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## THE LATIN

## THIRD DECLENSION

## A STUDY IN

## METAPLASM AND SYNCRETISM

A DISSERTATION PRESENTED TO THE FACULTY OF ARTS, LITERATURE, AND SCIENCE OF THE UNIVERSITY OF CHICAGO IN CANDIDACY<br>FOR THE DEGREE OF DOCTOR OF PHILOSOPHY



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## INTRODUCTION.

The Latin third declension has been selected as the basis for a discussion of metaplasm for the reason that it is a typical instance of such declensional amalgamation. In addition to the presentation of facts bearing directly upon this subject, an effort has been made to discuss the relations of the third declension to the corresponding systems of other languages. The treatment of syncretism is of a more general nature, including the phenomena of all declensions and of the Italic, Latin, and Oscan-Umbrian periods. In the third section, it has been my endeavor to discuss in detail the origins of the case endings peculiar to each language and to define the metaplastic and syncretic effects, wherever manifested.

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It is a pleasure to acknowledge the assistance of Professor Carl D. Buck, under whose supervision this work has been undertaken and completed.


METAPLASM. ${ }^{\text {T}}$

Metaplasm may be defined as that process by which are transferred or established upon noun or adjective stems any case endings original to a declension other than that to which the stems affected belong. In short, the effect of the process is to establish in a given system of declension case forms extraneous in origin, but necessarily identical in function with the forms which to a greater or less extent are displaced. The original endings may be either partially or totally eliminated, may exist as the predominating type still possessed of greater force than the encroaching element, or may not appear, and if appearing may exist in few and sporadic instances.

In its origin and development, metaplasm depends upon analogy. ${ }^{2}$ The original condition, in any specific instance, must be a series of case endings distinct in form and peculiar each to its particular system of declension. Between these two parallel series of forms, a point of contact must first have been established. This may result from phonetic change, causing identity of form, ${ }^{3}$ from a similarity in meaning or function, ${ }^{4}$ or by reason of circumstantial elements of formation inherited from the parent speech. ${ }^{5}$
${ }^{1}$ For the subject of metaplasm in general, of. Brugmann, Gr. II, 722; B. Torp, Die Flexion des Pali; Wetter, Zur Geschichte der Nominal-Declination im Russ.; Courtenay, K. S. B., VI, I9 ff.; K. Bojunga, Die Entwicklung der neuhochdeutschen Substantiv-Flexion.
${ }^{2}$ Wheeler, Analogy, 9 ff.; Paul, Principien, 95 ; Bartholomie, K. Z., 29, 524 ff.; Brugmann, Gr. II, p. 722.
${ }^{3}$ E. g., Goth. $i$-stems masc. with gen. and dat. sg. after $o$-stems, balgs, gen. balgis, dat. balga like dags, dagis, daga.
${ }^{4} E$. $g$., Skt. náptr beside napüt after words of relationship. Wheeler, Analogy, 9 ff.; Brugmann, Gr. II, p. 722.
${ }^{s} E$. g., Skt. us $\frac{1}{a} m$ beside us ${ }^{\frac{\alpha}{a}}$ sam to usáas after sthàs; Lith. kirmis, gen. kirmio, beside Lat. vermis, wherein inherited likeness of form between $i$ - and io-stems has caused a metaplasm.

When a point of contact has been established by reason of similarity of form, analogy may occasion a like similarity in the remaining case endings previously distinct in form. Likewise, if the contact be not in form but in meaning or function, the analogy proceeds on the lines observable in the case of analogy from similarity of meaning and diversity of form. ${ }^{\text { }}$

The effects of the metaplastic force are of two distinct types, (i) one series of forms may be entirely eliminated, or the type newly created may exist beside the original as a distinct word, e. $g$., Skt. náptr beside napāt, or (z) the result may be an amalgamation, in which traces of each of the two series of forms may be observed. The former type may be characterized as Metaplasm by Transfer; the latter as Metaplasm by Amalgamation. The representative instances of each type may be enumerated as follows:

## I. METAPLASM BY TRANSFER.

In the Aryan languages, many consonant stems have been transferred to the $o$-declension by reason of identity of form at the acc. and inst. sg. In Pali and Prakrit the process has been so extended as nearly to eliminate the consonant declensions. ${ }^{2}$ In Sanskrit ráptr has arisen beside napāt by the influence of other words of relationship; ussas has been re-formed on the analogy of nouns in -ás as sthäs; from the contact of -vant- and -ramstems have resulted many pairs of forms inflected after either system. ${ }^{3}$ Other instances are, in Greek, the extension of $-\tau$ -
 the transfer of masculine -es-stems to the $\bar{\pi}$-declension, e. $g$., इoкрáт $\eta$ s, इoкрát $\eta v$; in Latin, the transfer of $u$-stems to the $o$-declension; in Germanic, the passage of the consonant stems into the vocalic declensions, e. g., Goth. fōtus, handus, tunpus; O. H. G. zand, fuoz;4 in Balto-Slavic the transfer of consonant stems to

[^0]the $i$-declension and the change of $i$ - to io-stems, e. g., kirmis, gen. kirmio: Skt. k!mis. ${ }^{\text {a }}$

## II. METAPLASM BY AMALGAMATION.

This type appears in Aryan in the composite declension of $-i e n$-stems containing forms peculiar to the $i$-declension, e. g., acc. balinam, beside balibhis, baliṣu; Av. káninam beside ka'nibyō and in the extension of $n$-forms to the vocalic and $r$-stems; in Greek in the amalgamation of the $-i \bar{a}-$ and $-\bar{i}-:-i \bar{e}$-stems; in Germanic in the $i$-declension of adjectives, an amalgam of $i$ and $i o$-stem forms, ${ }^{2}$ in the confusion of $a$ - and $i$-stems in English ${ }^{3}$ and in such declensional types in Gothic, as frijordam to nom. pl. frijonds : nahtam to nahts*: baurgim to baurgs and dulpais to dulps; in Balto-Slavic in such types as dantis, gen. pl. dant $\tilde{u}$ : szirdis, szirdü; O. B. jelene, gen. pl. jelenz and in the appearance of $i$ of the $i$-stems before suffixes in $m$ among the consonant stems, e. g., Lith. akmenimis, O. B. kamencme; in Italic in the so called Latin third declension, to which consideration will now be given.

The third declension of Latin seems to be the most thorough. going and complete instance of declensional amalgamation observable in the Indo-European languages, to so great an extent have the original types, the $i$ - and consonant declensions, lost their individuality in the composite system which has resulted. It appears that this instance of netaplasm is the result of certain circumstances of stem formation, inherited from the parent speech, or exactly of a system of double formation, characteristic of the Indo-European period. It is, therefore, pertinent to consider this subject by reason of its probable bearing upon the main question in hand, and as well for any light which may be thrown upon the third declension as a whole, its constituent elements, and the relations of those groups to related words of other languages.
${ }^{1}$ Brugmann, Gr. II, p. 732.
${ }^{2}$ Streitberg, P. B. B., I4, 210 ff.; K. Z., 3I, 5 Iff.
${ }^{3}$ Kluge, Paul's Gr. I, p. S99; Sievers, Ags. Gr. S. 252.
${ }^{4}$ Kluge, Paul's Gr. I, 357.

## PARALLEL FORMATION IN INDO-EUROPEAN.

It appears that the extension of the primary root to substantival or adjectival formations was not in every instance accomplished by the addition of a single, specific, suffixal element. On the contrary such extension seems to have been directed along various axes of formation by the addition of different stem elements to the same root. Hence there may have existed side by side parallel forms, constructed upon the same primary root with practical identity of meaning but different systems of declension. Of the parallelisms of formation which may be inferred, two, in particular, are clearly defined. These may be characterized as follows :
I. Upon a given root there may have been formed, (i) a root-noun, or consonant stem, (2) an $o$-stem, and (3) a form in $i$, or, if the same principle be applied to suffixes, consonant, $o$ - and $i$-stems may exist side by side upon the same root with substantial identity of meaning.
II. In like manner a given root may appear (1) as a rootnoun or consonant stem, (2) as an $o$-stem, or (3) as a formation in -io-. These types, assumed at this point, are substantiated by the following material:
i. Consonant $O$ - and $I$-Stems.

Skt. dvăr, dúr "door" : Skt. dvăra-s, Lat. forum, Grk. $\theta \dot{\imath} p a$, Goth. daur: Lat. forēs (pl.), Lith. durys (pl.) "door."

Skt. path " path" : Grk. $\pi$ áro-s : Lat. pōns, O. B. pąte " way," O. Pr. pintis, Skt. pathī-s.

Grk. $\chi \not{ }^{\prime} v:$ Skt. han̂sa-s " goose" : Lith. ząasis " goose."
Skt. an-ákss- : Skt. catur-akṣá-s"four-eyed": Skt. áksi-s"eye."
Grk. (Doric) ${ }^{\text {fs }: ~ L a t . ~ a u r i s, ~ L i t h . ~ a u s i s ~ " e a r, " ~ O . ~ P r . ~ a u s i n s, ~}$ Av. $\bar{u} \bar{s} \imath ̄(d u)$ "ears."

Skt. nás " nose" : Skt. năsā, O. B. nosz, " nose," Lat. nāsu-s : Lat. nārēs (pl.), Lith. nósis "nose."

Grk. övvé : Lat. unguis, O. I. niga : Lith. nâgas "nail," Skt. nakhá-s.

Skt. nábh: O. Pr. nabis, Skt. nâbhi-s" navel": O. H. G. naba, Lith. naba.
O. B. gradz "city," O. N. gardr: Goth. gard-s"house," Lith. žar̃lis, ${ }^{\text { }}$ Lat. urbs.

Grk. $\theta \eta$ 只 : Lat. feru-s, fera: O. B. zvěre, "wild animal."
Goth. fisks" fish," O. I. casc: Lat. pisci-s.
Skt. akṣá-s "axle," Grk. ̈̈ $\mu a \underline{\alpha} \alpha$, O. H. G. ahsa: Lat. axis, Lith. aszis, O. B. osc "axle."

Lat. os, Av. asto (gen. sg.), "bone": Skt. ásthi•s, O. B. kostz "bone."

Skt. $̧ \vartheta \vec{a}$ "dog," Av. sp̄̄, Grk. кv́ $\omega v$, Lith. szöu: Skt. funi-s, Av. suniš, Lith. szunis.

Lat. carō, Umbr. karu: Lat. carnis.
Grk. кацли́, Lat. campus, Lith. kampas "corner": Lith.keturkampis "four-cornered."

Lat. clāvus, O. I. clui : Lat. clāvis, Grk. $\kappa \lambda \eta{ }^{\prime}(f) \iota s$.
Skt. pratisthä"standing-place": pratisthi-s.
Lat. haedus : Goth. graits.
O. B. dala : Lith. dalis.

Skt. abhi-hrút"injury": abhi-hruti-s.
Goth. heizu-frauja "house-master," O. B. po-sivz, Skt. féva-s, fiva-s: Lat. civvis, Osc. cevs.
O. N. hlaun (n) "buttock," hlauna-svert: Skt. fróni-s "hip," Av. sraoniš, Lith. szlaunis, Lat. climi-s.

Grk. $\pi \tau \notin \rho v a, ~ O . ~ H . ~ G . ~ f e r s n a ~ " h e e l ": ~ S k t . ~ p a ̈ r s n i-s ~ " h e e l . " ~$
Goth. priuts-fill" leprosy": Lat. pellis.
Skt. vésan "manly ": v́rsni-s, Av. varšniš "ram."
Av. raohošna and raohošniš "bright."
Skt. áfna-s and áfni-s "stone."
Skt. usná-s and usni-s "warm."
Grk. äкко-s, Skt. afra-s : Lat. ācer, ācris, Grk. őкрє-s, Osk. AKRID, Skt. -afri-.

Lat. sacer, $-a, u m$, Umbr. SAKRA: Lat. sacer, $-e$, Umbr. sakre.
Goth. fagrs "fair" : Umbr. pacier (nom. pl.) "pacati."
Av. tizra- and tizris "pointed."
Lat. secūris and O. B. sěkyra "ax."
${ }^{1}$ A io-stem transferred from $i$-declension.

