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GENERAL PRINCIPLES
OF THE
STRUCTURE OF LANGUAGE.

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OF THE

STRUCTURE OF LANGUAGE

BY

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IN TWO VOLUMES

VOL. I.

LONDON

TRÜBNER & CO., LUDGATE HILL

1885

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Ballantyne Press

BALLANTYNE, HANSON AND CO.
EDINBURGH AND LONDON

PREFACE.

THE science of language contains two parts which are distinct from each other, the science of etymology and the science of grammar. The science of etymology investigates the general principles of the production and successive changes of the elements of which language consists, the laws of their expressiveness whereby they were connected in their original form with the elements of thought, and the laws of their subsequent alterations in utterance and in meaning. The science of grammar investigates the general principles of the structure of language, the causes which have determined the various modes of breaking expression into parts, and of putting the parts together in discourse, that prevail amongst the various races of mankind.

As a contribution to the former branch of the science of language, the author of this work hopes to publish, when he has revised it, a classification which he has made of Indo-European roots according to the general principles of expressiveness whereby they seem to have conveyed their fundamental meanings. And in the present publication he considers the influences which determine varieties of utterance among the various races. But with the exception of the latter, he is concerned here only with the second part of the science of language ; and he would first briefly explain his method.

In studying the structure of language in the spirit of inductive science, with a view to ascertain the causes which determine it, the mind must move with continual alternation from fact to theory, and from theory to fact. "*Neque enim in plano via sita est, sed ascendendo et descendendo.*"¹ And as language springs from thought, embodying it in expression, we have in our own consciousness the cause and the production ; and consequently the materials of theory are always within our reach in the laws of thought and expression. In the facts of language, so far as they are known to the scientific

¹ Bacon, *Novum Organum*, lib. i. 103.

inquirer, viewed in connection with the conditions amid which they are found, he will strive to penetrate as best he can to their causation. And the theory thus provisionally formed, he will proceed to correct by other facts, in the hope that by continuing the process through all the main varieties of language, the facts may all at length be seen in such scientific order as will reveal the truth as to their causation, and furnish a proof of the theory in the light of which they are viewed.

Now, such proof of the theory need not involve any reference to the process which has led to it. For no purpose could be served by recounting the plausible hypotheses which had to be abandoned, and the imperfect guesses which were gradually transformed by successive corrections, as facts were more widely studied and more carefully compared.

If the causes to which a theory attributes facts are not inextricably complicated with each other in their effects, and are capable of exact measurement in themselves and in their effects, the theory may possibly be proved by three steps: first, a deductive study of the causes, wherein the exact effects are proved which would follow from their action according to the exact degree in which they are supposed to operate; secondly, a proof that those causes, operating in a certain exact degree, are present among the conditions of the facts; thirdly, a proof that the facts which the theory professes to account for are the exact effects which should follow from this proved operation of the cause.

If, however, the causes and effects be not capable of exact measurement, each of these steps becomes insecure and needs circumspection. And so in the proof of a theory of the structure of language, the deductive study of the causes becomes an estimate of tendencies, which, however carefully it be made, is so vague that there is no certainty how far the supposed causes are adequate to produce the effects which may seem to be connected with them; and it is necessary, therefore, to make as wide a study as possible of all the causes which can be supposed to be concerned in the production of the facts, that what each contributes may be taken into account. The second step requires similar fulness in ascertaining for all the conditions which may affect the result, their presence, and an estimate of their degree. And the third step, instead of being an ascertained correspondence between the facts and the precise effects deduced from certain precise causes, becomes a proof that the facts vary with the variations of the causes in exact correspondence with the theory. For though the causes and effects be not capable of exact measurement, they can be

known as more or less; and if the several elements of the complex facts to be accounted for vary through all their combinations in correspondence with the variations of the causes to which they have been assigned, there will be an inductive proof of their connection as cause and effect, according to the inductive method of concomitant variations.¹ The more various and manifold the causes and effects are, the stronger will be the proof of their connection as such which will arise from their corresponding variations as actual co-existing facts. For the more each influence varies in its own degree and in its combination with other influences, the more clearly is its action indicated by the co-existence with it, through all these varieties, of the proper effect in the due degree.

The following effort to establish a theory of the structure of language consists of three steps such as have been described. The first states the theory as a deduction from the laws of our nature, and is in itself quite hypothetical. It forms the subject of the first Book, which may be entitled a deductive study of the action of the causes which tend to affect the structure of language. The second and third steps may most conveniently be taken for each supposed cause separately, each cause and its effect being traced in corresponding variations through the facts of life on the one hand, and those of language on the other. Thus taken, they form the subject of a second Book, which may be entitled an inductive proof of the causes which have determined the structure of language.

Some of these causes affect language more profoundly than others, because lying deeper in the nature of man. One cause in particular, the quickness or slowness of his mental action, is so deeply seated that each of its varieties prevails over a large portion of the globe unaffected by local differences in mode of life and in physical circumstance. And its effect on language is similarly profound. It produces the leading characteristics by which the languages of mankind are distinguished from each other, and throws them into groups which belong to great divisions of the globe. The study of this cause comes naturally first in order, and to the evidence for it as a fact a space proportional to its importance is devoted. Its effect on language is so profound and subtle, and has consequently to be traced so deep into each language, that it is most convenient to give once for all in connection with this first investigation a full account of each language, so far as the materials admit and the importance of the language as a variety of human speech demands. In such connected view of the entire

¹ Mill's Logic, Book III., chap. viii. sect. 6.

grammatical system of the language, the true nature of each variety of structure which belongs to it may best be seen. And while these varieties when afterwards studied in connection with each cause can be referred to as already given, those which are connected with the first cause can be singled out from the rest by marking with an asterisk in the table of contents the paragraphs in the grammatical sketches which refer to the action of that cause. The other causes whose action may thus be briefly stated by mere references to what has gone before, can themselves also be briefly evidenced as present by leading facts in the history and life of man.

To the two Books are prefixed the definitions and explanations which were formed in the course of the investigation to give exactness to the apprehension of facts in order the better to see how they were to be accounted for.

Besides the interest which belongs to language itself as the most astonishing fruit of the mental activity of man, the scientific study of its production possesses another interest as naturally forming the first division of the scientific study of the phenomena of human society. For language is the earliest product of the social life of mankind, and is a condition of all the rest. And the science of language, as naturally first in order, may be expected to throw light on the method, and to furnish data for the principles, of the other sciences which investigate the laws of man's social development. It penetrates to the roots of history in the mental character of the various races, and ascertains definite characteristics of mental action with which, as they vary from race to race, all the other phenomena of national life must harmonise.

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ERRATA.



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„	16	„	39	„	“Labro,”	<i>read</i>	“Labio.”
„	23	„	16	„	“connected with it by association,”	<i>read</i>	“dependent on it for their interest.”
„	36	„	24	„	“proceed,”	<i>read</i>	“precede.”
„	60	„	36	„	“benales,”	<i>read</i>	“enables.”
„	104	„	14	„	“68,”	<i>read</i>	“69.”
„	107	„	2	„	“ño,”	<i>read</i>	“ñõ.”
„	109	„	40	„	“prenominal,”	<i>read</i>	“pronominal.”
„	134	„	32	„	“my,”	<i>read</i>	“may.”
„	139	„	44	„	“73,”	<i>read</i>	“81.”
„	144	„	31	„	“verbal,”	<i>read</i>	“objective verbal.”
„	182	„	31	„	“substances,”	<i>read</i>	“substantives.”
„	301	„	6	„	“uñgal,”	<i>read</i>	“uñgal-.”
„	301	„	10	„	“tall,”	<i>read</i>	“tall-.”
„	330	„	9	„	“either to the,”	<i>read</i>	“to the.”
„	501	„	25	„	“tense,”	<i>read</i>	“sense.”

GENERAL PRINCIPLES

OF THE

STRUCTURE OF LANGUAGE.

*DEFINITIONS AND EXPLANATIONS OF THE
ELEMENTS OF SPEECH.*

SUBSTANTIVE OR NOUN.

1. WE are not only capable of experiencing sensations awakened within us by impressions from without, but we can also through such impressions perceive external objects. And in the act of perceiving an external object, the mind adds to the impressions which it has received the thought of an external object, at the same time giving unity to the impressions made on it by the object, and thinking them not as in itself, but as in their source in the object perceived. Thus, when we observe a particular round body, of two or three inches in diameter, of a reddish yellow colour, and with a peculiar unevenness of surface, and awakening certain associations of taste and smell, instead of being merely conscious of certain impressions, we perceive an orange; and in doing so we become aware of an external object, and at the same time we combine into one idea of that object the shape and size, and colour, and roughness, and taste, and smell, thinking these not as elements of thought in our mind, but as belonging to the orange. Or, instead of combining these in the one idea of an external object, we can observe them as separate external objects, fixing our attention only on the colour, or shape, or other element belonging to the orange, or we may observe only a part of it, or mentally take it to pieces, and think the orange not as one object, but as a combination of several. We have the power, moreover, to think afterwards of what we have perceived; to think separately what we have perceived in combination, and to make new combinations out of the elements with which perception has furnished us. But in all such conceptions of our minds, we think as we perceive. Our thoughts in the absence of the sensible objects correspond to our thoughts in their presence. They have the same unity of idea, and the same

reference to an object; so that even when we think of mental creations which have no real counterpart in existence, they are conceived not as thoughts, but as objects of thought.

The inner acts also, and states, of mind and consciousness we can contemplate, recalling them to our thoughts, and by a kind of double mental action making them the objects of thought; and fixing our attention on any part of them, we can think it as an object of thought and give unity to our idea of it.

Nor is it only what may be thought as if simultaneously perceived, that we can thus combine into one idea of one object. To successions also we can give a similar unity. Thus we can recollect how we started on a journey, and we can let our memory dwell successively on various stages of it; and we can also sum up the whole in one idea, and think of it as our journey from one place to another. In one such idea may be summed up a great number of successive objects of thought, and each of these may itself be a combination of a great number of simultaneous objects. The idea of our journey may involve not only the thought of our progress from place to place, but also that of the carriage, the company, the horses, the driver, the scenery, the weather; these, or other parts of our experience, entering more or less distinctly into the idea. And under that idea, when it is formed, they are all thought together as one object.

2. An idea of an object is a thought of the object, with revival of impressions associated with it. But it is to be observed that in thinking an idea of an object, it is not necessary that all the elements which we have noticed in the object should be present to our thought. Only so much is necessary as will bring with it the thought of the object. For in perceiving or thinking of an object, there is, besides what we perceive in it or think in it, the object itself, in which such attributes are united. And it is the object itself that we think of in the idea. Moreover, the idea may be thought as the idea of an object which may contain other elements, which have not been noticed. So it is in our perception of external things. We become aware of the object, not as the mere sum of what we have observed in it, but as a thing in which, indeed, we have noticed certain elements, but which doubtless has other qualities and properties. And when we observe a new quality or property in it, it is still thought as the same thing, though the idea of it may have changed. The creations of our own minds may be thought in the same way, and may be conceived as the same objects, though the idea of them be altered; our idea of an object being often only a particular aspect of it, under which it is thought, and which represents the whole of it.

3. An object may awaken associations of sense and thought, which are common to it with other objects; and then the idea of it formed of such associations will be a common or general idea. Or it may awaken associations proper to itself, and then the idea will be a proper idea.

A number of objects may be thought together, each one under the same idea as every other, and all together under the idea of a plurality of objects thought thus identically.

4. It is such ideas that common Substantives, and proper Substantives, and plural Substantives respectively express.

For a word which expresses an idea of one or more single entire objects of thought, under which idea the mind thinks the whole of each object, and if there be more than one, thinks each identically as every other, is called a Substantive or Noun; as *orange, journey, greenness, virtue, John, men, horses*. Such an idea may be called a substantive idea, and the object of thought a substantive object; and every substantive idea of a single object involves the attribute or attributes which are thought as in the object, and the object itself or substance in which the attributes dwell. By the substance of a noun is meant, not the abstract logical substance which is distinguished from *all* the accidents of a thing, as that in which they all inhere, but it means that to which the attributes thought in the idea of the noun belong, which is distinguished only from these attributes as the object itself which possesses them. The attributive part of a substantive idea is the general part; the substance the particular part.

5. The same substantive object thought under different ideas in succession is expressed by nouns in apposition; as *king, father*.

ADJECTIVE.

6. An object, after having been thought under the idea of a noun, may then be compared with and distinguished from that idea. Thus, when we speak of *a small horse, a big fly*, the idea of the object, as a horse or a fly, is accompanied by the thought which results from comparing it with the ordinary idea of horses or flies. Moreover, this comparative element, *small, big*, does not attract thought to itself so as to be detached from the noun as a distinct object of thought, but is thought along with the noun as part of the one idea.

An object may also be compared with any other object, and the comparative element may be thought in the same way as part of the idea of the object which is compared. Thus, we may speak of the *bright sun*, meaning thereby that the sun is bright compared with other objects.

The comparative element thus thought is expressed by an Adjective. For a word that expresses a comparative element, which is conceived not by itself, but along with a substantive idea of an object, as part with it of one idea of the same object, is called an Adjective.

PRONOUN.

7. In thinking a substantive object, the attention of the mind moves to the impressions which it has of the object, and then forms the idea of it. But of this twofold process, the second part may be almost or altogether omitted; for the idea of the object is not expressly formed by the mind when that idea has been recently thought, and need not be renewed. The object is then thought not explicitly, but merely as what we are thinking about, or what our attention is directed to, and this abstract element takes the place of the idea of the

object. Thus, by such words as he or it, himself or itself, we mean the person or thing, or the very person or thing, that we are thinking about, which has been already mentioned, and which therefore need not be more expressly denoted than as the person or thing that is the object of our attention.

Also, a substantive object may be more particularly denoted by a similar element used as an adjective. Thus, when we say *that man*, or *the man*, we express the idea of the man distinguished as the particular man that we mean, the man who is the object of our thought. That object is then distinguished, not by what it is in itself, but by the direction of our thought to it; and in such direction it may be distinguished as nearer or more remote, as when we use the words *this* and *that*.

When we define a substantive object by some fact in which it is concerned, as when we say, *the man whom I saw yesterday*, the object is thought in that subsidiary fact, with an attributive direction of thought towards it. Thus, in the word *whom* in the above expression the man is denoted by an abstract reference to him, and in that reference an additional element is attributed to him—namely, the part which he had in the fact, that I saw him yesterday.

The act of directing our thought to a substantive object also comes into prominence when the object is not determined, and we either think it as undetermined or seek to determine it. Thus, when we speak of *any man*, or *a man*, our thought moves indeterminately amongst our ideas of men; when we speak of *a certain man*, our thought moves indeterminately amongst our ideas of men, each idea being thought with particularity; when we say, *what man*, our thought moves amongst our ideas of men with an effort of inquiry; and in each case the idea of *man* is supplemented as with an adjective by the thought of him as the object of a corresponding indeterminate direction of thought.

Moreover, we may think self, not by any thing which is proper to the idea of ourselves, but abstractly as the subject who thinks or speaks, as when we use the word *I*; and we may think the person to whom we speak with equal abstractness as the object of our address, as when we use the word *thou*.

Now, the words which express all these elements of thought are Pronouns, being distinguished, according to the order in which they have been here described, as Demonstrative, Relative, Indefinite, Interrogative, and Personal Pronouns. For a word which denotes or characterises adjectively the substantive object of thought or speech, as object of the attention directed to it, without expressing the idea of it, or which denotes the subject of consciousness abstractly as such, is called a Pronoun.

Pronominal elements may be used to express an act of attention directed to an object in connection with the thought of another object in order to connect in thought the former with the latter. They may also be used to express an act of attention directed to an object in connection with the thought of that object, the mind taking it abstractly as a mere object of attention in order to connect it in thought with

another object. The former use may be illustrated by the person-endings of verbs; the latter by the liturgical expression Jesus Christ-his sake. The latter use is a remarkable feature in many languages, and may be called Arthritic, as it furnishes a word with a kind of joint by which it is articulated in the sentence.

PREPOSITION.

8. An object, instead of being thought under a single idea, may be thought under a combination of ideas, as involving more than one substantive object. In that case the mind thinks the whole, with attention passing through the parts, and joining them together. And if the mode of their connection be distinctively thought, the mind in the transitions from part to part thinks the relations which constitute the parts into the whole. Thus, if we observe a man on a chair, distinguishing the man and the chair, and note the mode of their connection, with thought passing from the man to the chair, we get the thought of *on* in the transition. If we observe the object with thought passing from the chair to the man, we get the thought of *under*. And in thinking the relation, we have before the mind the object denoted by the first member and we think partially the second; so that, while the relation is in apposition to the first member, thought tends to pass from the relation to the second object, as from a part to the whole; and if the relation be thought as a noun, it is so expressed, as when we say *an island west of England*.

Relative elements may be thought as Adjectives, as when, instead of saying *the region below us*, we say *the region below*, or *the lower region*. Or they may be thought as substantives, as when we say *the lowness of the region*. But when thought properly as relations, they are transitional thoughts between related objects. Relations therefore are not entire objects of thought. To think them it is necessary to have the related objects before the mind, and to pass in thought from one of these to the other. As thought passes to the second object through the relation, it unites the two in one conjoint idea, and thus a number of related objects may be thought together in one conjoint idea. Thus, we may speak of *a man on a hair-bottomed chair, with a wooden stool under his feet, and a black-thorn stick in his hand*; and as we think each relation, the mind combines the related objects till the whole unites into one idea.

9. Prepositions are elements of speech used before Substantives and Pronouns to denote, in reference to these, relations of space or position, and other relations which suggest these so strongly as to be expressed by the same word. When such elements follow their object they are called Postpositions.

10. A series of combinations of correlated objects may be thought under one conjoint idea in a succession in time. Thus, the idea of *a man driving his horse under his cart three miles in half-an-hour*, comprises not only the combination of a man, horse, and cart, with the relations which connect them, but the series of such combinations which existed at each moment during the half-hour.

VERB.

11. But all those ideas and combinations of ideas which occupy our thoughts are generally connected with the thought of a further element which is essential to the interest which they have for the mind, namely, the real existence of that whereof they are the idea. And when conceived with the thought of this element, they vary according as we think of a present reality, or of what we recollect, or of what we expect with more or less confidence, or of what we imagine. Now, the thought of this element is modelled after the thought of our own conscious life—present, past, future, contingent, or imaginary; for our own conscious life is the original of our idea of existence. The thought of real existence involves essentially in each of its modes or positions in time a succession of being or doing; for without such succession there is no life. And, moreover, it is necessary for the full sense of real existence in the various apprehensions of it that as we think our own conscious life with consciousness of ourselves, so we should think the realisations of fact as successions of being or doing in the subjects of them. It is in the consciousness of our own successive doings and beings that we think the existence of a permanent self. And it is under the same form in a succession of being or doing of its own that we conceive the reality of any substantive object. This is an element additional to the idea of the object, and may be thought of in the various aspects which have been mentioned. Thus we may think and speak of *a tree*, but the reality of what is thought under that idea is an element additional to the idea, and that element is conceived as a succession of being which is thought in *the tree* as its subject, *there is a tree, there was a tree, there may be a tree.*

In the successions of our own consciousness, too, we become aware of the reality which belongs to our own qualities, conditions, actions, apprehending them as actually present or remembered, or expected or imagined. We notice, or we recall to mind, or we imagine the consciousness of having the quality or being in the condition, or doing the action, and in our consciousness of the particular being or doing thus thought we have a corresponding apprehension of the reality of the attribute or action.

Under the same form we think, in their realisation, the attributes or actions of others as particular successions or as defining the successions of their being or exerted energy. Thus we may think or speak of *the small man, the burning mountain*; but when we would attach reality to these attributes we say, according to our apprehension of that reality, *the man is small, the mountain was burning, the mountain was a volcano, the mountain may have been a volcano*; under each of which expressions we think as in the subject a succession of being variously apprehended, viz., *is, was, may have been*, which is defined by the attribute belonging to the subject, whether thought as an adjective or as a noun. Thus, too, we may think or speak of *a man's journey, or a man journeying*, but when we would attach reality to

the action, we say *the man journeys* or *journeyed*, in which we think the journey as a particular succession of doing in the man apprehended as present or as past, or *the man is journeying*, in which we think it as an attribute defining a present succession of being in the man.

A number of objects correlated together may take the element of reality as a single object. Thus we may say, *there was a man sitting on a chair with a stick in his hand*, attributing the being to the whole combination. Or one of the objects, or a correlation of more than one, may attract notice, and the whole combination be thought as this connected with the remainder. The reality of the whole is then thought as a succession of being or doing in the one, or the correlation of more than one defined by connection with the remainder. Thus we may say, *a man sat on a chair with a stick in his hand*, or *a man sitting on a chair had a stick in his hand*. Here the whole combination is thought as a sitting of the man, or as a having of the man sitting on a chair; and its reality is thought in the succession of that doing or being in the man, or in the man sitting on a chair, as its subject, and particularised by the rest of the combination. Such a combination forms one conjoint idea though it may include many objects. That idea is the idea of a succession of being or doing of the subject defined by the remaining elements of the combination. Each member of the combination has a part in the doing or being. And to the whole belongs the time which the doing or being occupies. In every case the word, which has the element of realisation in its meaning, is a Verb. For a word which expresses an idea of realisation as a succession of subjective being or doing in a subject is called a Verb, whether or not it involves also a pronominal representative of the subject, called its person.

A Verb cannot be thought except as in its subject, and therefore it cannot without its subject express an idea of an *entire* object of thought, nor can it so coalesce with its subject, as with it to express an idea of a single object of thought, or of a double object of which each member is thought identically. The succession that is in a verb may be called its Process; the act or state of which this is the process of realisation may be called the Accomplishment.

12. As it is not necessary that all the elements which have been noticed in a substantive object should be present to the mind in the idea of it, so neither is it necessary that the whole of a succession should be present to the mind in thinking a verb. Only so much is needed as will bring with it the fact which is the object of thought.

13. The varieties of the Verb according as the subjective realisation is apprehended in different relative positions in time, are called Tenses.

Its varieties, according as the subjective realisation is apprehended as a simple fact, or weakened as contingent or ideal or by being more or less subordinated to another fact as a member of it, are called Moods. For when a verb is thought in a relation which is present to the mind along with its own realisation in the subject, that relation, in proportion to the strength with which it is thought as outside the subject, weakens the thought of the subjective realisation.

When the succession expressed in a verb is thought in a substantive object without subjective realisation, it is expressed as a Participle ; as *man walking*.

A Participle may vary according as its inherence is apprehended in different relative positions in time, or as more or less contingent or imaginary.

A Participle combines with a noun, but an adjective with the substance of a noun as part with the noun of one idea of the substantive object.

When the succession expressed in a verb is thought not with realisation in a subject but separately as a single entire object of thought, the idea of it is expressed by a verbal noun ; as *the singing, the walking*.

NUMBER.

14. A verb denotes a succession of being or doing, thought in a subject as we think a being or doing of our own. And although it may have many subjects, as when we say, *fifty men walked in a procession*, yet when properly thought the doing or being of each is thought identically in the same model of our own consciousness, and consequently there is no plurality except of subjects. So also a verb may denote an action having many objects, but being thought identically with each it does not become plural. The thought of the subject or object may mingle with that of the verb, so that the verb shall be thought as belonging to a plural subject or as having a plural object, but so long as it is thought with its proper subjectivity, it does not become plural itself. The plurality belongs to the subject or to the object.

In thinking the number of a noun with due sense of the individuals, whether dual, trial, or plural, we think a combination of substantive objects, each of which, so far as it is thought, is thought under the same idea. The idea having been thought once, need not be repeated for each object. Neither is it necessary to think every individual ; but as in thinking any substantive object, a part may stand for the whole. Each object noticed is thought abstractly as a unit ; and whatever facilitates such abstract individualisation promotes the development of Number in nouns. The attributive part of the idea is thought as common to the individuals, and it is to the substance that the Number belongs. Different numbers may be distinguished, as singular, dual, trial, plural, when the fulness or distinctness with which the individuals are thought differs so much according as there are two of them or a small number or a large number, that different expression is demanded for the combination.

15. Not only words which express ideas of single substantive objects, but words also which express these combined with elements of Number and of relation or Case, are called Substantives or Nouns. Adjectives and Pronouns, too, may involve these elements.

GENDER.

16. The ideas of substantive objects get an element of continuance from the successions of being or doing in which they are involved. They may also get an element of force from the same source in the associations which are formed with the force of causation or resistance exerted in the facts of experience. Thought thus as powers, substantive objects differ according as they are conceived to be primary or secondary powers, that is, as independent, or as dependent on others, because subordinate, or derived, or liable to be controlled. For a substantive object may be thought as an object which is only an appendage or attribute, so as not to be capable of an independent energy of its own, or as subordinate to other objects with which it is habitually connected in the mind; or the object may be thought as destitute of energy, either because it is found to exert no force in fact, or because the idea of it is of such an abstract nature as not to include a sense of energy. Thus there may arise a threefold distinction of substantive objects as primary and secondary powers, and as not involving force. Now the thought of objects as not involving force contrasted with those which have it, naturally suggests the difference between dead objects and living. And the distinction in respect of independence amongst those which are thought as having force, suggests the distinction between the male and the female. If, however, no objects are thought without an element of force, or if in those which have that element its degree of independence be not noted, the varieties of substantive objects in this respect may be reduced to two. And if objects be not thought as sources of force or causative powers, there may be no such varieties at all.

