd-a	dā-dar <sup>e</sup> s-a, vaŗd-ā	γέ-γον-α, οίδ-α
	2.	*ĝe-ĝón-tha, *ųóįt*tha:	ja-ján-tha ja-jñ- i-thá, véttha	v ō i s t ā	γέ-γον-ας, ο λοθα
	3.	*ĝe-ĝón-e, *uóid-e:	$ja-j\acute{a}n-a, v\acute{e}d-a$	$egin{aligned} da \cdot ar{d} ar{a}  r \cdot a  [va \cdot va \cdot ca], \ v  a  arepsilon  d  -ar{a} \end{aligned}$	γέ-γον-ε, οὶδ-ε
Plur.	1.	*ĝe-ĝņ-më(m), *vid- më(m), (mŏ(m)):	$ja-j\hat{n}-i-m\hat{a}$ $ca-k\gamma-m\hat{a}$ , $vid-m\hat{a}$	su - s r u - m a v a o x <sup>e</sup> - m ā	γέ-γα-μεν γε-γόν-αμεν, ἔδ-μεν Att. ἔο-μεν
	2.	9	ja-jñ-á, vid-á	ha-whān-a	γέ-γα-τε, γε-γόν-ατε, ίσ-τε
	3.	* $\hat{g}e$ - $\hat{g}n$ - $\hat{r}(r)$ , * $\psi$ id- $\hat{r}(r)$	ja-jñ-úr, vid-úr	c a - x r - a r · , ci- kōit-ar · š	γε-γά-ασι γε-γόν-ἄσι, ἴοῦσι
Dual	1.	*ĝe-ĝņ-ųė, *ųid-ųė (-ųŏ):	ja-jn-i-vd $ca-kr-vd$ , $vd-vd$		[γέ-γα-μεν etc.]
-	2.	?	ja-jn-áthur, vid- áthur		γέ-γα-τον γε-γόν-ατον, Ιστον
	3.	?	ja-jn-átur, vid-átur	yaęt-atar <sup>e</sup>	γέ-γα-τον γε-γόν-ατον, ἴστον

# 5. Imper. praes. act.

		Pr. Idg.	Sanskrit	Avestic	Armenian	Greek.
Sing.	2.	*i-dhi 'go':		i-đi bara	ber	ἔξ - ει ἔ - θι φ έ ρ ε ἐλθε-τῶς · ἐλθέ (Hes.)
	3.	*i-tốd, *bhére-tōd:	i-t ấd, bhára- tād, ết-u, bhárat-u			ἴ-τω, φερέ-τω
Plur.	. 2.		i-tá, bhára-ta i-tád, bhára- tād		berēk	ί-τε, φέρε-τε
	3.	*i-tốd, *bhére-tōd:	yánt-u, bhárant-u	yant-u, barant-u		ί-των , φερέ-τωσαν φερό-ντω -ντων -ντωσαν
Dual.	2.	*i-tôm (-têm?) *bhére-tom:	i-tám, bhára- tam			ί-τον, φέρε-τον
	3.	*i-tấm, *bhére-tām:	i - tām, bhára- tām			φερέ-των

Latin	Irish	Gothic	О.Н.G.
me-min-ī, scāb-ī	ro ce-chan 'cecini', ro gād 'I begged'	hai-hait 'I called', vait	hiaz 'I called', weiz
me-min-istī, scāb-istī	ro ce-chan, ro gād	hal-háist, váist	hiazi, weist
me-min-it, scāb-it	ro ce-chuin, ro gāid	haí-háit, váit	hiaz, weiz
me-min-imus, scāb-imus	ro ce-chn-ammar, ro gād- ammar	haí-háit-um, vit-um	hiaz-um, wizz-um (-umēs)
me-min-istis, scāb-istis	ro ce-chnaid, ro gād-aid	haí-háit-uÞ, vit-uÞ	hiaz-ut, wizz-ut
me-min-ërunt, scāb-ërunt (-ëre)	ro ce-chn-atar, ro gād- atar	haí-háit-un, vit-un	hiaz-un. wizz-un
	·	haí-háit-u, vit-u	
•		haí-háit-uts, vit-uts	
		[hal-háit-un, vit-un]	

Latin	Irish	Gothic	O.H.G.	Lith.	O.C.S1.
ā g e ī-tō, a g i - t ō	beir	bair	bir	eī-k veizdi veizd vedi ved, vèsk	viždī (§ 949)
ī-tō, agi-tō		bairadau			
ī-te, ag i-te ī-tōte, agi-tōte	berid	b a iri-p	bera-t [beret]	etkite, vèskite	
eu-ntō, agu-ntō		baira-ndau			
		baira-ts	2nd pl. bere-t	eīkita, vèskita	
		[baira-ndau]			

# 3. Optative pres. act.

	Pr. Idg.	Sanskrit	Avestic .	Greek
1.	*s-ię́-m *s-iįė́-m 'sim'	s-yấ-m s-iyấ-m	х́ y ē m	ะไท-ข
2.	*s-į́ę́-s *s-iį́ę́-s:	ร-yā́-s s-iyā́-s	х́ y ä	દાં મુ- ૬
3.	*s-íe-t *s-iíe-t:	s-yấ-t s-iyấ-t	х́ у ā <u>Б</u>	εἴη
1.	*s-ī-mḗ(m) (mʊ̄(m)): *bhụ-ii-ṃmē(m) (-ṃmō(m)):	s-yá-ma s-iyá-ma	±yāmā buyamā i.e.bv- -iy-amā	ะเ-ีนะห, อเ๊ท-นอห
2.	*s-ī-té:	s-yá-ta s-iyá-ta	źyātā	ะไ-тะ, ะไท-тะ
3.	*s-j-ént *s-ij-ént:	s-y-úr s-iy-úr	hyan hyar <sup>e</sup>	ะไ-ะห, ะไท-ฮฉห
1.	*8-ī-นฺฮั่ (-นฺŏั):	s-yā-va s-iyā-va		
2.	*s-ī-tóm (-tém?):	s-yá-tam s-iyá-tam		ะไ-ของ, อไท-ของ
3.	*s-ī-tām:	s-yấ-tām s-iyấ-tām		ะไ-รทุง, ะไท่=รทุง
1.	*bhéroi-m(m) 'feram'	bhárēy-am		φέροι-μι, φέροι-ν
2.	*bhéroi-s:	bhárē-š	b a r ō i - š	φέροι-ς
3.	bhéroj-t:	bhárē-t	barōi-Þ	φ <b>έ ę</b> ο ι
1.	*bhéroi-mō(m) (-mē(m)):	bhárē-ma	baraę-ma	φέροι-μεν, Dor.
2.	*bhéroż-te:	bhárē-ta	bara ę-ta	φέροι-τε
3.	*bhéroi-nt:	bhárēy-ur	baray-en	φέροι-εν
1.	*bhéroj-uō (-uē):	bhárē-va		[φέροι-μεν, Dorοι μες]
2.	*bhéroù-tom (-tem?):	bhárē-tam		φέροι-τον
3.	*bhéroż-tām:	bhárē-tām		φεροί-την
	2. 3. 1. 2. 3. 1. 2. 3. 1. 2. 3.	2. *s-i\(\varepsilon\) *s-	2. *s-i\(\tilde{e}-s\) *s-i\(\tilde{e}-s\) : s-y\(\dalpha-t\) s-i\(\dalpha-t\) : s-y\(\dalpha-t\) s-iy\(\dalpha-t\) : s-y\(\dalpha-t\) s-iy\(\dalpha-t\) i -mm\(\tilde{e}\) (m\(\tilde{o}\) (m)): s-y\(\dalpha-m\) s-iy\(\dalpha-m\) a s-iy\(\dalpha-m\) a s-iy\(\dalpha-t\) a m s-iy\(\dalpha-t\) a	2. *s-i\(\delta\)-s *s-i\(\delta\)-s:

Latin	Gothic	О.Н.С.	Lith.	O.C.S1.
s - i e - m, sim	sijau, vitjau 'I would know'	[s-ī, wizzi 'I would know'?]		
<b>s</b> -iē-s, sīs	sijái-s, vitei-s	s-ī-s -st, wizzī-s -st		jaždĭ 'eat thou' (§ 949)
s-ie-t, sit	sijái, viti	s-ī, wizzi		[jaždĭ (949)]
s <b>-ī-mus</b>	sijdi-ma, v i t e i - m a	s - ī - m, wizzīm		j a d - i - m ŭ
[s-ī-tis]	sijái-þ, vitei-þ	s-ī-t, wizzī-t		jad-i-te
s-ie-nt, sint, Umbr.	sijái-na, vilei-na	s-ī-n, wizzī-n		
	sijái-va, vitei-va			jad-i-vě
2 nd pl. s-ī-tis	sijái-ts, vitei-ts			jad-i-ta -te
	[sijái-na, vitei-na]			
	baírau	[bere?]		
	baírái-s	berē-s	Preuss. imai-s 'take thou'	beri
	baírái	bere	te-sukë 'let him turn'	ber i
	baírái-ma	berē-m		berě-mŭ
	bairái-Þ	berē-t	Preuss. imai-ti	berě-te
	baírái-na	berē-n	[te-sukë]	
7	bairái-va			ber·ě-vě
	baírái-ts			berě-ta <b>-</b> te
\	[baírái-na]		[te-sukë]	,