Lat．būra and büris．
Skt．vamrá－s and vamrít＂ant．＂
Skt．jivá－s and jivi－s＂alive．＂
Skt．fubhra－s and fubheri－s＂white．＂
O．B．bylz and bylc．
Grk．aủ入ウ́ and $\alpha$ v̉ $\lambda \iota$ ．
Grk．кav̂̀os，Lith．kańlas＂bone＂：Lat．caulis．
Skt．matkt＂night，＂Grk．vî $\xi$ ，Goth．nalıt－s：Skt．mákta－m：Skt． nákti－s，Lat．nox，Lith．naktis，O．B．nos̀tc．

Skt．dacait－＂tenth＂：Grk．סєкатós，Goth．taihunda，Lith，deszîm－ tas ：Skt．daçati－s，Lith．deszimtis＂ten，＂O．B．desetc．

Lat．hortus，Osc．hurz，Grk．גópтos：Lat．cohors．
Suffix－tāt－beside $-t \bar{a} t i-{ }^{\text {T}}$

## 2．Consonant $O$－and $1 O$－Stems．

Skt．păd＂foot，＂Grk．$\pi \hat{\omega} s$, Lat．pēs，Umbr．peři：Skt．páda－m ＂step，＂Grk．$\pi \epsilon \in \delta o v, ~ U m b r . ~ p e r ̌ u m, ~ L i t h . ~ p e d a: ~ S k t . ~ p a ̆ d y a-s, ~ A v . ~$ pa＇dya－，Grk．$\pi \epsilon \epsilon \zeta \mathrm{c}, \mathrm{L}$ ，at．aca－pedius，Lith．lingzua－pedys＂light－ footed．＂

Skt．víf＂village，＂Av．vis，O．P．vip ：Skt．vefá－s＂house，＂ Av．và̄sa，Grk．оїкоs，Lat．vīcus ：Skt．vefíam，Grk．oiкiov．

Skt．vak＂voice，＂Av．valo＇š，Lat．vōx：Skt．vōká－s＂word，＂Av． vaca－：Skt．vakya－m＂speech，＂Lat．cōnvícium．

Skt．raj＂king，＂Lat．rēx，O．I．rī，Goth．reik－s ：Skt．rajy＇á－ ＂kingly，＂Lat．regius，Goth．reiki．

Skt．napät＂grandson，＂Av．napia3，Lat．nepōs：Skt．napty＇a－s， Grk．${ }^{\alpha}-v \in \psi \iota o s$.

Skt．ksám＂earth，＂Av．$z \overline{a_{3}}, G r k . ~ \chi \theta \hat{\omega} v:$ Lat．humus，Grk． $\chi^{\alpha \mu u i}: ~ О . ~ B . ~ \check{z c m l j a, ~ L i t h . ~} \check{z} e ̂ m e ं " e a r t h . " ~$

I．E．dem＂house，＂Skt．dán，Av．đว̧gg，Grk．$\delta \in \sigma-\pi o ́ \tau \eta s:$ Skt． dáma－s，Grk．סópos，Lat．domus，O．B．domz ：Skt．dámy＇a－．
skt．ruc＂light，＂Lat．lūx：Skt．rocá－s，Grk．入єvкós，Lith．lã̃－ kas：O．B．luca，luce，Lith．lâtkis．
 Lat．iugum，Goth．juk：Skt．y＇ugyu－s．
${ }^{1}$ Brugmann，Gr．II，pl． 290 ff．

Skt. crad-dhī$"$ trust," Lat. cor, Grk. $\kappa \hat{\eta} \rho$, Lith. szird $\tilde{u}$ (gen. pl.) "heart," Grk. ко́ $\rho \delta \iota \alpha$.

Skt. spá̧" spy," Grk. $\sigma \kappa \hat{\omega} \psi$, Lat. auspcx : Lat. vestispica : Lat. auspicium.
O. P. kāra "army," O. B. kara, Lith. karas "war": Goth. harjis "host," Lett. karsch, O. I. cuire.

Skt. náz'a-s "new," Grk. vєós, Lat. novus, O. B. novz : Goth. niujis" new," Lith. naujus, Skt. názya-s.

Skt. ánta-s"end": Goth. andeis, Skt. antya-s.
Lat. orbus, Grk. ópфo- $\beta$ óт $\eta$ s : Goth. arbi "heritage," O. I. orbe.
Lat. ivva, Lith. "isa "berry," O. B. jaga : Lith. iugỹs, Grk. oै\}os.
Lat. porculus : Lat. porcilia, O. H. G. farheli.
Skt. svápna-s"sleep," Lat. somnus, Lith. sãpnas, Grk. v゙ँvos: Skt. svápıya-m, Lat. somnium, Grk. $\epsilon_{v} v$-v $v v t o v$.

Grk. oivov, Lat. vīnum, Arm. gini "wine," Lith. apzeyny̆s "hops."

Goth. kaurn "corn," Lat. grānum: Lith. žirnis "pea."
Skt. márta-s "mortal," Grk. $\beta$ рoтós, ả $\mu-\beta \rho o \tau o s: ~ S k t . ~ m a ́ r t y a-s, ~$ Av. mašija-, Grk. ả $\mu$ - $\beta$ pó $\sigma \iota o s$.

Skt. sahásra-m "thousand," Grk. סєка- $\chi^{i ́ \lambda \iota o \iota: ~ S k t . ~ s a h a ́ s r y a-s ~}$ Grk. $\chi^{\frac{t}{\lambda} \lambda \iota o \iota . ~}$

## THE ELEMENTS OF THE THIRD DECLENSION.

This fact of parallel formation may first be applied to the third declension in a general manner before its effect in the metaplasm is treated. Latin and Oscan-Umbrian possess many $i$ stems which may 1) correspond to $o$-stems in related languages or 2 ) exist beside $o$-stems in the Italic group, c. g., civis, Osc. cevs, Skt. féva-s; piscis, Goth. fisk-s; collus, Lith. kílluas; pellis, Goth. prūtsfill; caulis, Grk. каи̂גos, Lith. kaülas; humilis, Grk. $\chi^{\theta \alpha \mu \alpha \lambda o ́ s ; ~ s i m i l i s, ~ G r k . ~ o ́ \mu \alpha \lambda o ́ s ; ~ l e ̄ v i s, ~ G r k . ~ \lambda \epsilon i ̂ o s ; ~ l e ̀ n i s, ~ O . ~ B . ~ l e ̆ n z ; ~}$ tristis, Skt. trstas; agilis, Skt. ajurás : imberbis and imberbus; inermus and incrmis; exanimus and exanimis; biiugus and biiugis; sacer, $-a,-u m$ and sacer, $-c$.

These relations may be explained as the result of double formation. In the latter case both forms have been preserved:
in the former but one, the $i$-stem type, and, in consequence, a distinction is at once apparent when comparison is made with languages which have preserved only the $o$-stem forms.

A further fact increases this probability. It might be expected that, if the cause be parallel formation, in certain instances, at least, $o$-stems ought to exist in Latin beside $i$-stems in other groups. Such, indeed, is a fact, e. g., Lat. haedus, Goth. gaits; Lat. ferus, O. B. zvěre "wild animal."

The contention that parallelism is the cause for this relation of Latin $i$-stems to $o$-stems in other groups is supported by further considerations. $O$ - and $i$-stems often exist side by side in Latin and, as regards relative function, are assignable to certain groups, to be observed in other languages, as follows:-

1. Forms in $o$ and $i$ may have the relation of adjective and feminine abstract, c. g., Skt. hitcó-, Grk. $\theta \in \tau$ ós, Lat. con-ditus, Lith. preditas, beside Skt. $\bar{a}$-hiti-s, Av. dàtiš, Grk. $\theta$ '́ $\iota \iota s, ~ \mathrm{O}$. B. dětc. For Latin this relation appears in quiētus, quiēs; datus, dōs; grātus, grātēs (pl.); status, station.
2. The parallelism may exist in substantives, e. g., Grk. $\alpha \mu \alpha \xi \alpha$, O. H. G. ahsa, Skt. aksá-s beside Lith. aszis, O. B. osc, Lat. äxis. This type appears in Latin in būra, būris; forum, forēs; clāuus, clāvis; palumbus, palumbis; ' sequester, -tris, sequester, -tri, seques. trum, sequestre.
3. Adjectives in o may stand beside adjectives in $i$, e. g., Grk. $\pi \epsilon ́ \rho \kappa \nu o s$, Skt. pífni-s; ūná-s, Goth. wans; Grk. єv̋vıs: Skt. áqrats and áfri-s; fubhrás and subri-s. Av.raohvšna and raobošniš. Latin possesses the same relation, e. g., sacer, -ris (Plaut.), Osk. SAKRID U. SAKRE ; sacer, -rì, O. SAKRU, U. SAKRA: gracilis, gracilus ${ }^{2}$ : sterilis, sterilus ${ }^{3}$ : dapsilis, dapsilus ${ }^{4}$ : decorem, decörus : indecoris, indecōrus: hilaris, hilarus: celerō, celeris.
4. From Indo-European times compound adjectives formed upon $o$-stems have often assumed, 1) the $i$-form or 2) the $i$-form
${ }^{1}$ Cato R. R. 90 : Mart. 13, 67, I.
${ }^{2}$ Gracilu, Ter. Eun. 314 ; gracila, Lucil. Non. 8, 48.
${ }^{3}$ Sterilam, Paul. Fest. 314 : sterila, Lucr. 2, 845.
${ }^{4}$ Dapsilīs, Plaut. Pseud. 396, Aul. 167.
beside a form in $0,{ }^{\mathrm{r}}$ e. g., Skt. abhaya-hasti-s to hásta-s: dhūmi-gandhi-s to gandhá-s: práty-ardhi-s to ardhá-s: salıo-bhari-s, jar-bhári-s to bhára-s : sú-mīti-s, ágra-nīti-s to mīta-s : trir-áfri-s, cátur-afri-s to afra-s:Av. mazda-yasnis to yasna: zarapuštris to Zara-puštra-: Grk. äкоьтьs to коítך, Lith. ketur-kam̂pis to kam̈pas; naktekovis to kóvas; pig-kalbis to kalbà : O. B. pré-proste adv. to proste; iis-plene to plenz. ${ }^{2}$ This relation is seen in Italic in U. perakre to AKRU-TU; SEVAKNE to acnu; Lat. biiugis, iniugis to iugum; semisommis, sommus; inermis, inermus, arma; imberbus, imberbis, barba; exanimis, exanimus, animus; perennis, perennus, annus; effrēnis, effrēnus; pracoquis, pracoquus.

It is next in order to consider the io-stems and the category of parallel formations to which they belong, and to discern a possible bearing upon the question of metaplasm and the formation of the third declension. Streitberg has established, for the suffix io, two ablaut grades, $-i o-$, strong, and $-\bar{\imath}$, weak. This weak grade has been preserved in Italic in Lat. alis, alim; Cornēlis, Cornēlim; fīlī (voc.sg.); ingenī (gen.sg.); Umbr.tertim"tertium"; TEHTEDIM, "tectorium"; sansi, saci (acc.) to voc. sancie: Osc. medicim, memsim. These forms prove that this weak grade of -iowas inherited and existed until after the separation of the dialects. It is, further, probable that this type was, at an earlier period, a more extensive category, than appears from the material of historical times, for the greater relative frequency of the forms in Oscan-Umbrian indicates that they were more numerous in Italic and probably in early Latin. Again the forms seem to have been a dying force in Latin of the historical period and this may indicate that the few forms are remnants of a more extensive category previously existing. If this be true, it is in point to inquire i) what tendency has occasioned their elimination and 2) to what system of declension have they been transferred. The conjecture that they have been merged in the $i$-declension is supported by the following considerations:

[^1]
## i. The Argument from Inherent Probability.

It is evident that the two systems of declension come in contact at the following points :-

$$
-i-\quad-i o-
$$

Nom. sg. -i-s :-i-s, e.g., Lith. žódis; Goth. bruks, un-muts.
Acc. sg. -i-m:-i-m, e. g., Lith. žódi.
Gen. pl. -iōm: -iōm, e. g., Lith. žódžu; O. B. kraje; Goth. harje.

Nom. acc. pl. n. -i-a :-i-a, e. g., Goth. kunja: O. B. polje.
This condition, in itself, constitutes a strong antecedent probability that the two declensions were in close contact and would become merged in one system or the other.