Such is the Gender of Nouns, and hence its limitation to Masculine, Feminine, and Neuter, or its limitation to two kinds, or its absence altogether. Gender then may be defined to be the distinction of substantive objects of thought in regard to the sense of them as independent or dependent sources of force, or as not sources of force, which the ideas of them take up by association.

ADVERB.

17. Just as a substantive object may be compared with the idea under which it is thought, and the element which results from the comparison may be combined with that substantive idea in one idea of the object compared, so what is denoted by an adjective may be compared with other applications of the adjective, or what is denoted by a verb may be compared with other applications of the verb; and the comparative element conceived, not by itself, but along with the idea of the adjective or of the verb, may be combined in the one idea with the adjective or with the verb; as *very good, he rides well*. Such a comparative element may itself be qualified in the same way by another element of the same nature; for example, *he rides very well*.

An Adverb is a word which expresses such a comparative element thus combined.

It is with a comparative element of this kind that negation is thought; the negative fact being compared with other facts which are denoted by the same verb, in respect of that element which is thought under the verb, and the resulting comparative element being a negative.

18. And just as a substantive object may be thought abstractly as the substantive object of our present attention, and be denoted by a Pronoun, so may a qualifying element which is denoted by an Adjective or an Adverb be thought more or less abstractly as the adjectival or adverbial object of our present attention, and be denoted by a Pronominal Adjective in the one case, and a Pronominal Adverb in the other; for example, *such, thus*.

CONJUNCTION.

19. As one substantive object may be thought in relation to another, so may one doing or being, under the idea of a verb, be thought as related to another, whether in respect of time, or origin, or end, or tendency, or in some other respect. Such relations are thought in passing from the one doing or being to the other; and, when expressed in single words, are Conjunctions. Some Conjunctions express connective ideas which may also come between nouns; as *this man and that man, that man or the other man*.

INTERJECTION.

20. An Interjection is a word which expresses emotion, either by a mere utterance which is associated with the emotion, or by an utterance expressive of an element of thought which is associated with it.

COMPOUNDS AND DERIVATIVES.

21. There are combinations of thought which consist of parts, thought as such, whereof the mind, instead of thinking each part separately, and then combining it with other parts, continues in the first instance to think each part, after having passed to the part which follows.

Of this nature are compound and derived ideas, and often also grammatical or syntactical combinations of elements of a fact.

Compound ideas consist of parts which occur also as separate thoughts, or as the principal element of separate thoughts; as *land-lord, goat-herd, out-number*.

Derived ideas have parts added which do not occur as separate thoughts, or as the principal element of separate thoughts; as *girl-hood, good-ness, strength-en*.

Both compound and derived ideas may have different degrees of mutual penetration of the parts.

Correlated ideas, when frequently occurring in the same correlation, tend to get such close connection as to pass into compounds. And both compounds and derivatives tend to get by use more complete fusion of their parts together.

SENTENCE.

22. To express in a sentence a conception of a fact, we must express the parts separately, and put them together so as to form the conception. The mind distinguishes in the fact certain objects and attributes of objects, and at the same time gives to the whole a realisation, which is conceived as a doing or being of one part, and as determined by the remainder. That particular distinction of parts and succession of realisation tends to come into the view of the mind which is most favoured by the associations of life. And as the parts become more distinct to the mind, the relations are more clearly distinguished which connect them into the whole. The conception of a fact having been formed, it has to be expressed in parts. And as we express each part, we combine it in thought with the parts which have been already expressed, and then think the whole fact side by side with this combination, in order to bring out the next element.

23. Now, in whatever order the parts may be ultimately expressed, the adjective must, in the first conception of the fact, be thought after its noun. For it follows from what has been said as to the nature of an adjective, that the thought of the noun is necessary to the formation of the thought of the adjective. For the same reason the verb, which defines the affection of the subject, must at first be thought after its subject; and the relation must be thought after the first of the two correlatives, and before the second. Moreover, the subject, whether simple or qualified, or a correlation, and the verb, must at first be thought before the remainder of the sentence; for the remainder is thought as determining or defining that which the verb expresses, and, therefore, presupposes the thought of the latter. And the adverb must be thought after the verb or adjective, or other adverb which it qualifies.

This then may be called the natural order of thought. In this order the part which follows defines, or goes to complete with a supplementary thought, that which precedes, and after having been thought as supplementary to it, combines with it; so that in each case three thoughts are formed in succession—the antecedent part as undefined, the defining part, the antecedent part defined by combination with the defining part. Now the idea of the antecedent part as defined by this combination may have an interest which overpowers the idea of it as thought previous to being defined. In that case, when it comes to be expressed, it is expressed after having been defined, and not before, so that the antecedent in the natural order of thought becomes the consequent in the order of expression. In reality, however, this consequent is not the same as when it was antecedent, because it is now defined.

Thus, in the natural order of thinking *man good*, *man* is first thought in the general idea, then *good* is thought as an attribute defining *man*,

and then the particular idea is formed by combination of the two. If the expression be *man good*, it is the first and second of these three ideas that are expressed, and the mind supplies the third without expression. If the expression be *good man*, it is the second and third of the three ideas that are expressed, the first being dropped. The course of thought may have a connection with an element, or may give it an interest independent of the elements which should come before it, and this may lead the mind to pass to it without expressing those other elements until they have been defined by being thought in combination with it. These then will be expressed after it, even though such may not be the habitual order of expression.

When that which is antecedent in the natural order of thought is habitually consequent in the order of expression, it expresses a thought defined by combination with that which out of the natural order has been put before it; the thought thus defined having, by reason of its habitual superior interest, overpowered the thought previous to being defined, so that the latter is not expressed; or the thought of the natural consequent in its more general associations has overpowered, by its superior interest, the thought of it as defining the natural antecedent, so that the thought of this is dropped, and then taken up after the other as defined by it.

24. The realisation and succession that are in the verb pervade the entire sentence; for they are in the subject as a being or doing of the subject, and they are carried into the remainder of the sentence to be defined by it. They thus give to the sentence a higher unity than it would have as a mere correlation.

VOWELS AND CONSONANTS.

25. The transmission of thought by speech depends essentially on associations between thought and sensation. The thoughts suggest to the speaker the words, whose utterance as felt and heard by him is associated with the thoughts; and the sensations awakened by that utterance in the hearer suggest the thoughts which are associated with them. Now all human speech involves two kinds of utterance, which differ remarkably in their capabilities of impressing sense and of being associated with thought. The vowels are modifications of vocal sound, and that sound affects the hearing of the speaker and of the hearer alike. The consonants are interruptions more or less complete of vocal sound, and are produced or accompanied by muscular closures effected in the mouth by the tongue or lips. Their effect on the hearing is partly negative as an interruption of sound, and partly positive as an impression on the ear. And though the ear is sensible to the fine distinctions both in the interruptions of sound which are made by the different consonants, and still more in their positive impressions, yet in many of them their action on the hearing is extraordinarily slight, considering the important part which they generally play in human speech. But while the consonants, for the most part, make comparatively slight impression on the sense of the hearer, they are accompanied by very strong and definite impressions on the

muscular and tactile sense of the speaker. For they each require a muscular action in the speaker's mouth which involves very definite sensations. And it is by awakening in the hearer the recollections of these sensations in his own utterance of the consonants, rather than by their direct impressions, that the consonants have expressive power. Now these sensations of consonant utterance are principally muscular sensations and sensations of touch, and they have therefore much more association with ideas than sensations of hearing can have. For through the muscular sense and the sense of touch we get much more of our ideas of objects than through the sense of hearing. The utterance of the consonants involves sensations suggestive of contact, separation, figure, tension, force, resistance, friction, and motion; and these are principal elements in our ideas of objects. The vowels indeed also involve muscular sensations, and from these they too derive expressive power. For their modifications of vocal sound are produced by different positions of the organs of the mouth. But these sensations are much fainter and less definite than those of the consonants. The consonants, therefore, have much greater capability than the vowels of representing ideas; the vowels much greater power than the consonants of impressing the sense of the hearer. Now in the transmission of thought by speech there are two steps. The speaker represents his ideas in his perceptions of his own utterance, and he calls the hearer's attention to the representations which he has made. The consonants are more adapted to the first part of the process, and the vowels to the latter. They both have sound and expressiveness, but the vowels have the more sound, the consonants the more expressiveness.

For the utterance of the vowels and of the consonants, breath is supplied by the action of the chest. And it is to be observed that the one expiration supplies the utterance, it may be, of several words; so that while the action of the organs of the mouth and throat is directed to the parts of expression, that of the chest is directed rather to the whole. It is for the whole utterance which the current supplies that the chest emits it, and the volition of the whole utterance is that which prompts the emission. The strength of the action of the chest, therefore, represents the strength of the purpose to carry through the expression of thought. Force of breath, however, in the utterance of the vowels produces loudness, and this is governed by a regard to the hearing of the person addressed, and consequently it is on the consonants mainly that the strong purpose of expression tells. It is the pressure of breath from the chest in uttering the consonants which represents the strength of purpose in carrying the expression through.

26. The initial breath in the utterance of the vowel is weak and gives little sound; for it takes some time, however short, for the breath to acquire its full force of passage through the vocal chords from the compression of the chest. If a vowel follows another vowel in continuity of utterance, it has no such initial weakness, for in its beginning the breath is already passing with full force. And if it follow a consonant which is uttered with full force of breath, its initial breath gets force and becomes more vocal; for the breath

having been compressed to utter the consonant, gets the force of expansion when the compression is removed; and therefore, in this case, it is only an initial vowel to which this initial weakness or *spiritus lenis* belongs. If, however, the consonants be uttered with little pressure of breath from the chest, a vowel after them may have a slight *spiritus lenis*, and in this case the initial breath which is lost to vocal utterance may be sounded by putting before the vowel a semivowel, *y* or *w*, which by reason of their closure it can utter, and which help the utterance of the vowel by the force of expansion which the breath gets from the removal of their compression. For this reason they may be prefixed to an initial vowel to help its utterance.

ACCENT.

27. In speech it is necessary that there should be divisions of utterance corresponding to the divisions of thought, so that ideas thought separately may be expressed separately. Hence comes the division of speech into words. For though the speaker distinguishes without effort his own ideas in the successions of his utterance, the hearer, in order that he may similarly distinguish them, needs to have his attention arrested at the expression of each separate idea, that that idea may be distinctly suggested to his mind by that expression, instead of being confused with what follows. Now, the effort to arrest the hearer's attention is prompted by the idea according to the degree in which it is thought separately by the speaker, and is strongest at the moment when the volition of utterance suggested by the idea is felt most strongly by him. It falls, therefore, principally on that part of the word which corresponds to the greatest intensity of volition.

This, in the case of a simple idea, may be the beginning of the word as the idea is pressing for utterance. But when there are several elements in a word, representing elements of thought which make up the total thought expressed by the word, there is a point within the combination where the sense of the volitions of utterance of all the elements reaches a maximum. At the point of greatest intensity, the effort to arrest the hearer's attention and fix it on the expression of the idea is greatest. And as it is an effort to impress the hearer, it affects a vowel at that part of the word, and gives to it additional force of utterance. This is the Accent; but besides this principal accent, there may be secondary accents in a word, marking minor combinations of its elements.

28. There are two different exertions of force in the utterance of the voice which may or may not be combined in similar degrees in the accent, force of the current of breath through the larynx, giving loudness to the sound, and tension of the vocal chords making it high. The former adds Emphasis; the latter is properly called Tone. Tone may be used in representing ideas; for it involves force, and its varieties may therefore suggest varieties of force, whether thought abstractly or concretely, distinctive of the objects of thought, and independently of the emphasis with which the ideas of these may happen to be expressed.

KINDS OF CONSONANTS.

29. The consonants may be divided into those which are uttered with breath moving outwards, and those in which there is no breath behind the closure of the organs, so that when this is opened the breath comes back into the vacuum. The latter are the South African clicks. The former may be divided into those which stop the breath, called Mutes, as *p*, *b*, and those which do not stop it, as *v*, *m*, *r*. Those which stop the breath are divided again into those which stop it completely for an instant, as *p*, *t*, *k*, and those which do not stop it completely, but in which the breath breaks through the stoppage, called Aspirates, as *ts*.

Those which do not stop the current of breath may be divided into those which make it audible by partially closing it, called Spirants, as *h*, *s*; those which make it audible by vibrating the tongue or the soft part of the palate, which may be called Vibratiles, as *r*, *l*; and those which send the breath through the nose, called Nasals, as *m*, *n*. The Nasals and Vibratiles are also called Liquids.

Moreover, every one of those consonants may be uttered either with or without that tension of the vocal chords which gives voice to whatever movement of breath they permit; for even those which stop the breath completely admit of a certain movement of breath accumulating pressure against the closure which stops it. When the vocal chords are relaxed, the breath comes more immediately with full pressure against the closure, which has then a corresponding hardness. But when the vocal chords are in tension, the current of breath is reduced by the narrow vibrating passage in the larynx; its pressure against the closure is gentler, and the closure softer. Those consonants, therefore, which stop the breath completely are doubly distinguished from each other by the accompanying relaxation or tension of the vocal chords. The relaxation of the vocal chords makes them hard and surd, that is, devoid of all vocal sound. The tension of the vocal chords makes them soft and sonant. Thus *p*, *t*, *k* are hard and surd, and are called Tenuis. *B*, *d*, *g* (as in *go*) are soft and sonant, and are called Medials.

A similar softness and sonancy are given to the aspirates by tension of the vocal chords, as *dz*; and the aspirates may be distinguished as Tenuis Aspirates and Medial Aspirates. And to all the consonants which do not stop the breath voice may be given by tension of the vocal chords, or withheld from them by relaxation of these, except the nasals, which without the voice would not be audible. The rest, when vocal, may be distinguished as Medial.

Now all these classes of consonants, involving as they do a closure, complete or partial, made by the tongue or the lips, are subdivided according to the part of the mouth in which the closure is made. Those in which it is deepest in the throat may be called Fauicals as *h*. The closure which is less deep gives Gutturals, as *g*; that of the tongue against the hinder part of the palate gives Post-palatals, as *k*; that of the tongue against the whole concave palate gives Palatals, as *ky* uttered as a single consonant in such a word as *kya*; that of the tongue against

the anterior part of the palate gives Ante-Palatals, as *ty* uttered as a single consonant in such a word as *tya*; that of the tongue curled back with its under surface against the anterior part of the palate, and its point against the highest part of the dome of the palate, gives Cerebrals; that of the tongue against the back of the front teeth and gum gives Dentals, as *t*; that of the tongue against the edge of the upper front teeth gives Sub-Dentals, as *th* soft; that of the under-lip against the edge of the upper front teeth gives Labio-Dentals, as *f*; that of the lips against each other gives Labials, as *p*.

ALPHABET.

30. The following alphabet is founded on Lepsius's alphabet of the consonants. But instead of the letters which he proposed for the clicks, it seems better to use the letters of the other consonants which correspond to these inverted. For the clicks belong to the same closures as the other consonants, and differ from them in sucking the breath inwards, instead of pressing it outwards; and this may be regarded as a kind of inversion of their nature.

As ' indicates breath in Greek, it may be used, as Lepsius uses it, to denote aspiration or additional breath; but *◌*, instead of denoting *sheva*, as he proposes, had better be used to denote vocal sonancy in the consonant so far as the consonant admits it. In some languages softer varieties, and in other languages harder and stronger varieties of different consonants have been noted, and special letters have been proposed for them, as in Samoiede for softer consonants by Castren; but it seems simpler to denote such utterances when stronger by larger letters, and when weaker by smaller letters, and to use the same method for vowels reduced to *sheva*. An instance of a strong letter is furnished by the Dravidian hard rough *r*. The letter *x* may still be used for the double utterance of *ks*, though it is not included in the alphabet of single consonants.

	Tenuis.	Medial.	Tenuis Aspirate.	Medial Aspirate.	Spirant.	Medial Spirant.	Liquid.			Lateral Click.	Click.
							Vibratile.	Medial Vibratile.	Nasal. g		
Faucals . . .	<i>a</i>	...	...	...	<i>h</i>	<i>ḥ</i>	...	...	...	...	...
Gutturals . .	<i>q</i>	<i>ḡ</i>	<i>q̣</i>	<i>ḡ̣</i>	<i>χ</i>	<i>χ̣</i>	...	...	...	...	...
Post-palatals .	<i>k</i>	<i>g</i>	<i>ḳ</i>	<i>ḡ</i>	<i>χ</i>	<i>χ̣</i>	<i>ṛ ḷ</i>	...	<i>n</i>	...	...
Palatals . . .	<i>k'</i>	<i>g'</i>	<i>k'̣</i>	<i>ḡ'</i>	<i>χ'</i>	<i>χ'̣</i>	...	...	<i>n'</i>	...	<i>ʄ</i>
Ante-palatals .	<i>t</i>	<i>d</i>	<i>ṭ</i>	<i>ḍ</i>	<i>s</i>	<i>z</i>	<i>r ḷ</i>	<i>ṛ ḷ̣</i>	<i>n</i>	...	<i>ʄ̣</i>
Cerebrals . .	<i>t</i>	<i>d</i>	<i>ṭ</i>	<i>ḍ</i>	<i>s</i>	<i>z</i>	<i>r ḷ</i>	...	<i>n</i>	...	<i>ʄ</i>
Dentals . . .	<i>t</i>	<i>d</i>	<i>ṭ</i>	<i>ḍ</i>	<i>s</i>	<i>z</i>	{ <i>r ḷ</i> <i>r' ḷ'</i> }	<i>ṛ ḷ̣</i>	<i>n</i>	<i>l</i>	<i>ʄ</i>
Sub-dentals .	<i>θ</i>	<i>ḑ</i>	...	...	<i>θ'</i>	<i>θ'̣</i>	...	...	...	...	...
Labro-dentals .	...	...	...	...	<i>f</i>	<i>v</i>	...	...	...	...	...
Labials . . .	<i>p</i>	<i>b</i>	<i>p̣</i>	<i>ḅ</i>	...	<i>w</i>	...	...	<i>m</i>	...	...

The medial spirants and medial vibratiles may be uttered with a nasalisation, or a nasalisation may be uttered separately, and it may be denoted by the mark \sim either separate or put over the nasalised letter; a above the line is a catch in the throat. English q is not so deep as g is in the languages which have the true gutturals: $\dot{\chi}$ = German *ch* after *a*, \dot{n} = *ng*; in \dot{r} \dot{l} the breath rolls over the back part of the tongue. The palatals may be produced in an English mouth from the post-palatals by the incorporation of y . In the same way $\dot{t}a$ = *tya*, $\dot{d}a$ = *dya*, \dot{t}' = *ch* in *child*, \dot{d}' is the English *j*, \dot{s} = *sh*, \dot{z} = *zh*, \dot{r} = *r* in *clarion*, \dot{r}' = *rh* or *hr*, \dot{l}' = *lh* or *hl*, \dot{l} = *l* in *valiant*, \dot{n} = *n* in *onion*, \dot{t}' = *ts*, \dot{d}' = *dz*, $\dot{\theta}$ = *th* in *thick*, $\dot{\theta}$ = *th* in *that*, $\dot{\theta}'$ = *th* in *forth*, $\dot{\theta}'$ = *th* in *swathe*, \dot{p}' is nearly = Ger. *pf*, \dot{v}' the corresponding medial. The cerebrals have no equivalents in English.

The principal division of the vowels is into three, *a*, *i*, and *u*, sounded as in the English words *pass*, *ring*, *rule*. *A* is open, *i* close and palatal, *u* close and both guttural and labial. Intermediate between *a* and *i* is *e*, between *a* and *u* is *o*, between *i* and *u* is German \ddot{u} and French *u*. Lepsius places the two dots under the letter instead of over it, in order to leave room for marks of accent and length, and other marks which must be placed over the vowels. The two dots over the vowel may, however, be advantageously used as one of those other marks which distinguish not the vowels, but the mode of their utterance. Lepsius's scheme and notation of the vowels, which will be adopted in this work, except for the European languages of our family, is as follows.

Each vowel is in its utterance intermediate between the two which are on each side of it.

a			
Ger. \ddot{a} , Fr. \hat{e} (air) \underline{e}	Fr. $\text{c}\ddot{o}\text{eur}$	\underline{o}	\underline{o} (all, hot)
(there) \underline{e}	(current) \underline{o}	\underline{o}	\underline{o} (no)
Fr. \acute{e} \underline{e}	Ger. \ddot{o} , Fr. <i>eu</i>	\underline{o}	\underline{o} (forbear)
(sting) \underline{i}	Ger. \ddot{u} , Fr. <i>u</i>	\underline{u}	\underline{u} (rule)

As to the diphthongs, *au* seems to be the correct transcription of English *ou* in *house*, $\dot{a}i$ of English *i* in *right*, $\dot{e}i$ of English *y* in *apply*, $\dot{o}i$ of English *oi* in *join*, *ow* is closer than *au*.

Besides the mark $\bar{_}$ for long vowels and $\check{_}$ for short, there are also needed $\ddot{_}$ for indefiniteness arising from the organs not being strongly put into the position for giving the vowel its distinctive sound, \sim for nasalisation, \cdot for gutturalisation, and $\dot{_}$ for nasalisation and gutturalisation combined.

BOOK I.

DEDUCTIVE STUDY OF THE ACTION OF THE CAUSES WHICH TEND TO AFFECT THE STRUCTURE OF LANGUAGE.

CHAPTER I.

EXCITABILITY OF MENTAL ACTION.

1. IN connection with the definitions which have been given of the various parts of speech, are described the mental processes whereby these natural integers of thought are formed more or less distinctly by all mankind. They involve various elements, and in various degrees they take up elements connected with them in the conceptions of facts according to the associations which arise in various habits of life. For in proportion to the vividness or interest which any element acquires or imparts by being thought in connection with an idea, in the same degree will there be a tendency for the former to be taken up by the latter into combination with it. Thus, in different modes of life, not only do the elements differ which are taken up into the ideas of *friend, enemy, comfort, hate, pursue, wrong*; but also the noun has different degrees of affinity for elements of relation, gender, number, and the verb for those of subject, position in time, contingency, process of being or doing. Thoughts of relation, number, subject, time, contingency, process, are expressed in all languages. But only in proportion as they are habitually thought with interest in immediate connection with noun and verb, do they tend to be taken up by these into the integers of thought which these express; otherwise they are thought separately. And in various degrees do elements thus tend to be taken up by association into the integers of thought from the combinations of fact.

Now these tendencies of association arising out of the experience of life, and the habits of thought conforming thereto, are modified by variety in the degree of excitability of cerebral and mental action; which, if high, will cause thought to be quick and mobile, if low, slow and persistent.

2. Though mental phenomena are quite distinct in their nature from physical phenomena, yet every mental act is inseparably connected with a corresponding act in the brain, so that the one cannot take place without the other. And consequently, varieties in the action of the mind accompany and correspond to varieties in the action of the brain.

Now the action of the brain may be supposed to be the product of two factors, the excitability of the brain or the intensity of the action with which at each point it responds to a given impression, and the diffusion or extent of that action at each moment in the brain. The result of these two, continued for any time, would be the amount of the action of the brain in that time. Now the ordinary amount of the action of the brain in a given time must depend on the energy stored up in the brain by its development and nutrition; and being thus determined to a particular amount, the ordinary action, if intense, will be limited in extent; and if low, it will be diffused, that the normal amount of action in a given time may be maintained. The intensity of the action of the brain is the rate at which it spends its energy, and therefore is equivalent to its quickness; and the extent of its action is equivalent to the extent of the impression to which it is ready to respond; and to these correspond in mental action, quickness of thought and extent of its object.

3. The excitability of the brain and nervous system may possibly be greater or less owing to the direct influence of physical agencies; but as it is accompanied by corresponding excitability of mental action, different degrees of it suit different conditions of life, so as to be the most advantageous respectively under those conditions. A high degree of excitability is naturally accompanied by quickness of perception and promptitude of action; while a low degree of excitability is naturally accompanied by persistence of action, because less liable to be diverted by a new impression, and renders it easier to endure hardship and to exercise caution and self-control. And according to the degree in which the one class of qualities or the other are needed in different parts of the world, the races which have them will tend to prevail, and corresponding degrees of nervous excitability to be developed; quickness of mental action being accompanied by mobility or readiness to leave the present action for a new one, and slowness of mental action by persistence or tenacity of the action which has been begun.

So that, taking into account what has been said in the preceding number, we may lay down the principle that high excitability of mental action is accompanied by quickness and mobility of thought, with limitation of what is taken in as object of the present thought, the mind thinking quickly small thoughts, and passing readily from object to object, and the current of thought being contracted as it is quickened, that the total amount in a given time may be the same; and that a low degree of excitability is accompanied by slowness and persistence of thought with enlargement of its object, the mind moving slowly through large thoughts, and the current of thought spreading as it is retarded, that the normal amount which should pass in a given time may be maintained.

4. The processes of thought which are involved in language bring into play the analysing and shifting of thought, and must therefore be affected by the kind of aptitude which the mind possesses for such actions. For in order to express our conception of a fact, we must analyse it into its parts, and expressing these separately, we must put

them together as one conjoint expression in a sentence. In this process (Def. 22) there is continual movement of thought from the whole as unanalysed, or as partly analysed, to the part which is next separated, and then from that part to the whole as thus further analysed. These movements of thought are performed under the impulse of the volitions of distinct expression, and the attractions of the successive thoughts drawing attention according to the interest which they possess. And if there be quickness and mobility of thought, with limitation of the momentary field of view, the successive objects of thought will be smaller, and the mind will think them more readily in succession; while, on the other hand, if thought be characterised by slowness and persistence with enlargement of the momentary field of view, they will be larger and also more fully thought.