# 7. Indic. pres. and injunct. (pret.) mid. of Present Classes I and II.

	Pr. Idg.	Sanskrit	Avestic
Sing. 1.	*ēs-maį 'I sit' (-məį; *bherōį 'I bring me' etc.:	ás-ē; bhárē	ger <sup>e</sup> z-ē; barē
2.	•ēs-sai (-səi);*bhere-sai (-səi):	ās-sē; bhára-sē	raosē; bara-nhē
3.	*ēs-tai (-təi); *bhere-tai (-təi):	ás-tē; bhára-tē	ās-tē; bara-itē
Plar. 1.	*ēs-medhai (-medhəi); *bhero- -medhai (-medhəi):	ás-mahē; bhárā-mahē	cīš-maidē; barā-maidē
2.	P; P	ádhvē; bhára-dhvē	cp. mer <sup>e</sup> ng <sup>e</sup> -duyē; bara-duyē -Þwē
3,	*ēs-ņtai (-ņtəi); *bhero-ntai (-ntəi):	ás-atē; bhára-ntē	ånh-antē cp. mer°nc-aitē; bara-ntē
Dual 1.	*&s-yedhaj (-yedhəj); *bhero- yedhaj (-yedhəj):	ás-vahē; bhárā-vahē	
2.	9;9	ás-āthē; bhárēthē	
3.	P; P	ás-ātē; bhárētē	—; [barōiþē]

	Pr. Idg.	Sanskrit	Avestic
Sing. 1.	P; P	άε-i; ά-bharē	aoj-ī; a-barē
2.	*ēs-thēs; *(e-)bhere-so (-se?):	ás-thās; á-bhara-thās	aoγ-žā; a-bara-nha
3.	*ēs-to (-te?); *(e-)bhere-to (-te?):	ás-ta; á-bhara-ta	mrū-ta; a-bara-ta .
Plur. 1.	*ēs-medhə; *(e-)bhero-medhə	ás-mahi á-bharā-mahi	varmaidī
2.	P; P	ádhvam; á-bhara-dhvam	i-dūm; a-bara-đwem
3.	*ēs-nto (-nte?); *(e-)bhero- -nto (-nte?):	ás-ata; á-bhara-nta	dar <sup>e</sup> s-atā, mrav-anta; a- bare-nta
Dual 1.	*&s-yedha *(e-)bhero-yedha:	ās-vahi; ā-bharā-vahi	
2.	P; P	ás-āthām; d-bharēthām	
3.	P; P	ás-ātām ; á-bharētām	a-srv-ātem; a-baraetem

Greek	Gethic	Lith.	O.C.S1
ή μαι; φέρομαι	-; O.Icel. heite, Goth. [bairada]	vel-më-s(i)	
ήσαι; φέρε-αι φέρη	-; baira-za	cp. desë-s(i)	jasi
ήν-ται; φέρε-ται	-; baira-da	,	
ζμεθα; φερό-μεθα	-; [baira-nda]		
η-σθε; φέρε-σθε	-; [baíra-nda]		
η-αται, ηνται; φέρο νται	; bair a - nd a		
ημεθον; φερό-μεθον			
ξσθον; φέρε-σθον			,

Greek	Latin	Irish
ήμην ; ε-φερό-μην		
ήσο, ε-δό-θης; ε-φέρε-ο ε· -φέρου	cp. rē-re, -ris, spatiārus; se- que-re, -ris	cp. cluin-te; -sechther
ην σ-το; εφέρε-το	da-tu-r; sequi-tu-r — Oso. vinc- -ter	cp. as-bert; -sechethar
η-μεθα; έ-φερό-μεθα		
ησθε; ε-φέρε-σθε	V4	
ή-ατο, ήντο; έ-φέρο-ντο	da-ntu-r; sequo-ntu-r — Osc. kara-nter	-; -bertar, -sechetar
ημεθον; ε-φερό-μεθον		
ก็σθον; ε̂-φέρε-σθον		
ήσθην; ε-φερέ-σθην		

general reflexive pronoun; e. g. priveda se 'I take myself somewhere, turn towards', boja se 'I fear', směja se 'I laugh'. This se-reflexive also got a passive meaning, as ljubljaaše se gospodimi 'he was loved of the Lord'.

## THE VERB INFINITE (VERBAL NOUNS).1)

§ 1087. Our description of the Verb in the strict sense of the word is now at an end. But in its wider sense the Verb includes several classes of nouns, substantive and

Aryan. H. Brunnhofer, Über die durch Anhängung der dativisch flectierten Wurzel dha,  $dh\bar{u}$ ,  $dh\bar{u}$  an beliebige andere Wurzeln gebildeten Infinitive des Veda und Avesta, Bezzenberger's Beitr. xv 262 ff. A. Ludwig, Der Infinitiv im Veda, Prag 1871. M. Müller, Grammatische Formen im

<sup>1)</sup> For the sake of completeness some works are given here which have been mentioned before.

On the Indo-Germanic Verb Infinite in General. W. von Humboldt, Über das Wesen des Infinitivs und Gerundiums, A. W. von Schlegel's Indische Biblioth., II (1824) 71 ff. Idem, Über den Infinitiv, Kuhn's Zeitschr. II 242 ff. Max Schmidt, Über den Infinitiv, Ratibor 1826. C. E. A. Schmidt, De infinitivo, Prenzlau A. Höfer, Vom Infinitiv, besonders im Sanskrit, Berlin 1840. C. Fritsche, De substantia in verbo constituta vel de participio et infinitivis, Görlitz 1865. Schömann, Zur Lehre vom Infinitiv, Fleckeisen's Jahrbb. 1869 pp. 209 ff. E. Wilhelm, De infinitivi vi et natura, Eisenach 1869. Idem, De infinitivi linguarum Sanscritae Bactricae Persicae Graeeae Oscae Umbricae Latinae Goticae forma et usu, Eisenach 1873. J. Jolly, Geschichte des Infinitivs im Indogermanischen, München 1873. Th. Benfey, dāvánē dấmanē δόμεναι, und die Inflitive auf εναι, Orient und Occident I 606 ff. L. Tobler, Über das Gerundium, Kuhn's Zeitschr. xvi 241 ff. J. Jolly, Zur Lehre vom Particip, Sprachwissenschaftl. Abhandl. aus G. Curtius' grammat. Gesellsch. Leipz. 1874, pp. 71 ff. Th. Benfey, Indogermanisches Particip Perfecti Passivi auf tua oder tva, Nachr. von der Gesellsch. d. Wiss. zu Gött. 1873 pp. 181 ff. = Kleinere Schriften 1 2 and 159 ff. H. Ebel, Das Suffix -ant und Verwandtes, Kuhn's Zeitschr. IV 321 ff. M. Bréal, Origine du suffixe participial ant, Mém. Soc. Ling. II 188 ff. F. Baudry, Le t du suffixe participial ant, ibid. Bartholomae, Zur Flexion der nt-Participien, Bezzenberger's Beitr. xvi 261 ff. The Author, Zur Geschichte der Nominalsuffixe -as-, -jas-, -vas-, Kuhn's Zeitschr. xxiv 1 ff. J. Schmidt, Das Suffix des part. perf. act., ibid. XXVI 329 ff. W. Schulze, Zum part. perf. act., ibid. XXVII 547 ff.

adjective; these are the Infinitive, Supine, Absolutive, Gerund, Participle, and Gerundive.

Sanskrit, welche den sogenannten Infinitiven im Griech. und Lat. entsprechen, Essays IV 420 ff. H. Brunnhofer, Über Dialektspuren im ved, Gebrauche der Infinitivformen, Kuhn's Zeitschr. xxv 329 ff. Idem. Über die durch einfache Flectierung der Wurzel gebildeten Infinitive des Veda, ibid. XXX 504 ff. Th. Benfey, Zu dem sanskr. Infinitiv manē, A. Barth, Le gérondif sanscrit en tva, Orient und Oocident II 132. Mém. Soo. Ling. 11 238 ff. Bartholomae, Altind. Infinitive auf -man und -mani, Idg. Forsch. I 495 ff. J. Jolly, Der Infinitiv im Zendavesta, Kuhn-Schleicher's Beitr. VII 416 ff. Geldner, Ein neuer Infinitiv im Avesta, Bezzenberger's Beitr. XII 160 f. Bartholomae, Noch zwei avest. Infinitive, ibid. xv 12 f. Idem, Die Infinitivbildung im Dialekt der Gāthā's, Kuhn's Zeitschr. xxvIII 17 ff. Idem, Die ar. Flexion der Adjectiva und Participia auf nt, ibid. XXIX 487 ff. H. Kern, Le suffixe ya du sanscrit olassique, ia de l'arien, Mém. Soc. Ling. Π 321 ff.

Greek. K. Eichhoff, Über den Infinitiv im Griech., Cref. 1831. Delbrück, De infinitivo Graeco, Halle 1863. Idem, Der griech. Infinitiv auf  $-\epsilon \iota \nu$ , Kuhn's Zeitschr. XI 317 f. L. Meyer, Der Infinitiv der homer. Sprache, Gött. 1856. Simmerle, Zur Bildung der homer. Infinitivformen, Innsbruck 1874. C. Meierheim, De infinitivo Homerico, I. Gött. 1875, II. Lingen 1876. Abel, De infinitivi Graeci forma, Budapest 1878. L. Parmentier, L'infinitif  $\varphi \dot{\epsilon} \varrho \epsilon \sigma \vartheta \alpha \iota$ , Mém. Soc. Ling. VI 391 ff. Bartholomae, Das griech. Infinitivsuffix  $-\sigma \vartheta \alpha \iota$ , Rhein. Mus. XLV 151 ff. Moiszisstzig, De adiectivis Graecis, quae verbalia dicuntur, Progr. von Konitz 1844. 1868 etc. Ch. E. Bishop, De adiectivorum verbalium  $-\tau \sigma \varrho$  terminatione insignium usu Aeschyleo, Leipz. 1889. A. Funok, Das Verbaladjectiv auf  $-\tau \epsilon \sigma \varrho$ , Rhein. Mus. XXXIII 615 ff.