## 2. Analogies of Other Languages.

a) Germanic-The so called $i$-declension of adjectives in Gothic is a conglomerate of $i$ - and io-stem forms, resulting from a merging of such types, as bruk-s, un-nut-s with $i$-stems such as ga-mains, Lat. commūnis; hrains, Skt. frenis. ${ }^{1}$ Among substantives may be noted andins acc. pl. to andeis.
b) Balto-Slavic-Many $i$-stems have passed into the iodeclension. This is a process directly opposite to that assumed for Latin and yet the analogy has weight, showing as it does the contact of the $i$ - and -io-stems. Instances are krytis, gen. -tes and czio; szlitis, gen. -tës and fem. szliti: antis, gen. -tës and czio, Skt. ätis, Lat. anas ${ }^{1}$ O. B. sospode, gen. gospodja, dat. gospodjo : ognc Lat. ignis, inflected as a -io-stem, e. g., ognja, ognjo. ${ }^{2}$
3. Evidence within the Italic Group.
a) The correspondence of Lat. and Osc.-Umbrian $i$-stems to io-stems in other groups, e. g., pix, gen. pl. picium, Grk. $\pi i \sigma \sigma a$, Lith. pikis: postis, Skt. pastya-m, O. H. G. fasti: Osc. aiteis, gen. pl. aittium, Grk. aï $\sigma \sigma \alpha$ : faux, gen. pl. faucium, Grk. фv́ $\sigma a$ but Skt. bhūka-s : verrès, Lith. verszis, Lett. wersis : vehēs, Lith. va is, O. Pr. wessis: lüx, O. B. luče, luča, Lith. laひ̈kis: calx, gen. pl. calcium, Lith. kalkis.
${ }^{\text {r }}$ Brugmann, Gr. II, p. 269.
${ }^{2}$ Leskien, Handbuch, § 38.
b) The existence of $i o$ - and $i$-forms in the same word, e. $g$., prasēpe and acc. pl. prasēpis to prasēpiō, prasēpī̀s; ālāris, ālārius; auxiliāris, auxilīarius; articulàris, articulàrius; balneāris, balneārius; caligāris, caligārius; cubicularis, cubicutārius; intercalāris, intercalārius; mīlitūris, mīlitārius; palināris, palinārius; vulgāris, vulgārius; alveāre, alveārium.
c) Oscan in single forms gives evidence of such a transfer to the $i$-declension. Upfils, ${ }^{1}$ Latin Ofilius, is in the weak grade $-i$. The genitive is Upfaleis, ${ }^{2}$ in the form of the $i$-declension. But the oblique cases of the $-\check{i}$-stems have full -io-forms, e. g., Goth. harjis (gen.), Lith. zódžjo. Hence we should expect a form parallel to meddíkíai. Again, aiteis to Grk. aî $\sigma \sigma \alpha<a i t-i a$ and luisarifs, beside Latin lūsōriīs, point to the same conclusion, that there has been a transfer to the $i$-declension.

It thus appears that the correspondence of $i$-stems in Latin to $o$-stems in other groups may exist for two reasons, i) because of the parallelism of $o$ - and $i$-stems in the parent speech, and 2) by reason of the parallelism of $o$ - and $i o$-stems and the transfer of the weak form in $-\bar{i}$ - to the $i$-declension, as in Lat., e. g., faux, Grk. фv́ $\sigma$, Skt. bhíka-s or O. aiteis, Aíttíum, Grk. aỉ $\sigma \sigma$, є゙ $\xi$-aıтоs.

The third declension presents two further anomalous stem relations. $I$-stems in Latin may correspond to $u$-stems in other languages in the well-known relations suāचis, Grk. í $\delta u{ }^{\prime} s$, Skt. svādús; tenuis, Skt. tanuis; brevis, Grk. $\beta \rho \alpha \chi$ ús, etc., and -es-stems
 nūbēs, Skt. nábhas, Grk. véфos.

As regards the former condition, it is evident that an explanation may be sought in the parallelism of $o-, i$ - and $u$-stems, e. g., Skt. babhruis "brown," Lat. fiber, Av. bawriš "beaver"; Skt. tántu-s and tánti-s "thread"; Lith. asztrùs, O. B. ostre"sharp," Skt. ástrā "good," Lith. asztràs; Skt. áfru-s, áfra-s, ácri-s; Skt. dhāru-s "sucking," Grk. $\theta \bar{\eta} \lambda v s, ~ G r k . ~ \theta \dot{\eta} \lambda \eta$; Skt. patáru-s, patára-s "flying"; gätú-s, gáti-s "motion." This condition may account for such a relation, as mollis, Skt. mr-dhu-s, but not for the cases

[^2]in which the element $\nVdash$ is present. It has been suggested that these forms in - $\sigma / i$ are the feminine formation in $-\mu \overline{I_{2}}{ }^{x}$ There is, however, a possibility that another element is present. Beside the stems in $-u$ - there may have existed forms in -uo-fem. $u \bar{\alpha}$ or $-u i$ i- fem. $-u \bar{i}-$, e. g., Skt. dārú, drú "wood," Av. dī̃"ru; Grk. סpúfa, Lith. dervà, Skt. därvis, dárvì"spoon": Skt. tanís, Grk. тavis; Grk. tavafós, Skt. tania-s "slender," Lith. tenvàs; Skt. ghirsu-s and ghrṣi-s "lively"; Skt. yahiz-s, yahvá-s, yahzí
 parafú-s "axe," Grk. $\pi \epsilon \lambda \epsilon \kappa u ́ s ; ~ G r k . ~ \pi є ́ \lambda \epsilon \kappa к о v: ~ S k t . ~ p u r u ́-s, ~ G r k . ~$ тодv́s ; $\pi$ ód入os: Skt. fifu-s " young " and su-cifvi.s "well growing."

The three types appear in Latin, as follows - 1 ) -u-stems, dènsus, Grk. סaøv́s; cārus, Skt. cārús: 2) -ưo-, arduus, Skt. $\bar{u} r d h v a ́$-s, Grk. ó $\left.\rho \theta \theta_{o}^{\prime} ; ~ 3\right)$-ui-stems, suãzis, tenuis, etc. In the case of the last type, it is only intended to point out that the forms in $-u i$ - would naturally fall in that category and to suggest that they may have helped to form the group together with the feminines in $-u \bar{\iota}-$.

Occasionally $i$-stem forms seem to exist beside $s$-stems, e. $g$., sêdès, Skt. sádas, Grk. ébos: nūbēs, Skt. nábhas, Grk. vé申os: môlēs beside molestus : pübēs, tābès, plèbēs, sordès, squàlēs: pulvis beside pulver, pulveris; cinis, ciner; vömis, vomer: cucumis, cucumer.

Brugmann has explained one, at least, of the $i$-stems, paralleled by -es-forms, as the result of double formation. ${ }^{2}$ It seems, also, that the parallelism noted in Skt. sadas and sädi-s is widely extended, e. g., Skt. päthas, pathís; jánas, jáni-s, jänı̄ ; vánas, upamati-vảni-s; rábhas, su-rabhís; máhas, máhi-s; dhruvás, dhrivi-s; v'ácas, vaci-s.

Grk. $\mu \dot{\epsilon} v o s, \mu \eta{ }^{\prime} \nu-s ; A v . r a v \overline{a_{3}}$, raviš, Grk. $\rho \eta f i-\delta i o s$.
Similar relations appear in Latin, e. g., nūbès, nūbs; sordès, sors; tābès, tābis; pūbēs, pūbis; mōlès, mōlis; sēdès, sèdis; plèbès, plëbs. Hence the entire category may perhaps be explained by this parallelism.

[^3]
## APPLICATION TO THE METAPLASM IN THE THIRD DECLENSION.

Parallelism in formation has served to explain the apparent anomalous relation of Lat. $i$-stems to $o$-stems in other groups. As has been intimated, however, the same facts, in a different application, bear upon the question of metaplasm in the third declension. It has been shown that consonant and $i$-stems may exist side by side upon the same root with substantial identity of meaning. Brugmann ${ }^{2}$ has suggested that the metaplasm has been occasioned by this condition and by the existence of such doublets as noct-, nocti- : cīvitāt-, cizilāti-. To this theory, however, the following supplementary matter may, perhaps, be added.

If the conclusions of the previous pages be sound, the conditions tending to promote the metaplasm may be increased by the fact that $i$ - and consonant stems may exist side by side in Latin by reason of the fact that certain io-stems have become merged in the $i$-declension. If, then, we assume such doublets from two distinct sources, the rise and development of metaplasm may be traced as follows:

It is probable that two forms of the same word belonging respectively to the $i$ - and consonant declensions and existing side by side with identity of meaning and function, would be often confused, that the case forms peculiar to each would be used indiscriminately and without regard for their point of reference. Thereby a point of contact between the two declensions would necessarily arise. The probability of such a confusion and point of contact is supported by the analogies of other languages, $e . g$.;

1) Aryan - O. P. vipibis ${ }^{2}$ to vip, Skt. vif, Av. vis.
2) Germanic - Gothic consonant stems show the influence of the $i$-declension, ${ }^{3}$ e. g., baurgim to baurgs; alhim to alhs; spaurdim to spaurds; waihtins to waihts; dulpais to dulps.
3) Balto-Slavic - a) The transfer of consonant stems to the
${ }^{\text {r }}$ Grundriss II, pp. 292, 727.
${ }^{2}$ So Spiegel, A. P., Keilinschr., ${ }^{2}$ p. 177 : Bartholomæ reads vipaibis and holds for influence of o-stems ; cf. Brugmann, Gr. II., p. 723, and Kossowitz, Inscr. Pal. Pers., under vit ibis.
$i$-declension, c.g., Lith. dantis, Skt. dánt-; szirdis, Lat.cor, Skt. hṛd; debesìs, Grk. vé申os, Skt. nábhas, O. B. vese, Skt. víf: b) metaplasm in the Balto-Slavic period before suffixes in $m$ and in the locative plural, e. g., Lith. akmenyse, older -ise, O. B. kamencchz; Lith. moterimis, O. B. matereme, matercche.

Assuming, therefore, as the first condition such a confusion in the case of specific words, it is probable that the approximate contact between the two declensions would become crystallized in some particular case form and that, at that point, one of the two possible terminations would eventually prevail to the exclusion of the other, first in specific words belonging originally to either declension and, second, by an analogical extension in other or in all the forms in each declension. Such a condition may be termed the formal contact in distinction to that approximate type which was noted in the element of confusion. This formal contact would occur at the point where the two declensions have the strongest affinity. That point seems to have been the dativeablative plural. For the earliest Italic we may suppose such relations as dōtibus beside *nepōt-bus; mentibus, *ferent-bus; sacri-bus, *mātr-bus; fūni-bus, *homin-bus; fauci-bus, *düc-bus, and possibly within the same word nocti-bus, *noct-bus; cīvitāti-bus, *cīvitātbus. The affinity of the two declensions at this point is apparent.

But, further, in other languages this metaplasm of the $i$ - and consonant stems appears most frequently or exclusively at this point, e. $g$., in Germanic and Balto-Slavic before suffixes in -m(cf. p. 9). The only point of infection must necessarily be the first point also, and this condition adds further probability for that assumed in Italic. Hence the formal contact in the dat.-abl. plural, occurring first, perhaps, in such words as nox and civitās, must have been, later, extended to all the words of each declension by analogy. Then the similarity at this point may well have produced similarity at other points and thus have extended the metaplasm.