5. In every case the tendency will be to analyse the conceptions of fact into the natural integers of thought, enlarged by the elements which it is the habit of the mind to think with interest in connection with them (1). But this tendency is profoundly modified in its result by the peculiarities of mental action which are under consideration; quickness and mobility of thought tending to limit the extent of the object which at any moment is before the mind so as to hinder its growth by association, and slowness and persistency tending to enlarge the object so as to promote its growth by association. Under the former influence no elements can coalesce so as to be thought together by the mind, except such as have been most closely and constantly connected; under the latter such elements may coalesce as have only a comparatively occasional and remote connection.

6. If there be great mobility and quickness of thought, elements such as frequently and closely concur, and are therefore strongly associated with each other, may yet be thought wholly or partly separate from each other. Some of them may be less close or constant in concurrence than others, or impart less interest to the combination, and some may have a special interest of their own so as to attract attention separately from the others, and such will be readily detached. And if the mind be very ready to act on a new impression with limitation of the object of thought, the interest of the first elements which it thinks may be sufficient to engross the mental energy in thought, so as to separate this part from the remainder, either in partial detachment from it, or as a distinct member of the fact.

In every case the lighter of the fragments into which ideas are broken will readily join on to connected thoughts, because the energy not being fully engaged by them will be ready to include these in part, so that the lighter fragments may be taken up as often as they are strongly referred to in thinking the connections of fact. And the readiness of the mind also to pass from one object to another, taking up the latter before the former has been fully thought, will favour those loose combinations in which the end of one thought coalesces with the beginning of another. The tendency to combine the elements of fact will be proportional to the degree of interest which the whole fact

possesses, compared with the interest of the parts. If the former interest prevail, large combinations of light thoughts may be formed, in which, however, the mind will never have a large object at once before it, but will think the parts in succession, joining on one to another, as it leaves the one and passes to the other. If the interest of the parts prevails over that of the whole, speech will be full of light fragments lying separate; and its fragmentary nature will be apparent on the surface. In general, the characteristics impressed on language by this quality of thought will be its resolution into fragments and the readiness of its parts to be attached to each other.

7. A less degree of this quality will give to language similar features; the parts, however, being larger fragments. Natural integers of thought, if strong, will tend to be thought in successive mental acts, each of which will comprehend an object more nearly equal to the whole than if thought were quicker; and in the second act the mind will be less ready to leave constantly associated elements which have been thought in the first. If the habit of thought be concrete and particular, there will be little tendency to distinguish in the object a general element with a particular modification; so that the mind will tend in each act to grasp the whole idea. In the second act the mind will tend, as in the first, to think a large fragment nearly equal to the whole. And when the object of the first act is closely associated with that of the second as part of the same radical idea, that second act will, to a great extent, in completing the idea, go back on what was thought in the first, as has been said. It will nearly comprehend the whole object of thought, including what the first act omitted, and omitting somewhat which the first act included; and according as the difference between the two is more or less felt, the second thought will be expressed by a second radical element or by a repetition of the first.

In either case the twofold action of thought will tend to be expressed in a twofold action of utterance. And accordingly, the tendency to disyllabic roots will be the characteristic feature of speech corresponding to this quality of thought, which has a minor degree of quick action and great concreteness of idea.

8. Slowness and persistence of mental action must tend to impede the movements of thought which are involved in language (4), and to make its acts larger so as to embrace a wider object. But the form under which this character of mental action will manifest itself in language will be different according to the interest which is taken in the combination of fact, and the interest which is taken in the objects which are involved in that combination. When the interest of the whole is strong, thought when shifted to the part will still be tenacious of the total fact, tending to spread into it according to the strength with which the part present to the mind is thought as connected with the remainder, or has an affinity by association for some of its elements. Combinations will thus be formed in which each element will be dwelt on with persistence; while the slowness of the action of the mind in thinking it will leave mental energy available to pass to succeeding elements, still retaining the first till all are thought.

The less the interest of the total fact predominates over that of the part, the more fully will the part tend to be thought. And if the interest with which the part is thought quite predominates over that of the total fact, thought will tend to spread on the idea of the part, with large conception of its contents, defining it and distinguishing it largely from other objects of thought.

Thus in general slowness and persistence of mental action will tend to cause thought and language to be divided into imperfectly analysed aggregates of heavy elements thought together, or into parts thought with large conception and definition.

9. A minor degree of this quality will show itself in a minor tendency of thought to spread to successive objects, while still retaining the first, and in a minor tendency to dwell on each object with persistence. Such thought may not spread so as to add strong natural integers one to another, but only to add to a natural integer elements quite subsidiary to it because connected with it by association. These subsidiary elements, however, will be thought with a degree of fulness proportional to the persistency of mental action; and as each in succession engages attention it will be felt in its own significance. Thus, though the combination may include no more than ordinary grammatical accidents, the elements which express these will have such fulness that they will form a heavy synthesis; and the subsidiary elements will exist in the consciousness of those who speak the language as semi-independent materials of speech, which may be put together at pleasure into words according to established habits of construction.

10. Intermediate between that quickness of mind which is moved to action by the light suggestion of a fine element, and tends to subdivide natural integers of thought, and that slowness which tends to think its objects together in heavy combinations or to think them largely as separate, is the quality of mind which ordinarily concentrates its energy only on the full impression of a strong integer of thought with the elements which may be taken up into it by vivid association (1), and then thinks that integer, leaving the combination in which it may occur.

This intermediate quality of thought will tend to apprehend its objects in single acts, instead of by successive additions. Not being moved to think some of the elements which they contain before others, it will tend to think them together, and it will expend ordinarily on them all together all the mental energy which is available at the time, without spreading into connected thoughts.

It will tend neither to break the natural integers of thought, nor to compound them, but to think them as individual wholes. And where elements are found in combination with full single integers, they will indicate a quality of thought not strictly intermediate, but either verging towards the slow and spreading, so as to think the subordinate element with the integer, or towards the quick and narrow, so as to leave the integer before it is quite thought, and complete the thought of it in passing to the subordinate element.

CHAPTER II.

AMOUNT OF MENTAL POWER.

1. THE development of the brain itself, and of the mental power which is probably proportional to its energy, is doubtless favoured in various degrees according to the physical circumstances in which man lives, his wants, and the way in which he habitually supplies them. These all constitute a physical condition which may be more or less favourable to the growth of brain-power, and a mode of life in which it may be more or less advantageous that brain-power should grow. For, though mental power must always be advantageous, power of sense or of muscle may often under the circumstances be more so. In every region those whose development is most advantageous will prevail. And, consequently, in various regions the races which have prevailed have developed mental power in various degrees; and these must have their effects on language.

2. The more mental power there is, the more thought will each mental act contain. And those mental acts which are obscure when the mental power is small will come into more distinct consciousness when it is greater. For in all thought which is expressed in language there are, besides the thought which is being expressed, those thoughts which have been expressed, and those which are about to be expressed, and those which are supplied without being expressed. These all are more obscure in the consciousness than the thought which is just getting expression; but when the mental power is greater, they become clearer, and exert a greater influence on the thought which is being expressed. Additional mental energy strengthens the thought of the whole which the speaker seeks to express, and of the part as a constituent of it, so that the part which is being expressed will be thought more strongly in reference to the whole, as having in it a place and function of its own. In this reference of each part to the whole, the mind contemplates the part and the whole as single objects, and consequently gives greater unity to each part and to the whole. And this being a mental act, additional to the thought of the part in itself, it gives unity to that thought in whatever way it is formed. Whether its elements are thought all at once or in succession, and whether, in the latter case, the mind retains or passes from the first elements in adding the succeeding ones, the thought of the part as a constituent of the whole will fuse its elements into a closer union than they could otherwise form. Such unification of elements in one idea is itself a display of mental energy, as showing the fulness of a single

thought. And being due to the conception of the part in reference to the whole, it reveals the abundance of that energy in thinking the whole along with the part; so that in the unification of elements mental power should show itself in language.

3. But also in the beings and doings of life, the consciousness of self-direction will be stronger when the mental energy is greater. For the advantage which mental power gives, and which would lead to its larger development, is in the guidance of action. And as in language the sense of the subject in the verb corresponds to this consciousness in the life (Def. 11), superior mental power should show itself in higher subjectivity of the verb.

4. Moreover, the guidance of action is in reference to the substantive objects with which man is concerned, that he may make them subservient to his purposes. And to this end it is advantageous that he should note their power to influence fact. Mental energy, therefore, as it is developed, is bound to work in this direction, including in the ideas of objects that sense of energy inherent in them, to which grammatical gender is due (Def. 16).

CHAPTER III.

HABITS OF THOUGHT AND LIFE WHEREIN THE RACE HAS BECOME
ADAPTED TO THE REGION.

THE requirements of human life in the various regions of the world, and the ways in which man adapts himself to his circumstances, determine various modes of apprehending facts and things; and these must tend to mould his speech into corresponding forms. For our ideas are formed according to the aspects under which objects are presented to us in the experience of life; and the view which we take of objects when mental action is most earnest and therefore possesses most interest, as in the serious business of life, tends to become the habitual mode of conceiving them.

Our ideas of facts are, moreover, essentially connected with the thought which guides our own actions. For according to the definition of the verb (Def. 11), we think the realisations of fact as beings or doings of the subject, just as we think the beings and doings of ourselves. Those states and actions of our own which are thought most earnestly, as in providing for our own welfare, have most influence on the habitual conception of fact. For the form of thought in which man guides his actions to supply his wants is that which has prevailed, because it is the habit of mental action which is most advantageous under the circumstances, being best suited to the requirements of the particular mode of man's life. It must spread as a pervading habit to the thought of all his beings and doings in order that it may have the strength required for the guidance of life, just as the peculiar aptitudes which fit the lower animals each for its mode of subsistence are to be seen not only in their act of taking what is needful for them, but throughout all their habits and movements. And as such form of thought becomes established in each region by natural selection, it will impress itself on the conception of fact, and consequently on the formation of the sentence.

Life dependent on what can be found or caught, life dependent on the keeping of flocks and herds, life dependent on arts of production, life in a rigorous climate and on a barren soil, life in a genial climate and amid abundant spontaneous production, these and other varieties of condition tend to give different degrees of interest to different elements of thought, and to different combinations of those elements in the conduct of life. And those people are best suited for the life who think in the way which that mode of life demands. Each element and combination of elements in the thought of action will have an

interest for the race proportional to its importance in the conduct of life, and will be thought according to the determinations of action which are most advantageous, that the race may be fitted to prevail in the region.

1. The consciousness of self and of the energy of self which the actor has in his conception of his action will differ according as in his life action springs habitually from will, or desire, or imitation, or habit. For the will is to be distinguished as a self-determining origin of action from desire or imitation determined by its object, and from habit acting like an instinct by mere association. Habit tends to act without thought. Desire or imitation thinks only of its object. The will involves a consciousness of the spiritual energy of self. Now in this consciousness there are two elements which must be distinguished—the spiritual energy, and self as the seat of that energy. The thought of the latter is that of a cause, and will be strong in proportion to the sense of the effect. The thought of the former is that of the capability of a force, and will be strong in proportion to the habitual development of the force. So that while the sense of our inner energy in action is proportional to the habitual exercise of will, that of self as the seat of our inner energy will correspond to the degree in which, in the exercise of will, self has the direction of life.

If the self-directing action of the will have much power in determining the course of life, there will be a strong sense of self as governing life by its internal energy. And this will strengthen the sense of self as the realiser of all experience; for self-direction is self having the direction of experience. Such a sense of self in the experience of life as distinct from the energy of self will be accompanied by a similar sense of the subject as the realiser of fact, and distinct from the subjective realisation. For according to Def. 11, our own conscious life is the source and model of our idea of the realisation of fact; and the subject in that idea corresponds to self in the thought of our own existence or activity. And hence it follows that the development in language of the subject, as such, separate from the verb, will be proportional to the effect of the self-directing power of the will in life.

If the self-direction of a race be an element of no great significance in its life, either because the will, though strong and active, cannot control the external conditions, or because action, though it may in its commencement spring from will, is in its performance little guided by volitional thought, but rather by habit or imitation, or because action springs little from will, but rather from pleasure and desire, or from the habitual suggestion or constraint of object or circumstance; the thought of self as governor and realiser of life will be less noted, and the thought of the subject distinct from the verb as the realiser of fact will be proportionally weak, and the nominative as such, that is, its distinctive element, will get weak expression in language.

2. Moreover, in the thought of self as realiser of experience and distinct from the realisation, there is a difference according as self is thought more or less independently of what he experiences. And

this independence will be proportional to the amount of deliberation and range of choice from which the determinations of the will habitually proceed. For in choosing amongst possible actions, or in deliberating on alternatives, the actor gets a consciousness of himself as adopting other decisions, and therefore as not limited to that which he determines on. And this strengthens the thought of self as actor in its more general associations. Whereas if the will determine, however strongly, with little deliberation and choice, self as actor, though perhaps strongly thought, will tend to be thought as limited to the action. Such width of view in the consciousness of self as actor will affect also the thought of self in the inactive states of being. For these too, though they may not depend on the will, yet admit the thought of alternatives; and in them, too, self will be thought in its general associations, if a habit of deliberation and choice prevails. On the other hand, if there be less of this habit in the serious business of life, there will be still less in its relaxations; and the race will tend to be habitually conscious of themselves as possessed by the state or action, not as being first undetermined in regard to it.

In each case the same habit of thought will extend to the conceptions which the race forms of other facts. For by Def. 11 we think the realisations of fact in the subject, as we think our own beings and doings. An undeliberative race, therefore, will tend to think the subject when separate from the verb, not in the general idea of it, but as limited or defined by combination with the verb. The thought of the subject in its natural place before the verb, and therefore not yet limited by it, will tend to be dropped; and that of the subject as engaged by the verb, with this already present to the mind and preceding it in speech, will tend to get expression instead (Def. 23); so that in the language of such a race the nominative will tend to follow the verb.

But if a race have not this undeliberative habit, it will tend to place the subject in its natural position before the verb, when expressed separately from it.

3. From the thought of self as actor is to be distinguished, as has been said above, the volition involved in the action, which in proportion to its habitual strength imparts to the thought of the action a sense of the spiritual energy of self. This latter element will be strong or weak according to the degree in which action is guided in its performance by self-directing volition, or, instead of this, by external guidance or habit; for in habit there is no volition, and in external guidance, when once it has been adopted, there need be no further volition, the subsequent steps coming by suggestion of the guide.

The sense of the energy of self will vary in the extent to which it penetrates the thought of action, according as the self-directing volition affects only the awakening of the activity, or governs the whole action. In whatever strength, and to whatever extent, the sense of the spiritual energy of self habitually pervades the thought which man has of his own action—in similar strength, and to a similar extent, will the sense of the subject pervade his idea of fact; for by Def. 11

the sense of the subject in the verb corresponds to the sense of self in man's own conscious life. So that the subjectivity of the verb in a language will correspond in its strength and the extent to which it penetrates the verb, to the strength and extent in which the action of the race is habitually guided by self-directing volition. The subjectivity of the verb is expressed by the element of person; and the extent to which it penetrates the verb is to be seen in the degree in which the whole verb is thought as inhering in the person.

The sense of the subject in the verb may be reduced by the verb not being thought in present realisation; and this may cause the verb to be conceived more as an external fact, and less as an experience of the subject.

A similar conception of the verb may be produced by the volition of the race habitually regarding the action as reaching to the effect. For the thought of the effect brings the idea of the action out of the limitation of self into the realm of external fact. 'And this extrication of the thought of action from the limitation of self will lead to a similar extrication of the verb out of the limitation of the subject.

In either case, the thought of the subjective person in its natural place before the verbal stem will tend to be dropped, that the stem may be thought independently of it; and the thought of the person in union with the verbal stem, with this already before the mind, will be taken instead. So that in expression the person-element will be subsequent to the verbal stem (Def. 23).

4. As the action proceeds from the volition there is a conversion of energy into force, which is accompanied in its expenditure by a consciousness of successive steps of doing. This may conveniently be called the Process, while the action which is performed by these successive steps may be called the Accomplishment (Def. 11). In these elements there will be differences, according to the mode of life to which the race has become adapted so as to be fitted to prevail in the region. And those habits of thinking these elements of action which correspond to that mode of life will pervade the thought of all beings and doings, because their determination as general forms of thought will strengthen and ensure the fitness of thought and action to the life which is suited to the region, and give an advantage to the race in the struggle for existence there.

The various modes of life require various degrees of attention to process for the attainment of their ends. This attention is variously connected with self-directing volition on the one hand, and with accomplishment on the other. For in some modes of life the process is guided by self-directing volition, in others by an external rule, or by the suggestion of object or circumstance. In some the thought of the process becomes independent of the thought of the accomplishment, and the attention to process ceases before the accomplishment is in any degree realised; in others the attention to process is carried through the accomplishment; in others the thought of the process is suggested by the thought of the accomplishment, or the thought of the accomplishment is present all through the process.

The life of the navigator requires processes of navigation, which are

performed as subsidiary to an end, namely, arrival at a certain place, which end is not in any degree accomplished until the navigation is over, and during the navigation the mariner may think not of the end of his voyage, but only of his course.

Processes of tillage aim at an end which is not in any degree accomplished until they have been finished, and if performed by copying a rule, they may involve no thought of what they are intended to accomplish. The same holds true in a less degree of the processes of the pastoral life when these are followed as a routine. But the hunter's attention is on his game as he pursues it, and his process of action is strongly directed towards it; and the same is true in a less degree of those who seek what may be found to furnish the means of subsistence.

The processes of the artisan are processes of accomplishment, each step being a step of accomplishment, and the object for which he works growing under his hands as he works at it. And without such exercise of art, if the processes be simple and familiar, they may be suggested by the thought of the end to be accomplished so as to be thought along with it.

Now such differences in the mode of life will impress corresponding differences on the conception of fact when the race has become adapted to them. And they will tend to show themselves in the way in which the element of process enters into the structure of the verb. For in whatever degree the element of process becomes prominent in the conscious life of the race, with similar prominence a corresponding element will, according to Def. 11, be present in their conception of fact and in the expression of that conception in the verb. And with whatever connection this element is habitually thought as governed by the volition or as leading to the accomplishment, with similar connection the corresponding element will be thought with the personality of the subject on the one hand, according to 3, and with the verbal root on the other. When thought strongly and independently of the accomplishment it may be expressed by auxiliary verbs, but otherwise it will be an element in the structure of the verb itself.

Where the mode of life which is fitted to the region requires processes of action leading up more or less immediately to accomplishment as their end, but not themselves processes of accomplishment nor involving the thought of the accomplishment, there the succession of being or doing will tend to be connected more or less closely with the verbal root, but will not penetrate into it.

Where the required processes of action are processes of accomplishment, or are associated with the thought of the accomplishment, there the root of the verb will tend to be penetrated by the succession. In every case, the element of succession will tend to intervene between the person and the root, being carried more or less into the latter. But sometimes when the doing of the race habitually aims strongly at the object, the succession is carried through the root so as to be subjoined to it. And then if the root follows the person, it will come between the person and the succession.

5. The succession which is involved in the thought of doing or being introduces into that idea an element of time, and gives to it a

tendency to place itself in the mind, after what was anterior to it, and before what was subsequent to it. This tendency requires for its fulfilment that the mind should be stocked with anterior and subsequent events possessing interest, in order that the doing or being may be thought in its place among them. For, in proportion as the world of fact which is in the memory is full, each fact will have the more prior and posterior facts to put in position; and all will suggest more strongly their mutual arrangement in time.

The continuous life indeed of each individual involves a series of doings and beings tending to arrange themselves in a succession in the memory. But this succession consists more or less of processes of personal causation, and are apt to be thought in relation to their effect in the present, rather than to their position in the past. It is thus that fact tends to be conceived when there is a poor supply of facts outside the beings and doings of the individual. The past is then apt to be thought as present possession of a retrospect, the future as in present intention or expectation; both being in truth present experience. But when there is a good supply of external facts in the memory, there is a purer sense of position in the past; and as the conception of the future is formed on that of the past, there is a purer sense also of position in the future.

Now, the sense of position in time involved in the idea of a fact, is what is expressed in the tense of a verb. And it follows from the above that the development of tense requires two conditions. There must be a sufficient sense of succession in the verb to attract the thought of position in time, that this may be expressed truly as tense involved in the idea of the verb. And there must be a sufficient supply of external facts to suggest that position, and to incorporate it in the idea of each fact, that all may be thought in their due arrangement. If the latter condition be not supplied, events will tend to be expressed in their successions without variety of tense, by means of auxiliary or derivative verbs expressing present affections of the subject. If the former condition be not supplied, the position in time will tend to be expressed by elements having imperfect union with the verb, or separately from it, and therefore not properly as tense. When the position in time is expressed as tense in the verb, the element of tense tends to that place in the verb where the thought of the succession is strongest.

6. The sense of the being or doing as realised in its own subject is reduced if it be thought not as actual but as ideal, whether probable or hypothetical. It is also reduced when thought as a subordinate member of another fact. For the principal being or doing pervades all the fact, and dominates any other being or doing which the fact may involve as object or condition or attribute. The being or doing, therefore, will be thought with different degrees of vividness of realisation if there be a tendency to note differences of probability, or to combine one fact with another as subordinate to it.

The expression in a verb of its being or doing, as thought with different degrees of vividness of realisation in the subject, produces the moods of the verb (Def. 13). And it follows from the above that there

will be a tendency to distinguish moods, if the race is adapted to watch for fortune, or to avail themselves of circumstance for the attainment of their ends.

The number of different moods will depend on the number of different degrees of vividness of realisation distinguished in the thought of the being or doing, owing to these two causes. And as the same degree may arise from each cause, and have the same expression to whichever it is due, the distinction of ideal and subjunctive may be a difference not of form, but of use. If, however, that which belongs to the second cause, and which is the subjunctive properly so called, have a different vividness from what belongs to the first cause, which is properly the ideal, then the difference of subjunctive and ideal may be not only of use but also of form. There may be more than one ideal, if different degrees of verisimilitude be so noted as to need expression. And according to the different degrees of subordination, and the various strength of the being or doing as realised in its own subject, to maintain itself against these degrees of subordination, different expression will be given to the subordinate fact. If the subordination be complete, or the realisation in the subject be weak, the subordinate realisation in its subject may be suppressed, and the verb become an infinitive, gerund, participle, or other verbal noun.

7. Some races, owing to the circumstances of their life, have more interest than others in the result, and tend more to think action in its end in the object. This direction of thought is favourable to the development of the passive verb; for the end of the action is the affection of the object, and the realisation of that affection by the object being subsequent to the activity of the agent, tends more to be apprehended according as the interest tends towards the result in which action ends.

There are also various habitual interests imparted to actions and states by various accessories of doing and being, owing to the influence of these on the life of the race; and the interests imparted by taking up these accessories into the idea of the verb lead to the formation of derivative verbs. Such interests may spring from causation or effect, reiteration, intensity, co-operation, reciprocity, &c. And when such adjuncts are present, the interest which the verb acquires by taking them up, will lead to their absorption so as to form a derivative stem. The development therefore of derivative verbs will show the interests which vivify the thoughts of doing and being, and will correspond to the nature of the life out of which those interests have arisen.

Such derivations will differ according to the degree of interest with which the simple verbal stems are thought in their general associations. Where the field of observation is large, new facts and things will continually present themselves, and keep in active exercise the faculties of observation and comparison by which they are classed under terms. And the habitual activity of these faculties will cause an interest to belong to the general ideas which they form. According to the strength of this interest those ideas will tend to be thought in their general associations, and come out clear of their present accidents,

preceding them in thought and expression. Whereas if habits of general observation be less developed owing to the limited range which the region affords for it, the ideas which the radical parts of words express will have less tendency to be thought in their general associations, and they may be preceded by their accessories in the formation of the word, if such is the natural position for these, or if the radical parts derive from combination with these an interest which overpowers that of their simple conception (Def. 23).

8. If in the life wherein the race has become adapted to the region the action must be habitually suited to the object with such care as to require that in the thought which guides action the act shall be conceived as determined by the object, then the mental action when conformed to the life will have as one of its essential aptitudes a special interest in the thought of action as thus determined. And if it require that the action as suited to its object shall be suited to indirect objects and conditions, or to some of these, with such care that it must be conceived as determined by them, then the race will have a special interest for the action thought—first as determined by the object, and then further by the indirect objects and conditions. Or if it require that the action having been first suited to some or all the indirect objects and conditions, this adjustment shall be more particularly suited to the direct object with such care that in the thought which guides action the act must be conceived as determined by indirect objects and conditions, and then as determined by its direct object; the race when conformed to the region will have amongst its aptitudes a special interest in action thought as determined by indirect objects and conditions, and when thus determined as determined by its direct object. Whatever be the careful adjustment of the action which the life demands, the race when quite conformed to the life will have a special interest in the action when thought as determined by the corresponding elements in corresponding order. This interest will overpower that of the action thought simply in its natural position before the objects and conditions; and the idea of it so thought will be dropped in forming the conception of an entire performance, the mind fixing its attention on the act with increasing interest as it is combined in thought successively with the objects or conditions to which the life requires that it shall be suited (Def. 23).

When the race is quite conformed to the life this mode of conceiving action will extend to all its conceptions of fact (Def. 11); and its verb will thus in general be thought in corresponding combination with objects and conditions, not attaining its full interest until it has been combined in thought with these, taking them up into combination with itself one after another, each after it has been thought (Def. 23).