L. Lange, Über die Bildung des lat. infinitivus praes. pass., Denkschr. der Wiener Akad. x (1860) 1 ff. F. Sander, Über die Bildung des lat. infinitivus praes. pass., Stade 1864. G. Schönberg, Ein Erklärungsversuch des lat. mediopassiven Infin. auf ier und rier, Kuhn's Zeitschr. XVII 153 ff. Giacomino, Dell' infinitivo pres. pass. latino, V. Henry, Les infinitifs médiopassifs du Savona 1880 [G. Meyer]. latin Mém. Soc. Ling. vi 62 ff. I dem, Esquisses morphologiques V, Les infinitifs latins, Paris 1889. A. Miodoński, Zur Erklärung der Infinitive auf -ier -rier, Arch. f. lat. Lexikogr. vii 132. E. H. Miles, The Passive Infinitive in Latin, Class. Review v 198 f. S. Brandt, Infinitivus futuri passivi auf -uiri, Arch. f. lat. Lexikogr. II 349 ff. III 457. J. P. Postgate, The Latin Future Infinitive in -turum, Cambridge Phil. Soc. Proceed. 1889 p. 6 and Class. Review v 301. C. Pascal, La formazione degl' infinitivi latini, Rivista di filol. XIX 471 ff. E. Walder, Der Infinitiv bei Plautus, eine sprachwissenschaftliche Untersuchung, Berl. 1874. E. W. G. Wachsmuth, Von dem Gerundio, Supino und den damit verwandten Participien, Günther und Wachsmuth's Athenäum I (1816) 37 ff. Deecke, Of these, which hold a place halfway between the Noun and the Verb, some general account has been given in vol. II

Beiträge zur Auffassung der lat. Infinitiv-, Gerundial- und Supinum-Constructionen, Mülh. i. Els. 1890. P. Genberg, De gerundiis et supinis Latinorum, p. 1-1x, Lund 1841. E. L. Richter, De supinis Latinae linguae, p. 1-v, Königsb. 1856-60. F. Scholl, Das Supinum auf u als Dativform aufgefasst, Blätt. f. d. Bayer. Gymnasialschulw. iv (1868) 162 ff. Platzer, Die Lehre von den lat. Perfectis und Supinis, Neubrandenb. 1840. Lattmann, Das Gesetz der Perfect- und Supinbildung im Lateinischen. Nils Sjöstrand, De Zeitschr. f. d. Gymnasialw. N. F. n (1868) 94 ff. vi et usu supini secundi Latinorum, Lund 1891. W. Weissenborn, De gerundio et gerundivo Latinae linguae, Eisenach 1844. Schröder, Über den Ursprung des lat. Gerundium, Kuhn's Zeitschr. xiv 350 ff. H. Rotter, Über das Gerundium der lat. Sprache, Cottbus 1871. L. Adrian, Über das lat. part. praes. pass., Gross-Glogau 1875. Corssen, Zum Gerundium, Beitr. z. ital. Sprachkunde 1876 p. 589 ff. Kvíčala, Gerundium und Gerundivum, Wiener Studien I (1879) 218 ff. The Author, Der Ursprung der lat. Gerundia und Gerundiva, Amer. Journ. of Philol. VIII (1887) 441 ff. A. Döhring, Die Etymologie der sogen. Gerundivformen, Königsb. 1888. R. S. Conway, The Origin of the Latin Gerund and Gerundive, Class. Review v 296 ff. J. Weisweiler, Zur Erklärung der Arvalacten (adolenda commolenda etc.), Fleckeisen's Jahrbb. 1889 p. 37 ff. Idem, Das lat. part. fut. pass. in seiner Bedeutung und syntaktischen Verwendung, Paderborn 1890. Thurneysen, -mn- im Lat. (formation of the Ital. gerundive), Kuhn's Zeitschr. xxx 493 ff. Carlsson, Om det latinska gerundivum och gerundium, Pedagog. tidskr. 1891 p. 349 ff. G. Dunn, Origin of the Latin Gerund and Gerundive, Class. Review vi 1 ff. Idem, The Latin Gerundive, ibid. 264. E. P. Morris, Weisweiler on the Latin Participle in -dus, ibid. 265 ff. (I may say that even after these latest attempt to explain the vext question of the origin of the Latin Gerund and Gerundive, the explanation given on pages 608 ff. as preferable seems amply to hold its own.) Winckler, De vi et usu vocabulorum -bundus finitorum, Colberg 1869. A. Prehn, De adiectivorum verbalium in -bundus exeuntium usque ad alterum p. Chr. saeculum usu, Comment. in hon. G. Studemund 1889 p. 1 ff. G. H. R. Wichert, De adiectivis verbalibus Latinis, Tilsit 1839, 1843. O. Bechstein, De nominibus Latinis suffixorum ent- et mino- ope formatis, Curtius' Stud. vm 335 ff. J. Weisweiler, Zur Etymologie des lat. part. praes. act., Fleckeisen's Jahrbb. 1889 p. 790 ff. Usener, Zur Geschichte des lat. Participiums, Fleckeisen's Jahrbb. 1878 p. 51 ff. Bréal, Participes moyens en latin, Mém. Soc. Ling. vi 412 f. Birt, De participiis lat. quae dicuntur perfecti passivi, Marb. 1883. G. Bordellé, De linguae Latinae adiectivis suffixo to a nominibus derivatis, Düsseld. 1873. J. Ulrich, Die formelle Entwicklung des participium praeteriti in den roman. Sprachen, Winterthur 1879.

§ 144 pp. 456 f., and § 156 pp. 470 ff. Their Suffixes, both formative and case-suffixes, have been described each in its proper place. It remains to pass them in general review, and to point out certain peculiarities which have not yet been touched upon, or others on which I have had reason to change my view.

#### 1. VERBAL SUBSTANTIVES.

- § 1088. Nomina Actionis, which appear in more than one language as Infinitive, Supine, or Gerund.
- (1) Root-Nouns. Dat. Skr.  $nir-\acute{a}j\bar{e}$  'to drive out', Lat.  $ag-\bar{\imath}$ ; in Greek this type may be represented by infinitives such as  $\chi \epsilon \tilde{v} \alpha \iota$   $\dot{\epsilon} \nu \dot{\epsilon} \gamma \kappa \alpha \iota$  (§ 504 p. 67 f.). See II § 162 pp. 489 f.
- (2) -s- -es- between Root and Case-Suffix; this cannot be separated from the Noun-suffix -es- (- $\sigma$ s- -s-) or -s- in the aorist. Dat. Skr. ji- $\xi$ - $\acute{e}$  'to conquer', doh- $\acute{a}$ s- $\acute{e}$  'to milk', Gr.  $\delta \epsilon i \xi$ - $\alpha \iota$  'to show', Lat. da-r-i (cp. loc. da-r-e ag-er-e). See II § 132 pp. 413, 414 f., 416, 418, § 162 p. 489 f., III § 251 p. 153, § 254 p. 155, § 272 p. 172, IV § 655 p. 190, § 824 p. 363.
- (3) Suffix -men-. Dat. Skr.  $d\acute{a}$ -man- $\bar{e}$  Gr.  $\delta\acute{o}$ - $\mu \epsilon \nu$ - $\alpha \iota$  'to give' Lat.  $2^{\rm nd}$  pl. imper. da-min- $\bar{\iota}$ ; Skr. vid-mán- $\bar{e}$  'to learn' Gr.  $i\acute{o}$ - $\mu \epsilon \nu$  ·to know'. Loc. Skr.  $dh\acute{a}r$ -man 'to hold up' Gr.  $\delta\acute{o}$ - $\mu \epsilon \nu$  'to give'. See II § 71 p. 165, § 117 p. 367, III § 251 p. 153, § 257 p. 158.
  - (4) Suffix -yen-. Dat. Skr.  $d\bar{a}$ -ván- $\bar{e}$  Gr. Cypr.  $\delta o$ - $F \epsilon \nu$ - $\alpha \iota$

Keltio. Windisch, Zum irischen Infinitiv, Bezzenberger's Beitr. II 72 ff. Loth, Le partioip de nécessité en celtique, Mém. Soc. Ling. vi 66 ff.

Germanic. A. Denecke, Der Gebrauch des Infinitivs bei den ahd. Übersetzern des 8. und 9. Jahrh., Leipz. 1880. Paul, Zur Bildung des schwachen Präteritums und Participiums, Paul-Braune's Beitr. vii 136 ff.

Balto-Slavonic. W. Miller, Über den letto-slavischen Infinitiv, Kuhn-Schleicher's Beitr. VIII 156 ff. Schleicher, -të (d. i. -tai) als Endung des Infinitivs im Litauischen, ibid. I 27 ff. Forssmann, Der Infinitiv im Ostromir'schen Evangelium, Festschr. des Protest. Gymn. zu Strassb. 1888 p. 245 ff. Miklosich, Das Participium praet. act. I (in Old Slovenian), Sitzungsber. d. Wiener Akad. LXXXI (1875) 83 ff. Idem, Das Partio. praes. act. auf e statt auf y, ibid. 95 ff.