## THE DEVELOPMENT OF THE PROCESS.

The development of the metaplasm and its extension to the various cases may be traced as follows: The first stages of the
process must be assigned to the Italic period, by reason of the agreement of Latin and Oscan-Umbrian at certain points, as follows :

1) The dative-ablative plural. Latin and Oscan have the $i$-stem form $i$-bos ${ }^{1}$ without exception, ${ }^{2}$ e. $g$., O. Teremníss, aisusss, ligis. Umbrian has -us without exception, e. g., fratrus, nerus, kapidus, homonus, karnus. If this Umbrian type be accepted as secondary and a later formation after the $u$-declension, ${ }^{3}$ the forms do not disprove the hypothesis given above.
2) The ablative singular. Among the $i$-stems the oldest forms are in $-\bar{i} d$ in Latin and Oscan-Umbrian, e. g., O. Lat. mariad, omnei : Lat. turrī, classī, etc., : O. sLaAgid, SAKrid, AKR1D : U. poni, peracrei, ocri-per. This form was transferred to the consonant declension in the Italic period, e. g., O. Lat. airīd, cēventiönūd, bovid : Fal. opid; O. prasentid, prupukid, serevkid; U. pedi, persi. The fact that $-\bar{i}$ is largely replaced by $-e$ in Latin of the classical period, that Oscan has forms in $-\bar{o} d$ by the later influence of the $o$-stems, and that at a later time $-e$ is the prevailing type in Unbrian, cannot obscure the evident condition, noted above, that the two declensions become merged in the form -id at the point of the ablative singular.
3) Dative singular. It is possible that a metaplastic development occurred at this point. A positive statement cannot be made, since in the development of Latin and Umbrian the individual case endings have become identical in form. Hence no differentiation can be made. The probability is, therefore, mentioned at this point and a more extended discussion reserved for the treatment of the specific case forms (p. 43).
4). Genitive singular. At this point a somewhat different condition must be noted. Latin and Oscan-Umbrian do not agree in form. The former has the consonant type -es $>-i s$ and
' Or for Oscan -iffs, Buck, Voc., p. 49.
${ }^{2}$ Latin has senatorbus, C. I. L. I, 196, which may well be doubted on the ground of senatoribus ( 2 ) and mutieribus on the same inscription. Cf. Stoltz Lat. Gram., ${ }^{2}$ p. 344. Allen, Early Latin, p. 29.
${ }^{3}$ Brugmann, Gr. II, p. 7 II.
$-o s>-u s$, while the latter preserves the $i$-stem form eis, O. -Eís, U.-es. An element of similarity is, however, noticeable. The metaplasm is complete in each group. Latin, in no instance, preserves the $i$-stem form: Oscan-Umbrian has that form constantly and without exception. The conditions are different from those in the nominative plural, in which the forms are well distinguished in Oscan-Umbrian. It is probable, then, that in the Italic period there was not a complete metaplasm as in the abl. sg., but that the forms -eis and ees were used indiscriminately. Latin has preserved ees and Oscan-Umbrian -eis.

It is evident that the metaplasm advanced no further in the Italic period. Its force, however, was retained long after the period of separation. In Latin it lived to cause identity of form to a greater or less extent in the acc. and abl. sg. and in the plural cases other than the dat.-abl., and remained as an active factor in the historical period, making constantly for a complete amalgamation of the two systems. On the other hand no such activity is discernible in Oscan-Umbrian. The sole result was the survival, in the gen. sg., of the $i$-stem form -eis, a partial step only, since confusion must have been established in the Italic. To be noted, however, is the fact that in Latin the consonant forms have been preserved in the singular in marked contrast with the tendency of the earlier period.

The Italic languages are characterized by a marked frequency of $i$-stem forms among the adjectives. Original $i$-stem types are more consistently preserved in words belonging to that declension, and are more generally transferred to adjectives of different origin, $e . g$., for the $i$-stems abl. sg. in $-i$ in distinction to the -e of substantives, $\vec{a} c r \bar{r}$, celebrī , equestrì, tristi, etc.; acc. pl. in -īs, omnīs, mortālīs; gen. pl. in -ium and neuter pl. in -ia. Thee same characteristics are observable among adjectives, originally consonantal in inflexion, e.g., ingenti, inertī, perpetī, évidentī ${ }^{\text {a }}$ : acc. pl. amantis, prudentis, hebetis : neuter pl. always -ia except in vetera; gen. pl. -ium, e. g., amantium, inertium.

It is evident, therefore, that the $i$-stem forms possess exceptional vitality among the adjectives, both in persistence in their
${ }^{1}$ Cf. Neue, Formen. ${ }^{3}$ II, pp. 51 ff.: dizite is the prevailing type for dives.
original position and in extensive transfer to the consonant declension. Likewise $i$-stem forms often exist among the adjectives beside corresponding consonant terminations, when the same words are used as participles or substantives. The basis for this distinction seems to lie in the difference in function.

The facts noted above may not reasonably be separated from the further fact that in the entire Italic group there is a tendency toward $i$-formations among the adjectives (cf. p. 13 above), a tendency supported by the analogies of other languages. It may, then, be accepted that there come into Italic from the parent speech a considerable number of compound adjectives in $i$, existing beside a substantival simplex in $o$. Further, in the case of adjectives in $o$, beside forms in $i$ in Indo-European, the $i$-form has become the prevailing type in Latin (p. i4).

In the instance of parallelism between $o$ - and io-stems, the latter type was, in general, adjectival in function, as appears in the relation, Skt. pât, Gr. $\pi \omega \bar{s}$, Lat. pés : Skt. páda-m, Gr. $\pi$ édov, U. peřum, beside Skt. padyar, Gr. méGos, Lat. acu-pedius, Lith. lingvapedys "swift-footed." It has been assumed that the weak grade in $-\check{-}$ - of this suffix has been merged in the $i$-declension. If this be true, the relation adjective in $i$ to substantive in $o$ becomes a more numerous, and, in fact, a very considerable category in the Italic languages. The group must have constituted a very extensive body of $i$-stems existing among the adjectives, and possibly the largest proportion of words possessing that function belonged in this category.

It may, then, be assumed that the $i$-stem formation came to be viewed as the distinctive type of the adjectival function, and that the category, for that reason, possessed sufficient linguistic weight to make the original $i$-stems less susceptible to metaplastic influence, and to cause an extension of its forms and an infection of consonant stems more extensive than that noted for substantives. Such a heavy and compact mass of forms may well have influenced the whole category in this way, and, likewise, may have occasioned the transfer of some adjectives from the $o$ - or consonant declensions by reason of the tendency of identity of function to eliminate diversity of form.

## SYNCRETISM.

The term Syncretism is applicable to instances in which a given case form in any declension possesses a series of functions which, in the final analysis, must be referred, not to a single syntactical force, but to two or more such primary forces. A single case form thus assumes the functions previously possessed by two or more cases, and the grammatical apparatus is simplified and its diversity of form reduced by the total or approximately total exclusion of the forms thus yielding to syncretism. This phenomenon appears in the Indo-European languages in two types: i) A single case may have performed double syntactical duty from the earliest times, or 2 ) the condition may be the result of a genuine contamination and merging of functions. The former must be viewed as an inheritance from the parent speech; the latter as a result of some linguistic force tending to reduce complexity in the declensional systems.

There exist the following instances of syncretism as an inherited and original condition:

1) Dative-ablative plural ; 2) genitive-ablative singular, ${ }^{\text { }}$ except
${ }^{1}$ The ablative had a separate form only in the pronouns and in the sg. of the $o$-stems. Otherwise it was merged with the gen. in the singular and the dat. in the plural. The former condition seems natural (cf. p. 29 and Delbrück, Grundriss III, p. 191), but why is it identified with the dative in the plural ? Lanman (Noun Inflection, p. 583) holds for linguistic economy, the dative being taken as the nearest form in infrequency of usage. Gaedecke (Acc. im Veda, p. 144, Anm.) assigns actual syntactical contact as the cause, and Delbriuck (p. igo) adds further cases of the same nature. To these may be added the Lith. usage with verbs of stealing in a sense allied to that of separation, e. g., pàvogé tam séniui tạ́ óžaq" he stole the goat from the old man"; also various constructions in Homer of the nature of a dative of advantage, e. $g$.,
 $\dddot{\omega}_{\varphi} \rho \sigma \sigma \iota \nu, \mathrm{E} 486$, "to protect the wives," beside the same force with genitive, $e, g$.,

in pronouns and $o$-stems save in Avestan and Italic ; 3) nominative and accusative neuter, both singular and plural ; ${ }^{1}$ 4) nominative and vocative of dual and plural ; 5) in the oldest type of the dual, the various functions are borne by three forms, the nom.-voc.-acc., the inst.-dat.-abl., and the gen.-loc.

A condition analogous to the above may be noted in cases of accidental identity of form by reason of the union of the case ending and stem vowel, as in the dative and locative of the $\bar{a}$ declension, e. $g ., \bar{a}+-a i \underline{i}=-\bar{a} i: \bar{a}+i=\bar{a} i^{2}{ }^{2}$

The other type of syncretism, that process of simplification of case systems which has occurred within the separate history of the individual languages, has been considered by Delbrück as the result of three possible influences : 1) contact occasioned by confusion of prepositions, 2) contact in actual syntactical usage, and 3) identity of form.

As regards the first element, it is evident that prepositions may be used with different cases and with substantially identical meaning. This is evident, even in Sanskrit, in which the distinctions are generally well preserved. ${ }^{3}$

For other languages more striking instances may be added, e. g., Gothic-in filuwaurdein seinai, Matt. 6:7, "because of their much talking," beside in pizōzei waihtais, Eph. 3:1, "for this cause " : ana staina, Matt. 7:24, "upon a rock," but ana baurgs, Tit. I: 5, "in the cities": afar twans dagans, Matt. 26:2, "after two days," but afar pamma hlaiba, John 13:27, "after the sop": iah atstandands ufar ija, Luke 4:39, " and standing above her," but warp riqis ufar allai airpai, Matt. 27:45, "there was darkness over all the earth": Lithuanian -cf. $\check{u} z{ }_{z}$ with both acc. and gen. in sense "behind." ${ }^{4}$ Old Bulgarian - po patc "upon the way," po morjo "on the sea," beside po vise grady "in all cities" : vz tz denc "on that day," vz siją nošte "on this night," beside bě ob nošte vz molitvĕ božiji "and he tarried all night in prayer to God";
${ }^{1}$ For the explanation of this condition cf. Delbriick, Grun. III, p. 189.
${ }^{2}$ Brugmann, Gr. II, p. 738.
${ }^{3}$ Whitney, Skt. Gram. ${ }^{2}$ 293a, 1127.
4Schleicher, Handbuch, p. 290.
za tvoją besëda "because of your speech," beside za stracha jodijiska " from fear of the Jews."

It is a question, however, whether the preposition was so vital a factor in case relations at the time at which the syncretisms arose, as at a later time. If the prepositions be viewed as crystallized case forms of demonstrative stems, it seems probable that at first they were accessory only and that the case endings alone served to express the various case relations. Later the preposition must have become more intimately associated with the idea thus conveyed, until it was felt to be essential and equal to the case ending in grammatical value. Still further the preposition has in many cases assumed predominating force over the ending. Hence, granting that the preposition possessed force equal to that of the case, a diversity of function may well have assisted the syncretism. If, on the contrary, the prepositions were merely accessory forms, the difference of function in such words may be a result rather than a cause of the syncretism. Such an instance may possibly be found in the use of Latin ab with both abl. and inst. function. The original force seems to have been that of the abl., e. g., Skt. ápa, Grk. ánó. Hence the double function, in senses "by" and "from," may have been suggested by the syncretisun of the abl. and inst. The same word in Gothic, $a b$, is used with instrumental value, e. g., ab saurgom afhapnand, Luke 8: rq, "choked with cares."

On the other hand, prepositions may acquire a variety of functions, other than by a syncretism of cases, e. g., Av. a $a^{2}$ zui, used with both loc. and dat. in the sense "upon," but without syncretism of the cases; antar, "between, among" used with inst. and loc.; pare" before, beside" with abl., gen. and loc. : pasca "after, behind" with acc., inst., abl., gen. ${ }^{\text {P }}$

Again prepositions may develop a variety of meanings without syncretism of the cases, $e . g$., Av. $\not a^{2} t i$ "with" or "at" with acc., inst., abl. and loc., beside Skt. praiti "into" with acc., Av. aivi "to" with acc., "in" with loc. and "from" with abl. without trace of syncretism in case endings.

As regards the third factor, identity of form, it is evident that
${ }^{1}$ Jackson, Avesta Grammar, Pt. I, p. 204.
such a condition, arising by reason of phonetic change, would readily occasion syncretism. In Goth. the dat. case of the $o$ stems having dat., inst., abl. and loc. function may be referred to any one of the following forms, *dagai loc.; *dag $\bar{a} i$ dat.; *dag $\bar{a}$ inst., or *dagrod abl. ${ }^{\text {b }}$ It is also possible that partial identity of form may promote syncretism. The conditions would be two given cases, possessing a partial identity or similarity of form. Analogy might, then, cause elimination of the difference of function by that force by which resemblance of form suggests likeness in function. ${ }^{2}$ This element may possibly be noted in the case of the abl.-inst. in Italic, e. $g ., \bar{o}, \bar{o} d ; \bar{u}, \bar{u} d ; \bar{u}, \bar{u} d ; \bar{l}, \bar{u} d$.