When such a combination comes to be expressed, the part last taken up into it as last in the natural order of thought will be the first separated from it for expression; because it has been the most recently before the mind in its simple state. The other parts will follow in the order of their nearness to the part last taken up, the verb coming after them all; and the dependent parts of the sentence

which have not been taken up, if there be such, will follow in their natural order.

As the agent in thinking what he has to do contemplates the action as particularised by the objects and conditions to which it must be suited, so in the sentence that which is realised by the nominative is the verb, as it is determined by the corresponding objects and conditions. The agent may be conscious of himself as free to act and suit carefully his action to objects and conditions as he pleases; but he may, on the other hand, find himself habitually confined by certain conditions, and obliged to exercise his will in conformity with these. He will in this latter case feel his agency restricted, his will limited by those conditions, and the consciousness of himself as agent will involve a sense of his will as adapted to them before it determines; and if the life wherein the race has become fitted to the region involves the necessity that its freedom of action shall be governed by certain conditions, then the race, when conformed to that life, will have amongst its aptitudes a special interest for the thought of the agent, as observing those conditions before he acts, and for the nominative, as similarly combined with the corresponding conditions in the idea of fact. The simple thought of the subject in its natural place in the beginning of the sentence will be dropped, being overpowered by the interest of it, as combined with those conditions, taking them up successively after each has been thought (Def. 23). And when this combination comes to be expressed, the part last taken up into it will be first separated for expression, and then the others in the order of their nearness to the last, and then the subject; and the subject will be followed by the combination of verb, object, and condition, which it has been free to form, this combination having been analysed for expression, as above described.

In proportion as the life of the race requires less careful adjustments of will or action, the members of the fact will tend more to follow the natural order of thought (Def. 23).

9. According to the degree of attention which a race must give to the distinctive nature of substantive objects, it will tend to discriminate them not only by the radical and formative elements by which it designates them, but also by the correlations and comparisons with other objects which help to define their nature. For substantive objects may derive special properties from correlation with other objects, or such correlation may particularise them, and indicate the possession by them of special properties or attributes, or impart to the idea of them associations springing from their correlatives, and assimilating them in thought to these, the correlative being in each case thought as a genitive from which they are derived. And if the life in which the race has become conformed to the region require careful attention to substantive objects, the race will have amongst its mental aptitudes a special interest for objects thought as correlated with other objects, so as more definitely to conceive their nature. The idea of the object as thought simply will then be dropped, and the idea of it as combined in its relation with the correlatives, after these have been thought, will attract attention instead.

And when this combination comes to be expressed, the part last added to it will be first separated, and the order of its parts will be reversed (8); so that the governed noun will precede the governing.

Such careful attention to the nature of things may be due to the difficulty of the region, requiring care to overcome it, when predominant ability is wanting; or to the insufficient power of a race to carry out its projects without the aid of substantive objects ascertained to be of a nature to help them; or to the industry of a race demanding careful selection of means for the attainment of their ends.

A life of industry being concerned with the applications of the properties of things, tends strongly to promote a careful attention to the nature of substantive objects. And this will show itself in its highest form by thinking that nature comparatively, as qualified by an adjective (Def. 6), and by having that special interest for the substantive as qualified, which will cause the thought of the substantive to be postponed till it has been affected with the adjective. For this comparative thought of substantive objects involves a closer scrutiny of their nature than the mere observation of their correlations with other objects. And as careful attention to correlations tends to reverse their order, so does careful attention to the substantive as qualified by the adjective tend to place the adjective before the substantive.

The development and use of the adjective itself will be proportional to the interest taken by the race in the comparative attributes of things. And this will be promoted by variety in the products of the region; and by the desirable ends which they are made to serve in the life of the race.

10. In the actions which are performed by men for the attainment of their ends, objects are acted on, and means and conditions are used. And the application of action to its objects, and the use and construction of means and facilities, connect the elements of action into one entire performance. It is such performance that man thinks in the intention which guides his actions. And in the conception of it, the connections of its parts will be variously thought according to the need which there is in his life, that he should be careful in the application of action, use, or construction.

According as skill is required, attention will be given to that part of the action, use, or construction which is in contact with its object. Where art is needed, the various ways in which action may be applied to its objects, and these to each other, will be thought and distinguished.

The various forms of thinking the actions by which their wants are supplied belong to the various races as mental aptitudes, fitting them for the life which is suited to their region, and giving them an advantage in their struggle for existence there. According to these forms, they will think all their beings and doings, and in accordance with them will be their conception of fact (Def. 11-14) and their formation of the sentence.

If a race have their wants supplied with little need for skill, their verb will not be thought on completely into its application to the

objects or to the conditions; and the substantive will not be quite thought on to another as connected with it. And in each case if an element mediate between the antecedent and the consequent, the former will not be duly thought into that element, or will not be duly thought on in it to the consequent, and the intermediate element will tend to be thought independently of one of them or of both. If it be thought independently of both, it will not be a purely connective element or pure relation, but it will be of a verbal or nominal nature.

If, on the other hand, the race, in order to supply their wants, have need to exercise skill, the verb will be thought on completely to the objects and conditions, and the substantive on to another as connected with it. And if an intermediate element carry on the connection from the former to the latter, it will tend to be thought as a pure relation, involving a thought of the former and connecting it with the latter.

If the circumstances and life of the race be such that the mode of applying action to its objects, or of using or constructing means and conditions, must be noted with discrimination, there will be a corresponding development of elements of relation, art in the life accompanying the distinction of relations in the language. And if, further, those modes have to be carefully adjusted to the objects, means, and conditions respectively, the elements of relation will be thought as combined with these, and will be expressed after them (8, 9; Def. 23), otherwise they will proceed in the natural order.

If a race, instead of exercising skill or developing art of its own, guides its actions by imitation or tradition, each part is copied separately from an original, instead of being thought in reference to other parts; and in its conception of fact and its construction of the sentence, there will be a corresponding want of organic connection of the parts.

11. In the conception of performance which is involved in the intention wherewith man guides his actions, there will be a difference according to the strength of practical aim which the conditions of his life require. Where these render necessary a concentrated attention to what he has to do, one of the aptitudes which will fit him to prevail will be a tendency to think exclusively of the performance and its parts, so that though he may have chosen the action and the objects and means from amongst many alternatives, his attention concentrates on them when chosen with an interest which is exclusive of all that does not belong to the performance. Where the conditions of man's life do not require such concentrated attention to his performances, he may, while thinking of that in which he is engaged, retain a sense of other actions and objects; and in that case there will be an advantage in thinking the present object in the light of experience, or with a mental view beyond it, which may give it illustration. Ideas will then tend to be accompanied by a sense of the general, of which they are particularisations, or of somewhat beyond themselves, which will give them speciality. When this habit of thought has grown to be developed as an aptitude of the race, it will affect generally the conception of all facts, and it will show itself in the sentence by the use

of articles with the noun to particularise or emphasise it, and of particles with the sentence to specialise it in the world of fact, if this be well stocked with facts possessing interest for the race.

Such elements will be absent from the language of a race which is strongly bent on practical aims.

12. The substantive idea itself will differ, according as in the conditions of life of the race substantive objects possess more interest for what they are in themselves or as materials of useful action for something further.

If the welfare of the race depends on what they can find, and if at the same time they must seek for it with care and selection, there will be an intense interest in the natures of things, and a concreteness of substantive idea.

If the race depends little on selection of things, but much on their own operations, the natures of things will be thought slightly compared with what things are in reference to action. And in general the interest attached to what things are in themselves, will strengthen the attributive part of the substantive idea (Def. 4). When the interest is attached to substantive objects as materials of action it will tend to strengthen the objective part or substance (Def. 4). This will affect the way in which the plural substantive is thought. For if the objective part or substance of the substantive idea be not sufficiently strong to maintain its individuality when thought with others in a plural object, that object will either be thought as a singular collective, or if the attributive part of the individuals be thought strongly enough, the plurality will fall on it, and the plural object will be thought with a weakening by indistinctness, or with an extension, or reduplication, or other change of the attributive part of the singular.

That which distinguishes a plurality from a collective aggregate is the sense of manifold individuality which it involves. And the strength of this will vary with the interest habitually connected with the individual in the experience of the race. Such interest is apt to be greater in the personal individual than in the non-personal, in the animate than in the inanimate, in the masculine than in the feminine. But in all kinds of objects it is heightened by the skill in dealing with objects which may be required in the life of the race. For such skill involves an attention to action in its application to the objects (10), and will note the individual differences of these. It also gives unity to the idea of the plural object by combining the individuals in the one application of the action thought on close to them all in common (10). And if the application of the action, whether through an express relation or not, is not thought on close to its object, the individuals may be less noted, or the plurality, instead of being thought in the application of the action, will not be thought till the attention has settled on that object, and thought it first in the singular.

When by the requirements of life such skilful action with close attention to objects has been developed as one of the aptitudes of the race, it may go so far into the objects when there are only two of them as to take up a sense of the individuals so full as could not be

carried through a larger number; and then there will be a felt difference between a duality and a plurality which will develop a dual number distinct from the plural. Such fulness in the thought of duality may, however, arise without such demand for skill, if there be a tendency to fulness in the substantive idea.

Now, the latter tendency exists when the substance is comparatively weak in the substantive idea. For the substance is the abstract thought of the substantive as object, which is formed when thinking it in the connections of fact. And when it is strong, there will be a tendency to think duality as well as plurality in the abstract substances of the individuals. But when it is not so strong, this abstraction will be less, and there will be a tendency, when there are only two objects, to think them more fully than a plurality of individuals can be thought, and so to develop a dual number.

The element of number pertains properly to the substance (Def. 14); and its natural place therefore is, like that of the substance, at the beginning of the noun. But an habitually superior interest in the attributive part will tend to place this before the substance, determining the latter; and then the element of number will tend to be at the end of the noun.

When the substantive idea is very full and concrete, it is apt to be too heavy to be used as a unit in counting; and then a lighter idea which may represent the object will be used instead, if the traffic carried on by the race necessitate counting.

13. There are various influences which tend to heighten the sense of personality, or of the individual person. But there is one special influence which tends to heighten the sense of the persons associated with self, namely, the need for help and co-operation. This, whether it be felt in navigating the ocean, in struggling against the large carnivora, in hunting large game which move in herds, or be due to an indolent looking for assistance, will lead the race to notice strongly the persons associated with self. And this will tend to affect the thought of the first person plural, distinguishing it when it includes the person or persons addressed, and when it does not.

14. Grammatical gender expressing (Def. 16) a sense of the degree of power possessed by substantive objects to influence fact by virtue of their inherent properties, is promoted in language, as has been already said, by the development of mental energy in the race (Chap. ii. 4); because the sense of such power gives an advantage in that guidance of action for which mental energy is developed, and therefore the development includes a tendency to note that element.

The sense of such power, and consequently the development of gender, will also tend to show itself when the life of the race is dominated by the powers of nature, so as to feel them the more. And on the other hand, according as man dominates nature, his own power takes the place of hers, and his sense of power inherent in substantive objects will tend to be restricted.

15. According as the interest of a race lies in practical results, it will in thinking action look beyond the accomplishment of the action to what is to be effected by it. And in thus thinking action in

reference to the result at which it all aims, all its parts will tend to be drawn closer together; for in the result they are all united. When such tendency to think results has been developed as an aptitude of the race, it will extend to the conception of all facts, and will give synthesis to the sentence, drawing its parts closer to each other.

16. The mode of life to which a race has become conformed may also affect the phonesis, that is, the consonant and vowel utterance of their language.

It may in a greater or less degree favour the development of strength of purpose in carrying out a determination; and this, according to the degree of its development, will tend to show itself in all action and in the act of speaking itself. Those who have it will tend to speak with a stronger effort than others to sustain the utterance, till the intended expression is completed. But such effort, according to Def. 25, comes from the action of the chest in supplying a pressure of breath to the organs of speech, and falls on the consonants. And hence strength of purpose will tend to show itself in the pressure of the breath from the chest in consonant utterance. Such activity of the chest also facilitates guttural utterance; for it is easier to make with distinctness the various interruptions of the breath with the root of the tongue, when the current of the breath is strong; and, moreover, the strong passage of the breath over the root of the tongue excites its activity so as to attract guttural utterance.

The conditions of life may favour in different degrees habitual exertion, so that some shall foster indolence, and in others a tendency to work hard shall be an aptitude giving an advantage to the race in the struggle for life in the region. In proportion as a race is laborious, its utterance will in the same degree tend to have an energetic character, and the actions of the organs of speech will be performed with corresponding tension and fulness. On the other hand, indolence will tend to show itself in an imperfect utterance of the elements of expression.

There is another difference which may arise among the races of men, according as their condition and life have more call for change or steadfastness of action, and favour in a corresponding degree the development of versatility or tenacity. And either habit, according as it is established, will appear in the act of speech. Versatility will tend to show itself in the facility of passing distinctly from one element to another; tenacity, in restricting the transitions of utterance or concurrent elements which it will admit.

Different moles and conditions of life may make one race social and communicative, another thoughtful and observant. The former will talk more to companions than the latter. The latter will be more occupied with their own thoughts than the former. Now it has been stated in Def. 25 that speech involves two steps, the representation of ideas to the consciousness of the speaker, and the transmission of that representation to the sense of the hearer; and that the consonants are more adapted for the first step, the vowels for the second. The first step is more in accordance than the second with the habits of a reserved and silent race who are comparatively much occupied with

their own thoughts, and little with impressing the hearing of others. With them, therefore, in the act of speaking, the representation of ideas to their own consciousness will be strengthened by their thoughtful habits, and will tend to prevail over the act of impressing the sense of the hearer. And in their language the consonants will tend to engage more of the action of the organs and to predominate over the vowels. On the other hand, the second step for which the vowels are adapted is more in accordance than the first with the habits of a talkative unthinking race. And with them, therefore, the consonants will tend to engage less of the action of the organs; and the vowels will tend to predominate over the consonants.

CHAPTER IV.

MIXTURES AND MIGRATIONS OF THE RACE, AND ITS PROGRESS IN
KNOWLEDGE, ARTS, AND CIVILISATION.

1. WHILE man is unsettled and migratory, nation is liable to mix with nation on various terms of equality or conquest. And from such mixture of two nations speaking different languages there will result a language more or less different from both. If indeed one of the two has such superiority or advantage over the other in the intercourse of life that the latter sees more benefit from understanding and being understood by the former than the former sees from understanding and being understood by the latter, then the latter will make the greater effort to learn the language that is new to it; and the language spoken by the former will tend to prevail over the other. Otherwise the language of the more numerous, or perhaps of the less apt to learn, will have the greater influence. And if the mental qualities and mental habits of the two be similar, the language which results from their mixture will tend to have the same characteristic features as the original languages.

2. Now men's migrations are limited in a great degree to particular regions to which they are adapted in constitution and habits, so that they would not flourish outside those regions, while other races adapted to other regions would not flourish within them. Within such limits languages will probably have those same general features which belong to similar mental qualities and to similar modes of life. At the common boundary of two contiguous regions, the characteristic features of language are most likely to be disturbed.

3. Each language now known has probably been subject to such mixtures, and is the mode of expression in which those who spoke different tongues succeeded in their effort to communicate thought to each other. In such an effort the speaker, when he had no expression intelligible to the hearer for the object of thought which he wished to denote, might endeavour to find in the idea of that object an element capable of intelligible expression which would suggest it to the hearer's mind. Such an element, if discovered, would then be used to denote the object of thought, and might be afterwards used in denoting other objects of thought which resembled it; and it would thus become a root common to a number of different words. It would, however, be necessary to distinguish from each other the different objects of thought which involved this common element, and for that purpose other

elements should be noted in those objects which would be distinctive of them, and which might be denoted by expression intelligible to the hearer. These would be used in other similar cases, and would give rise to elements of language formative, or determinative, or supplementary.

4. In the ages of unsettled life and frequent mixture of people and language, the power of inventing and of understanding new expression would grow by frequent exercise, the best modes of expression would be imitated, and only after a long series of improvements would language quite satisfy the needs of expression. If, however, the faculty of inventing speech had been in a great degree disused before a mixture of two languages took place, then the invention of such fine elements as roots and forms would be alien to the habits of the speaker who was striving to convey thought to a hearer. He might in that case succeed in making his own speech intelligible by the help of gesture, especially if the hearer was very anxious to understand him; or the hearer might learn by gestures from others what the words meant. Thus in the continuance of intercourse words of both languages might come to be generally understood and used, while other words which had not come to be generally understood would tend to fall into disuse. On the other hand, one language might so prevail over the other as to be scarcely at all affected with admixture of foreign elements. And yet if it contained very fine expressions of meaning these would be slowly apprehended, and the foreign speaker who was endeavouring to express himself in the language would make out his meaning by the help of the coarser elements which he had learned; while the variations of form which expressed fine varieties of meaning would tend to be dropped, the form which occurred most frequently tending to prevail over the others. And thus the language might be greatly altered in its structure without any change in its vocabulary.

Such, too, in a less degree, would be the effects of the mixture of different dialects of the same language. And in this case as well as in the former the new forms of expression would settle down into conformity with the mental habits of the mixed people.

5. In every case in which new expression was coming into use the meaning of each word would be largely determined by the rest of the sentence. And the effort, both of the speaker to be understood, and of the hearer to understand, would be directed, not only to each part of the sentence, but at the same time in a secondary degree to the whole, as fixing the meaning of the part. That effort would lead both speaker and hearer to think each part with great particularity of attention, directed to the part itself, and to its connection with the whole. So that even when the object of thought was denoted by singling out and signifying in utterance fine elements common to it with other objects, those radical elements would be thought, not in the abstract essence which was truly common to all those objects, but in the particular form in which they were found in the present object. They would recall, indeed, the utterance which was used to denote them in the other instances; but this would not be used as identifying the present

elements with those others, but with a particularity of reference to the present elements proportional to the effort to denote them.

6. This particularity, which characterises a language in its first growth, tends to be diminished by any influence, such as migration into a new country, and new conditions of life, which enlarges the stock of ideas and widens the variety of the elements of thought which the elements of speech are used to express. For by the association of thought, thoughts which have been present to the mind in immediate succession tend to suggest each other, and become more firmly connected with each other the oftener they occur together. By virtue of this principle, an element of speech becomes associated in the mind with that which it is used to express; and the oftener it is used, the more do the elements of thought to which it is successively applied tend to be associated together, and to coalesce in one thought; so that the element of speech tends to become by use a nucleus, around which gathers an associated thought, formed by the fusion together of all the thoughts which it has been used to express. In this fusion the particulars in which the associated thoughts differ from each other tend to neutralise each other, and to be lost, while the common essence of all those thoughts tends to unite into a single thought. That common essence is not identical with the common element which suggested the root, in order to signify the objects, for this radical element was one special element which was fixed on because it suggested significant expression, and needed the help of other elements to complete the thought of the object, whereas the common essence comes out as the whole of that in which the objects agree. And so far as it is thus common to all the particular instances, it tends to come out with a weaker sense of its present connections and modifications, for these belong only to the present instance, and are weakened in the thought which the word expresses by the partial withdrawal of thought from the present instance to the more general associations.

7. This tendency of the elements of speech to greater generality and singleness in the thoughts which they express, is promoted by whatever enlarges the range of thought, but it is held in check by the influence of sense. For while it is the property of the mind that in it thoughts become associated so as to coalesce and to be reduced to the general essence which they have in common, the impressions of sense, on the other hand, are always particular and concrete. The object of sense is perceived in its individual particularity, and with its present connections; and the nearer thought keeps habitually to sense, the more it has of particularity and concreteness, and the less of that abstract singleness which belongs to a general idea. This influence of sense over thought in keeping it concrete and particular, is less where the mental power is greater. But in this respect a great change comes over the mental habits of a race, when they advance in knowledge, arts, and civilisation.

8. As knowledge extends and arts multiply and society advances in organisation, men's thoughts become less confined within the limits of sense, and their pursuits become more distinct and special. Now it is each man's pursuit in life which constitutes for him the sphere of

material objects which most engage his interest, and as this becomes more special and limited, sense has a diminished range for its earnest action ; so that as the ideal world enlarges with the progress of knowledge, the sensible world contracts with the specialisation of business that accompanies the development of art and civilisation ; and the consequence must be that thought will become more ideal and be less governed by sense. The thoughts which words express will then become less connected with impressions of sense, and therefore they will have more generality and singleness. The act of utterance will acquire a singleness corresponding to that of the thought which prompts it. And, moreover, the increased generality of the meanings of words may necessitate the introduction of new formations or of particularising elements to denote what is thought with particularity.

9. The utterance of language, too, tends to be changed by the continued identity of the race, and by their progress in civilisation.

Under the former condition, the language becomes familiar and readily understood by all, so that less care is needed in uttering it ; and consequently the elements of utterance tend to be more and more impaired and worn down, so as to be easier for the organs.

The latter cause produces a softness of habit and action, according as life becomes easier and less laborious, and this tends to give softness to utterance (Chap. iii. 16).

When the finer elements of expression are thus worn down, they are liable to lose the difference of form which distinguishes one from another. Their meaning becomes then more difficult to be apprehended by foreign speakers. And if the language be exposed to the effects of mixture of the race with a strange people, those elements of different meaning whose difference of form has been impaired will be replaced by coarser and more distinct forms of expression.

BOOK II.

INDUCTIVE PROOF OF THE CAUSES WHICH HAVE DETERMINED THE STRUCTURE OF LANGUAGE.

CHAPTER I.

PART I.—DEGREES OF QUICKNESS OF MENTAL EXCITABILITY POSSESSED BY DIFFERENT RACES OF MEN.

I.—*African.*

1. THE great peculiarity of the mental constitution of the true African races is the readiness with which they are affected by an impression, and with which the affection produced in them by an impression passes away.

The inexhaustible gaiety which struck Humboldt¹ in the negro slaves in South America indicates this characteristic in both its parts, for it shows an elasticity of spirit which is easily moved, and from which depression quickly passes. Richard Lander, who travelled in Yoruba and the other kingdoms on the lower course of the Niger, says: ²—“Nature has wisely endowed the African with a buoyant, cheerful, happy temper, so that no calamity, however great, no grief, however poignant, is capable of making a deep or lasting impression on his mind. He does indeed display a lively, natural feeling when his infant children are snatched forcibly from his embraces, or he himself torn from his home and kindred and village tree, to gaze upon strange faces and wander amongst foreign scenes; but this emotion is as evanescent as a flash of lightning. He knows no fixed, lasting sorrow. I have often seen disobedient slaves, and slaves offered for sale, singing in chains and dancing in fetters, suffering at the same time under a loathsome disease and an accumulation of misery the very thoughts of which would melt even to tears a sympathising English philanthropist. For their parts, they hardly know what a bitter moment is, and enjoy themselves, although under such apparently overwhelming circumstances, with as keen a zest as if they had been surrounded by their friends and companions, and dancing by the light of the moon underneath the branches of their favourite tree. In their toilsome journeyings from one part of the country to another, it must be admitted that the captured slaves

¹ Humboldt's Personal Narrative, chap. v. vol. i. p. 177.

² Records of Clapperton's last Expedition to Africa, vol. i. p. 300.

undergo incredible hardships; yet whenever they arrive at the end of their march, all their woes are buried for ever in a calabash of pitto or otee, and they are as merry and thoughtless a day or two afterwards as they ever were."

2. To the same purpose Barbot writes of the natives of the Gold Coast.¹ "They are very little concerned in misfortunes, so that it is hard to perceive any change in them, either in prosperity or adversity, which among Europeans is reckoned magnanimity, but among them some will have it to pass for stupidity. To instance in this particular; when they have obtained a victory over their enemies, they return home dancing and skipping, and if they have been beaten and totally routed, they still dance, feast, and make merry. The most they do in the greatest adversity is to shave their heads, and make some alteration in their garments; but still they are ready to feast about graves; and should they see their country in a flame, it would not disturb their dancing, singing, and drinking; so that it may well be said, according to some authors, that they are insensible to grief and want, sing till they die, and dance into their graves. If amidst their hardest toils and work, at home or abroad, they do but hear any one sing or play on their musical instruments they will fall a-dancing."

Bosman uses almost the same language in his description of the Gold Coast, p. 118. And from the description it is evident that it is not insensibility that characterises them, but rather a readiness to receive a new impression, such levity as enables them to pass quickly from what is painful to what is pleasant.

3. So, too, amongst the Jollofs, Adanson describes the strange alternations of feeling after the death of a friend. "One night when I was fast asleep, I was wakened by a horrid shrieking which threw the whole village into an uproar. Immediately I inquired what was the matter, and was told they were bewailing the death of a young woman, who had been bit, about four leagues off, by a serpent, and died of the poison in less than two hours; and that her body had been just now removed to her cottage. The first shriek was made, according to custom, by one of the female relations of the deceased. At this signal all the women in the village came out, and setting up a most terrible howl, they flocked about the place from whence the first noise had issued. This shocking noise lasted some hours, that is, till break of day. When the burial was over, the cries and lamentations ceased. Thus ended the lugubrious ceremony. Their thoughts were now turned towards making an entertainment in honour of the deceased; and that same evening, they had a folgar or a dance which they continued for three nights successively. An European on such an occasion would have gone into mourning for some months, while the African seizes the opportunity to rejoice."²

4. M. Caillié, who travelled from the mouth of the Rio Nunez to Timbuctoo, thus notices the Bambaras, a Mandingo people who have

¹ Description of the Coasts of South Guinea, Book iii. chap. xviii. p. 235; chap. xxi. p. 275.