- Att.  $\delta o\tilde{v} vai$  'to give'; Avest.  $v\bar{\imath}d$ -van- $\bar{o}i$  Gr.  $\epsilon l\delta \acute{\epsilon} vai$  for \* $F\epsilon i\delta$ - $F\epsilon v$ - $\alpha i$  'to know'. Loc. Avest.  $r\bar{o}i\bar{p}$ -wan 'to make run together', with which perhaps should be compared Greek Infinitives like as  $\delta o\tilde{v}v = *\delta o$ - $F\epsilon v$  (§ 1093. 4).
- (5) -sen- i. e. s+en (cp. 2). Skr. loc. -san-i, e. g. sak-ṣán-i 'to be with'. With this probably goes the Gr. infin. type Ion. Att.  $\varphi \dot{\epsilon} \varrho \epsilon \iota \nu$  Dor. Lesb. El.  $\varphi \dot{\epsilon} \varrho \eta \nu$  for \* $\varphi \epsilon \varrho \epsilon$ - $\epsilon \nu$ . See II § 114 p. 347.
- (6) Suffix -ti-. Dat. Skr.  $p\bar{\imath}$ -táy- $\bar{e}$  'to drink', see II § 100 p. 298, III § 249 p. 149, § 251 p. 153. The explanation of Avest. mrūitē is uncertain, see III § 249 p. 150, § 260 Rem. p. 161. Loc. Lith. dekte 'to burn', see III § 260 p. 161, Hirt, Idg. Forsch. 1 27. The Lith. infinitive in -ti, as du-ti 'to give', and the O.C.Sl. inf. in -ti as da-ti 'to give', are probably locative, standing for \*-tei or \*-tei. But Lith. -ti may be derived from \*-ti-ui (dative); this would become \*-tië, then \*-të, and lastly, because of the accent (cp. dat. do-uevai), -ti (cp. 2<sup>nd</sup> sing. vertì for \*ver-tië § 991 p. 528) and would be related to Skr. -tay-ē (see above) as Pruss. -tw-ei to Skr. -tav-ē (7). And O.C.Sl. -ti may also be the Idg. locative -ē for -ēi (cp. Lith. dektė). See III § 260 p. 161, Hirt, Idg. Forsch. I 28, Streitberg, ibid. 271 und 289. It is wholly doubtful how we are to explain such Lith, infinitive forms as dů'-të; see III § 260 p. 161, Hirt, as cited pp. 27 f., Streitberg ibid. 271.
- (7) Suffix -tu-. Dative Skr.  $dh\acute{a}$ -tav- $\bar{e}$  'to place', Pruss.  $d\bar{a}$ -tw-ei 'to give'. Locative supine Lat. da- $t\bar{u}$  O.C.Sl. da-tu 'to give', ground-form - $t\bar{e}\psi$  or - $te\psi$ . Accusative Skr.  $dh\acute{a}$ -tu-m Lat. sup. con-ditum Lith. sup.  $d\acute{e}$ - $t\psi$  ( $d\acute{e}$ - $t\bar{u}$ , cp. opt. 1st pl.  $d\acute{e}$ tum-bime) O.C.Sl. sup.  $d\acute{e}$ - $t\check{u}$  from  $\sqrt{dh\bar{e}}$  'place'. See II § 108 pp. 323 ff., III § 250 p. 152, § 261 p. 161 f.
- (8) Suffix -o-. Accusative Skr. adverbial gerund abhy- $\bar{a}$ -krámam 'approaching', Umbr. er-om Osc. ez-um 'esse'; Greek similar forms perhaps are aor.  $2^{\rm nd}$  sing. imper. Syrac.  $\lambda \dot{\alpha} \beta o \nu$  'take' Att.  $\delta \epsilon \tilde{\iota} \xi o \nu$  'show' etc. ( $\lambda \dot{\alpha} \beta o \nu$ )

- δεῖξον = Skr. -áj-ē Gr. <math>χεῦ-αι : ji-ξ-έ Gr. δεῖξαι = Skr. bhuj-yāί : a-vyáth-iξ-yāi). See II § 60 p. 114.
- (9) There is a close connexion between the Aryan dative infinitive in  $-dh\underline{i}a\underline{i}$ , as Skr.  $v\dot{a}ha-dhy\bar{a}i$  'to convey' (other suffixes with the same value are used,  $-dh\bar{e}y\bar{a}ya$   $-dh\bar{a}i$  and  $-dh\bar{e}$ ), and the Greek dative infinitive in  $-\sigma \vartheta a\iota$ , as  $\xi \pi \varepsilon \sigma \vartheta a\iota$  'to follow'. See § 1089. 12, § 1093. 8, Bartholomae in Rhein. Mus. XLV 151 ff.
- § 1089. Aryan. Alongside of complete Infinitives we meet many other forms which stand on the line between infinitives and nomina actionis. Thus it is impossible to define sharply the infinitive in this branch. In what follows no attempt has been made to give complete lists, at least of what may be called Infinitives in posse.

But it is only in the older dialect that Sanskrit shows this rich variety of infinitive forms. The classical language knows only that in *-tum* (9).

- (1) Root-Nouns, see § 1088. 1. Dative Skr. dṛṣ-ē Avest. dar s-ōi 'to see'. Locative Skr. dṛṣ-i 'to see'. Gen.-Abl. Skr. ā-tṛd-as 'to pierce'. Accus. Skr. subh-am 'to shine, be magnificent', Avest. dam 'to place'.
- (2) -s- -es- between Root and Case-Suffix; see § 1088. 2. Dat. Skr. ji- $\check{s}$ - $\check{e}$  'to conquer'  $d\bar{o}h$ - $\acute{a}s$ - $\bar{e}$  'to milk', Avest. av-avh- $\bar{e}$  'to help'. Gen.-Abl. Avest. aenanh- $\bar{o}$  'to force'.
- (3) Suffix -men-, see § 1088. 3. Dative Skr. dá-man-ē 'to give', Avest. stao-mainē 'to praise'. Locative Skr. dhár-man 'to hold up'; Loc. Skr. sávī-man-i 'to uplift', Avest. caš-mainē 'to behold' (so the new recension, in place of the form caš-mainē (given in II § 117 p. 369).

Remark. The Avestio loc. forms caš-man etc., which we classed as infinitive in II § 117 p. 369 and III § 257 p. 158, comparing them with Cret. inf.  $\delta \dot{o} - \mu \eta v$ , are now denied to be infinitive at all by Bartholomae (Idg. Forsch. I 495 f.).

(4) Suffix -uen-, see § 1088. 4. Dative Skr.  $d\bar{a}$ -ván- $\bar{e}$  'to give', Avest.  $v\bar{\imath}d$ -van- $\bar{o}i$  'to know'. Locative Avest.  $r\bar{o}i\bar{p}$ -wan 'to cause to flow together'.

- (5) -sen-, see § 1088. 5. Dative Avest. srao-šān-ē 'to hear'. Locative Skr. sak-šán-i 'to be with'.
- (6) Suffix -ter-, cp. Avest. dar'-prai, no. 11. Locative Skr. vi-dhartár-i 'to divide up, distribute'.
- (7) Suffix -i-. Dative Skr. dṛṣ-áy-ē 'to see'. See II § 93 p. 280, III § 249 p. 149, Bartholomae, Bezz. Beitr. xv 238.
- (8) Suffix -ti-, see § 1088.6. Dative Skr.  $p\bar{\imath}$ -táy- $\bar{e}$  'to drink', Avest.  $ker^{\bar{\imath}}$ -tē $\bar{e}$  'to complete'. Locative Skr.  $s\bar{a}t\bar{a}u$  'to attain' (III § 260 p. 159 f.). Instrumental Skr.  $\bar{u}t$ - $\bar{i}$  'to help', Avest. fra- $mr\bar{u}iti$  'to recite', see III § 249 p. 150, Bartholomae as cited 245 f. Gen.-Abl. Avest.  $dar\check{s}t\bar{v}i$ - $\check{s}$  'to see'. Accusative Avest.  $ast\bar{v}m$  (= \*a-sth-ti-m) 'to stand by'.
- (9) Suffix -tu-, see § 1088.7. Dative Skr.  $dh\acute{a}$ -tav- $\ddot{e}$  'to place' (cp.  $d\acute{a}tav \vec{a}i$  no. 16). Gen.-Abl. Skr.  $dh\acute{a}$ -t $\ddot{o}$ - $\ddot{s}$  'to place'. Accusative  $dh\acute{a}$ -tu-m 'to place', which, as has been said, is the only classical type of infinitive.
- (10) Suffix -tno- -tnno-. Locative Avest. aiwi-šōi-pnē 'to inhabit', O.Pers. car-tanaiy 'to do'. See II § 69 p. 161.¹) But these may be regarded as the dative from stems containing the suffix -ten-.
- (11) Suffix -tro-. Dat. Avest.  $dar^e$ - $pr\bar{a}i$  'to hold fast' (cp. 6).
- (12) Suffix -io- (cp. -io- as participial suffix § 1099.3). Dat. Skr. bhuj-yāi 'to enjoy', also -yaj-yā 'to honour' like sakhyā, and -yájyāya 'to honour' like vīkāya (III § 246 p. 145), Avest. vaed-yāi 'to recognise'. Skr. a-vyáth-iṣ-yāi beside the s-Aorist 2<sup>nd</sup> sing. mid. vyath-iṣ-thās from vyath- 'to waver' (Bartholomae as cited, 229 f.). Loc. Avest. vereiāyē 'to help on' (Bartholomae, as cited, 240). Acc. Skr. -vidya-m 'to find'.