A further factor is that of syntactical contact. It seems that each case must have possessed a primary force which may be viewed as its distinguishing characteristic. These primary forces must, however, be regarded as the centers of syntactical areas, from which radiate numerous secondary functions. Hence, though the primary forces be wholly different in character, these secondary syntactical extensions may not only approach but also intersect or coincide. Such a contact becomes evident from the comparison of the cases, notably the ablative and genitive and the dative and locative.

## i. Ablative and Instrumental.

The original forces of these cases must have been respectively separation or source and accompaniment or association. In the secondary forces, however, the two cases come in contact as follows:
a) Instrumental - A derived force appears in the usage, which expresses instrument or means, ${ }^{1}$ e.,$\underline{\rho}$., Skt. bhadrám kárnebhith. r!nuyüma " may we hear with our ears what is auspicious";

 A. 5, 4, 23, "they pelted them with stones": Old Bulgarian jispleniše se strachome, Luke 5:26, "they were filled with fear";
${ }^{1}$ Cf. Kluge, in P'aul's Gr., p. 386 ; Brugmann, Gr. II, pp. 599, $617,628$.
${ }^{2}$ Wheeler, Analogy, p. 29.
${ }^{3}$ Whitney, Sanskrit Gram. ${ }^{2}$ § 280.
toja bo mereoja, Luke 6:38, "by that measure"; traste li vetrome dvižemy, Luke $27: 24$, "a reed shaken by the wind": Lithuanian lazdà mùszti "to strike with the staff"; kcliù važiüuti "to go by the road." This force readily passes into an expression of occasion or reason, e. g., Skt. krpay $\bar{a}^{1}$ "through pity"; tena satyena "by that truth" : Grk. ả $\gamma v o i \not a ́ ~ e ́ \xi ̧ a \mu \alpha \rho \tau a ́ v o v \sigma \iota, ~ X . ~ C . ~ 3, ~ 1, ~ 38, ~$ "they err by reason of ignorance": Old Bulgarian azz že scde gladome gybla "I perish from hunger"; Lithuanian badù gaiszti "to perish from hunger"; drugiù sirgti" to be sick of a fever."
b) Ablative--The ablative may come to mean procedure, as from a cause or occasion, e.g., Skt. z'íjrasya cúṣmäd dadēra "from the fury of the thunderbolt he burst asunder" : Grk. réo $\delta^{\prime}$ aviv' $\epsilon \in \pi \iota \epsilon ́ \mu \phi \epsilon a \iota$, B. 225 , "on what account do you again find fault": Old Bulgarian straždǎ̧̛leji otz duchz nečistz, Luke 6: s 8 , "afflicted by unclean spirits": Lithuanian jus nusigàndo to žódz̆o "he was terrified at the word "; àsz bódžừs to vàlgio, "I loathe food." There is evidently a contact in the force, occasion, or cause. The instrumental may also be used with verbs denoting separation, ${ }^{3}$ and the two cases are used with the verb "drink" to denote the cup or vessel. ${ }^{4}$

## 2. Dative and Locative.

The primary force of the locative was situation or location. Extended usages, however, are found in i) the forces "in case of," "respecting," "with reference to," e. g., Skt. tám it sakhitvá ìmahe ${ }^{5}$ "him we beg for friendship": Old Bulgarian ize jašte ne szblaznitz se o mne" "who shall not be offended at me"; ubudite sja pravde, i Cor. 15:34,"awake to (with respect to) righteousness": 2) with verbs of "arriving," "placing," "showing," "bestowing," or as a goal or object of motion, action, or feeling, $e$. g., sá id devé." gacchati "that, truly, goes to the gods"; sam frutla pūrvam asmāsu "having before promised us": O. B. nalez̆estjo
${ }^{1}$ Whitney, Sanskrit Gram. ${ }^{2}$ § 280.
${ }^{2}$ Schleicher, Lith. Gr. p. 267.
${ }^{3}$ Whitney, Skt. Gram. ${ }^{2}$ § 283, and Delbrück, Gr. III, § ino.
4 Delbrück, Gr. III, $\S \S 87$ and 113 .
${ }^{5}$ Whitney, Skt. Gram. ${ }^{2} § 304$ b.
ieme narodu, Luke 5: 1 , "as the people pressed upon him"; kosme sja podolecere rizy jego, Matt. 9:20, "she touched the hem of his garment": 3) with nouns and adjectives having similar forces. ${ }^{\text { }}$

With these usages may be compared those of the dative in i) the force "with reference to," e.g., Skt. ísumk !! ! vānáa ásanāya "making an arrow for hurling": O. B. vznemljate sebě, Luke 2 I: 34, "take heed with respect to yourselves": 2) with verbs of "giving," "assigning," "moving," etc., e. g., Skt. yó "á dádāte sákhye "who gives not to a friend"; O. B. pomanase pricestcnikome, Luke 5:7, "they beckoned unto their partners" : 3) verbs of mental status signifying "give attention," "have regard for," "please," etc., e. g., Skt. yádyad vocate vipribhyah."whatever is pleasing to Brahmans," kim asmábyham hrnisse "why art thou angry with us"? O. B. revenute dorome bolisime, I Cor. 12:31, "covet the best gifts."

There are assumed for Indo-European eight cases: nominative, vocative, accusative, instrumental, dative, ablative, genitive, and locative. The instances of syncretism tending to eliminate this diversity of form are as follows. In Greek such a process is evident at two points, 1 ) the dative, locative, and instrumental ${ }^{2}$ in the so-called dative form, and 2 ) the genitive and ablative ${ }^{2}$ in the genitive form. In Latin the instrumental, ablative, and locative have become merged in a single form, in most cases that of the ablative (cf. p. 30). The four oblique cases, instrumental, ablative, locative, and dative, have become syncretized in Germanic, the nominative and accusative functions are, in certain cases, borne by a single form, ${ }^{3}$ and the nominative is often used as a vocative. Irish is on a line with Germanic, since the so-called dative form has the functions of the instrumental, dative, locative, and ablative. In Balto-Slavic both Lithuanian and Old Bulgarian have syncretism of the genitive and ablative. The form for the singular of the $o$-stems is that of the ablative, elsewhere the genitive.

[^4]
## SYNCRETISM IN ITALIC.

Latin shows the following instances of syncretism: 1) the ablative, locative, and instrumental in the so-called ablative form and in both singular and plural of all declensions ; 2) the dative and locative of the $\bar{a}$-stems ; 3) the dative and locative of the $i$-stems; ${ }^{1} 4$ ) the genitive and locative of the 0 -stems ; ${ }^{2}$ 5) the nominative and accusative plural of $i$ - and consonantstems and possibly, also, the same cases in the $u$-declension. ${ }^{3}$

Oscan and Umbrian have the following certain cases of syncretism : i) the ablative and instrumental, e. g., O. ablative, Amvíanud, Buviantd "a Boviano," cisucen ziculud "ab eo die"; inst. amnud egmas tovticas "rei publicæ causa," trístaamentud "testimonio," altrud ligud "cum altero lege," cum preivatud " cum privato," dolud malud "dolo malo," múltasíkad " multaticia," serevkid "auspicio," rehtúd amnud "recto circuito," múnikad tanginúd "communi sententia"; U. abl.akru-tu "ex agro," ehe esu poplu "ex hoc populo," anglu-tu" ab angulo": inst. adputrati "arbitratu," nomue " nomine," paca " causa," esu bue peracre "hoc bove opimo," perskle "supplicatione," pure "igne," pone " posca," vea "via."
2) Dative and locative of the $\bar{a}$-stems, ${ }^{4}$ e. $g$., O. dat. anterstataí "interstitæ," deívaí genetai "deæ genetrici," entraí "interæ," Pernaí " Pernæ," Anagtiai "Augitiæ" : loc. Bansae "Bantiai," eisaí víaí mefíaí "in ea via media," aAsaí purasiaí "in ara igniaria," medikkiaí " magistratu." U. dat. ase " aræ," cerfie " cerfiæ," mefe " mensæ," tote "civitate" : loc. scalsie " in patera," totem-e, tote "in civitate," sate "in sancta," Akedunie. "in Aquilonia."
3) Dative and locative of $i$-stems (cf. p. 44).

In the plural, as in Latin, the dat., abl., or inst. form pos-
${ }^{1}$ Assumed on the basis of the forms which are locative. Cf. Brugmann, Gr. 11, pp. 604, 605.
${ }^{2}$ Brugmann, Gr. II, p. 586.
${ }^{3}$ Brugmann, Gr. II, p. 666.
${ }^{4}$ Here as in Latin the syncretism may be viewed as an accidental identity of form (p. 25).
sesses four functions, dat., abl., loc., and inst., e. g., O. dat. dekmannibís " decumanis," huntruis " inferis," supruís " superis," lígatuís "legatis," anafríss "imbribus," matuís KERRíUíS " manibus cerealibus" : inst. Aisusis "sacrificus": loc. op eizois " apud eos," anter teremníss "inter terminos," exaiscen ligis, "hisce in legibus."
U. dat. fRatrus "fratribus," homonus "hominibus," aketus " agentibus," nerus sihitir "principibus cunctis": inst. veskles vufites "vasculis consecratis," veskles snates "vasculis umectis," adepes arves "adipibus arviis," Kapidus " capidibus," dupursus " bipedibus," asesetes karnus " non sectis carnibus": loc. pre-veres " ante portam," tuvere kapidus "in duobus capidibus," vasus "vasis," fesner-e " in fanis," fondlire "in fontulis"; abl. vapersus "ab sellis."

In the early history of the Italic group there appear to have arisen two syncretisms: 1) that of the abl. and inst., and 2) that of the dat. and loc. The former is evident in all declensions and both numbers. The causes may have been syntactical contact (p. 27) and in certain cases approximate identity of form. The latter may be noted in the entire plural and in the singular of the $\bar{a}$ - and $i$-stems. Herein also functional contact may have been the cause, and in the case of the $\bar{a}$-stems, identity of form. In the plural, therefore, four functions were brought within the scope of a single form. For the consonant, $i$, and $u$-stems this form was the dat.-abl., for the $o$ - and $\bar{a}$-stems the instrumental.

For the consonant declension slightly different conditions must be noted. The abl. force in this declension was borne by the gen. originally. There are, however, no traces of this condition in Italic. But there can be no objection to the supposition that the metaplasm and transfer of $-i d$ to that declension was as early as the syncretism of the inst.-abl. Hence as $\bar{o} d, \bar{a} d$, $\bar{u} d$ assumed this double function, it is probable that $\cdot i d$ did the same for both $i$ - and consonant stems, and further, as the inst. forms $\bar{o}, \bar{a}, \bar{u}$ were displaced by the ablatives, it is probable that $-\bar{d} d$ also prevailed to the exclusion of the inst. of the con-
${ }^{1}$ Bugge, Alt.-It. Stud., p. 40.
sonant stem, whatever that may have been. Accordingly the conditions in the various declensions would be as follows, sin-gular-o-stems, a loc. in -ei and an abl.-inst. -obd; $\bar{a}$-stems, a loc.-dat. $-\bar{a} i$ and an abl.-inst. - $\bar{a} d$; $i$-stems, a loc.-dat. -ei and an abl-inst. $-\bar{i} d$; consonant stems, an abl.-inst. $\bar{i} d$ and a loc. $i$; plural - the dat., loc., abl., and inst. functions in a single form.

In the Latin of the classical period further conditions are noticeable. The locative function has become merged in the ablative-instrumental with relatively few exceptions in the instance of the $o$ - and $\bar{a}$-stems. The causes for this syncretism appear to have been the following. After the rise of the metaplasm in the third declension there existed an abl.-inst. in -īa beside a locative in $i$. At an early period, before $i$ changed to $e$, the similarity of form might have suggested an identity of function, somewhat before the parallel syncretism in the other declensions. Further, in the plural of all the declensions, the locative function was borne by the same form as the abl.-inst. In the latter instance the existence of so large a body of forms having all three forces might well occasion, by analogy, a similar condition at other points in the various declensional systems.