² Adanson's Voyage to Senegal, p. 108, &c.

not been affected by Mahommedanism. "I scarcely ever saw so gay a people as the Bambaras. At sunset they assemble under the great bombaces at the entrance of the village, and dance all night to music which is not unpleasant."¹ "They are content with the present without troubling themselves about the future."² To judge by his account of them, they are a people of great quickness of excitability. "In the evening a dispute arose between two men of the village, who began to fight, and would even have used their poniards, if the inhabitants had not collected round them to make peace. Nothing was heard but the shrieks of the women, who made great lamentations, and the crowd was immense. All spoke at once and shouted to make themselves heard, so that there was a tremendous uproar. I never could learn what was the cause of this scuffle, which took place precisely in the court where we lodged, and lasted a very long time, though the rain was pouring in torrents."³ The Jallonkas also, a Mandingo pagan people, are similarly excitable. "A great number of people were going across the river in canoes, and they were all disputing, some about the fare, others about who should go first. They all talked at once and made a most terrible uproar. Those who had crossed fired muskets in token of rejoicing, which augmented the tumult."⁴ "All the evening, and indeed till night was pretty well advanced, the young negroes and negresses danced to the tom-tom."⁵

5. Dancing and singing at night by moonlight, or firelight, seems to be constant and universal amongst the negro races, except where they are checked by Mahommedanism. "For music and dancing are forbidden among the Mussulmans, and consequently their amusements are far from equalling in frolic and gaiety those which prevail among the pagans."⁶ When Caillié was on the Niger sailing to Timbuctoo, "the slaves, male and female, all Bambaras, began after sunset to leap, dance, and amuse themselves in various ways. Their gaiety, however, proved the cause of some trouble to us; for the Mahommedan Foulahs observing them, came on board at nightfall armed with bows and pikes. They severely censured the impropriety of allowing the slaves to dance during the Ramadan, observing that it was like making a scoff of religion. The dispute ended by the slaves being condemned to receive each five lashes on the back. The sentence, however, was not executed with much severity; and it did not restrain the slaves from resuming their dance as soon as the fanatical Foulahs departed."⁷ "These people (Bambaras) are always gay; and their cheerfulness forms a striking contrast with the dull gloomy look of the fanatic Mussulman."⁸ Yet even the Mahommedan Mandingos have not quite lost their native character. "The negroes are extremely fond of social meetings. In the fine season, after evening prayer, they assemble with the whole neighbourhood to take supper together. These parties are always very merry. These worthy Mussulmans vituperate those whom they call infidels, laugh heartily, and amuse

¹ Caillié's Travels through Africa, vol. i. p. 369.

² Ibid. p. 370.

³ Ibid. p. 319.

⁴ Ibid. p. 250.

⁵ Ibid. p. 252.

⁶ Ibid. p. 269.

⁷ Ibid. vol. ii. p. 12.

⁸ Ibid. vol. i. p. 392.

themselves at the expense of absent friends." ¹ "At the end of every meal they thank each other reciprocally, and afterwards run through the village, repeating their thanks to every one they meet, which is equivalent to saying that they have dined or supped. It is easy to judge of the quality of the repast by the expression of satisfaction with which the word signifying thanks is pronounced. Some of them came to the door of my hut also to ejaculate their thanks." ²

6. Many examples of the quick excitability of the negro occur in the travels of the brothers Lander in the same part of Africa which Richard Lander had visited before with Clapperton.

They found the people of Badagry "an ever-grinning and loquacious people." ³ And at Bidjie, some eight or ten miles inland, the laughter was continuous, and on the slightest occasions. "When I shook hands with the chief's son, which act is not very diverting in itself, the bystanders set up so general a roar of laughter, that the town rang with the noise. And when I ventured farther to place my hand on his head, they were yet more amazingly tickled, and actually shrieked like mandrakes torn out of the earth." ⁴

At Jenna, "we have had the customary visit to our yard of a line of women, who come every morning, with rueful countenances and streaming eyes, to lament the approaching death of the old widow." She was to be put to death to attend her husband in the other world. "They weep, they beat their breasts and tear their hair, they moan and exhibit all manner of violent affliction at the expected deprivation. Perhaps their sorrow is sincere, perhaps it is feigned. At all events, their transports are ungoverned and outrageous. The first woman in the line begins the cry, and is instantly followed by the other voices. The opening notes of the lamentation are rather low and mournful, the last wild and piercing." ⁵

"As a contrast to the afflicted females of Jenna, the wives of the king of Katunga all fell to crying for joy this evening, on recognising a few old acquaintances in the yard, who soon joined them in the melancholy music. It was laughable enough to see them. Yet, after the first burst had subsided, they began to chat with a garrulity far beyond that of the most talkative of their European sisters. The conversation lasted more than an hour, till at last it resolved itself into a violent quarrel." ⁶

At Pooya, in Yoruba, "one old woman had the misfortune to let a calabash of palm-oil fall from her head. On arriving at the spot, we found a party of females, her companions in slavery, wringing their hands and crying. The old woman's own affliction was bitter indeed, as she dreaded the punishment which awaited her on her return to her master's house. I compassionated her distress, and gave her a large clasp-knife, which would more than recompense her for the loss of the oil; whereat the women wiped away their tears, and fell down on the dust before us, exhibiting countenances more glad-some and animated than can be conceived." ⁷

¹ Caillié's Travels through Africa, vol. i. p. 347.

² Ibid. p. 348.

³ Lander's Travels in Africa, p. 9.

⁴ Ibid. pp. 50, 53.

⁵ Ibid. p. 73.

⁶ Ibid. p. 83.

⁷ Ibid. p. 85.

At Chekki, in Yoruba, "people of both sexes are infinitely more grave and serious in their manners than those nearer the coast. And the loud laugh that speaks the vacant mind, we have not heard these many days."¹ This is probably due to the absence of the dissipation which arises from their intercourse with foreigners.

But there seems to have been little diminution of excitability; for in Keeshee, a frontier town in the north of Yoruba, the following incident was recorded. "This is a market-day here, and I took a walk this evening to the place where the market is held. But the crowd that gathered round me was so great as to compel me to return home much sooner than I had intended. If I happened to stand still even for a moment, the people pressed by thousands to get close to me; and if I attempted to go on, they tumbled one over another to get out of my way, overturning standings and calabashes, threw down their owners, and scattered their property about in all directions. Smiths welcomed me by clashing their iron tools against each other, and drummers by thumping violently upon one end of their instruments. A few women and children ran from me in a fright, but the majority, less timid, approached as near as they could to catch a glimpse of the first white man they had ever seen. My appearance seemed to interest them amazingly, for they tittered and wished me well, and turned about to titter again. On returning, the crowd became more dense than ever, and drove all before them like a torrent. Dogs, goats, sheep, and poultry were borne along against their will; which terrified them so much, that nothing could be heard but noises of the most lamentable description. Children screamed, dogs yelled, sheep and goats bleated most piteously, and fowls cackled and fluttered from among the crowd. And happy indeed was I to shelter myself from all this uproar in our own yard, whither the multitude dared not follow."²

At the same place "the widows of the deceased chief daily set apart a portion of the twenty-four hours to cry for their bereavement and pray to their gods. They began this evening in the same sad, mournful tone which is commonly heard on similar occasions all over the country. We asked our interpreter why the women grieved so bitterly. He answered quickly, 'What matter? they laugh directly.' So I suppose they cry from habit rather than from feeling; and that they can shed tears and be merry in the same breath, whenever they please."³

7. On the north of Yoruba is the kingdom of Borgoo; the inhabitants of which are classed by Dr. Külle, in the "Polyglotta Africana," as akin to those of Ashantee. Lander says: "Perhaps no two peoples in the universe, residing so near each other, differ more widely in their habits and customs, and even in their natures, than the natives of Yoruba and Borgoo;"⁴ the former being commercial, cowardly, and mild, the latter warlike, bold, and haughty. But though there is a great difference in this respect between the two races, excitability seems to be as great in Ashantee as in Yoruba.

¹ Lander's Travels in Africa, p. 102.

² Ibid. p. 154.

³ Ibid. p. 155.

⁴ Ibid. p. 189.

8. Bowdich thus describes his entrance into the capital of Ashantee : "We entered Coomassic at two o'clock, passing under a fetish or sacrifice of a dead sheep, wrapped up in red silk, and suspended between two lofty poles. Upwards of 5000 people, the greater part warriors, met us with awful bursts of martial music, discordant only in its mixture ; for horns, drums, rattles, and gong-gongs were all exerted with a zeal bordering on frenzy, to subdue us by the first impression. The smoke which encircled us from the incessant discharges of musketry confined our glimpses to the foreground. And we were halted whilst the captains performed their Pyrrhic dance, in the centre of a circle formed by their warriors ; where a confusion of flags, English, Dutch, and Danish, were waved and flourished in all directions, the bearers plunging and springing from side to side with a passion of enthusiasm only equalled by the captains who followed them discharging their shining blunderbusses so close that the flags now and then were in a blaze, and emerging from the smoke with all the gesture and distortion of maniacs. The several streets branching off to the right and left were crammed with people. Their exclamations were drowned in the firing and music, but their gestures were in character with the scene."¹ "The next morning the king sent to us to come and speak our palaver in the market-place, that all the people might hear it. We found him encircled by the most splendid insignia, and surrounded by his caboceers. We were received graciously."

The following day "we were sent for to the king's house. He was only attended by his privy counsellors. He expressed much delight at the camera obscura and instruments. He again acknowledged the gratification of the preceding day, and desired Mr. James to explain to him two notes which he produced. When these were explained his countenance changed, his counsellors became enraged ; they were all impatience, we all anxiety. 'These white men,' said the king, 'cheat me, they think to make 'Shantee fool. They pretend to make friends with me, and they join with the Fantees to cheat me, to put shame upon my face. This makes the blood come from my heart.' This was reported by his linguist with a passion of gesture and utterance scarcely inferior to the king's. The irritation spread throughout the circle and swelled even to uproar."² Subsequently the king "drew his beard into his mouth, bit it, and rushing abruptly from his seat exclaimed, 'Shantee foo ! 'Shantee foo ! ah ! ah !' Then shaking his finger at us with the most angry aspect, would have burst from us with the exclamation, 'If a black man had brought me this message I would have had his head cut off before me.'" But on an explanation being made by Mr. Bowdich, "conviction flashed across the countenance of the interpreter. The cheerful aspect of the morning was resumed in every countenance. The king held out his hand to Mr. Bowdich. Every look was favourable. Everywhere there was a hand extended."³

9. In Dahomey, at the festival of watering the graves of the king's

¹ Bowdich's Mission to Ashantee, p. 31-33.

² Ibid. p. 43, 47.

³ Ibid. p. 49, 51.

ancestors, debates and trials are held which the king decides. The excitable spirit in which such processes are conducted may be seen in the following incidents witnessed by Captain Forbes. Ahlohpeh was accused of cowardice, and the mayo claimed an office which he held. While he was making his defence, the mayo rushed at him and dealt him several blows, and caused him to be arrested and forcibly removed. In an instant the whole yard was in an uproar, and it was with difficulty that silence could be procured for the king to rebuke the mayo, and order Ahlohpeh to be brought back." ¹

Any head-man of a town or district can, by prostrating and kissing the ground, declare a king's court and try a culprit. "In the afternoon a terrible noise drew my attention, when, on examination, I found some of our hammock-men and the townspeople at a war of words. Presently the head of the town rushed in among them, prostrated, kissed the dust, and on his taking his seat on his hams, all squatted down peaceably scarcely a moment after. Narwey arrived too late, and in a terrible passion he rushed on one of the hammock-men and fairly pummelled him, while the head-man called to him to desist, and that his conduct was contempt of court. He fell back among the crowd a quiet but enraged spectator." ²

10. Lander says of the people of Africa in general: "They are easily provoked to anger, and as easily induced to resume sentiments of benevolence and compassion. We not unfrequently observed persons quarrelling and fighting in one moment with all the bitterness of angry and elevated passions, and in the next as gentle as lambs, and the most cordial friends in the universe, forgetting their previous noisy dispute in the performance of reciprocal acts of kindness and good-nature." ³

11. Yet there are considerable diversities among the natives of Africa, and to some of them this description is less applicable than to those which came under Lander's notice. For Africa being separated from Asia on the north-east only by the Red Sea, and joined to it by the Isthmus of Suez, is open on that side to Asiatic influences and Asiatic immigrants. And it is natural, therefore, that a pure African type should, for the most part, be found only in those regions which are most separated from those sources of Asiatic mixture. Not only is Africa, north of the Sahara, peopled by races of an Asiatic stock, but south of the Sahara, even in Bornou, about half-way between the most easterly and westerly parts of Africa north of the equator, a more sedate and less vivacious nature was observed by Denham, who says that "there is a remarkable good-natured heaviness about them;" ⁴ and by Dr. Barth, who remarks that "even amusements have rather a sullen character in Bornou." ⁵ And south of the equator, in latitude 4°, and five days' journey inland from the east coast, Rebmann found the Teita people, who said that their ancestors had come thirty days' journey from the north, and whose huts, constructed in

¹ Forbes's Dahomey, vol. ii. p. 138.

² Ibid. vol. i. p. 89.

³ Clapperton's Last Expedition to Africa, vol. ii. p. 1, 2.

⁴ Denham's Narrative of Travels, p. 316.

⁵ Dr. Barth's Travels in Central Africa, vol. ii. p. 310.

the Abyssinian fashion, confirmed this tradition. He says: "The quiet and more earnest character of this mountain people prevented them from making a great deal of fuss in the reception of the first European whom they had seen in their midst, as is the custom of the Wanika, who always, when you come for the first time into one of their villages, set up dancing and singing in honour of the stranger. Here there was nothing of the kind."¹ "The more serious character of the Teita showed itself in this, that Maina did not laugh, as the Wanika are in the habit of doing, when he heard of the resurrection."²

12. The Hottentots in the extreme south differ in their mental character, as in their physical, from the other natives of South Africa. "Missionaries of different societies have lately proceeded to very distant parts of the colony, and some even much beyond it, both among the Kafirs to the eastward and the Bosjesman Hottentots to the northward. The latter they represent as a docile and tractable people, of innocent manners and grateful to their benefactors beyond expression; but the Kafirs, they say, are a volatile race, extremely good-humoured, but turn into ridicule all their attempts to convert them to Christianity."³ "The humour of the Hottentots is a little phlegmatic, and their temperament cold."⁴ "Their phlegmatic coolness and their serious looks give them an air of reserve, which they never lay aside even at the most joyful moments; while, on the contrary, all other black or tawny nations give themselves up to pleasure with the liveliest joy and without any restraint."⁵ "They appear to be a dull, gloomy, and indifferent people."⁶

Such observations would suggest the inference that the Hottentots differed from the pure African races in having a lower degree of quick excitability; but this impression is removed by the account which Kolben gives of their character and habits. His description of their indolence gives the true cause of the apparent difference; for though man in his rude state everywhere is liable to habits of indolence, except when pressing necessity rouses him to action, the Hottentot seems to surpass all other men in this respect. "The first thing I shall remark in this view of the Hottentots is their laziness. They are without doubt both in body and mind the laziest people under the sun. A monstrous indisposition to thought and action runs through all the nations of them, and their whole earthly happiness seems to lie in indolence and supinity. They can think, and to purpose too, if they please; but they hate the trouble of it, and look upon every degree of reasoning as a vexatious agitation of the mind. They therefore shun argument as the invader of their quiet, and never reason but in cases of downright necessity. Fire not a Hottentot's mind by violence, and he is all supinity and reverie. They can be active too if they please, and when employed by the Europeans are as diligent and expeditious as any people in the world. But let not a Hottentot

¹ Dr. Krapf's Travels in East Africa, p. 226.

² Ibid. p. 234.

³ Barrow's Travels in Southern Africa, vol. i. p. 376.

⁴ Vaillant's Travels, p. 271.

⁵ Ibid. p. 343.

⁶ Campbell's Travels in South Africa, p. 382.

be roused by any present appetite or necessity, and he is as deaf to employment as a log, and when upon his legs will hardly stoop for any one thing in the world he does not either particularly doat on or immediately want. When appetite or necessity urges he enters readily into employment and is all activity; when these are gratified and his obligation to serve is at an end, he retires to enjoy himself again in his beloved idleness. This is the general character of the Hottentots in point of action."¹ "They will neither work nor reason but upon a kind of force. Let it not be said, then, as stupid as a Hottentot, but as lazy as one."²

Now such habits of inaction and of disinclination to exertion tend to repress the manifestations of mental movement, and to reduce that movement itself while the habit operates. And it is to those occasions when habit does not favour indolence that we must look if we would see the quality of the mental action which is natural to the race. When the habits of the Hottentots are thus studied, their similarity to the genuine African races in respect to quickness of excitability becomes apparent. For not only on occasions of a strongly exciting nature, as when the favour of deity is sought with earnest appeals, which are strengthened with the transports of religious dance and song, but at times which furnish a stimulus small compared with its effect, the Hottentot is roused to excitement with true African facility.

"Dancing is the delight of both sexes of the Hottentots;"³ and among them, as among the negroes, the custom prevails of dancing in the light of the moon. These dances are thought by those who have observed them to have a religious character. But "most of the Hottentots deny this, and avouch that their dancing, shouting, or singing in the open fields in the night is only for diversion and to please themselves, without the least intention to invoke or adore the moon or any deity whatsoever."⁴ Kolben thinks that these are religious dances, and describes the worship which they address to the new and full moon. At other times, however, they correspond to the general African habit and seem to have a genuine African character, with a degree of excitement out of proportion to the religious element which they involve. "They assemble in great numbers in their several districts, and dance in circles, clap their hands, and cry and rave, as it seems, all night long. Their behaviour on those occasions is very amazing. They throw themselves into various surprising distortions of body, stare wildly up towards heaven, stretch every feature, and cross their foreheads with a red stone."⁵ At other times, when there is no religious motive, the dance goes on with an excitement which is quite disproportioned to the occasion. "The occasions of their dancings, setting aside the religious solemnities, are generally these: when peace is clapt up with a nation with which they have been at war; when one of the kraal has slain a wild beast or escaped some great danger; or when some notable piece of good luck has happened to some particular person or family of the kraal. On these

¹ Kolben's Cape of Good Hope, chap. iv. sect. 7. ² Ibid. chap. xix., introd.

³ Ibid. chap. xxii. sect. 4. ⁴ Ibid. chap. viii. sect. 3.

⁵ Ibid. chap. viii. sect. 3.

and the like occasions the whole kraal testifies its joy in dancing, sometimes whole nights and sometimes till far in the next day, without any manner of refreshment. The men in dancing deal their legs about them to a prodigy of activity. The women are very active in this diversion, keeping their legs continually in a wonderfully nimble motion." ¹ "They can sing, and dance, and confabulate with all imaginable gaiety for twenty hours together by the help only of their ordinary beverage, water and cows' milk; vivacities in which, spite of all the sarcasms with which they have been pelted for stupidity, they excel the Europeans, who cannot, forsooth, maintain their mirth for an hour without the help of strong liquors." ² When distemper ceases among their sheep, after offerings made to propitiate their god Gounja, "the sense of having pleased him furnishes such scenes of mirth and ecstasy as are perhaps nowhere else to be met with." ³ And "when the sheep pass readily through or over the fire," through which at certain times they are driven, "'tis hardly in the power of language to describe them in all the sallies of their joy. Heavens! what a distracted scene! what shouting, singing, and screaming! what bouncing and scampering! what laughing, grinning, and staring! what stamping, capering, and tumbling! what clapping of hands and shaking of heels! what twistings and wriggings of the body! what raptures and uproars! They are mad in all appearance, stark-staring mad, and their extravagances know no end." ³

Such descriptions show the excitable nature which is concealed beneath the indolence of the Hottentot.

13. There is no such veil of indolence obscuring the true nature of the Kafir. When Vaillant first met Kafirs after having been accustomed to Hottentots, the difference between them in this respect struck him forcibly. The Kafirs were of the Kosah race. "What showed their difference from the Gonaquas most sensibly was their manner of saluting. They all spoke together, and with a precipitation and volubility which appeared to me so much the stranger, as I had been for almost a year accustomed to the slow manner of my indolent Hottentots." ⁴ "Being more open and lively than the Hottentots, and having in their character nothing approaching to their taciturnity, these people gained upon me in volubility." ⁵ When he made a bellows for them, "this specimen of skill raised their astonishment to the highest pitch. I may venture to say they were almost convulsed and thrown into a delirium. They danced and capered around the bellows; each tried it in turns, and they clapped their hands, the better to testify their joy." ⁶

14. Captain Gardiner thus describes a scene of excitement which he witnessed among the Zulus. "A chief named Georgo, at the head of a large detachment from his regiment, came from a distant part of the country for the purpose of begging shields. Their arrival at the principal gate of the town having been notified to the king, an order was soon after sent for their admission; when they all rushed up with

¹ Kolben's Cape of Good Hope, chap. xxii. sect. 4. ² *Ibid.*, chap. ix. sect. 6.

³ *Ibid.* chap. ix. sect. 8. ⁴ Vaillant's Travels, p. 375. ⁵ *Ibid.* p. 379.

⁶ *Ibid.* p. 393.

a shout, brandishing their sticks in a most violent manner, until within a respectable distance of the Issigordlo (or residence of the king), when they halted. Dingarn, the king, shortly after came out, the two indoonas, or ministers of state, and a number of his great men having already arrived. Tambooz, who is the great speaker on all these occasions, and the professed scolder whenever necessity requires, was now on his legs. To speak publicly in any other posture would, I am convinced, be painful to a Zulu. Nor is he content with mere gesticulation; actual space is necessary. I had almost said sufficient for a cricket-ball to bound in, but this would be hyperbole. A run, however, he must have; and I have been surprised at the grace and effect which this novel accompaniment to the art of elocution has often given to the point and matter of the discourse. On a late occasion it appears the troops now harangued had not performed the service expected. After a long tirade, in which Tambooz ironically described their feeble onset and fruitless effort, advancing like a Mercury to fix his dart, and gracefully retiring as though to point a fresh barb for the attack, now slaking his wrath by a journey to the right, and then as abruptly recoiling to the left, by each detour increasing in vehemence, the storm was at length at its height, and in the midst of the tempest he had stirred, he retired to the feet of his sovereign. Georgo's countenance can better be imagined than described at this moment. Impatient to reply, he now rose from the centre of the line. Amanka (it is false), was the first word he uttered. The various chivalrous deeds of himself and his men were then set forth in the most glowing colours, and a scene ensued which I scarcely know how to describe. Independent of his own energetic gesticulations, his violent leaping and sententious running, on the first announcement of any exculpatory fact indicating their prowess in arms, one or more of the principal warriors would rush from the ranks to corroborate the statement by a display of muscular power in leaping, charging, and pantomimic conflict, which quite made the ground to resound under his feet; alternately leaping and galloping (for it is not running), until, frenzied by the tortuous motion, their nerves were sufficiently strong for the acmé posture—vaulting several feet in the air, drawing the knees towards the chin, and at the same time passing the hands between the ankles. In this singular manner were the charges advanced and rebutted for a considerable time.”¹ Even in the ordinary discourse of the Zulu, his excitement requires an outlet additional to what it gets in language. “A Zulu can scarcely speak without snapping his fingers at every sentence; and when energetic, a double slap is often made, and that between every four or five words.”² Gardiner also notes the quickness with which the Zulus accomplish a process of joint deliberation. “It was in this impromptu manner that the town of D'Urban was named, its situation fixed, the township and church lands appropriated, and, in short, as much real business gone through as would have required at least a fortnight's hard writing and debating in any other quarter of the globe.”³

15. Among the Bechuanas, Campbell found similar quickness of

¹ Gardiner's *Journey to the Zulu Country*, p. 47-50.

² *Ibid.* p. 168.

³ *Ibid.* p. 188.

excitability. When he entered Lattakoo, "in a few minutes the square was filled with men, women, and children, who poured in from all quarters to the number of a thousand or more. The noise from so many tongues, bawling with all their might, was rather confounding after being so long accustomed to the stillness of the wilderness."¹ "While writing in the tent some of the principal persons came in and seated themselves around me, but in consequence of their talking so much and so loud about my writing, dress, and so forth, I was obliged to desist. At my manner of pronouncing some of their words they laughed so immoderately loud as almost to make me deaf."² "It is very difficult to know, when these people are talking, whether they are in a rage or in good humour. I had generally to listen whether they laughed or not before I could determine, if not within sight of their countenances; for when they become the least interested in what they are saying, they speak with all their might, as if addressing people at a great distance."³ "From fifty to a hundred women are to be found at these little wells from morning to evening. No person having a headache should approach within a hundred yards of these wells, the tongue-uproar is so great."⁴ "When writing I was hastily called out to witness something extraordinary. There was a hard, smooth skin laid on the ground, on which was put another skin, which they intended to soften. Twelve men on their knees surrounded it. Every second person, which made six of the circle, at one instant plunged down upon the skin, like one diving into the sea. Each person driving it from him, the whole skin was shrivelled into a heap in the centre; but in raising again their bodies, they pulled it to them, which made it flat as before, and made room for the other six to plunge down upon it in the same way. Both sixes alternately continued a long time at this exercise, keeping exact time in falling and rising by means of words which they sang, intermixed with frightful screams and howling. They frequently appeared frantic and furious, but the instant the operation ended, their countenances resumed their former aspect, as if nothing had happened."⁵ "Having plenty of flesh, the Matchapees (a Bechuana tribe) were in such high spirits that I was induced to compare their combined vociferations to the uproar which prevailed in the streets of Paris during some of the revolutionary massacres. Many of them appeared so full of rage that a stranger would have expected every moment to see them stab each other with their assegais, or cleave one another down with their battle-axes. Inquiring of the interpreter at the height of the uproar the subject of dispute, he carelessly answered it was only about the best way to travel on the morrow in order to obtain water."⁶ "The king heard a case of goat-stealing, passed judgment, and put it in execution with his own hands, all in the course of a few minutes."⁷ "The Matchapees were much depressed and discouraged, no people being more affected by rain and damp than they are."¹

¹ Campbell's Travels in South Africa, p. 246.