The same suffix occurs in the Aryan inf. in \*-dhiāi (dative), as Skr.  $v\acute{a}ha$ -dhyāi Avest.  $vazai\bar{d}y\bar{a}i$  'to convey, carry'. This form is a combination of the two noun-stems vaha- and dh-ya- ( $\sqrt{dh\bar{e}}$ -), compare these other forms, also used

<sup>1)</sup> The connexion there assumed between the Latin gerund in -ndoand the Lithuanian participia necessitatis in -tina- now seems to me very dubious. See Remark to § 1103.

as infinitive,  $vay\bar{o}$ -dhéyāya  $vay\bar{o}$ -dhāi 'for giving of strength' and  $\dot{s}rad$ -dhé 'for cherishing of trust'. When  $v\acute{a}hadhy\bar{a}i$  had got associated with  $v\acute{a}ha$ -ti 'conveys, carries', Sanskrit formed  $i\ddot{s}ay\acute{a}$ -dhyāi beside  $i\ddot{s}ay\acute{a}$ -ti 'is strong',  $prn\acute{a}$ -dhyāi beside pr-n $\acute{a}$ -ti 'fills', Avest.  $sr\bar{a}vayeidy\bar{a}i$  beside  $sr\bar{a}vayeiti$  'causes to hear',  $ver^en$ -dyāi beside  $ver^en$ -tē 'chooses' (§ 599 p. 142),  $mer^eng^e$ -dyāi beside  $mer^enc$ -inti 'they destroy' (§ 626 p. 162) and the like. See § 1088. 9.

- (13) Suffix -iā-. Acc. Avest. xwairyam 'to devour'.
- (14) Suffix -t-io- (cp. -t-io- as a participial suffix § 1100. 4). Dat. Skr. i-tyāi 'to go'.
  - (15) Suffix -uo-. Loc. Avest. dā-vōi 'to place, to give'.
- (16) Suffix -teuo- (cp. Gr. διωκ-τέο-ς § 1099.4). Dat. Skr. dά-tavāi 'to give', also sár-tavā 'to stream' like sakhyā (III § 246 p. 145). See Bartholomae as cited 224 ff., where conjecture a is offered by way of explaining the double accent.
- § 1090. The Sanskrit Gerund (II § 108 p. 327) in -y-ā -ty-ā, as ā-gam-ya ā-ga-tya lit. with a coming' (III § 278 p. 182), and that in -tvā as šru-tvā lit. with a hearing' (II § 108 p. 327, III § 279 p. 183), are Instrumental. There is another group in -tvī, as bhū-tvī, which Bartholomae explains as locative (Bezz. Beitr. xv 227, 240, 241); a group in -tvāya, which is dative, e. g. drš-tvāya (see Bartholomae, pp. 239 f.); and an accusative "adverbial gerund" as abhy-ā-krāma-m 'approaching'.
- § 1091. Another class of verbal substantives in Sanskrit consists of the forms which are found in the well-known periphrasis with cakára ása babhúva, the accusative in -ām, as vidám. See § 896, p. 445.
- § 1092. In Armenian, the Inf. has an *l*-suffix, as *ta-l* 'to give' from indic. *ta-m*. See II § 76 p. 202, Bugge, Etruskisch and Armenisch I 15.
  - § 1093. Greek Infinitive.
  - (1) It is doubtful whether χεῦ-αι ἐνέγκ-αι and the like

are the dative of Root-Nouns, to be placed with Sanskrit and Latin infinitives such as  $-\dot{a}j-\bar{e}$  and  $ag-\bar{\iota}$ . See § 1088. 1.

- (2) Dative in  $-\sigma$ - $\alpha$ , belonging to the s-aorist, e. g.  $\delta \epsilon \tilde{\iota} \xi \alpha$ . See § 1088. 2. Thess. aor.  $\delta \nu$ - $\gamma \rho \dot{\alpha} \psi \epsilon \iota \nu$  (Att.  $\dot{\alpha} \nu \alpha$ - $\gamma \rho \dot{\alpha} \psi \iota \iota \iota$ ) with  $\epsilon \iota = \alpha \iota$  (I § 96 p. 90), and  $-\nu$  added on the analogy of other infinitives.
- (3) Suffix -men-. Dative - $\mu\epsilon\nu$ - $\alpha\iota$ , loc. - $\mu\epsilon\nu$ , e. g.  $\delta\acute{o}$ - $\mu\epsilon\nu\alpha\iota$   $\delta\acute{o}$ - $\mu\epsilon\nu$ . See § 1088.3. By contamination of - $\mu\epsilon\nu$  and - $\epsilon\iota\nu$  ( $\phi\acute{e}\rho\epsilon\iota\nu$ ) arose Rhod. - $\mu\epsilon\iota\nu$ , e. g.  $\vartheta\acute{e}$ - $\mu\epsilon\iota\nu$ . Cret.  $\delta\acute{o}$ - $\mu\eta\nu$  is probably, like  $\delta\acute{o}$ - $\mu\epsilon\nu$ , Locative, with a strong-grade formative suffix; cp. Avest. loc.  $ca\check{s}$ -man, see III § 257 p. 158, IV § 1089 Rem. p. 599.
- (4) Suffix -uen-. Dative Cypr.  $\delta \sigma$ - $F \varepsilon \nu$ - $\alpha \iota$  Att.  $\delta \sigma \tilde{\nu} \nu \alpha \iota$  'to give', Att.  $\dot{\alpha} \tilde{\eta} \nu \alpha \iota$  'to blow' for \* $\dot{\alpha} F \eta$ - $(F) \varepsilon \nu \alpha \iota$  (III § 251 p. 153). Forms like  $\delta \sigma \tilde{\nu} \nu$  (Theognis),  $\dot{\epsilon} \xi$ - $\varepsilon \tilde{\nu} \nu$  (Oropus), Lesb.  $\mu \varepsilon \vartheta \dot{\nu} \sigma \vartheta \eta \nu$  may perhaps be locative in -uen like Avest.  $r \tilde{\sigma} i p$ - $w \alpha n$ . See § 1088. 4.
- (5) A Locative in \*-s-en may perhaps explain Att.  $\varphi \acute{\epsilon} \varrho \epsilon \iota \nu$  for \* $\varphi \epsilon \varrho \epsilon \epsilon \epsilon \nu$ . See § 1088. 5.
- (6) Doric and Arcadian infinitives in  $-\nu$ , such as  $\check{\alpha}\varrho\chi\epsilon\nu$   $\mathring{\alpha}\gamma\alpha\gamma\dot{\epsilon}\nu$ , are obscure. See the Author's Gr. Gr.  $^2$  § 146.5 p. 175.
- (7) Perhaps the imperative in  $-o\nu$  (2<sup>nd</sup> sing.), as Syrac.  $\lambda \acute{\alpha} \beta o\nu$  (Att.  $\lambda \alpha \beta \acute{\epsilon}$ ) Att.  $\delta \epsilon \widetilde{\iota} \xi o\nu$ , are infinitive; see § 1088.8.
- 8) The medio-passive Infinitive in  $-\sigma\vartheta\alpha\iota$  is connected with the Skr. inf. in  $-dhy\bar{a}i$   $-dh\bar{e}y\bar{a}y\alpha$   $-dh\bar{a}i$   $-dh\bar{e}$ , see § 1088. 9, and § 1089. 12.  $\epsilon i\delta\epsilon\sigma\vartheta\alpha\iota$  for instance is the dative of a compound consisting of the noun stem  $F\epsilon\iota\delta\epsilon\sigma$  ( $\epsilon \bar{\iota}\delta\sigma\varsigma$ ) + \* $dh\bar{e}$ -\*dh- $\sqrt{dh\bar{e}}$  'place, do'); cp.  $\epsilon \pi\epsilon\sigma$ - $\beta\delta\lambda\sigma\varsigma$  and the like, II § 29 p. 50; the Skr.  $\epsilon rad$ -dh- $\epsilon$  corresponds exactly. After the second member of such compounds had sunk into a mere suffix,  $\epsilon i\delta\epsilon\sigma\vartheta\alpha\iota$  was mentally analysed  $\epsilon i\delta\epsilon$ - $\sigma\vartheta\alpha\iota$  because such was the structure of the forms associated with it,  $\epsilon i\delta\epsilon$ - $\tau\alpha\iota$  and the rest. Then this supposed suffix  $-\sigma\vartheta\alpha\iota$  was added to other tense-stems, and became a type. It received its medio-passive

meaning because this was the meaning of  $-\mu\varepsilon\vartheta\alpha$  - $\sigma\vartheta\varepsilon$  and similar personal endings with  $\vartheta$ .

- § 1094. Italic Infinitive.
- (1) Dat. of Root-Nouns, Lat. depon. pass.  $sequ-\overline{\imath}$   $ag-\overline{\imath}$ , see § 1088. 1.
- (2) Dat. in  $-s-\overline{i}$   $-r-\overline{i}$  = \*-s-a $\underline{i}$ , Lat. depon. pass.  $da-r\overline{i}$  (O.Lat.  $das\overline{i}$ ) fer-ri. Loc. in -s-e -r-e -er-e = \*-s-i \*-es-i, Lat. act. da-re es-se ag-ere. See § 1088. 2.
- (3) In Old Latin, and later in poetic style, we meet with deponent or passive forms with the ending -ier -rier, having the same value as -ī -rī; e. g. ag-ier da-rier. In II § 162 Rem. 2 p. 490 f. an attempt is made to explain this type; and my attempt has been followed by others, those of Henry, Miodoński, and Miles (see footnote, page 595); compare further Stolz, Lat. Gr. 2 pp. 380 f. The origin of these forms is still not quite cleared up.

Remark. If we agree with Fr. Müller (Grundr. der Sprachwiss. III 2 p. 651) that -er is the exponent of the deponent and passive, and that this was added to forms in  $-\bar{\imath}$ , we must suppose that it has been abstracted from forms like Osc. vincter 'vincitur' karanter 'pascuntur'. As pointed out in § 1082. 1, it is possible that the Latin language once had likewise these indicative forms in -er.