It remains to consider whether this condition is characteristic of Oscan-Umbrian as of Latin. First, it is noticeable that the locatives of the $o$ - and $\bar{a}$-stems are better preserved than in Latin. In the latter language the instances are relatively few in number, e. g., humī jacere, bellī domīque, Rōma. In Osc.-Umbrian, however, the type is well preserved, e. g., O. múnikeí tereí "in commune territorio," thesaureí "in thesauro," Frentreí "Frentri," aASAí purasiaí "in ara igniaria," eíSaí víaí mefiaí " in ea via media": U. destre onse " in dextro humero," Fisie-m, Fisie "in Fisio," totem-e "in civitate," Rupinie "in rubinia," Akedunie "in Aquilonia." It seems, therefore, that this syncretism has not progressed so far as in Latin. A further question involves the consideration whether it has affected OscanUmbrian in any degree, and, if so, to what extent.

For the $i$-stems the question is complicated by the fact that in Umbrian the abl.-inst. form in $-e$ cannot be distinguished from
the dative or from a possible locative in $-e$ derived from I.-E. $-\bar{e}^{\text {. }}$ In the case of the abl. in $-\bar{i}$ it is alone possible to distinguish the form, and of these cases, relatively few in number, none appear to possess a certain locative force. However, such a function is noticeable in the instance of the same form, transferred to the consonant declension, e. g., testru-ku pedit " ad dextrum pedem," nestru-ku peti " ad sinistrum pedem." It would seem, therefore, that the same force must have belonged to this form in its original position, the $i$-declension. In Oscan there are three instances of the abl. of the $i$-stem, e. $g$., slaagid, akrid, sakrid. Of these the first alone seems to bear on the question in hand. The word certainly denotes a point in space and can possess neither abl. nor inst. force, as defining the preceding word sakaraklúm. Bücheler ${ }^{2}$ has identified the usage with the Latin "e regione" in the sense "opposite to," "facing." The natural translation of the form, however, seems to be "in loco" and the construction thus becomes locative. If the necessity for avoiding such a force in an abl. form be removed, it seems possible to view the word as locative. Such an objection may best be removed by a consideration of the abl. forms of the $o-, \bar{a}$-, and $u$-declensions. In Oscan no instances of a locative usage without a preposition occur, but with certain prepositions it seems to appear, e. $g$., ÚP Eísúd SAKAraklúd i 36 "apud id sacrum," ap tovtad 231 " apud populum." The evident meaning is locative, ${ }^{3}$ as in the plural, e. g., ap eizois 231. But further Umbrian gives evidence of an abl. form used with loc. force, e. g., testru " at the right," termnuco stahituto "ad terminum stanto," vukukum "in luco Jovis," andervomu sersitu "inter rogos sedito."

It would seem, therefore, that the syncretism of the locative with the abl.-inst. in the singular had, in a measure, made its
${ }^{1}$ Brugmann, Gr. II, pp. 604, 612.
${ }^{2}$ Mommsen, p. 23 I .
${ }^{3}$ The objection to such a view is that the locative force may inhere in the preposition. Delbrück (Gr. III, p. 677) identifies the word with Skt. ápi, Av. $a^{2} \not p i$, Grk. $\dot{\epsilon} \pi i$. Both Greek and Sanskrit use the form with the locative and that seems to have been one of its inherent usages. Hence ap would seem to require a locative force in the word depending upon it.
appearance in Oscan-Umbrian, but to no such extent as in Latin. In general, also, it seems that it was a much later process than that by which the ablative and instrumental functions were amalgamated.

The syncretism in the instance of the nom. and acc. plural of the third declension was relatively late and purely a Latin phenomenon. It is supported by analogies of other languages, e. g., Grk. $\tau \rho \epsilon \bar{i} s, \tau \rho \hat{s} ;{ }^{r}$ O. B. nom. sg. of $o$-stems in $z ;{ }^{2}$ Av. dātā$r \bar{o}$, acc. Skt. dāt $\bar{q} n$; O. B. nošti raky; In O. N. and West Germ. the nom. and acc. plural have frequently become confused. ${ }^{3}$ This cannot, however, be viewed as genuine syncretism. It does not seem that there can have been any intimate syntactical contact, for the functions of the two cases are well defined. A possible explanation for Latin may appear in the fact that in the consonant declensions the forms had become identical by metaplasm, e. g., $-\bar{e} s$ from $i$-stems and acc. - $\bar{e} \ll-e n s$. This identity might affect the closely related $i$-stems.
${ }^{\text {r }}$ Brugmann, Gr. II, p. 664 ; Brugmann, Gr. Gr. ${ }^{2}$ p. 136.
${ }^{2}$ Brugmann, Gr. II, p. 532.
${ }^{3}$ Kluge, in Paul's Gr. I, p. 386.

## THE CASE FORMS IN DETTAIL.

Nominative.--In this case, the endings of the two declensions are in general well preserved. In one category, however, confusion may be noted, viz., the original $i$-stems, which have a nom. sg. differing in no respect from that of the consonant declension, e. g., mēns, Skt. matís "thought," Goth. ga-mutnds "remembrance," O. E. ge-mynd, Lith. isz-mintis "understanding," O. B. pa-metc: mors, Skt. mrtis "death," Lith. mirtis, O. B. se-mretc: ars, Skt. !tis "ratio," O. B. retc: fors, Skt. bhertis "support," Goth. ga-baurps "birth," O. E. ge-byrd: nox, Skt. náktis, Lith. naktis O. B. nošte : pōns, O. B. patc "way," O. Pr. pintis, U. puntes (nom. pl.) gēns, Skt. jatis, Av. fra-zántiš: dōs, Skt. dâtis, ditis, Grk. dóoıs, $\delta \bar{\omega} \iota \iota s$, Lith. dütis "gift" : glāns, O. B. želade "acorn": quiees, Av. šā̃̌tǐ̆, O. P. šiyāti: anas, Lith. ántis "duck," Skt. ätis.

Further the $i$-sten character of these words is proven by other facts, i) the consistent form of the gen. pl. in -ium ${ }^{\mathrm{r}}$ and 2) the presence of early forms of these words with a nom. sg. -is, e. g., opis, Plaut., Bacch., 893, stirpis, Cic., Leg., I, 8, 26 ; municipıs, C. I. L., 2, 1964 ; Col. 5, p. 67 ; sortis, Plaut., Cas., 358 ; mentis, Ennius in Priscian, p. 764, Varro, L. L., 5, § 59 ; lentis, Priscian, p. 764 .

Various explanations may be sought for these phenomena. It is possible that they are the result of double formation, that there were originally two types and that the consonant stem form has prevailed to the exclusion of the parallel type peculiar to the $i$-declension. This view may certainly be applied to specific cases, for of the types *nokt- and *nokti-, civitāt- and civitāti- the former have prevailed in Latin nox and civitās. In the majority of cases, however, the $i$-stem was the only form existing from IndoEuropean times, and hence this condition cannot be accepted as the specific cause in all instances.
${ }^{\text {r }}$ Neue, Formenlehre ${ }^{3}$ I, pp. 276, 277.

It is further possible that the reduction of these nominative forms is the result of the loss of $i$ by syncope. ${ }^{1}$ This hypothesis seems hardly tenable for the following reasons. Syncope may be noted for Latin in the instance of a syllable following the principal accent, in case there follow one or more additional syllables. ${ }^{2}$ It does not appear that syncope occurs in Latin in a final syllable, save in the instance of the suffixes -rn-, $\cdot l o$ - and $-r i$-, $-l i-$, In these cases, certainly, special conditions may be noted. Hence it will not escape notice that for mors, gēns, dès, etc., this process must be supposed under conditions different from those noted above.

Further the supposed syncope seems to be of a decidedly sporadic character. It appears that syncope in final syllables, when manifested, affects consistently all vowels save $u$, e. $g$., Lat. ager <*agros, sacer < *sacris : Osc. húrz "hortus," cevs "cīvis," humuns "homines"; Umbr. pihaz "piatus," fons < *faunis, fust, ferest, etc.; ${ }^{3}$ Germ. dags, gasts, nahts gen. $<^{*}$ nahtes.4 It is, therefore, in point to inquire why, if such a syncope developed in Latin, it did not affect the parallel formations in o, e. g., mortus beside mors; quiètus, quiēs; catus, cès; hortus, co-hors. Likewise if syncope be claimed for $-i$-, it cannot have been thorough in effect, e. $g$., vītis, crītis, grṑtēs, vūtìs beside cōs, dōs, liss; sementis, gēns, pōns; fortis, ars, mors; orbis, corbis, scrobis, turpis, urbs.

It is also possible to assume that the apparent reduction of *artis to ars, *gentis to gens, etc., is a further step in that metaplasm by which the $i$ - and consonant systems have become amalgamated. There are certainly no distinctive reasons why a nom. sg. might not be affected by such a process as readily as other cases. There is nothing more anomalous in the hypothetical fact that *mortis yields to mors than in the evident fact that *morteis has been replaced by *mortes, mortis. But the plausibility of this hypothesis is increased by the fact that $i$-stem forms have developed in the nom. sg. of certain consonant stems,

[^5]e. g., juvenis, Skt. yuỉăn; canis, Skt. cvăn, Gik. кv́ $\omega v$, lith. szüu; mensis, Skt. mats, Grk. urv. The original character of these words seems to be proven by the consistent appearance of $-u m$ in the gen. pl.

Again, the instances of a nom. sg. in $-i s$ in the words in question all occur after the metaplasm has become fully developed and established in certain of the case forms. In a word, the dat.-abl. plural had -ibus and the gen. sy. -es at a period so early as to leave no trace of the original types. On the other hand, a nom. sg. in is is proven in certain words in which it later appears as $-s$. A reasonable inference may, then, be that the reduction of *artis to ars, *mentis to mens, etc., occurred at a period later than that at which the eeis of the gen. sg. was replaced by -es. If, then, this change from -is to -s took place at a time after the rise of the metaplasm, it seems that it was not a cause of that process, that it was rather a resultant of the metaplasm, an effect and not a cause. Hence it would appear that the linguistic force underlying this change was analogy and not syncope.

A second group of forms has in the nom. sy. a consonant form, while in the same words in other languages os appears, e. sr., faux, Skt. bhūkas "hole"; pāx, Skt. pă̧as " noose"; puls, Grk. пódros; lēns, Lith. glindas "louse"; trux, Goth. proairh-s "angry"; vī̃āx, Lith. gyvokas "living"; latex, Skt. latakas; strix, Goth. striks "stroke"; falx, Grk. фо́лкоs, фа́лкךs; lamx, O. B. lakz "crooked," Lith. lañka "valley"; luxx, Grk. 入єúкоs, Lith. laukas, Skt. rócas; senex, Skt. sanaká; vertex, Skt. vártakas. To these forms may be added formations in -fix, referred to $-f e c o-{ }^{,}{ }^{x}$ and those in $-\bar{a} x,-\bar{i} x,-\bar{o} x, e . g .$, audū $x$, fèlix, ferōx.

It is first evident that the forms in question cannot be the result of the syncope of final $-o-$. for there is no evidence of such a loss of that vowel in final syllables. Moreover, the words bear evidence of an $i$-stem character, in that they have a gen. pl. in -ium, e. g., fuucium, pultium, etc. ${ }^{2}$ It therefore seems that these words must have been $i$-stems originally or have assumed their
${ }^{1}$ Brugmann, Gr. II, p. 239.
${ }^{2}$ Neue, I, ${ }^{3}$ pp. 272 ff ; of. Charisyas, I, I17.
known form through the intermediate stage of the $i$-stems. The former hypothesis is to a certain extent reasonable. An $i$-stem form may have existed beside the parallel form in the $o$-declension, as in civis, Skt. cévas. Then the former, preserved in Latin, might have lost its nom. sg. as did mors, gèns, dès, etc., e. g., I. E., *polto-s = Grk. $\pi$ ódtos ; I. E., ${ }^{*}$ polti-s = Lat. ${ }^{*}$ poltis $=$ puls, as *mortis = mors.