² Ibid. p. 251.

³ Ibid. p. 275.

⁴ Ibid. p. 279.

⁵ Ibid. p. 253.

⁶ Campbell's Second Journey in South Africa, p. 141.

⁷ Ibid. p. 183.

⁸ Ibid. p. 193.

16. Amongst the Makololo, some 600 miles north of Lattakoo, in south latitude 18°, and east longitude 24°, Livingstone found a similar character of ready excitability. "The people usually show their joy and work off their excitement in dances and songs. If the dance were witnessed in a lunatic asylum, it would be nothing out of the way, and quite appropriate even as a means of letting off the excessive excitement of the brain."¹ "The dance is kept up in the moonlight till past midnight. The attendants of the chief keep up a continuous roar of bantering raillery, laughing, and swearing."²

17. The Barotse also, two or three degrees further north, have a similar character; "they often engage in loud scolding of each other in order to relieve the tedium of their work." "They are a merry set of mortals. A feeble joke sets them off in a fit of laughter."³

18. North of the Barotse are the Balonda, a people of a negro type. Livingstone's description of the Balonda female chief Manenko is like Gardiner's description, already quoted, of the Zulu Tamboozza. She considered that a grave offence had been committed against her, and "she had now a good excuse for venting her spleen. She advanced and receded in true oratorical style, belabouring her own servants as well for allowing the offence, and, as usual in more civilised feminine lectures, she leaned over the objects of her ire, and screamed forth all their faults and failings ever since they were born, and her despair of ever seeing them become better until they were all killed by alligators."⁴ "One of Intemese's men (Balonda) stole a fowl given me by the lady of the village. When charged with the theft, every one of Intemese's party vociferated his innocence and indignation at being suspected, continuing their loud asseverations and gesticulations for some minutes. Intemese then called on me to send one of my people to search the huts if I suspected his people. The man sent soon found it, and brought it out, to the confusion of Intemese, and the laughter of our party."⁵ "The Balonda seemed generally to be in good spirits, and spend their time in everlasting talk, funeral ceremonies, and marriages. This flow of animal spirits must be one reason why they are such an indestructible race."⁶

19. Livingstone, in his travels across South Africa from Loanda to the mouth of the Zambesi, did not meet with any race which formed an exception to the general African excitability, for if he had, he could not have failed to notice it. His observations bearing on the subject all point to the universal prevalence of this character. In Angola, on the occasion of marriages, "dancing, feasting, and drinking are prolonged for several days." "In cases of death the body is kept several days, and there is a grand concourse of both sexes, with beating of drums, dances, and debauchery, kept up with feasting, &c., according to the means of the relatives."⁷ On the Tamba, E. long. 20° 13', S. lat. 10°, "on the arrival of strangers, men, women, and

¹ Livingstone's *Missionary Travels in South Africa*, p. 225.

² *Ibid.* p. 508.

³ *Ibid.* p. 244.

⁴ *Ibid.* p. 279.

⁵ *Ibid.* p. 307.

⁶ *Ibid.* p. 460.

⁷ *Ibid.* p. 412.

children ply their calling as hucksters with a great deal of noisy haggling."¹ At Cabango, in the same vicinity, "funeral obsequies occupy about four days, during which there is a constant succession of dancing, wailing, and feasting."² Among the Batoka, E. long. 27°, S. lat. 17°, "the mode of salutation is quite singular. They throw themselves on their backs on the ground, and rolling from side to side, slap the outside of their thighs as expressions of thankfulness and welcome, uttering the words 'Kina bomba.'"³

20. On the east coast, too, in S. lat. 4°, Dr. Krapf thus describes his reception by the Wanika, a Suahili tribe: "The chiefs and their retinue arrived, welcomed me, and conducted us through three entrances in the palisades into the village amid cries of rejoicing, dancing, and brandishing of swords and bows. In the village the noise was still greater, as young and old, men and women, streamed forth to pay the European the same honours which are paid to a great man from Mombaz when he visits the Wanika. Whenever any one only stood and looked on, he was driven by the chiefs into the crowd to dance and shriek with his neighbours."⁴ The only exception to this character of quick excitability met with south of the Gallas was apparently that of the Teita, already referred to as being probably of an Abyssinian origin.

Abyssinia itself was deeply affected by Arabic influence, as the language shows; but in Nubia the native race is more original. And as the natives of Bornou, when contrasted with the negroes to the west of them, seem to have a more sedate character, so the Nubians, when compared with the tribes of mixed Arabic blood with which they are in contact, produce an opposite impression. They are thus described by Küppell: "Though the Dongolawi at present languish in great misery, yet they are always in a cheerful humour. They sing and dance gladly and often, and if they only have Busa to drink, they forget all troubles."⁵ "The Dongolawi are a light-minded, merry, impressionable (*sinnliches*), and highly selfish people."⁶ "The difference is striking between the character of the inhabitants of Mahas and Suckot and that of the Dongolawi. Instead of the light cheerfulness of the latter, one finds here at all times only dark reserve. Envy and mistrust are the main features of their character; and the two races have nothing in common but an unbounded selfishness."⁷

II.—*American.*

1. In the opposite extreme from the quick excitability of the African races is the low intensity of the mental action which is set on foot by a given force of impression amongst the aborigines of America. Nor is there any fact more remarkable in the natural history of man, than the universal prevalence of this peculiarity in North and South America, from the Arctic Ocean to Cape Horn. No variety of climate

¹ Livingstone's *Missionary Travels in South Africa*, p. 453. ² *Ibid.* p. 456.

³ *Ibid.* p. 551. ⁴ Dr. Krapf's *Travels in East Africa*, p. 136.

⁵ Küppell, *Reisen in Nubien*, p. 56. ⁶ *Ibid.* p. 61. ⁷ *Ibid.* p. 63.

or of food seems to have any direct effect on it. One race indeed may, from the circumstances of its life, be more social or more enterprising than another; and the comparative willingness to talk, or to act, may seem to indicate a more excitable nature. But these varieties, where they are met with in America, are always accompanied by the general indications of slow excitability; and are therefore to be regarded as the effects of special habits generating a readiness for special kinds of action, and not as resulting from a general readiness to respond with nervous force to an impression. In the present state of our knowledge it seems vain to speculate on the question, whether there was any cause generally prevalent in America tending to produce directly this impassive temperament. But from national characteristics in general, there is a freedom of individual deviation which seems to indicate the weakness or want of prevalence of causes directly producing them; and we are thus led to account for them rather by the principle of natural selection. Applying this principle to the immobility of the American races, we should have to inquire whether there is any peculiarity in the conditions of life in America, which so corresponds to this character of nervous action, as to give advantage in the struggle for life to those who possess it, and consequently to lead to its prevailing everywhere. Now, there is one quality connected generally throughout America with this unexcitable nature which seems to point to such a peculiarity in the conditions of life, namely, capability of endurance. For endurance corresponds to hardship. And the cultivation of endurance by the American aborigines shows that a value was attached to it, which it must have derived from its association with success as a necessary condition. Endurance is facilitated by low nervous excitability. Without this it would be scarcely possible to carry it to the length to which it is carried in America. And we are thus led to the conjecture that in America, more than in the other continents, the conditions of life involved hardship which required endurance, and that low excitability by facilitating endurance gave an advantage in the struggle for life which favoured its development.

The peculiar condition of the natives of America prior to its discovery by Columbus was that without domestic animals and with little help from agriculture, which was generally left to the women, they lived for the most part by hunting large animals over extensive grounds. The uses which the Peruvians made of the llama, and the Esquimaux of the dog, were insignificant exceptions to this general fact. Now the want of domestic animals increased enormously the difficulty of this mode of life in North America, and in that part of South America which is outside the tropics. In those regions the hunter had to follow his game over wide ranges of pasture, and he had to keep his large extent of hunting-grounds from being encroached on by others. And to do this on foot with the constancy which was necessary for his subsistence involved enormous exertion, not in intermittent bursts of great activity, but in protracted expenditure of energy. Such great exertion must have been attended by great fatigue. It had, moreover, often to be persisted in when they were hungry and wounded. And those were best fitted for it who could best endure

fatigue and hunger and pain. When the struggle for life consists rather of ready conflicts of men with men, then those are most likely to prevail who from quick excitability can put forth the most force on a sudden emergency. But when, either in war or for subsistence, man has to face natural difficulties entailing hardship, then a power of endurance is a capital condition of success, and a low degree of nervous excitability a decisive advantage. This American hardship, however, of being a hunter on foot on a large scale did not exist where the natives lived mainly by fishing or agriculture; and it might be supposed that in those parts a more excitable character would prevail. But these parts either entailed hardships of their own, as was the case with the frozen coasts of the Arctic seas, or they were exposed to the inroads of the hunters; and with such enemies the inhabitants needed to have a constant and enduring nature, that they might not be destroyed. In the movements and mixtures of unsettled races the effects of exceptional circumstances are overruled by the more general influences. And, moreover, national characteristics which have continued for ages become rooted in fixed ideas of excellence, and tales of noted achievement, and systems of traditional habits, which form a complete institution of life, and preserve with wonderful permanence the national character from which they sprang. The impassive nature of the American, formed when he was a hunter on foot, has not passed away since the introduction of horses. And not only does it prevail amongst those who live by fishing on the sea-coast and the banks of the great rivers, and amongst those who live by cultivating the fertile lands within the tropics, but amongst both these that impassive nature is more strikingly manifested, because it is more or less dissociated from habits of active enterprise which simulate excitability. However this character is to be accounted for, its prevalence is a fact; and it is only with the fact that we are here concerned.

There are certain peculiar habits directly connected with it which serve as indications of it amongst all the American aborigines. As they discipline themselves in endurance to a degree which would not be possible if they were of a nature more easily moved, so in their enterprises, in their warfare, and in their ideal of the warrior, patient caution is a principal excellence. This quality their peculiar temper enables them to exercise in a high degree. It is one of their strong points, and they cultivate it accordingly. Rashness would be in them inexcusable.

The same habit of caution marks all their more serious intercourse, making them careful not to displease, and producing generally great ceremoniousness.

They speak in a low tone of voice compared with other men, showing the low intensity of their nervous action.

For the same reason they are less quarrelsome than other men would be in their circumstances.

And a novel and surprising object, which in other people would call forth speech, is apt in them to produce silence. They are less excited by it and more puzzled, the novel impressions awakening in them less readily than in others the ideas under which the new objects are to be thought.

In these respects there is wonderful similarity amongst all the native races of America through all differences of climate and of soil. Humboldt says: "The Caribs have a gravity of manner and a certain look of sadness which is observable among most of the primitive inhabitants of the New World."¹ Now, such an expression of countenance corresponds exactly to want of elasticity of spirit, and its prevalence indicates that of an impassive nature. Such nature, indeed, may exist without such clear expression, for where the habits of life are sociable, the countenance will have a more cheerful aspect, so that this want of elasticity will be less apparent. But even in such a case it is discernible. Thus in Lewis and Clarke's Expedition, vol. ii. p. 368, we are told that the Chopunnish on the Columbia river have a "general appearance of face which is cheerful and agreeable, though without any indication of gaiety and mirth."

2. The Esquimaux are a people of sociable habits, but at the same time of American immobility. "The Greenlanders," says Egede, "are commonly of a phlegmatic temper, which is the cause of a cold nature and stupidity. They seldom fly into a passion, or are much affected or taken with anything, but are of an insensible indolent mind."² Their even temper and good-nature make them observe a regular and orderly behaviour towards one another. One cannot enough admire how peaceably, lovingly, and united they live together; hatred and envy, strifes and jars, are never heard of among them. And although it may happen that one bears a grudge to another, yet it never breaks out into any scolding or fighting, neither have they any words to express such passions, or any injurious and provoking terms of quarrelling."³ "They go and come, meet and pass one another without making use of any greeting or salutation; yet they are far from being unmannerly or uncivil in their conversation, for they make a difference among persons, and give more honour to one than to another according to their merit and deserts."⁴ "They are very good-natured and friendly in conversation; they can be merry and bear a joke, provided it be within due bounds."⁵

Crantz thus describes their character: "They are not very lively; at least, they do not indulge in any sallies of mirth, but they are good-humoured, friendly, and sociable." "They are patient of injuries, and will concede their manifest rights rather than engage in dispute. But when pushed to extremity, they entrench themselves in a brutal desperation and an utter disregard of life." "They are so skilful in disguising their passions that, from their external conduct, we might judge them to be a set of Stoics. They appear to meet misfortunes with the greatest composure, and they are not easily irritated, or at least they can easily suppress their anger. But in this case they are dumb and sullen, and do not forget to revenge themselves the first opportunity."⁶ "The children are quiet, sheepish, and not at all mischievously inclined. Their disposition is such that in case they

¹ Humboldt's Personal Narrative, vol. iii. chap. xxvi. p. 74.

² Egede's Description of Greenland, chap. ix. p. 122.

³ Ibid. chap. x. p. 123.

⁴ Ibid. p. 125.

⁵ Ibid. p. 128.

⁶ Crantz's History of Greenland, Book iii. chap. i. sect. 2.

cannot be prevailed upon to do anything by entreaties or arguments, they would rather suffer themselves to be beaten to death than compelled to it." "The nearer their children arrive at years of maturity, the more quiet and tractable they become."¹ "There is less noise and confusion in a Greenland house inhabited by ten couples with numerous children of different ages than in a single European one where only two relations reside with their families. When a Greenlander considers himself injured by his neighbour, he retires, without any reprisals, into another house."² "Their deportment in the social intercourse of everyday life is discreet, cautious, friendly, mannerly, and modest. In company they are loquacious and fond of ironical remarks. They are anxious to please, or rather not to displease, each other, and carefully avoid whatever might excite uneasiness. This principle seems to run through all their actions."³ "In their visits, all hands are employed in drawing on shore and unloading their boats, and every one is eager to have the guests in his own house. They meanwhile are silent, and wait till the invitations are repeated."⁴ "In their dances and merrymakings, were it not for the drum and the droll figures of the dancers, a stranger ignorant of their language would almost conclude that they were assembled for religious exercises, rather than for pastime."⁵ "Humanity and sympathy are so entirely excluded from their character that they are not even found in the weaker sex. On the other hand, the bonds of filial and parental love seem stronger in them than amongst most other nations."⁶ This intense and exclusive care for one's own family probably suits the difficulty of the life, so that those who have it succeed best, and the quality has prevailed accordingly.

Captain Lyon thus speaks of the Esquimaux north of Hudson's Bay: "Though the Esquimaux do not possess much of the milk of human kindness, yet their even temper is in the highest degree praiseworthy. In pain, cold, starvation, disappointment, or under rough treatment, their good-humour is rarely ruffled. No serious quarrels or blows happen among themselves. An insensibility of danger is acquired in venturing amongst young or loose ice, which by a change of wind or unseen ruption might carry them to certain starvation and death at sea."⁷ "I led an old woman to the side of one of our 24-pounder carronades, and entered into conversation with her, when I observed that at the explosion she did not even wink her eyes, but very earnestly continued a long story about a pair of boots for which some of our people had not contented her."⁸

Dr. M'Keavor, in his account of his voyage to Hudson's Bay, says that the Esquimaux, "males and females, young and old, had all the same low, husky, whispering kind of voice."⁹

3. Of the North American Indians about Hudson's Bay, Dr. M'Keavor says: "The general expression of their countenance is

¹ Crantz's History of Greenland, Book iii. chap. ii. sect. 3.

² Ibid. sect. 8.

³ Ibid. chap. iii. sect. 1.

⁴ Ibid. chap. iii. sect. 2.

⁵ Ibid. chap. iv. sect. 2.

⁶ Ibid. chap. iv. sect. 5.

⁷ Captain Lyon's Private Journal, pp. 350, 351.

⁸ Ibid. p. 402.

⁹ M'Keavor's Voyage, p. 31.

gloomy and severe,"¹ a remark similar to that which has been already quoted from Humboldt as to Americans generally.

The aborigines of Canada have for the most part, according to Charlevoix, "a nobleness and an equality of soul to which we seldom arrive with all the helps we can obtain from philosophy and religion. Always masters of themselves in the most sudden misfortunes, we can't perceive the least alteration in their countenances. Even the first emotions do not find them at fault. Their constancy in suffering pain is beyond all expression. Nothing is more common than to see persons of all ages, and of both sexes, suffer for many hours, and sometimes many days together, the sharpest effects of fire and all that the most industrious fury can invent to make it most painful, without letting a sigh escape. They are employed for the most part during their sufferings in encouraging their tormentors by the most insulting reproaches. The savages exercise themselves in this constancy of endurance all their lives, and accustom their children to it from their tenderest years. We have seen little boys and girls tie themselves together by one arm and put a lighted coal between them to see which would shake it off first. There are no men in the world who fatigue themselves more in their huntings or in their journeys. But this kind of insensibility, the effect of a true courage, is not found in all of them."² This last remark is important, for it shows that their endurance is not to be regarded as mere insensibility, but rather as an excellence which indeed the low intensity of their feeling qualifies them to attain, but which is associated with the glory of success, and therefore cultivated to the utmost, different individuals attaining it in different degrees.

In consequence of this glory which belongs to endurance amongst the North American hunters, the prisoners taken in war, though defeated in the field, may yet have their triumph at the stake; so that generally a horrid struggle takes place to overcome their endurance by the most horrid tortures.³ Hence, too, the fearful ordeals through which the young warriors pass with such marvellous fortitude to prove their heroism,⁴ and the almost incredible sufferings which their distinguished men inflict on themselves, or voluntarily submit to, in order to show their greatness.⁵

The impassive nature or low excitability which renders possible such amazing feats is to be seen amongst them under other forms. "The savages," says Charlevoix, "are naturally calm, and early masters of themselves. Reason guides them rather more than other men."⁶ "They appear to be without passion. But they do that in cold blood, and sometimes through principle, which the most violent and unbridled passion produces in those who give no ear to reason."⁷ Their oratory is not "supported by action. They make no gestures,

¹ M'Keavor's Voyage, p. 50.

² Charlevoix, Letters from Canada, &c., Letter xx. p. 215.

³ Ibid. Letter xv. p. 164.

⁴ Catlin's North American Indians, i. 170.

⁵ Keating, Expedition to the Source of St. Peter's River, i. 449; Catlin, i. 232.

⁶ Charlevoix, Letter xxvi. p. 233.

⁷ Ibid. Letter xxii. p. 245.

and do not raise their voice."¹ They never quarrel except when gambling or drunk.²

Their caution is as remarkable as their fortitude. "In their wars they expose themselves as little as possible, because they make it their chief glory never to buy the victory at a dear rate."³ "The savages are intrepid; they preserve in the midst of action much coolness. Nevertheless they never fight in the field but when they cannot avoid it. Their reason is, that a victory marked with the blood of the conquerors is not properly a victory, and that the glory of a chief consists principally in bringing back all his people safe and sound."⁴ The same quality appears in the cautious negotiations and elaborate councils in which they are continually engaged. "They conclude nothing hastily. The strong passions which have made such alterations in the systems of policy even amongst Christians, have not yet prevailed in these savages over the public good."⁵ It is owing also to their cautious watchfulness that they are such keen observers of the countenance. "They rely much on physiognomy, and perhaps there are no men in the world who are better judges of it."⁶

These observations made by Charlevoix in his travels in Canada, and from thence to Louisiana and the Gulf of Mexico, agree completely with the accounts given by more recent travellers of the natives west of the Mississippi.

4. "The Dacotas appear to take but little pains in the education of their children. The only attention which these receive is towards the development of those qualifications both of mind and body which shall enable them to make active hunters and dauntless warriors. To rise early, to be inured to fatigue, to hunt skilfully, to undergo hunger without repining, are the only points to which the Dacota thinks it important to attend."⁷ Here is seen the demand for endurance made by the conditions of life even since the introduction of horses. For, "notwithstanding the constant activity of the hunters, the people are often much necessitated for food previously to their arrival within view of the bisons, an interval of fifteen or twenty days."⁸

5. "It is the common practice of the Indians, however closely pressed their appetites may be, to exercise patience; and I have frequently known them to return from long marches in an almost famished condition, and sustain conversation with their friends for hours together without giving the slightest intimation of their pressing exigencies."⁹ "When watchfulness is necessary they recline in nearly the same position without sleep for forty or fifty hours at a time."¹⁰ "The Omahaws readily perceive that they have a greater capacity than the whites for undergoing with fortitude the many evils to which they are exposed, as heat and cold, hunger, thirst, and pain."¹¹

The Kansas "bear sickness and pain with great fortitude, seldom

¹ Charlevoix, Letter xx. p. 214.

² Ibid. Letter xx. p. 216.

³ Ibid. Letter xv. p. 168, xvii. p. 183.

⁴ Keating's Expedition to the Source of St. Peter's River, i. 420.

⁵ James's Expedition to the Rocky Mountains, i. 187.

⁶ Hunter's Captivity among the Indians of North America, p. 260.

⁷ Ibid. p. 262.

⁸ Ibid. p. 262. ⁹ James's Expedition to the Rocky Mountains, ii. 43.

² Ibid. Letter xvi. p. 176.

⁴ Ibid. Letter xiv. p. 157.

⁶ Ibid. Letter xxii. p. 246.

uttering a complaint.”¹ When from age the Omahaws become helpless on a march, they are abandoned to their fate, often at their own earnest solicitation. “When thus abandoned, their fortitude does not forsake them; and the inflexible passive courage of the Indian sustains them against despondency.”²

“On the following day the Pawnees were summoned to council, and in a short time they appeared, marching leisurely in a narrow pathway in Indian file, led by the grand chief. Near this pathway the musical band was stationed, and when Longhair appeared opposite they struck up suddenly and loudly a martial air. We wished to observe the effect which instruments that he had never seen or heard before would produce on this distinguished man, and therefore eyed him closely, and were not disappointed to observe that he did not deign to look upon them, or to manifest by any motion whatever that he was sensible of their presence. The Indians arranged themselves on the benches prepared for them, and the cessation of the music was succeeded by stillness, which was suddenly interrupted by loud explosions from our howitzers that startled many of us, but did not appear to attract the notice of the Pawnees.”³ This was an experiment similar to the one already mentioned which Captain Lyon tried on the Esquimaux woman, with the same result. For immobility of nerve is the essential quality which everywhere is the basis of the American character. “An Otto squaw, whose husband had recently been killed by the Kansas, rushed into the lodge with the intention of seeking vengeance by killing one of the Kansas ambassadors on the spot. She stood suddenly before Herochshe, and seemed a very demon of fury. She caught his eye, and at the instant, with all her strength, she aimed a blow at his breast with a large knife, which was firmly grasped in her right hand, and which she seemed confident of sheathing in his heart. At that truly hopeless moment the countenance of the warrior remained unchanged, and even exhibited no emotion whatever. And when the knife approached its destination with the swiftness of lightning, his eyes stood firm, nor were its lids seen to quiver. So far from recoiling or raising his arm to avert the blow, he even rather protruded his breast to meet that death which seemed inevitable, and which was only averted by the sudden interposition of the arm of one of her nation, that received the weapon to its very bone.”⁴ The low tone of voice corresponding to low excitability which prevails amongst the Americans is affected and increased by the men, because it is felt to belong to that passive fortitude which is their ideal heroism, and for which low excitability is necessary. “Ordinary conversation among the men is conducted in a low tone of voice. Often when you suppose from the compass of the speaker’s voice that he is addressing a person at his elbow, he is in reality directing his discourse to one on the opposite side of the room, or at a considerable distance. The ordinary conversation of the women is in a much louder tone than that of the men.”⁵

¹ James’s Expedition to the Rocky Mountains, vol. i. p. 117.

² Ibid. vol. i. p. 237.

³ Ibid. vol. i. p. 149.

⁴ Ibid. vol. ii. p. 34.

⁵ Ibid. vol. ii. p. 6.

At the councils of the Omahaws each one has his place according to his dignity;¹ and "the proceedings of the council are uniformly conducted with the most perfect good order and decorum. Each speaker carefully abstains from militating against the sensibility of any of his hearers, and uncourteous expressions towards each other on these occasions are never heard. If they do not approve what is said, they do not condemn, unless urged by necessity."² "One warrior seldom visits another, unless he has business, or is on very intimate terms. On entering a lodge, he is welcomed by the proprietor with the usual salutations. He then speaks a word or two to the individuals of the family, beginning with the eldest. He next mentions the individual his visit is for; sits perhaps half an hour engaged in conversation; has food offered, which he commonly eats, and then takes a general leave. During these visits, the men commonly speak slow, and are very dignified, though complaisant in their demeanour." "For one to fail in courtesy is generally regarded as an insult, or as characteristic of a vulgar mind."³

"They experience much less discord and quarrelling than is met with in the lower orders of civilised life."⁴ "No state of society is, in my opinion, more exempt from strife and contention between husband and wife than that of the Indians generally."⁵

The effect of surprise on the North American Indian is seen in the following incident: "A party of Sioux visited us, to view the steamboat. They appeared much delighted with it. Two of the howitzers were discharged, loaded with case-shot. The effect produced of the shot falling into the water, at unequal distances and times, was new and unexpected; and they covered their mouths with the hand to express their astonishment."⁶ So when Catlin painted the portraits of two principal chiefs amongst the Mandans, they both, when they saw each other's likeness, pressed their hand over their mouth for a time in dead silence; "a custom," he adds, "amongst most tribes, when anything surprises them very much. They then walked up to me in the most gentle manner, taking me in turn by the hand with a firm grip, with head and eyes inclined downwards, and in a tone a little above a whisper, pronounced the words *te-ho-pe-nee wash-ee* (medicine white man), and walked off. After they had returned to their wigwams and deliberately seated themselves by their respective firesides, and silently smoked a pipe or two, according to a universal custom, they gradually began to tell what had taken place."⁷

6. Notwithstanding the similarity of character which prevails amongst the aborigines of North America, in consequence of their impassive nature, there are considerable diversities among them in respect of habits of warfare and enterprise.