- (4) An infinitive with formative suffix -men- is probably to be seen in the Lat. 2<sup>nd</sup> pl. imper. in -minī, as da-minī sequi-minī. See II § 71 p. 165, § 117 p. 373, IV § 1088.3.
- (5) On the Lat. inf. fut. in  $-t\bar{u}rum$ , as  $da-t\bar{u}rum$ , see § 900 p. 448 and no. (7) below.
- (6) An Infinitive type is also to be seen in forms like  $\bar{a}re$  in  $\bar{a}re$   $faci\bar{o}$ , see § 578 p. 120, § 896 Rem. p. 445, § 899 p. 447.
- (7) In Umbr.-Samn. the inf. pres. act. ends regularly in -om, as Umbr. er-om Osc. ez-um 'esse', Umbr. fasiu 'facere' stiplo 'stipulari' (for \*stiplā-om), Osc. deíkum 'dicere' moltaum 'multare' fatíum 'fari'. See II § 60 p. 114, IV § 1088.8, § 1103 Rem., Buck, Der Vocalismus der osk. Spr. 123, von Planta, Vocalismus der osk.-umbr. Dialekte 111 f., 272.

Postgate holds that the Latin inf. fut. in  $-t\bar{u}rum$  represents the same type, and that its ending is \*- $t\bar{u}+erom$ ; see § 900 p. 448.

§ 1095. In Latin there are two Supines, in -tu-m (acc.) and in  $-t\bar{u}$  (loc.), e. g. da-tum da- $t\bar{u}$ . The former occurs in Umbr., aseriato 'observatum' (-o(m) for -u(m), I § 49 p. 42). See § 1088.7.

On the Latin Gerund with -ndo- see § 1103.3.

§ 1096. Where other languages use the Infinitive, Irish has instead a group of nomina actionis which do not lose their noun character, and when an object is exprest, it is put in the dependent genitive (II § 156 p. 471). As a rule, each verb has some noun from the same root ready to be used as the infinitive; the strong verbs having nouns with the suffixes—men-, -ti-, -tu- and others (Zeuss-Ebel, Gr. Celt. 483 ff., Windisch, Bezz. Beitr. II 75, Ir. Gr. pp. 97 ff.), and the weak verbs usually nouns with -tu-, e. g. nertad 'a strengthening' beside nertiam 'I strengthen' (II § 108 p. 329). Most commonly these are used in the dative with do 'to', as Mid.Ir. do blith 'to grind, for grinding' (pres. melim) do nertad 'for strengthening'. This is as near as Irish ever comes to the infinitive of the other European languages.

For the infinitive in Britannic dialects, which differs from Irish only in unimportant particulars, see Zeuss-Ebel, Gr. Celt. 534 ff.

§ 1097. In Germanic there used to be in prehistoric times a noun with the suffix -ono- used in the accusative case as an infinitive; e. g. Goth. itan O.H.G. ezzan 'to eat' = \*ed-ono-m, Goth. áihan O.H.G. eigan 'to possess, own'. These come very near the Skr. ádana-m neut. 'an eating', and Irish infinitive-nouns such as Mid.Ir. blegon 'a milking'. See II § 67 p. 153.

§ 1098. Balto-Slavonic. (1) -ti- forms the infin. stem in Lithuanian, where the infinitive ends with -ti or -të, and in Old Church Slavonic, which has -ti; e. g. Lith. dë-ti dë-të, O.C.Sl. dě-ti 'to place, lay'. There are also Lith. inff. in -tè

- (loc.), as dektè dega 'it burns fiercely' (cp. Leskien, Bildung der Nomina im Lit., 404). See § 1088. 6.
- (2) The Suffix -tu- occurs in the Supines Lith.  $d\check{e}t\bar{u}$  i. e.  $d\check{e}-tu$  (cp. opt. 1st pl.  $d\check{e}tum-bime$ ) O.C.Sl.  $d\check{e}-t\check{u}$  (acc.) and O.C.Sl.  $d\check{e}tu$  (loc.), beside which observe Pruss. acc.  $d\bar{a}-tun$   $d\bar{a}-ton$  and dat.  $d\bar{a}-twei$  'to give' used in the ordinary infinitive way (the more usual ending for this meaning is -t, as  $d\bar{a}-t$ ). See § 1088. 7.
- (3) A verbal substantive in -ĕ is seen in O.C.Sl. vidĕ-achй 'I saw'. See § 903 р. 452.

#### 2. VERBAL ADJECTIVES.

- § 1099. As already explained, no clear line can be drawn between Verbal Adjectives (Participle, Gerundive) and other Adjectives. I mention first such suffixes as are found in more than one language with verbal adjectives.
- (1) -to-, part. perf., mostly passive. \*dhɔ-tó-s 'placed, laid': Skr. -dhitá-s hitá-s Gr. θετό-ς Lat. crēditu-s Lith. dēta-s. Mid.Ir. do-breth 'datum est Skr. bhṛ-tá-s 'borne'. Goth. vaúhr-t-s Avest. varš-ta- 'done'. O.C.Sl. žę-tŭ 'cut, mown' Skr. ha-tá-s 'struck, killed'. See II § 79 pp. 218 ff., § 140.3 and 4 p. 452 f.
- (2) -no- -eno- -ono-, part. pret., mostly passive. Skr. pūr-nά-s 'filled', Alban. θεηε (Gegian dialect θαη) 'said' for \*θons-no-(G. Meyer, Kurzg. Alban. Gramm., p. 42 f., Alban. Stud. II 76, III 65 f.), O.H.G. gi-tān 'done' O.C.Sl. o-děnŭ 'done again, turned over', A.S. bund-en O.Icel. bund-enn Goth. bund-an-s O.H.G. gi-buntan 'bound', O.C.Sl. nes-enŭ 'borne'. See II §§ 65—67 pp. 138 ff., § 140.3 p. 452.
- (3) -io-, part. fut. pass. (Gerundive). Skr. dfś-ya-s dárś--iya-s 'conspiciendus, visible, worth seeing', Goth. un-qēp-s 'inexpressible' O.Sax. un-fōd-i 'insatiate' (cp. also Gr. άγ-ιο-ς 'venerandus' Lat. ex-im-iu-s 'eximendus, remarkable'). See II § 63 pp. 123 ff., § 140 p. 452.
- (4) -teuo-, -tuo- -tuuo-, part. fut. pass. (Gerundive). Gr. διωχ-τεό-ς 'to be followed' for \*-τερο-ς (Hesiod φατειό-ς for

- \*φα-τε--ιο-ς?), Skr. kar-tavyà-s 'faciendus' (implies \*kar-tava-, cp. inf. in -tavāi § 1089.16 p. 601), Skr. kár-tva-s kár-tuva-s 'faciendus'. See II § 61 p. 116, § 63 p. 127, § 64 p. 135, § 140 p. 452.
- (5) -lo-. Armen. part. aor. act. and pass., gereal 'capiens', captus' from gerem capio', O.C.Sl. part. pret. act. II nes-lu 'having borne'. See II § 76 p. 212, § 140 p. 451.
- (6) -ent- -nt-, part. pres., aor., and fut. act. Skr. bhárant-Gr. φέρων Lat. ferens Goth. bairand-s O.C.Sl. bery 'ferens', Lith.  $v\tilde{e}\check{z}\bar{q}s$  'vehens'. s-Aor. Skr.  $dh\acute{a}k$ - $\check{s}$ -at- 'burning', Gr.  $\pi\acute{e}\psi\bar{\alpha}\varsigma$ 'cooking'. sio-Fut. Skr. dā-syá-nt- Lith. dial. dů-sius for \*-sians High Lith. dử/sēs Gr. δώσων 'daturus'. See II §§ 125 f. pp. 394 ff., § 140 p. 451, IV § 491 p. 50 footnote.
- (7) -ues- part. perf. act. Skr. ririk-vás- Gr. λελοιπ-ώς Lith. lìkęs 'having left', O.C.Sl. mlūz-ū 'having milked'. See II § 136 pp. 438 ff., § 140 p. 451.
- (8) -meno- -mono- -mno-, part. mid.-pass. Pres. Skr. yája--māna-s Avest. yaza-mna- Gr. άζό-μενο-ς from  $\sqrt{i}$ aĝ- 'honour', Pruss. po-klausi-manas (i) nom. pl. fem. 'being heard'. Skr.  $d\bar{a}$ -syá-māna-s Gr.  $\delta\omega$ -σό-μενο-ς from  $\sqrt{d\bar{o}}$ - 'give'. Perf. Gr.  $\delta \varepsilon - \delta \delta - \mu \varepsilon \nu \sigma - \varsigma$ . The suffix  $-\bar{a}na$ , which replaces this in Sanskrit with unthematic stems, e. g. pres. dá-dh-āna-s perf. riric-ānά-s, may perhaps come from \*-m̄no-. See II § 67 Rem. p. 152, § 71 pp. 163 ff., § 140 p. 451.

§ 1100. Aryan.

- (1) -to-, part. perf. mostly passive. Skr. kr-tá-s Avest. kere-ta- O.Pers. kar-ta- 'made', Skr. Avest. O.Pers. i-ta- 'gone'. See § 1099.1.
- (2) -no-, in Sanskrit, beside -to-, as  $p\bar{u}r$ - $n\dot{a}$ -s =  $p\bar{u}r$ - $t\dot{u}$ -s'filled', bhinná-s 'split'. See § 1099.2.
- (3) -io-, part. fut. pass. (Gerundive), Skr. dŕś-ya-s dárś--iya-s Avest. dares-ya- 'conspiciendus, visible'. See § 1099.3.
- (4) Skr. -t-ya- instead of -ya- (3) when the root ends in a short vowel, as ký-tya-s 'faciendus'. See II § 63 p. 123. Cp. infin. i-t-yāi beside bhuj-yāi § 1089.12, 14 pp. 601 f.
  - (5) Skr. -āy-yā -āy-iya-, part. fut. pass., based upon the

Infinitive in -āy, as śraváy-iya-s 'laudandus, praiseworthy'; next we have stušéyiya-s 'celebrandus, praedicandus' based upon the Infin. stu-ṣ-é (§ 1089. 2 p. 599). Cp. Mod.H.G. der zu lobende, ein zu lobender from zu loben.