Such an explanation, however, does not seem to apply to a considerable number of forms. In the case of the suffixes -qo-, -aqo-, -iqo-, - aqo-, -iqo-, it is difficult to assume forms in $-i$. . These suffixes in question appear in the different languages as follows :

Aryan - -qo-, e. g., Skt. átka-s, Av. adka : Skt. marká-s, Av. mahrka-; Skt. fúska-s, Av. huška-, Skt. antāka-s, sindhuka-s, etc. ${ }^{\text {T}}$

Greek, Latin and Celtic - -qо-, e. g., iтлıкós, ả $\sigma \tau \iota \kappa o ́ s, ~ a ̉ v \delta \rho \iota к o ́ s ; ~ ;$ amnicus, civicus, bellicus, mordicus; O. I. süile-ch, ses-c, bres-c: ${ }^{2}$ - $q^{-3}$ (consonant stems), e. g., $\mu \in i \rho \alpha \xi$, Skt. maryaká-s; v́́a $\xi$, O. B. novake; O. I. nathir, lāir, fāl; ${ }^{4}$-qió-, e. g., $\pi \epsilon p \iota \sigma \sigma o ́ s, ~ \pi \epsilon \rho \iota \tau \tau o ́ s, ~ \delta i ́ \sigma \sigma o t, ~$
 avסра́кьov, та入入áкьov; patricius, sūtōrīcius, novicius, artificium, opificium; O. I. fem. in -iche, Lat. icia, e. g., tairismiche.

Balto-Slavic--qo-, Lith. pilka-s, júdo-kas, gyvókas, kirktikas; silpnó-kas, didó-kas, mazó-kas. O. B. znake, prĕkz, mec̆ckz, tolikz, kolike. -qio., Lith. kumeliké, rankiké, pleszké; O. B. orica, dĕtica, karablice, kamencce, jadece, pisice; weak grade -qi-, e. g., Lith. jaunikis, czùsikis,kiszkis, plùszkis, kulikis, prozikis; Lett. pluschkis, kaschkis, namikis.

It is clear that the types $-q-$, $-q 0-$, and -qio- came into Italic. It is possible, therefore, that the weak form -qi- also existed at an earlier period. In fact, this hypothesis is highly probable, in view of the presence of the full form -qio-. It is further supported 1) by specific forms in the Italic languages, e. g., U. sumrsim-e
${ }^{1}$ The consonant type appears only in vípä̧ ( $\hat{\mathrm{k}}$ ) (Brugmann, Gr. II, 385); the -io- stem in apicíya, Grk. $\bar{\epsilon} \pi \ell \sigma \sigma \alpha$ (J. Schmidt, K. Z., 28, 122).
${ }^{2}$ Brugmann, Gr. II, pp. 238 ff.
${ }^{3}$ The material in Latin is obscured by metaplasm, but there can be no doubt of the presence of the consonant type, e. g., cornix to U. curnacu (acc. sg.).
${ }^{4}$ Brugmann, Gr. II, p. 385 ; Wh. Stokes, B. B. XI, 84, I 55.
to Lat. ad murcim; ${ }^{1}$ pracoquus, pracoquis, pracox; merces beside merx in Char. p. 27 ; 2) by the relations audūcia, audāx; efficācia, efficāx; mendācium, mendāx; pellācia, pellāx; artificium, artifex, ${ }^{2}$ etc. ; 3) by such relations as pix, Grk. $\pi i \sigma \sigma \alpha$, Lith. pikis; faux, Grk. фv́va, Skt. bhūka-s; calx, Lith. kálkis; frïx and frügis (Varro), Goth. brük-s; lüx, O. B. luc̈a, luc̆e.

It may, therefore, be not unreasonable to suggest that many of these nouns in $x$ were originally weak -io- formations, that they have passed into the $i$-declension in Latin and that their characteristic ending -is has been lost, as in the case of mors, gëns, etc. Such an hypothesis, at least, explains the apparent $i$-stem character of the nouns evident at the point of the gen. plural. For the adjectives, it is necessary to assume that the category contains many original consonant stems, that it is an amalgam of the two types $-q$ - and $-q i$-. All distinctions have been leveled, however, and the consonant stems have become virtually $i$-stems in common with many other adjectives.

Genitive.-At this point the metaplasm must have affected the forms in the Italic period, though the infection cannot have progressed beyond the stage of confusion (p. 21). Since the separation, however, different treatments have prevailed. Latin gives no evidence of the original $i$-stem form -eis, ${ }^{3}$ Skt. avés, Goth. anstais, Lith. naktê's. In all instances for both $i$ - and consonant stems the form is the original consonant type -es,-os. These endings appear unchanged in Apolenes, Salutes, partus, Kastorus, Venerus, Cererus, patrus, Cesarus, hominus, nōminus, previāricātiöus. The form of the classical period is $-i s<-e s$, os having yielded to the parallel ablaut form. It is evident that the elimination of eis from the $i$-stems took place at a very early period and that the metaplasm and confusion established in the Italic period produced this result soon after the separation. For

[^6]among the genitive forms in -us we note an $i$-stem, partus. The loss of eeis must have taken place before the decadence of the type -os, since an $i$-sten would probably not take such an ending after it had lost its linguistic force and was preserved in a small number of forms only.

In Osc.-Umbrian, on the other hand, the $i$-stem form has prevailed, $e . g ., \mathrm{O} . i$-stem, aiteis ; con. stems, Appeluneís, Iúveís, LÚVFREÍS, KÚMPARAKINEÍS, MAATREÍs, medíkeÎs, tangineis, carmeis : U. $i$-stem, punes, ocrer, sorsalir, con. stems, matrer, nommer, farer. In the prevailing type in Umbrian, ei is reduced to $e$, ${ }^{\text {x }}$ sorsalir is a variant, but the $i$ is viewed as from I. E. ei. ${ }^{2}$

Accusative.-The prevailing type in Latin is -em, the ending of the consonant stems. This form appears without exception in its original position, the consonant declension. For the $i$-stems a less general statement can be made. In the majority of cases the metaplasm has been complete in its effect, and the ending original to the consonant declension has been transferred to the $i$-stems. But the original ending has not been completely eliminated, as in the instance of the gen. sg. Certain words always or nearly always have an accusative in -im, while in others it appears beside eem. In manuscripts of the same author both forms are used, e. g., nävim, Hor., Carm., I. 32, S; Cic., Att., 7, 22, ı ; nävem, Hor., Serm., ı, г, 6; Cic., de Orat., I, 38 ; messim, Plaut., Most., 16 i ; messem, Plaut., Rud., 637 ; Trin., $32 .{ }^{3}$

The ending -im is best preserved in certain words, ${ }^{4}$ e. g., turrim, bürim, secūrim, puppim, sitim, restim, zim, pulvim, tussim. However, the form -em is not unknown in these cases, e. g., turrem, C. I. L., I, 259 ; Suet., Calig., 46 ; puppem, Juv., 6, 102 ; secīrem, Livy, 8, 7, $20: 9$, ı6, г7; restem, Plaut., Rud., io36; Juv., io, 58.

These facts seem to indicate that at this point, the acc. sg., the $i$-stems yielded to metaplasm later than in the gen. sg. If

[^7]
it be correct to assume that the complete stage, exemplified in the latter instance, is preceded by a stage of confusion, then the acc. sg. may be characterized by that term. Further, it seems that the progress of the metaplasm in this can be observed within the literary period. Certain words, such as turris, ${ }^{3}$ have $\cdot \mathrm{em}$ much more frequently in the later writers. Hence we may assume that the metaplasm, at this point, is at an incomplete stage, but yet near to and constantly approaching completion in the elimination of the ending $-i m$.

For the Oscan-Umbrian period we may infer, i) that the $i$-stem ending remained unaffected, e. $g .$, O. slagím, tiurrí, SAKRIM, DEKKVÍARIM : U. SPANTIM, AHTIM-EM, SEVAKNI; 2) that the consonant-stem ending -em was replaced by the $o$-stem ending after the metaplasm between the $o$ - and consonant stems had developed, e. g., O. LeGinum, tanginom, medicatinom: U. arsferturo, curnaco, capirso, UHTURU, SALU.

The sole variant from these types appears in the Umbrian in -em -e among the $i$-stems, e. g., SAKRE, UVEM, staflare. It is hardly possible to assume that this ending has come from the consonant declension, for in the Osc.-Umbrian period that ending - em was eliminated from its original position, yjelding to -om from the $o$-stems. It is not reasonable to assume the reappearance of these forms at a later time in Umbrian alone and in the $i$-declension. The facts of Umbrian orthography show that $\check{\imath}$ was open relatively to $\bar{i}$ and that, further, $\check{\imath}$ was sometimes indicated by $e$. On the other hand, no such conditions govern the case of original $e$. There could be no reason for a difference of orthography and change of $e$ to $i_{\text {. }}{ }^{2}$ In the final position an original $-i m$ might well appear as $-e m$, even in the majority of instances. Such are the facts, for Uinb, has -em -e and -im $-i$ in the proportion fourteen to five, $e$. $g$., PERAKNEM, PERAKNE (3), perakre, purtifele, randem-c, sakre, sevakne, staflarem, staflare, Tadinate, Tarsinatem (2): aHtim-em, ferim-e, smursim-e, spantim, spanti. Planta ${ }^{3}$ holds that $-e m$ stands for $-i m$, while

[^8]$-i m$ is to be explained on the ground that the forms are $-i o$-stems with acc. -im. The grounds for such a reference are. however, not readily apparent.

Ablative.- It has already been shown that metaplasm occurred at this point in the Italic period (p. 30) and that $-\bar{\imath} d$ was transferred to the consonant stems. In Oscan this form alone appears ${ }^{\text { }}$ (p. 33). For Latin and Umbrian no such general statement can be made. In Latin of the classical period a form in $-\ell$ is in the ascendancy for both $-i$ and consonant stems. Umbrian, likewise, contains numerous forms in $-\ell, \ell . g$., PURE, VAPEDE, KARNE, TIKAMNE, nomne, menzNe, curnas̀e, pas̀e, bue. This form in -e may be viewed as a possible locative or instrumental suffix, from $i$ loc. or $-e,^{2} a^{3}$ inst. From the point of view of Umbrian, however, the last possibility is excluded. ${ }^{4}$ Hence, for the Italic group as a whole, the decision must lie between the loc. and inst. in -e. Preference may be given to the former alternative for the following reasons. The suffix e for the inst. has not been generally accepted. To suppose $-a$ would involve the separation of Latin and Umbrian. It is probable that $-\bar{i} d$ came into the consonant declension as a syncretized abl.-inst. form, and that the inst. would then cease to exist as a separate form, as in the vocalic stems. From this point the forms may be traced as follows. The consonant declension in the Italic period must have possessed an abl.-inst. $-i d$ and a locative $-i$. Later there arose a syncretism between these three cases, and hence the forms $-\bar{i} d$ and $-z$ (Latin $-e$ ) came to be used indiscriminately for all three cases. The type $-i$ has been lost in Oscan; in Latin and Umbrian it has remained in the form $-e$.

Within the Latin period a further development has taken place. The type $-e$ has been transferred to the $i$-stems, and this is in accord with the facts noted for the gen. and acc., that the consonant stem forms predominate in the singular. We may
${ }^{1}$ The consonant stems have also been affected by metaplasm, e. g., ligud, tanginúd (cf. Brugmann, Gr. II, 594).

[^9]also note the same incomplete stage and the same element of confusion as in the acc. sing. In the consonant declension the type $-\bar{i} d$ remains beside that in $-e^{r} c$ c.g., capiti, Catull., 68, 124 ; scelerī, Sen., Phædra, 693; cōventiōn̄̆d, C. I. L.., I, I96: sanctiōn̄, C. I. I.., I, 198 ; virtütei, C. I. L., 1,34 : airīd, C. I. L., I, 6 I : corporī, C. I. L., I, 206. Among the $i$-stems $\bar{i}$ exists beside $-e, c$. $g .$, sorti, Plaut., Cas., 428 : partī, Plaut., Men., 479 ; and very frequent in $\bar{r} c r n \bar{l}, n \bar{a} \imath^{\prime} \bar{\imath}, p u p p \bar{p}, t u r r \bar{q}$, etc. The same confusion is noticeable here as in the acc. sg. in the case of individual authors, e. or, neptī, Tac., Ann., 3, 24: mepte, Tac., Hist., 5, 9 : classī, Verg., Æı., 8, 11, classe, Æn., 1, 379 : civ̄̄̄, Cic., Fanı., I, 9, 15 ; cīve, Verr., 2, I 3, 32.