"Those which inhabit the warm regions, where game is plenty, are naturally of a peaceable turn, but are forced to become warlike to defend their hunting-grounds. Those who till the earth and fish for

¹ James's Expedition to the Rocky Mountains, vol. i. p. 183.

² Ibid. vol. i. p. 184.

³ Hunter's Captivity, pp. 269, 270.

⁴ Ibid. p. 12.

⁵ Ibid. p. 38.

⁶ James's Expedition, vol. i. p. 161.

⁷ Catlin's North American Indians, vol. i. pp. 105, 106.

a livelihood, and those who are feeble and border on powerful neighbours, generally cultivate social and friendly relations; while those who live on poor hunting-grounds, and are formidable, are as generally hostile in their avocations and character."¹

7. The more peaceful races who live by agriculture in the open and fertile regions of South America, exhibit even more strongly than the hunting nations, in consequence of their want of active enterprise, the quality of low excitability.

Thus Humboldt complains of the "indolent indifference" and "habitual apathy" of the interpreters with whom he was provided from the Missions of the Orinoco. "After leaving my mission," said the good monk of Uruana, "you will travel with mutes." "This prediction was nearly accomplished."² But he admires the absence of excitement in danger and suffering, "the presence of mind and resignation which characterise the Indians, the Zamboes, and copper-coloured men in general."³

Colonel Hamilton, who travelled in Columbia, found the Indians "of a serious turn, seldom smiling, very taciturn, but uniformly good-tempered, and civil and anxious to oblige."⁴

8. Of the natives of the province of Quito in Peru, Ulloa writes: "They possess a tranquillity immutable either by fortunate or unfortunate events." "They show so little concern for the enjoyments of life, as nearly approaches to a total contempt of them." "Fear cannot stimulate, respect induce, or punishment compel them." "The Indians are in general remarkably slow, but very persevering; and this has given rise to a proverb, when anything of little value in itself requires a great deal of time and patience, 'that it is only fit to be done by an Indian.'" "Their mirth continues while kept up by liquor." They are quite indifferent to danger and to death.⁵

9. The natives who dwell on the banks of the Amazon were observed by Condamine; and he says that insensibility is the basis of their character, not only in the Missions, but in their natural state.⁶ The Amazonian Indians have been more recently visited by Mr. Wallace on the remote affluents of the Amazon, where they are to be found in their original condition; and he gives a very striking, though brief description of them. "The main feature in the personal character of the Indians of this part of South America is a degree of diffidence, bashfulness, or coldness, which affects all their actions. It is this that produces their quiet deliberation, their circuitous way of introducing a subject they have come to speak about, talking half an hour on different topics before mentioning it. Owing to this feeling they will run away if displeased rather than complain, and will never refuse to undertake what is asked them even when they are unable or do not intend to perform it. It is the same peculiarity which causes the men never to exhibit any feeling on meeting after a separation;

¹ Hunter's Captivity, p. 204.

² Humboldt's Personal Narrative, chap. xix. vol. ii. p. 222.

³ Ibid. chap. xxv. vol. iii. p. 5.

⁴ Hamilton's Columbia, vol. ii. p. 54.

⁵ Ulloa's Voyage to South America, Book vi chap. vi.

⁶ Condamine, Voyage, pp. 50, 52.

though they have, and show, a great affection for their children, whom they never part with; nor can they be induced to do so even for a short time. They scarcely ever quarrel among themselves, work hard, and submit willingly to authority. They are ingenious and skilful workmen, and readily adopt any customs of civilised life that may be introduced among them."¹ This portrays a character the very reverse of impulsive, undemonstrative, deliberate, cautious, watchful of opposition, anxious therefore to avoid discord, and careful not to awaken it. "The Indians are always apt to affirm that which they see you wish to believe; and when they do not at all comprehend your question will unhesitatingly answer 'Yes.'"² It is fundamentally the same character as that which prevails all through North America. The basis of it is unexcitability, low intensity of the mental action which is set on foot by a given force of impression.

10. Spix and Martius, in their travels in Brazil, were struck by what they call "the melancholy expression of the festivity of the Indians,"³ that is, of their dance and song; which recalls the similar observation, already quoted from Crantz's *Greenland*, chap. iv. (2), on the dances of the Esquimaux; and what Robertson in his *History of America* remarks of the American dances in general. "Among them dancing ought not to be denominated an amusement. It is a serious and important occupation, which mingles in every occurrence of public or private life."⁴ "The temperament of the Indian," according to Spix and Martius, "is almost wholly undeveloped, and appears as phlegm. All the powers of the soul, nay, even the more refined pleasures of the senses, seem to be in a state of lethargy. Obtuse, reserved, sunk in indifference to everything, the Indian employs nothing but his naturally acute senses, his cunning, and his retentive memory, and that only in war and hunting, his chief occupations. Cold and indolent in his domestic relations, revenge is the only passion that can rouse his soul from its moody indifference. Still and docile in the service of the whites, unremittingly persevering in the work assigned to him, not to be excited by any treatment to anger, though he may to long-cherished revenge, he is born, as the colonists are used to say, only to be commanded."⁵ "They bear the pain of wounds with incredible insensibility."⁶ "Without looking at, or speaking to each other, they often remain for hours together in a squatting position round the fire."⁷ With caution and patience they take their prey.⁸

11. Azara, in his account of the nations of Paraguay, says, "that they make little use of the voice; never break out into laughter; know neither plays, nor dances, nor songs, nor instruments of music; bear with patience inclemency of climate and hunger; and die without any concern for wife or child, or aught that they leave behind; that they are much more phlegmatic than Europeans, and less

¹ Wallace's *Travels on the Amazon and Rio Negro*, p. 518.

² *Ibid.* p. 494.

³ Spix and Martius' *Travels in Brazil*, Book iv. chap. ii. p. 237.

⁴ Robertson's *History of America*, Book iv. chap. viii.

⁵ Spix and Martius' *Travels in Brazil*, Book iv. chap. ii. p. 241.

⁶ *Ibid.* p. 249.

⁷ *Ibid.* p. 256.

⁸ *Ibid.* p. 258.

irascible ; that their voice is neither strong nor sonorous, so that one scarcely hears them ; that they scarcely laugh ; that one cannot distinguish in them any external sign of passion ; and that they appear equally insensible in sickness, in calamity, in mourning, and in festival.”¹ Their endurance of voluntary torture is similar to that which prevails in North America.² They are remarkable for their caution and watchfulness in war. “The Guayeurus are constantly on the watch that they may not be surprised by their enemies.”³ “The Abipones (of Chaco in the centre of Paraguay) will curse a victory obtained at the expense of one of their countrymen’s lives. Before they undertake a warlike expedition, they carefully consider the nature of the place, the numbers of their enemies, and the opportunity of the time. They think long and often upon what is to be done once. They seldom attack openly, but do it in general unawares.”⁴ They have scouts and watchmen continually on the alert, and are always apprehensive of danger.⁵ The Abipones are a great example of American endurance of hardship. “Who can describe the constant fatigues of war and hunting which the Abipones undergo? When they make an excursion against the enemy they often spend two or three months in an arduous journey of above three hundred leagues through desert wilds. They swim across vast rivers, and long lakes more dangerous than rivers ; they traverse plains of great extent destitute both of wood and water ; they sit for whole days on saddles scarce softer than wood, without having their feet supported by a stirrup. Their hands always bear the weight of a very long spear. They generally ride trotting-horses, which miserably shake the rider’s bones by their jerking pace. They go bareheaded amidst burning sun, profuse rain, clouds of dust, and hurricanes of wind. They generally cover their bodies with woollen garments, which fit close to the skin ; but if the extreme heat obliges them to throw these off as far as the middle, their breasts, shoulders, and arms are cruelly bitten and covered with blood by swarms of flies, gad-flies, gnats, and wasps. As they always set out upon their journeys unfurnished with provisions, they are obliged to be constantly on the look-out for wild animals, which they may pursue, kill, and convert into a remedy for their hunger. As they have no cups, they pass the night by the side of rivers and lakes, out of which they drink like dogs. But this opportunity of getting water is dearly purchased, for moist places are not only seminaries of gnats and serpents, but likewise the haunts of dangerous wild beasts, which threaten them with sleepless nights and peril of their lives. They sleep upon the hard ground, either starved with cold or parched with heat, and if overtaken by a storm, often lie awake soaking in water the whole night. When they perform the office of scouts, they frequently have to creep on their hands and feet over trackless woods and through forests to avoid discovery, passing days and nights without sleep or food. This also was the case when

¹ Azara, *Voyages dans l’Amerique Meridionale*, vol. ii. pp. 192, 194.

² *Ibid.* pp. 26, 135, 181 ; Charlevoix, *History of Paraguay*, vol. i. pp. 87, 88 ; Dobrizhoffer, *History of the Abipones*, vol. ii. p. 35. ³ Charlevoix, vol. i. p. 89.

⁴ Dobrizhoffer, vol. ii. p. 348. ⁵ *Ibid.* vol. ii. pp. 71, 372.

they were long pursued by the enemy, and forced to hasten their flight. All these things the Abipones do and suffer without ever complaining or uttering an expression of impatience, unlike Europeans, who, at the smallest inconvenience, get out of humour and grow angry. What we denominate patience is nature with them. While yet children they imitate their fathers in piercing their breasts and arms with sharp thorns without any manifestation of pain. The most acute pain will deprive them of life before it will extort a sigh. The love of glory acquired by the reputation of fortitude renders them invincible, and commands them to be silent."¹

This power of endurance requires, as has been already observed, a general tranquillity of mind and an impassive nature. "Their minds are generally in a tranquil state. They fear danger; but either from not perceiving or from despising the weightiness of it, always think themselves able to subdue or avoid it. No affections with them are either violent or of long duration."² "The Abipones in their whole deportment preserve a decorum scarce credible to Europeans. Their countenance and gait display a modest cheerfulness and manly gravity, tempered with gentleness and kindness. In their daily meetings all is quiet and orderly. Confused vociferations, quarrels, or sharp words have no place there. If any dispute arises, each declares his opinion with a calm countenance and unruffled speech. They never break out into clamorous threats and reproaches, as is usual to certain people of Europe, as long as they remain sober. In their assemblies they maintain the utmost politeness. One scarcely dares to interrupt another when he is speaking. They account it extremely ill-mannered to contradict any one, however much he may be mistaken. When tired of a conversation, they never depart without taking leave of the master of the house. The one who sits nearest to him says, 'Have we not talked enough?' the second accosts the third, and the third the fourth in the same words, till at length the last of the circle seated on the ground declares that they have talked enough, upon which they all rise up together at one moment. Each then courteously takes leave of the master of the house."³

Like the other American races, the Abipones speak usually in a low tone. "When asked what they called such or such a thing, the Abipone would reply in so low and dubious a tone that we were not able to distinguish a syllable or even a letter."⁴

12. The natives of Chili were found by Ulloa like those of Quito and Lima,⁵ on whom he made the observations which have been already quoted. They have the same cautious spirit in their warfare which has been observed among the other American races, and the same ceremonious formality in their social intercourse. "Their first step when a war is agreed on is to give notice to the nations for assembling, which they do with the utmost silence and rapidity. In these notices they specify the very night when the rupture is to be made, and though advice of it is sent to the Indians who reside in the

Dobrizhoffer, *History of the Abipones*, vol. ii. p. 149.

Ibid. vol. ii. p. 55. ³ *Ibid.* vol. ii. p. 136. ⁴ *Ibid.* vol. ii. p. 201.

• Ulloa's *Voyage*, vol. i. Book vi. chap. vi. p. 334.

Spanish territories, nothing transpires; nor is there a single instance among all the Indians that have been taken up on suspicion, that one ever made any discovery."¹ "Before setting out on his expedition, the general assigns three days for consultation, in order to consider anew the plans of the campaign and to adopt the best expedients. Upon this occasion every one has the liberty of offering his opinion, if he deems it conducive to the public welfare. In the meantime the general consults in secret with the officers of his staff upon the plans that he has formed and the means of remedying sinister events." "The Araucanian troops are extremely vigilant."²

As in their warfare they are cautious, so in their social intercourse they are ceremonious. "They are rather tiresome in their compliments, which are generally too long. They are naturally fond of honourable distinction."³

13. The Patagonians seem to have the usual American characteristics indicative of low intensity of nervous action. Just as, according to Azara in the passage already quoted, the natives of Paraguay speak in a voice neither strong nor sonorous, so as to be scarcely audible; and as Charlevoix says of the Caaiguas of Paraguay, that their speech is "a kind of hissing, so little articulate that one would imagine their words did nothing but roll in their throats;"⁴ and as Spix and Martius say of the natives of Brazil, that "their pronunciation is mostly guttural and particularly nasal,"⁵ so we are informed that the Patagonians speak "in a low guttural tone."⁶ "They have deep, heavy voices, and speak in guttural tones—the worst guttural I ever heard—with a muttering, indistinct articulation, much as if their mouths were filled with hot pudding."⁷ "He appeared to be conversing in low, gurgling sounds with his lately-married daughter."⁸

They are vigilant and cautious, like the American Indians in general. "There was no eluding the vigilance" of the chieftain's eyes throughout the night, though he appeared to be asleep.⁹ "They always select the night to inflict injuries; never meet an enemy in open combat whom they can stab from behind or despatch in the dark; and when obliged to attack by day always do so in large numbers."¹⁰

Their caution seems to be accompanied, as elsewhere throughout America, with a mutual respectfulness which ministers to self-opinion. "They have a large share of vanity, and an immoderate love of praise."¹¹ Patient of hunger,¹² of tedious toil,¹³ and of delay,¹⁴ they have in their countenances an expression of stupidity,¹⁵ which corresponds to an impassive nature. They have little apparent curiosity, and nothing seems to attract or cause them surprise.¹⁶

14. The natives of Terra del Fuego are similar in this last respect. Even when under the excitement of visiting the ships of the United

¹ Ulloa's Voyage, vol. ii. Book ii. chap. ix. p. 216.

² Molina's History of Chili, vol. ii. p. 73.

³ Ibid. vol. ii. p. 112.

⁴ Charlevoix, History of Paraguay, vol. i. p. 338.

⁵ Spix and Martius, vol. ii. p. 256.

⁶ Life among the Giants, p. 22.

⁷ Ibid. p. 39.

⁸ Ibid. p. 85.

⁹ Ibid. p. 27.

¹⁰ Ibid. p. 43.

¹¹ Ibid. p. 39.

¹² Ibid. p. 43.

¹³ Ibid. p. 76.

¹⁴ Ibid. p. 143.

¹⁵ Ibid. p. 39.

¹⁶ United States Exploring Expedition, vol. i. p. 115

States Expedition, "they did not show or express surprise at anything on board, except when seeing one of the carpenters engaged in boring a hole with a screw-auger through a plank, which would have been a long task for them. They were very talkative, smiling when spoken to, and often bursting into loud laughter, but instantly settling into their natural serious and sober cast. They always speak to each other in a whisper. Their cautious manner and movements prove them to be a timid race."¹ Their talkativeness and laughter seem to have been exceptional, due probably to the presence of such strange visitants; seriousness and sobriety their natural and habitual temper; so that they form no exception to the remark made by Mr. Darwin, that "every one who has had the opportunity of comparison must have been struck with the contrast between the taciturn, even morose aborigines of South America, and the light-hearted talkative negroes."²

III.—*Oceanic and Dravidian.*

1. The races of men in other parts of the world are not so strongly distinguished in respect of this quality of excitability. And consequently the character of most of them in this respect is more obscure in its evidence, because less striking in its manifestations, and therefore not attracting the attention of travellers. The Polynesian race, however, as it is found in the Friendly, Society, and Sandwich Islands, and in New Zealand, appear from the accounts given of them to have an excitable nature, though not so strongly marked as the aboriginal races of Africa.

The description which Mariner gives of the way in which the natives of the Friendly Islands usually spend their time seems to indicate a gay lively nature. "In the evening they have dancing and singing, which is often continued till very late at night, on which occasion they burn torches, each being held by a man, who, after a time, is relieved by another. These dances are generally kept up for about four hours after dark."³

To the Society Islanders Mr. Ellis attributes a quick and volatile nature. "They certainly appear to possess an aptness for learning, and a quickness in pursuit of it, which is highly encouraging, although in some degree counteracted by the volatile disposition and fugitive habits of their early life, under the influence of which their mental character was formed."⁴ "They are seldom melancholy or reserved, always willing to enter into conversation, and ready to be pleased, and to attempt to please their associates. They do not appear to delight in provoking one another, but are far more accustomed to jesting, mirth, and humour than irritating or reproachful language."⁵ In their wrestling matches, "unbroken silence and deep attention was manifested during the struggle. But as soon as one was thrown, the scene was instantly changed. The vanquished was scarcely stretched

¹ United States Exploring Expedition, vol. i. p. 125.

² Darwin's *Descent of Man*, vol. i. p. 216.

³ Mariner's *Tonga Islands*, vol. ii. p. 341.

⁴ Ellis's *Polynesian Researches*, vol. i. p. 94.

⁵ *Ibid.* vol. i. p. 96.

on the sand when a shout of exultation burst from the victor's friends. Their drums struck up; the women rose and danced in triumph over the fallen wrestler, and sang in defiance to the opposite party. These were neither silent nor unmoved spectators, but immediately commenced a most deafening noise. One party were drumming, dancing, and singing in the pride of victory and the menace of defiance, while the other party were equally vociferous in reciting the achievements of the vanquished or predicting the shortness of his rival's triumph. However great the clamour might be, as soon as the wrestlers who remained in the ring engaged again, the drums ceased, the song was discontinued, and the dancers sat down; all was perfectly silent."¹ There were wild paroxysms of sorrow or of joy, with self-inflicted violence, to which their transports of emotion made them insensible, not only in the Society² but also in the Sandwich Islands.³ And in the former, the superstitions of the natives corresponded to their "ardent temperament."⁴

The Polynesian race in New Zealand differs not in respect of excitability from the same race in the other islands. "Their understandings, uncultivated as they were, were quick and penetrating, their conversation was lively and animated, and their love of humour irrepressible. Impetuous and daring, the New Zealander courted rather than shrank from danger."⁵

And the darker race in the Fiji Islands partakes in a considerable degree of the same character. "Dull barren stupidity forms no part of the Fijian's character. His feelings are acute, but not lasting; his emotions easily roused, but transient. Tact has been called 'ready cash,' and of this the native of Fiji has a full share, enabling him to surmount at once many difficulties, and accomplish many tasks, that would have 'fixed' an Englishman."⁶ "In sarcasm, mimicry, jest, and 'chaff' they greatly excel, and will keep each other on the broad grin for hours together."⁷

The dark-coloured inhabitants of the Melanesian Islands have been usually regarded "as less quick but more steady than the Polynesian race, with somewhat the same difference of character as there is between the Teuton and the Celt."⁸ The natives of Bauro, one of the Solomon Islands, are noted by Bishop Patteson as having "little manliness or resolution of character."⁹ And those of the Loyalty Islands are remarkable for the respect which they pay to their chiefs.¹⁰ But they all were found by Bishop Patteson to be "most docile, gentle, and lovable,"¹¹ and the intelligence of some of them "really surprised him."¹²

There are diversities amongst the other islanders of the Pacific Ocean in martial qualities and habits, arising partly perhaps in some from the smallness of many of the islands reducing the scale of war,

¹ Ellis's Polynesian Researches, vol. i. p. 207. ² Ibid. vol. i. pp. 407, 410.

³ Ibid. vol. iv. p. 181.

⁴ Ibid. vol. i. p. 407.

⁵ The Southern Cross and Southern Crown, pp. 15, 16.

⁶ Williams' Fiji and the Fijians, vol. i. p. 107.

⁷ Ibid. vol. i. p. 111.

⁸ Life of Bishop Patteson, vol. i. p. 192.

⁹ Ibid. p. 359.

¹⁰ Ibid. p. 389.

¹¹ Ibid. vol. ii. p. 584.

¹² Ibid. vol. i. p. 565.

and leading the inhabitants to subsist less on the produce of the land and more on fishing, which was open to all, and therefore less liable to give cause for contention. Also the lust of cannibalism¹ may have engendered in some more than in others a bloodthirsty treachery and love of murder² which would put every one always on his guard and develop caution, dissimulation,³ and a carefulness to conciliate by the observance of respectful forms.⁴ But through all these differences, it is probable that an excitability of nature widely prevails, though lower in degree than what is found in Africa. Thus in the Pelew Islands, when Captain Wilson's men fired three volleys to gratify the curiosity of the king, "the surprise of the natives, their hooting, hallooing, jumping, and chattering, produced a noise almost equal to the report of the muskets."⁵ When the signal was given, by a shriek, for the king's attendants, numbering about three hundred, to accompany him in his departure, they, "though all differently dispersed and engaged in looking about at everything that attracted them, as if instantaneously moved by the shriek, might be said to have rather darted than to have run to their canoes. It was a signal obeyed more suddenly than could have been conceived, and no word of command was ever executed with more promptitude."⁶ When the king, with much hesitation, asked for four or five men to accompany him to war with their muskets, and this was assented to, "the interpreter certainly very well translated this declaration, for in an instant every countenance which was before overshadowed became brightened and gay."⁷

2. It is not easy to find any distinct evidence with reference to the degree of excitability possessed by the aborigines of India of the Tamil race; but what Dr. Caldwell says of their mental characteristics seems to indicate a certain readiness of mental action. "The language illustrates the mental characteristics of the races by which it is spoken, by the soft sweet garrulous effeminacy of its utterances."⁸ For though garrulity depends in a great degree on the aggregation of a race and on other circumstances which promote sociality, it is greatly favoured by quick excitability. Elphinstone gives more distinct evidence when he says that "the inhabitant of the Carnatic speaks on the most trifling subject with a degree of volubility and eagerness to which no occasion could rouse an Englishman."⁹ Tamil is spoken throughout the Carnatic.¹⁰

3. The natives of Australia seem to have this quality. Their life involved little hardship from hunting. In South Australia "the rivers were their homes;"¹¹ and they also lived much on roots. In North Australia they had a copious supply of fruits.¹² "All native altercations are vociferous and noisy in the extreme, and are usually accom-

¹ Williams' *Fiji and the Fijians*, vol. i. pp. 210, 211.

² *Ibid.* vol. i. pp. 133, 134. ³ *Ibid.* vol. i. p. 107. ⁴ *Ibid.* vol. i. pp. 37, 38.

⁵ Keate's *Account of the Pelew Islands*, p. 58. ⁶ *Ibid.* p. 64. ⁷ *Ibid.* p. 73.

⁸ *Grammar of the Dravidian Languages*, Introduction, p. 152.

⁹ Elphinstone's *Cabul*, vol. i. p. 392.

¹⁰ Caldwell's *Dravidian Grammar*, Introduction, p. 10.

¹¹ *Aborigines of Victoria*, vol. i. p. 34. ¹² *Ibid.* p. 209.

panied with a great deal of running and leaping about, and quivering of spears."¹ "Immediately after the operation (of circumcising a boy), several of the blacks cried."²

4. The Malay race is more indolent; and their indolence, though not comparable with that of the Hottentots, obscures, as in their case, their excitability. "In their external deportment they are grave, reserved, cautious, courteous, and obsequious."³ "They are good-humoured and cheerful to a remarkable degree, and owing to the habitual caution which their manners impose, so little irascible that one seldom sees them ruffled."⁴ "They are gifted with a large portion of fortitude, but their courage consists rather in suffering with patience than in braving danger."⁵ "Their dancing is always grave, stately, and slow, never gay nor animated."⁶ Mr. Finlayson gives rather a different picture of the Malays, or shows another side of their character: "Bold and enterprising in their maritime excursions, they hold the peaceful arts of civilised life almost in contempt. Negligent, slothful, and listless in their moments of ease, they display in the hour of danger and of enterprise the most daring courage and intrepidity. They enjoy neither the goods nor ills of life with the calm sobriety and moderation of other men. In action fierce, cruel, and immoderate, their leisure is passed in a sleepy indifference that approaches to the apathy of brute life."⁷ Was this character of alternate listlessness and activity formed to correspond with the habits of a maritime life, now still and monotonous, now full of peril and demanding the utmost promptitude and boldness of action? For the Malays "are passionately attached to a seafaring life, and their principal occupation is that of fishing."⁸ "The most favoured of their tribes have as yet made but little progress in civilisation, whilst the majority would appear to be enthusiastically attached to the unrestrained condition of savage life."⁹ The bursts of activity are all the stronger from their following periods of repose, and hence the outbreaks of passion, passing into frenzy, in which the Malay runs a-muck, devoting his own life to the slaughter of those who come in his way, sometimes without any discrimination of guilt or innocence.¹⁰ His liability to such outbursts indicates a degree of excitability; and altogether his character in this respect seems to be intermediate between the islanders of the Pacific above noticed on the one hand, and the Chinese on the other. "Inferior to the Chinese in the knowledge of all the arts of civilised life, as well as in industry, stature, strength, and general appearance, but their superiors in point of courage and military enterprise, and, above all, in the possession of an ardent mind and exalted imagination, stand the Malays."¹¹

¹ Grey's Australia, vol. ii. p. 354.