- (6) Skr. -tva- -tuva- and -tavya-, part. fut. pass.,  $k\acute{a}r$ -tva-s  $k\acute{a}r$ -tuva-s and kar- $tavy\grave{a}$ -s 'faciendus'. See § 1099. 4.
- (7) Skr. -anīya-, part. fut. pass., derived from nomina actionis in -ana-m (II § 67 p. 150), as karaņīya-s 'faciendus' from karaṇa-m 'a making', cp. grhamēdh-tya-s adj. of grhamēdhá-s 'house offering', trt-tya-s 'tertius' (II § 63 p. 122). These gerunds did not grow common until the later period.
- (8) Skr.  $-\bar{e}nya--\bar{e}niya-$ , part. fut. pass., as  $dr \dot{s} \dot{e}niya-s$  'conspiciendus', from an s-aorist  $yas-\dot{e}nya-s$  'cohibendus'. A suggestion may be offered that this form comes from the infin. with  $-\bar{e}$ ; compare the remarks on -na- as a secondary suffix in Sanskrit, vol. II § 66 p. 142.
- (9) -ent- -nt-, part. pres., fut., and aor. active. Skr. s-ánt-Avest. h-ant- 'being', Skr. váha-nt- Avest. vaza-nt- 'vehens', fut. Skr. vak-šyá-nt- Avest. vax-šya-nt- from vac- 'to speak', s-aorist Skr. dhák-š-at- from dah- 'to burn'. See § 1099.6.
- (10) -o-, part. pres. active. Skr. pra-mṛṇá-s 'destroying' with indic. -mṛṇá-ti, Avest. per sō 'asking' with indic. per sa-iti. See III § 198 p. 78.
- (11) Skr. -u-, part. pres. active of s-Desideratives (§ 667 pp. 198 ff.), as dipsú-š 'wishing to hurt' beside indic. dipsa-ti, and from verbs in -áya-ti (§ 794 pp. 326 ff., § 795 pp. 330 f.), as bhājayú-š from indic. bhājáya-ti. See II § 104 p. 314. With the latter participles compare those from denominative verbs, such as aśvayú-š. II § 105 p. 319.
- (12) Skr. -uka-, part. pres. active, formed from -u- (11) with -ka-, as śikṣu-ka-s 'sharing' (specially common in the Brāhmanas). See II § 88 p. 264.
- (13) -ues-, part. perf. active. Skr. ci-kit-vás Avest. ci-kip--wah- beside indic. Skr. ci-két-a 'knows'. See § 1099. 7.
  - (14) Skr. -tavant-, part. perf. active, formed from -ta- (1)

with -vant-, as krtá-vant- 'factum habens, πεποιηκώς' (cp. the unique Avestic (vī-)verezda-vant- == ai. vrddhá-vant- from vardh- 'to help, exalt'). See II § 127 p. 406, Bartholomae, Stud. zur idg. Sprachg. 1 14 ff.

- (15) Skr. -māna- Avest. -mana- -mna-, part. mid.-pass. with thematic stems. Pres. Skr. bhára-māna-s from bhar- 'to bear', Avest. bareze-mana- bareze-mna- from barz- 'to raise oneself, be high'. Fut. Skr. yak-šyá-māṇa-s from yaj- 'to honour' Avest. varešya-mna- from varz- 'to work'. See § 1099.8.
- (16) Ar. -āna-, part. mid.-pass. with thematic stems. Pres. Skr. dá-dh-āna-s Avest. da-ħ-āna- beside indic. Skr. dá-dhā-ti 'places'. Perf. Skr. ja-gm-āná-s from gam- 'to go', Avest. vāverez-āna- from varz- 'to work'. The ground-form of this -ana- is doubtful. See § 1099.8.

## § 1101. Armenian.

- (1) -lo-, part. aor., e. g. gereal 'capiens, captus', from the c-Aorist gereceal (§ 905 a p. 453). See § 1099.5.
- (2)  $-au\lambda$  (later  $-\bar{o}\lambda$   $-o\lambda$ ) forming nomina agent s and part. pres. act., e. g. geraul 'captor, capiens'. Bugge, Idg. Forsch. 1 437 derives -auλ from Idg. -a-tro- (II § 62 pp. 118 ff., § 119 pp. 376 ff.).
- (3) Two part. fut., both with active and passive meaning, are made from the infinitive in -l + -i and -oc, as gereli and gereloc.

## § 1102. Greek.

- (1) -to-, part. perf., mostly passive (but generally used as adj.) and gerundival (expressing capacity, possibility, or the like, II § 79 p. 220); e. g. δρα-τό-ς 'skinned', λυ-τό-ς 'capable of being set free'. See § 1099.1.
- (2) -teuo-, part. fut. passive, as διωκ-τέο-ς 'fit to be pursued'. See § 1099.4.
- (3) -ent- -nt-, part. pres., aor., and fut. active, as λείπων  $\lambda \iota \pi \omega \nu \lambda \epsilon \iota \psi \bar{\alpha} \zeta \lambda \epsilon \iota \psi \omega \nu$  from  $\lambda \epsilon \iota \pi \omega$  T leave. See § 1099. 6.
- (4) -yes- (-yet), part. perf. active, as  $\lambda \varepsilon \lambda o i \pi \omega \varsigma$ . See § 1099.7.

- (5) -meno-, part. mid.-pass. from any mid.-pass. indicative; λειπό-μενο-ς λιπό-μενο-ς λειψά-μενο-ς λειψό-μενο-ς λε-λειμ-μένο-ς. See § 1099. 8.
  - § 1103. Italic.
- (1) -to-, part. perf., mostly passive (for the use of this participle with deponents see II § 79 p. 219 f.). Lat. scrīp-tu-s, Umbr. screihtor pl. 'scripti' Osc. scriftas pl. 'scriptae'. See § 1099. 1.
- (2) Lat. - $t\bar{u}ro$ -, part. fut. active, as  $dat\bar{u}ru$ -s. Possibly developed out of the inf. in - $t\bar{u}rum$ . See § 900 p. 448.
- (3) Ital. -endo-, part. fut. passive (Gerundive.) Lat. ferundu-s ferendu-s faciundu-s faciendu-s, juvandu-s, videndu-s, Umbr. an-ferener gen. 'circumferendi' pihaner gen. 'piandi', Osc. úpsannam 'operandam'. In the explanation suggested in vol. II § 69 p. 161 f. (cp. Bartholomae, Stud. idg. Spr. II 96) I went far astray, chiefly because the Lith. participles in -tina-s, which I compared, are probably analogical and belong only to Balto-Slavonic (§ 1106.3). Of the explanations which I have met with in the meantime, those of Thurneysen, Conway, and Dunn (for references see footnote to page 596) in my opinion none will do.

Remark. Weisweiler's investigations (for which see same page) make it extremely probable that 'something to be done' is really the original meaning of this Gerundive; and that the Gerund (which is not found in our records of Umbrian or Samnite) is a mere outgrowth of the gerundive, such a phrase as virtūs colenda est suggesting colendum est (similarly patriae dēfendendae causā suggested dēfendendā causā) as an impersonal construction with similar meaning (colitur = cultiō fit, cultum est = cultiō facta est, hence colendum est = cultiō facienda est). And since the other Idg. languages, so far as we know, have nothing which we can compare with the suffix of the Italic gerundive, it becomes probable a priori that the gerundive grew up in Italy, and was based upon the infinitive of purpose, just as Mod.H.G. der zu lobende, ein zu lobende comes from zu loben, and Skr. šravāy-iya-s 'laudandus' from inf. \*šravāi (§ 1100.5 p. 102). On this I base the following conjecture.')

<sup>1)</sup> This was written before I learnt that Pott (Et. Forsch. II <sup>1</sup> 239 and II <sup>2</sup> 517) and Schröder (Kuhn's Zeitschr. XIV 354) had already analysed ferendus into feren-do-, and that in the final part of it, -do-, they saw the Mod.H.G. zu (Engl. to). But their view of the first part of feren-do- is untenable.

In pr. Italic it was customary to combine the accus. infinitive in -m, such as Umbr. fero(m) fasiu(m), with the postposition \*dō or \*de 'to' (op. Lat. en-do indu, dō-nicum dō-nec, Avest. vaesman-da 'to the house', Gr. ημέτεεον δε ημέτεεον δῶ, O.Ir. do 'to' A.S. tō O.H.G. zuo and zi 'to', see III § 223 Rem. 3 p. 102, Fick, Wtb. 457), the combination meaning the same as our to with the infinitive. -md- must have become -nd- in pr. Ital. (op. O.Lat. quan-de Umbr. pane and the like, I § 207 p. 174); this isolated the inf. + postposition from the ordinary inf. in -m. Then these forms ending with dō or de were made the foundation for derivative adjectives in the o-declension, on the same principle as subjugu-s, antenovissimu-s, perfidu-s come from sub jugō, ante novissimum, per fidum (II § 15 p. 31, § 35 p. 62).