Umbrian, also, has forms in $-e$ among the $i$-stems, and it may be assumed that this type has been transferred from the consonant declension. However, the influence of the consonant stems in the metaplasm seems to have been a Latin phenomenon. Elsewhere in Umbrian the $i$-stem forms have prevailed, and hence the presumption is against the hypothesis of such a transfer. But, further, it is possible that $e$ has arisen within the $i$-declension, and that the distinction is non-essential and orthographical. Planta ${ }^{2}$ has shown that $\bar{l}$ may appear as $e$ in Umbrian and so it is reasonable to accept the explanation, which obviates the necessity of assuming a transfer.

Umbrian has certain forms in -e among the $i$-stems, which possess a locative force, e. g., ocre-m, ocre. No definite determination of these forms can be made. They may be i) locatives in $-\bar{e}, 2$ ) identical with the dative in $-e$ with a loc. force still present, or 3) the ablative with loc. function, as in the $o$-declension, testru, termunco, or the Lat. ablative-locative. ${ }^{3}$

Dative.-The endings of the dat. sg. in the different dialects are the following: Latin has $i$ in both $i$ - and consonant declensions, e. g., urbī, rë̀gī, lèg ${ }_{g}$, virtūtei, Apolenei, fraudei. Oscan has

[^10]${ }^{2}$ Planta, I, pp. 107, 108.
${ }^{3}$ Brugmann, Gr. II, p. 612.
-ei, e. g., Herentateí, ${ }^{1}$ A $\pi \pi \epsilon \lambda o v v \epsilon \iota$, Diúveí, dovfєı, luteí, Futreí, kvaístureí, leginei, medíkeí, Patereí, sverruneí, vezkel. The form for Umbrian is $-e, e . g$., Tadinate, Tarsinate, ocre, adFerture, karne, nomue, Iovie, pas̀e, kapide. There are also two forms in $\bar{\imath}, e . g$. . Iuvip" "Iovi patri" and Marti.

It is evident that the O . -ei must be referred to the locative of the $i$-stems $-\bar{e} i$ and this reference involves a metaplasm, since the form appears in the consonant declension. The Umbrian types $c$ and rarely $i$ are not so clear. The forms may have arisen either from $-i j$ of the $i$-stems or $-a i$ of the consonant declension. Hence it is possible to avoid the assumption of metaplasm and refer each to an origin within its own declension. It might, however, be expected that Umbrian would agree with Oscan and this probability is further supported. It has been noted that Umbrian has two forms in $-\bar{i}$. This condition is more nearly in accord with the treatment of $-e i$ than $-a i$ in Umbrian, ${ }^{2}$ since the latter does not appear as $-\bar{i}$. In Latin, also, the forms may be separated and referred, respectively, to -ai in the $i$ and $a i$ in the consonant declension. ${ }^{3}$ The forms of both languages, however, are in accord with the assumption that the metaplasm occurred in the Italic period. The two declensions had become merged in the dat.-abl. plur. and abl. sg. and this condition might promote identity in the dat. sg. If the metaplasm occurred in this period, the forms of all three languages can be referred to the same origin, the $i$-stem ending.

Latin also possesses a small number of dative forms in $-\ell$, e. g., Iünōne, C. I. L., I, 172, mātre, id., 177, salīte, I79, Marte, (3) 62, patre, 182, Diove, 188, vïctōre, 638, līctōre, 1060, Pilēmone, 1104, Hercule, 1170 , Tove, 1402, and in formulas, e. g., ī̈re dīcundō. This type may be from a locative of the $i$-declension in $-\bar{e} .{ }^{4}$ It is further possible that the $-e$ is an orthographical variant for the normal type $-\bar{i} .{ }^{5}$ This is supported by the anomalous parallelism

[^11]in Diozei rictôre, C. I. L., I, 635 , and by a similar representation of $-i$ in the nom. plural, c. g., ploirume, Hivire and abl. plural cavaturnes, mentovines, nüges.

Nom. and Acc. Plural.-The forms of these cases for the Italic period were respectively: $i$-stems, nomı. plural ees $<-e i e s$, e. g., O. Aídilis, trís "tres"; U. sacres, sacrer, puntes, pacrer: acc. plural -ins, e. g., U. avif, aveif, trif ${ }^{r}$ : consonant-stems ; nom. plural eis, e. g., O. humuns, meddíss, usurs, ${ }^{2}$ acc. plural -ens $<$ -ns, e. g., U. nerf, capif, vapef, vef, buf. In Oscan and Umbrian the forms are unaffected. Latin, however, has conditions differing from those of the Italic period. The original forms would give for the $i$-stems, nom. -és, acc. -is : for the consonant declension, nom. -es, acc. -ēs. As a matter of fact, however, the $i$-stems have both $-\bar{e} s$ and $-\bar{i} s$ in the nom. and acc. In the consonant declension there are no certain instances of $-e s,-\bar{e} s$ is the prevailing form, but -is occurs, though less often than among the $i$-stems. ${ }^{3}$

From these facts may be inferred, i) that in the nom. plural the $i$-stem form was transferred to the consonant stems at a very early period: 2) that the acc. plural in each declension was preserved, becoming -is and -és, respectively ; 3) that a syncretism arose among the $i$-stems, and in consequence $-\bar{s}$ and $-\bar{i}$ came to be used as a pair of forms, valid for either function ; 4) that this confusion among the stems has affected the consonant declension and caused the appearance of forms in -is in both nom. and acc. function.

The confusion of $-\bar{e} s$ and $-i s$ may be explained on the ground that, in the closely related consonant declension, the forms were already identical. This identity of form may have suggested an identity of function also among the $i$-stems.

Genitive plural.-The types which prevailed during the Italic period were respectively -ium and -um, e. g., O. AItтiúm ; i.ímítúm, fratrúm, nerum; U. peracrio, perachio; fratrom. fratru, buo.

[^12]In Latin one may observe a stricter adherence to the original forms than in any of the case endings previously considered. The $i$-stems have -ium with great uniformity in cases where an acc. in -im and an abl. in i rarely occur. Such are the types represented by auris, neuters in $-e,-a l$ and $-a r$, imber, clàdès, and the forms with reduced nominative, urbs, ars, gens, etc. On the other hand, most consonant stems have -um, e. g., dux, pess, pater, etc., and notably the original consonant forms, iuvenes, canis.

It is, however, evident that infection and confusion are present even in the gen. plural. This may appear in two ways, i) confusion of a general nature, and 2) metaplasm manifested in particular categories. The former type is represented by such instances as apum beside apium, nübum, nūbium, cadum, cadium, etc. ${ }^{1}$ These words show the characteristic of the opposite declension, though less often than the original form and in many cases rarely. The facts are in line with those noted for the acc. and abl. sg. and, indeed, such a metaplastic effect might well be expected, since the declensions are so generally affected at other points.

Of the particular categories to which reference has been made the most important is that of the stems in -nt-. These are undoubtedly consonant stems. These words have -ium beside $-u m$ even in substantival usage, $e . g$., parentum, parentium, clientum, clientium, nefantum, nefantium. It is possible that this condition has arisen as follows. The forms were originally participles and hence closely allied with the adjectival function. It is further evident that $i$-forms have assumed predominating force among the adjectives and have displaced consonant forms more often than among the substantives. Hence we may assume that -ium was first established in the participial and adjectival usages. From this point of contact -ium might well spread to the substantives.

Among the $i$-stems there are certain words which have $-u m$ with unvarying consistency, e. g., hospes, O. B. gospode; anas, Skt. ätís, Lith. antis, and many nouns which may have been $i$-stems at one point in their history (p. 39), c. g., artifex, scnex, müniceps,
${ }^{1}$ Neue, Formen. ${ }^{3}$ I, pp. 259 ff.
princeps, etc. It is noticeable that these words are words of more than two syllables which have lost their $i$-form in the nom. sg . The dissyllabic forms have a different history, since mors, pöns, etc., retain -ium. It is remotely possible that the heavier forms were more completely subjected to metaplastic influence than was the dissyllabic type; that the nom. -is was lost earlier and that, in general, the metaplasm was more effective in all the case forms. The fact that no traces of - is remain, as in sortis, mentis, etc., may point to this hypothesis.

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[^0]:    ${ }^{1}$ Balgs : dags = balgis : dagis; sthãs : uṣās=sthām : uscām.
    ${ }^{2}$ Brugmann, Gr. II, p. 723; Lassen, Inst. Ling. Prac., p. 314. Kuhn, Pali Gram., pp. 67 ff.
    ${ }^{3}$ Bartholomæ, K. Z., 29, 540 f.; Brugmann, Gr. II, pp. 724 ff.
    ${ }^{4}$ Kluge, Paul's Grundriss I, p. 389. Braune, O. H. G. Gr. ${ }^{2}$ § 216. Anm. 1.

[^1]:    ${ }^{r}$ Cf. Mahlow, AEO., p. 12 I.
    ${ }^{2}$ Leskien, Handbuch, p. 94.

[^2]:    ${ }^{1}$ Zvetaieff $121,122$.
    ${ }^{2}$ Zvetaieff 113 .

[^3]:    ${ }^{1}$ Brugmann, I. F., IV, 218 ; J. Schmidt, K. Z., 25, 139 and K. and S. B., IV, 266; Johanssen, K. Z., 30, 403; Danielsson, Gram., Anm. I, 25.
    ${ }^{2}$ Brugmann, K. Z., 24, 44; J. Schmidt, Pluralbild., p. 148, otherwise J. Sclimidt, K. Z., 27, 328; cf. also Thumeysen, K. Z., 30, 489.

[^4]:    ${ }^{\mathrm{I}}$ Whitney, Skt. Gram. ${ }^{2}$ § 304 b.
    ${ }^{2}$ Brugmann, Gr. Gr. ${ }^{2}$ pp. 207, 205.
    ${ }^{3}$ Brugmann, Gr. II, pp. 526, 547.

[^5]:    ${ }^{1}$ Corssen, II, pp. 597, 598, 599.
    ${ }^{2}$ Brugmann, Gr. I, p. 475 ; Stolz, Lat. Gr. ${ }^{2}$ pp. 321 ff.
    ${ }^{3}$ Buck, Voc., 194 ff.; Plauta, I, 225 ff.; Brugmann, Gr. I, pp. 475-6.
    ${ }^{4}$ Brugmann, Gr. I, p. 477 ; K'luge, in Paul's Gr. I, p. 359.

[^6]:    ${ }^{\text { }}$ Murcim, Varro, L. L., I51; other texts read murcia (strong form). Cf. Bücheler, "Umbrica," vocab.
    ${ }^{2}$ It is noticeable that the noun forms are either fem. or neut. in line with the facts of the development of substantive force in adjectives. Cf. Brugmann, Gr. II, p. 444.
    ${ }^{3}$ Exc. parenteis, an error.

[^7]:    ${ }^{x}$ Planta, I, p. I47.
    ${ }^{2}$ Planta, I, p. 148.
    ${ }^{3}$ Neue, Formen. ${ }^{3}$ II, pp. 196 ff.
    4 Schweizer-Sidler, Gram., p. 152.
    5 l'im probably for *vïm; cf. Brugmann, Gr. II., p. 550.

[^8]:    ${ }^{\text {t }}$ Georges, Lex. der Lat. Wortform., "turris."
    ${ }^{2}$ Buck, Voc., p. 45 : Planta, I, p. 100.
    ${ }^{3}$ Planta, I, p. 100.

[^9]:    ${ }^{2}$ Brugmann, Gr. II, p. 594.
    ${ }^{3}$ J. Schmidt, K. Z., 27, 292 f. Pluralbild., 41 f.
    4 Buck, Voc., p. 39. Planta, I, p. 563.

[^10]:    ${ }^{x}$ It is evident that e has prevailed to the exclusion of $-\bar{i}$ to a much greater extent in the consonant declension than among the $i$-stems, since the type $-\bar{i}$ is relatively infrequent among the former.

[^11]:    ${ }^{1}$ Possibly the only $i$-stem, from -tât or tâti-.
    ${ }^{2}$ Planta, I, pp. 143, 147, 148, 368.
    ${ }^{3}$ Brugmann, Gr. II, p. 603.
    ${ }^{4}$ Brugmann, Gr. II, p. 604.
    ${ }^{5}$ Solmsen, I. F. IV, 137.

[^12]:    ${ }^{1}$ Planta, I, p. 505.
    ${ }^{2}$ Planta, I, p. 229 ; Buck, Voc., p. 196.
    ${ }^{3}$ Brugmann, Gr. II, pp. 665, 666.