The explanation of the forms plendu-s videndu-s flandu-s arandu-s depends upon our view of the Umbr.-Samn. infinitive (Osc. fatium 'fari' censaum 'censere' Umbr. stiplo(m) 'stipulari' - -o(m) contracted from  $-\bar{a}$ -om). Firstly, these may be transformations of  $-\bar{e}$ -m and  $-\bar{a}$ -m on the lines of the thematic conjugation. In view of all that has been said in § 487 p. 41 f. §§ 578 ff. pp. 118 ff., and of infin. forms like Avest. dam 'to place, give' (§ 1089.1 p. 599), \*plē-m \*vidē-m \*flā-m \*arā-m in the same sense as plēre, vidēre etc. would seem nothing strange. In Lat. plendu-s arandu-s Osc. úpsannam, then, we should see these older infinitive forms unchanged. For Lat. rotundu-s (beside rota) rubicundu-s (beside rubicare Rubicō from \*rubico-) it would be needful to assume inf. \*rotō-m \*rubicō-m (cp. aegrō-tu-s); rotundu-s for \*rotondo-s like latrunculu-s for \*latron-And the agreement in form between arandu-s videndu-s and part. pres. arant- vident-, whilst in \*ferondo-s (ferundu-s) the vowel did not agree with ferent-, produced very soon, indeed in pr. Italic, the Secondly: it is possible that even in pr. Italic re-formate ferendo-s. the Oscan forms fatium censaum existed, in the shape \*-ē-jom \*-ā-jom (cp. 1st sing. pres. in \*- $\bar{e}$ - $i\bar{o}$  \*- $\bar{a}$ - $i\bar{o}$ ), and so there were also in use -ē(i)on-do- -ā(i)on-do- (cp. Lat. faciundu-s beside Umbr. fasiu(m) 'facere'). Then the relation of \*ferondo- to the participial stem \*feront-(cp. eunt- etc. II § 126 p. 401) produced not only ferendo- following ferent- but also arando- videndo- following arant- vident-. In this case a simple explanation is possible for rotundu-s rubicundu-s.2) would go with rotare rubicare, and would come regularly from \*rotā(i)ondo- \*rubicā(i)ondo- through the intermediate stage of \*rotōndo- ·

<sup>1)</sup> This would allow a simple explanation for Umbr. suboco in the formula sobocau suboco 'I entreat entreatingly'. It would be inf. like Lith. dektè in dektè dēga 'it burns up bright' (cp. § 473 Rem. p. 17 f.). But it would be perhaps not acc., for \* $-\bar{\alpha}$ - $\dot{\alpha}$ 0 ('with weeping'). For the ending of the 1st sing. subocau see § 980 p. 520.

<sup>2)</sup> What is gained by connecting the group in -cundu-s with the Greek \*-perfect I oannot see (cp. Weisweiler, p. 41; Johansson, Beitr. Gr. Spr., 91 f.).

\*rubicondo- (op. 1st sing.  $rot\bar{o}$  for \*roto-(i)o — rotundus would mean 'that which goes rolling, rollable'. These then will have kept the older form of the infinitive more exactly than rotandu-s rubicandu-s, because they so soon became simple adjectives.

Of these two explanations I prefer the second.

The Lat. adjj. in -bundu-s cannot be directly connected with the b-future, as is shewn by furibundu-s (beside furere) pavibundu-s (beside pavēre) and like forms. If we are not to start from nouns with the suffix -bho--bhā- (II § 78 pp. 216 ff.), the best thing is to suppose that they are compounds containing -bhy-o- (from bey-'to be come, be', cp. Skr. â-bhv-a-m). We then compare the Skr. vâha-dhyāi and similar compounds (§ 1089. 12 p. 600).

- (4) -ent- -nt-, part. pres. active. Lat. prae-sēns Osc. prae-sentid 'praesente', Lat. sedēns Umbr. zeřef serse 'sedens'. See § 1099.6.
- (5) The part. perf. active with -ues- must have been living in Umbro-Samnite, because it was used to make the future perfect, as Umbr. dersicust 'dixerit'; cp. also Osc. sipus 'sciens'. See II § 136 p. 445, IV § 872 p. 421, § 1099.7. p. 606.
  - § 1104. Keltic.
- (1) The -to- of the part perf. (passive), which is contained in the pret. passive, e. g. Mid.Ir. do-breth 'datum est', was exchanged for -te -the, which consist of -to- + -io-; e. g. O.Ir. brithe brethe 'brought'. Cymric had in place of -to- the ending -(e)tic i. e. -t-īco-. See II § 79 p. 232 f., IV § 1099. 1.
- (2) O.Ir. -ti -thi, 1) part. fut. passive ("participle of necessity"); e. g. messi 'iudicandus' carthi carth<sup>a</sup>i 'amandus'. Mod.Cymr. cara-dwy Cornish cara-dow.

Remark. The last who has discussed this participle is Ascoli (Sprachwiss. Briefe, 76 ff.); but he comes to no definite conclusion. Thurneysen writes: "I know no plausible explanation. Ir. -thi admits of no ending with orig. -os or  $-\bar{a}$ . British has for final the diphthong which has developed in stem-syllables from ei (or from  $\bar{e}$  in borrowed words), e. g. O.Bret. in-aatoe, a gloss, 'ineundum' ( $\swarrow ag$ -) Mod.Cymr. caradwy 'amandus'. The suffix perhaps originally had  $\bar{a}$  before the dental even in primary verbs, ep. Brit. \*aga-toi, Ir. bethi for \*biathi 'to cut' beside part. passive  $b\bar{v}$ the (this word bethi I have wrongly explained in Kuhn's Zeitschr. XXXI 92), for-canti 'to teach' for \*-canathi. Its

<sup>1)</sup> The supposed ending -tī -thī is due to a scribe's blunder, dénti 'faciendum' being written dénti.

connexion with the stem of the part. passive, which came about in Irish with primary verbs, must then be secondary; it is not carried out in Old Irish. We should arrive at something like \*-ateivis as the original ending."

### § 1105. Germanic.

- (1) -to-, part. perf., mostly passive, in Weak Verbs and those Strong ones which had a weak preterite (§ 907 p. 454). Goth. salbō-p-s O.H.G. gi-salbō-t 'anointed', Goth. vaurh-t-s O.H.G. gi-worht -woraht 'worked'. See § 1099.1.
- (2) -no- -eno- -ono-, with the same function as -to- (1), only in Strong Verbs. O.H.G. gi-tān 'done', O.H.G. bund-en O.Icel. bund-enn Goth. bund-an-s O.H.G. gi-buntan 'bound' (II § 65 p. 138, § 67 pp. 151, 153). See § 1099.2.
- (3) -io-, part. fut. passive, seems establisht for the earlier periods of Germanic as a participial suffix, e. g. Goth. un- $q\bar{e}\bar{p}$ -s 'inexpressible', O.Sax. un- $f\bar{o}di$  'insatiate'. See § 1099. 3.
- (4) -nt-, part. pres. active. Goth. kiusa-nd-s O.H.G. chiosanti 'trying, choosing' (II § 126 p. 402). See § 1099. 6.

### § 1106. Balto-Slavonic.

- (1) -to- part. perf., mostly passive. Living in all classes of verbs in Lithuanian, as suk-ta-s 'turned'. In O.C.Sl. however its use is circumscribed; an example of it is z = tu 'chopped, hewn, mown' (II § 79 p. 236). See § 1099. 1.
- (2) -no--eno-, with the same function as -to- (1), and in O.C.Sl. much the commoner; e. g. danŭ 'given' nes-enŭ 'borne, carried' (II § 67 p. 151, 154). See § 1099. 2.
- (3) A part. fut. passive is formed in Lithuanian and Slavonic from the part. in -to- (1), and in Slavonic from that in -no- -eno-, the further suffix used for this purpose being -yno- Lith. -ina- O.C.Sl. -ino-; e. g. Lith. sùk-tina-s 'fit to be turned' O.C.Sl. pri-jetinu 'acceptable, preasant', O.C.Sl. ne-iz-d-reč-eninü 'inexpressible'. On consideration of what Leskien says in his Bildung der Nomina im Lit., 255 f., I now believe that the comparison of Lith. -tina- with the O.Pers. infin. in -tanaiy and the Lat. gerundive in -ndo- (II § 69. 2 pp. 161 f.) must be given up.

- (4) O.C.Sl. -lo-, so-called part. pret. active II, e. g. nes-lŭ in neslŭ jesmi 'I have borne' (§ 903 p. 452). See § 1099. 5.
- (5) O.Preuss. -mana-, part. pres. passive: madlas poklausimanas ast 'the prayers are heard'. See § 1099. 8.
- (6) -mo-, part. pres. passive in Baltic and Slavonic; also part. fut. passive in Baltic. Lith. věža-ma-s O.C.Sl. vezo-mŭ 'being carried', Lith. fut. vèszi-ma-s. Add the so-called Lith. part. pres. active II in -da-ma-s, as sùk-dama-s 'turning', which is closely connected with the imperf. -davau (§ 908 p. 455) and must originally have been middle (deponent). Compare Umbr. persnih-mu 'precamino', II § 72.1 p. 166.
- (7) -ent- -nt-, part. pres. and fut. active. Lith.  $v\tilde{e}z\bar{q}s$  O.C.Sl. vezy 'vehens', Lith. fut. dialectic vèszius for \*veszians, High-Lith. vèsz $\bar{q}s$  (O.C.Sl. byšqšteje byšqšteje 'futurum,  $\tau \delta$   $\mu \dot{\epsilon} \lambda \lambda \delta v$ '). See § 1099. 6.
- (8) -ues-, part. perf. active. Lith. mìlž-\(\vec{e}\)s O.C.Sl. ml\(\vec{u}\)z-\(\vec{u}\) 'having milked'. In Lith. also in the so-called part. imperf. act. in -dav\(\vec{e}\)s, belonging to the indic. in -davau (\§ 908 p. 455). See \§ 1099.7.