² Aborigines of Victoria, vol. i. p. 75.

³ Crawford's Indian Archipelago, vol. i. p. 51.

⁴ Ibid. vol. i. p. 52.

⁵ Ibid. vol. i. p. 43.

⁶ Ibid. vol. i. p. 121.

⁷ Finlayson's Mission to Siam and Hué, p. 72.

⁸ Ibid. ⁹ Ibid. p. 71.

¹⁰ Crawford's Indian Archipelago, vol. i. p. 66.

¹¹ Finlayson's Mission, p. 71.

IV.—*Central and Northern Asiatic and Northern European.*

1. After these notices of races which seem to be intermediate in respect of excitability between the African and Chinese, it will be convenient to pass to those which in respect of immobility are intermediate between the American and the Chinese.

The three great nomad races of Asia, the Tartar or Turkish, the Mongolian and the Tungusian, live under very similar conditions, and have great similarity of nature, physical and mental. Their mode of life tends to develop a uniformity of character, as it favours to a certain degree an unexcitable nature. For though the Asiatic nomad has not to endure such hardship as that which requires the impassive nerve of the American hunter, he has in summer to travel far and store up food, and he dwells in regions which for half the year suffer the utmost rigours of winter. For such a life patience is required, and those are best qualified to be patient in whom the impressions that must be disregarded have a dulness of nervous action. The pastoral life has probably of itself a tendency to favour an unexcitable nature, as it involves a monotonous routine of occupation and requires an habitual attention to natural conditions which do not demand sudden exertion of energy.

Marco Polo, who wrote before the discovery of America, says "no people on earth can surpass the Tartars in fortitude under difficulties, nor show greater patience under wants of every kind."¹ Their various tribes are still characterised by the same equable and steady temper. "The character of the Kasan Tartars is open, hospitable, patient, and peaceable."² The Uzbeks "are a grave, broad-faced, peaceable people."³

The Kirghis pass the winter with their flocks on the banks of the Sir or Jaxartes. "They are fond of wandering amid the reeds on its margin. These wandering people are of a melancholy disposition, and the murmur of the waters of the Sir has a charm for their idle moments. They often pass half the night seated on a stone, gazing at the moon and singing plaintive airs."⁴ The Yakuts frequent pastures which in summer are abundant, and then "everything announces a prosperous condition associated with patriarchal simplicity, peace, and purity of manners."⁵ The Yakuts "are more hospitable, good-tempered, and orderly than the Tongousi, but neither so honest nor so independent. They have a servility, a tameness, and a want of character which assimilates them in some measure to the despicable Kamtchatdales. They are patient under fatigue, and can resist great privations."⁶ "Their countenances are expressive rather of pleasing indolence and good-nature than of thought or passion."⁷

The Tartars, Mongols, and Tungusians are distinguished from each

¹ Marco Polo's Travels, chap. xlvi. ² Prichard's Researches, vol. iv. p. 346.

³ Sir Alexander Burnes, ap. Prichard, vol. iv. p. 352.

⁴ Prichard (from Meyendorff), Researches, vol. iv. p. 365.

⁵ Ibid. vol. iv. p. 372.

⁶ Cochrane's Narrative, vol. ii. p. 101.

⁷ Erman, ap. Prichard, vol. iv. p. 377.

other by language, "yet there is a general resemblance in features and manners throughout the whole."¹

Of the Buriät Mongols, Ritter says: "Their temperament is, according to Georgi, sanguine-phlegmatic, sleepy; they are of slow understanding, suspicious, shy, indocile, disobliging, thievish, yet neither covetous nor rapacious nor quarrelsome, though their rough speech in usual intercourse often sounds like a dispute."²

The Kalmucks or Western Mongols are "hardened against all fatigue. They are in a high degree honest, good-natured, pleasant, obliging, placable."³ This character is different from the former; yet they both indicate an equable temper.

Of the Tungusians, Dobell says: "Their countenances generally are indicative of a tractable, mild disposition; they would continue walking the whole day through, without apparently suffering much fatigue."⁴

2. The Finnish races seem to have a similar slowness of excitability. "The Esthonians are not very strong, nor are they quick and active; their gait is slow, and their gesture crooked and weak. Their temperament is, as Baer declares, generally phlegmatic, inclined to the melancholic. A few are strictly melancholic, namely, those who have black hair and beards. With this bodily constitution is closely connected a melancholico-phlegmatic temperament of mind, so that the Esthonian indulging his inclination is slow, lazy, and indifferent. Yet a slight mental culture and suitable exercise develop and bring into play the good qualities of which he is susceptible. For although slow he is found to be patient of labour and tenacious of his purpose."⁵

"On the sea-coast, where many Swedes have settled, the original race (of the Finns) is already much degenerated. The Finlanders have a serious, gloomy aspect and slow utterance." "Quarrels, fights, or crimes of violence, are seldom to be heard of in the inland parts."⁶

V.—*Chinese and Syro-Arabian groups.*

1. Passing from the centre to the south-east of Asia, we descend into more temperate and fertile regions, till we reach the lowlands of China, Cochin-China, Cambodia, Siam, and Burmah. The peculiarity of all these regions is that they consist of mountain-valleys, leading down to lowlands which afford great facility of subsistence; the lowlands of China being small compared with the mountainous country which leads to them; those of Cochin-China, Cambodia, Siam, and Burmah having larger comparative extent. Now facility of subsistence is an influence which of itself probably favours quick excitability. It tends to dispense with the need of patience, and at the same time it tends to demand promptitude, because it admits of denser population, and so places each one within easier reach of the hostility of those

¹ Prichard's Researches, vol. iv. pp. 421, 422.

² Ritter's Erdkunde, vol. iii. p. 119.

³ Ibid. vol. ii. p. 968.

⁴ Dobell's Kamtchatka and Siberia, vol. i. p. 205.

⁵ Prichard's Researches, vol. iii. p. 303.

⁶ Ibid. pp. 308, 309.

who are bound to him by no tie of natural alliance, and whose attacks he must be ready to resist.

Patience is facilitated by dulness of excitability, and promptitude by quickness of excitability; and in a fertile and abundant region, where men must be prompt, and need not be patient, it would seem that a race which is readily excited is most fit to prevail. But when the fertile region is limited, and pressed on by those who have inferior advantages, that pressure, in proportion to its force, will call forth a force of combined resistance, which will require in the fertile region union and numbers. Union necessitates peace, and numbers must be supported by industry; so that, in such a region, in proportion to the pressure on it, it may be supposed that the character which will tend to be developed in the struggle for life will be orderly and industrial. Now, maintenance of peace and perseverance in labour both demand patience, but a keen struggle for acquisition also calls for quickness in perceiving and in seizing utilities and opportunities of gain. It seems likely, therefore, that the character which would tend to prevail where severe pressure necessitated both peace and sharpness in providing for self, would be one which was capable both of patience and of promptitude, and the nature best adapted to such a combination would be one which had an intermediate degree of excitability.

In China the orderly and industrious race, which seems to correspond in its development to the circumstances of the Chinese lowland, has overspread most of the mountain country. But there seems still to be a pressure on the lowlands, for Du Halde remarks that, "as the quantity of land proper to be cultivated is not very great in several mountainous provinces, it is no wonder that those which are more fruitful should scarcely be sufficient for the maintenance of such a multitude of inhabitants."¹

The Chinese race has also largely affected with its character the natives of the adjacent regions, who, though similar, are inferior to the Chinese; the Burmese, however, and Tibetans being less affected than the others by the Chinese influence.

"The Chinese are the best and most industrious part of the population of the surrounding nations, over whom their industry, their superior intelligence, and knowledge of the arts have given them a great and decided superiority. There is one general and well-marked form common to all the tribes lying between China and Hindostan."² Consequently the same "observations will be found to apply to the several nations already mentioned, and in general to the Chinese also, whom I consider as the prototype of the whole race."³ "The stature of the body would appear to be much alike in all the tribes—the Chinese being perhaps a little taller."⁴ Mr. Crawford thought the Chinese might be on the average an inch and a half taller than the other nations.⁵

An intermediate degree of mental excitability seems to belong to

¹ Du Halde's History of China, vol. i. p. 8.

² Finlayson's Mission to Siam and Hué, pp. 167, 224.

³ Ibid. p. 226.

⁴ Ibid. p. 227.

⁵ Crawford's Embassy to Siam and Cochin-China, vol. ii. p. 2.

the whole group, with slight variations in this respect in the Burmese and the Tibetans.

“The Chinese in general are mild, tractable, and humane. There is a great deal of affability in their air and manner, and nothing harsh, rough, or passionate. This moderation is remarkable among the vulgar themselves. ‘I was one day,’ says Père de Fontaney, ‘in a narrow long lane, where there happened in a short time a great stop of the carriages. I expected they would have fallen into a passion, used opprobrious language, and perhaps have come to blows, as is very common in Europe. But I was much surprised to see that they saluted each other, spoke mildly, as if they had been old acquaintance, and lent their mutual assistance to pass each other.’”¹ “When you have to do with a Chinese, you must take care of being too hasty or warm. The genius of the country requires that we should master our passions and act with a great deal of calmness. The Chinese would not bear patiently in a month what a Frenchman can speak in an hour. One must suffer, without taking fire, this phlegm that seems more natural to them than to any other nation. It is not because they want fire or vivacity, but they learn betimes to become masters of themselves, and value themselves on being more polite and more civilised than other nations.”² “If the Chinese are mild and peaceable in conversation, and when they are not provoked, they are exceedingly violent and revengeful when they are offended.”³ “Yet they revenge themselves in a kind of methodical manner.”⁴ The main direction of the Chinese development is towards peaceful material acquisition; and hence that want of ideality which may be seen in their religion, and that eagerness for peace which has produced such submission to their natural superiors. In their intense pursuit of gain, the two sides of their nature are manifested in steady industry and in ready deceit, the former showing patience, and the latter promptitude; and the combination argues an intermediate nature capable of cultivating both.

“In an empire of such vast extent it is no wonder that the nature of the soil is not everywhere the same, it differing according as you are nearer to or farther from the south. But such is the industry of the husbandmen, and so inured are they to labour, that there is not one province which is not very fruitful, and scarce none but what will yield subsistence to an inconceivable number of inhabitants.”⁵ The mode in which they cultivate the rocky mountains “gives an insight into the painful disposition of this people.”⁶ “As there is not a spot in all the empire that lies untilled, so there is not one person, either man or woman, though never so old, deaf, or blind, but what may gain a livelihood.”⁷

They are as dexterous in craft as they are persevering in industry. “When there is anything to be gained, they employ all the cunning they are masters of, artfully insinuate themselves into the favour of persons who may forward their business, and gain their friendship by

¹ Du Halde's History of China, vol. ii. p. 128.

² Ibid. p. 129.

³ Ibid. p. 130.

⁴ Ibid. p. 131.

⁵ Ibid. p. 108.

⁶ Ibid. p. 111.

⁷ Ibid. p. 125.

constant services, assuming all sorts of characters with a wonderful dexterity, and turning to their advantage the most trifling matters to gain their ends."¹ "Thieves and highwaymen seldom make use of violence; they choose rather to gain their ends by subtlety and craft."²

"The Chinese are active and laborious, supple and pliant, self-interested and inclined to deceive. They love play and debauch, and under a grave and decent exterior they know better than any how to conceal their vices and irregular propensities."³ "The Tartars have more firmness of character than the Chinese. When one of the latter is beaten he cries. The Tartar, on the contrary, suffers in silence, or is content with murmuring."⁴

The Chinese are more patient and less excitable than the European nations, as appears not only from the testimony of Du Halde, but also from that of Gutzlaff. "Everything stimulates industry. The inhabitants are hardy and inured to great fatigue. Their constitution is of a coarser grain than ours, and though they are on that account less sensitive, they are also less subject to diseases, bear them with greater fortitude, and recover sooner from them."⁵ "Boys are less lively than with us, but also more quiet and obedient."⁶ On the other hand, "they are in general a cheerful people, and never more so than at their meals, when all is joviality, and care is drowned in present enjoyment. They then talk incessantly, and endeavour to exhilarate their companions."⁷ "In their quarrels they are noisy and abusive. They seldom, however, come to blows, and the sight of a little blood appeases the most ferocious brawler."⁸

2. The Indo-Chinese nations are more favourably circumstanced in their tropical plains. Their welfare comes more from sources external to themselves and less from their own energy and ingenuity than is the case with the Chinese. They are consequently less self-supporting and more dependent. The submissiveness which comes of dependence, combined with the subordination which favours union against hostile pressure, has produced in these countries habits of excessive homage. But a demonstrative submission to superiors, though much less servile, is a characteristic also of the Chinese; and there is in general considerable similarity to the Chinese throughout these nations. They seem for the most part to be characterised by a combination of quietude and vivacity like the Chinese, though deficient, more or less, in the industrial aptitudes of the latter.

"The Cochin-Chinese are mild, gentle, and inoffensive in their character beyond most nations. They are, besides, lively and good-humoured, playful and obliging. They are cunning, timid, deceitful, and regardless of truth; and at the same time conceited, impudent, clamorous, assuming, and tyrannical, where they imagine they can be so with impunity. They are more industrious than we should be apt to suspect, considering the oppressive nature of the government.

¹ Du Halde's History of China, vol. ii. p. 132.

² Ibid. p. 133.

³ De Guigne's Voyages, vol. ii. pp. 161, 162.

⁴ Ibid. p. 166.

⁵ Gutzlaff's China, vol. i. p. 479.

⁶ Ibid. p. 492.

⁷ Ibid. p. 486.

⁸ Ibid. p. 506.

They are capable of supporting a large share of fatigue, and the quantity of daily labour is in general very considerable."¹

"I found the Siamese a civil, humble, willing people."² "Our awkward attempts to avoid rolling out of our palanquins seemed to afford great amusement to the spectators (Siamese), who kept shouting aloud until we were within the gate of the palace."³

3. The Burmese have more excitability. "You see us here," said some of the chiefs to Mr. Judson, "a mild people, living under regular laws. Such is not the case when we invade foreign countries; we are then under no restraints, we give way to all our passions."⁴ "The Burmese speak with a loud voice. Even in common conversation they usually pitch their voice to a high key, as if they were delivering an oration."⁵ "The Birmanians are a lively, inquisitive race, active, irascible, and impatient."⁶ "Yet when from curiosity they scruple not to go into your house without ceremony, they meddle with nothing, ask for nothing, and when desired to go away always obey with cheerfulness."⁷

The Tibetans have less excitability than the Chinese. "The Tibetans are a contented race of men, slow of intellect, and phlegmatic in their amorous propensities."⁸

4. In Japan, as in China, there are considerable differences among the various regions in respect of facility of subsistence. "Those islands offer only mountains, hills, and valleys. The plains are few, and of small extent. The quality of the soil in the valleys and plains varies much; but generally it is composed of rich earth or sand, sometimes of both mixed together. On the whole it is pretty good."⁹ The more favoured regions would, therefore, as in China, be exposed to severe hostile pressure, which would necessitate in them union and numbers, peace and industry, and might lead to the development of a race which ultimately would prevail everywhere, characterised by patience and promptitude, and by an intermediate degree of excitability. But in Japan the conditions of life seem to be less favourable than in China, with more demand for patience, and the development consequently of a less excitable nature. In both regions we see a similar industrial development, the same intense regard to material things, such immersion of the ideal in the real, that the objects of religious veneration are the chiefs of the state and of the family, and such observance of the peace which industry requires that the natural organisation of society is submitted to with a dutiful and demonstrative subordination to superiors. Japanese industry, however, differs from Chinese in greater elaboration of process. It is less easily satisfied with its own productions; perhaps because it seeks to make up in quality for the restricted quantity which is due to the limita-

¹ Finlayson's Mission to Siam and Hué, p. 383-385.

² Neale's Residence in Siam, p. 160.

³ Finlayson's Mission to Siam and Hué, p. 138.

⁴ Crawford's Embassy to Ava, vol. i. p. 422.

⁶ Symes' Embassy to Ava, vol. ii. p. 384.

⁸ Gutzlaff's China, vol. i. p. 270.

⁹ Thunberg's Travels to Japan, vol. iii. pp. 168, 169.

⁵ Ibid. p. 457.

⁷ Ibid. p. 37.

tion of the productive region. And the deficiency of invention in its inhabitants is accompanied not by the self-satisfied conservatism of the Chinese, but by an eager inquisitiveness into what is strange and new. For the struggle for life brings out and establishes in each region the character which in that region it is most advantageous to possess.

“The people of Japan have little invention, and exercise their industry only on objects which are really necessary; but all that issues from their hands has a precious finish. Nothing is comparable to the brightness and beauty of their works in copper, or in other metal; those in wood combine delicacy with solidity. The beauty of their lacquer, and the excellence of the temper of their sabres, have not yet been equalled. It is impossible, without witnessing them, to form an idea of the patience and minute cares with which the labourers cultivate their fields.”¹

This careful industry is naturally accompanied by a utilitarian disposition. “I have not found on them the shells, the glass pearls, the plates of polished steel, of the Hottentots or Kafirs, nor all the trifles in gold or silver of Europe. Good stuffs of their manufactures, clean dresses, wholesome and savoury meats, excellent arms, these are what they seek.”²

Their religion is without ideality; the descendant of their most ancient sovereigns was till quite recently withdrawn from the civil government, and treated with divine honours; and he is still regarded as divine ruler of the visible world.³

In Japan, as in China, the peace which industry requires is favoured by an eager observance of the natural subordinations of society. “They are trained from their tenderest infancy in submission to their princes and their parents. The example of the older serves as a guide to the younger, and this docility spares them the reprimands and chastisements with which we overwhelm our children. Inferiors testify their respect towards their superiors by deep bows; they execute their orders with surprising punctuality. Persons of the same rank salute each other on meeting and on parting. This salute consists generally of bending forward the body and the head, and placing the hands on the knees, or even on the legs or feet.”⁴

“This nation does not yield in curiosity to any of those which I have visited. They consider very attentively everything that Europeans bring, or that they have on them; they inform themselves of everything. As the physician of the legation passes for the most instructed of all the Dutchmen, he is most particularly exposed to their importunate interrogations. Their questions run particularly on mathematics, geography, physics, pharmacy, zoology, botany, and medicine. I have already spoken of the attention with which we were examined at the emperor’s, and among the grandees of Jedo. Hats, swords, dresses, buttons, lace, watch, canes, rings, &c., &c., they

¹ Thunberg’s Travels to Japan, vol. iii. p. 201.

² *Ibid.* p. 196.

³ *Ibid.* pp. 231, 234; Miss Bird’s Japan, vol. ii. pp. 353, 354.

⁴ Thunberg’s Travels to Japan, vol. iii. p. 199.

inventoried all that we had on us from head to foot, and wished even to have copies of our writing." ¹

"Active, sober, economical, loyal and full of courage," ² a self-restrained moderation marks their character. "They are of a sweet disposition, enemies of trickery, passionate for honours, temperate in eating, less so in drinking; they like not any game for money." ³

"It is in Japan especially that I have found that wise and useful economy which must not be confounded with avarice, and to which I make no difficulty to grant the name of virtue, since its contrary is one of the most disgusting vices. This virtue is equally practised in the palace of the emperor, and in the cottage of the poor man. Their desires are as limited as their necessities. They waste not the land or their time in the cultivation of tobacco, and of plants to which idleness and satiety have given value; nor do they extract poisonous beverages from grain intended to supply wholesome nourishment." ⁴ "Justice is not here an unmeaning word. Every one observes it towards his fellow-citizens, and the despot towards his neighbours." ⁵ "One may travel through the whole extent of the empire with perfect security from robbers, and even thieves are rare." ⁶ On the other hand, "pride and haughtiness form the basis of their character; they claim to draw their origin from the gods." ⁷ But their wrath, when they are offended, "does not exhale itself externally. They concentrate it profoundly, till they find the opportunity for vengeance. They make no answer to insult or injury, unless sometimes by a bitter and malicious smile, and by a long *e, e, e*; but they preserve a deep hatred, which neither excuses, nor time, nor even services can destroy." ⁸

5. In the south-west of Asia, and in nearly the same latitude as China, lies the region of Syria and Arabia, consisting for the most part of desert, interrupted by districts which derive more or less fertility from wells. Such districts yield to man a moderate facility of subsistence, and consequently require of him a moderate degree of patience. They admit at the same time a moderate density of population, which will tend to develop in him a moderate degree of promptitude to resist unforeseen attack. They are guarded by the desert from hostile pressure; and their inhabitants therefore are not forced into unions of large numbers living by industry. The patience which is required in them is not patience of labour in production, but patience of frugality in use; for no labour could produce abundance where the atmosphere—at least in the summer half-year—furnishes so little moisture that there is not even enough for putrefaction. "Putrefaction is effectually anticipated by the parching influence of the air, which renders a carcase of three or four days' standing as inoffensive to the nose as a leather drum. And one may pass leisurely by a recently-deceased camel on the roadside, and almost take it for a specimen prepared with arsenic and spirits for an anatomical museum." ⁹

¹ Thunberg's Travels to Japan, vol. iii. p. 200. ² Ibid. p. 195.

³ Ibid. p. 195; Francis Xavier. ⁴ Ibid. p. 201-203.

⁵ Ibid. vol. iii. p. 204. ⁶ Ibid. p. 205. ⁷ Ibid. p. 207.

⁸ Ibid. p. 214. ⁹ Palgrave's Arabia, vol. i. p. 164.

“About the numerous shambles every refuse is left to cumber the ground at scarce two yards’ distance, but dogs and dry air much alleviate the nuisance, a remark which holds true for all Central Arabia.”¹ Contentment with little is required in such a region as the ordinary habit of life. “Fasting, especially in presence of a fat sheep, is quite out of the question, if indeed his ordinary allowance of nutriment might not be called a perpetual fast, and even a severe one.”² Now, whatever it be that demands patience, those are best qualified to exercise it who have a low degree of nervous excitability; as, on the other hand, those are best adapted for promptitude who have a ready excitability. And accordingly this quality is developed in an intermediate degree in the Syro-Arabian region as well as in China. The nervous excitability of the Arab, as of the Chinese, is less than that of the European nations. “What is really remarkable among them is a great obtuseness in the general nervous sensibility. On more than one occasion I had to employ the knife or caustic, and was surprised at the patient’s cool endurance.”³ But the activity of the Arab gives vivacity to his character. “Patience to endure and perseverance in the employment of means to ends, courage in war, vigour in peace, these are features distinctive of the Arab nation.”⁴

It is in Central Arabia—that is, in Shomer and Nejed—surrounded on all sides by the desert, that the Arab race has been most secure from mixture, and that its character therefore is to be found in its greatest purity. In Hejaz and the rest of the western and southern border there has been a mixture of African influence, on the south and south-east probably also an Indian influence, and on the eastern border a Persian influence. And, moreover, the physical conditions of life, especially as regards moisture, are so different in the south and south-east of Arabia from the rest of the Syro-Arabian region that they would naturally lead to a diversity of character in the race. In Central Arabia, therefore, the Arab character may best be studied, and it is found to be different there from what it is in the other parts. “The Nejdean—patient, cool, slow in preparing his means of action, more tenacious than any bull-dog when he has once laid hold, attached to his ancestral usages and native land by a patriotism rare in the East, impatient in the highest degree of foreign rule, sober almost to austerity in his mode of life, averse to the luxury and display of foreign nations, nay, stranger still, to their very vices,—sympathises but ill with the volatile and light-minded Hejazee, who begins vigorously but soon tires and turns away, a lover of ornament and magnificence, willingly adopting the customs, and the dissoluteness too, of his neighbours; ostentatious, talkative, and inconsiderate. In the well-known verses of a native poet, ‘Nejed is the land of great souls, and the rest are dwarfs in comparison; but for the men of Hejaz, they are all at short tether.’”⁵

“Unlike an Arab, a Persian shows at once whatever ill-humour he may feel, and has no shame in giving it utterance before whoever

¹ Palgrave’s Arabia, vol. i. p. 439. ² Ibid. vol. i. p. 68.

³ Ibid. vol. ii. p. 35. ⁴ Ibid. vol. i. p. 70.

⁵ Ibid. vol. i. p. 242.

may be present; nor does he, with the Arab, consider patience to be an essential point of politeness and dignity."¹ "A Nejdean makes it his boast to put up with rudeness and passion, and considers the bearing such with equability and composure to be the test-proof of superiority in character and good breeding—fully understanding that self-restraint is the first condition of being a gentleman."² "Nejdean anger is no fire of straw. It burns hotter the second day than the first, and the third than the second."³

The intermediate degree of excitability possessed by the Syro-Arabian family is strikingly indicated by the following language: "Here, stretched in the cool and welcome shade, would we for hours canvass the respective merits of Arab poets and authors, in meetings that had something of the Attic, yet with just enough of the Arab to render them more acceptable by their Semitic character of grave cheerfulness and mirthful composure."⁴

VI.—*Indo-European.*

The regions occupied by the Indo-European family have for the most part a temperate climate with regular moisture, and consequently are more favourable for human subsistence than Syro-Arabia, while they are not exposed to such hostile pressure as enforced in the lowlands of China peace and industry. They would demand, therefore, less patience and more promptitude than either of those regions, and accordingly the Indo-European races have more readiness of mental action than the Chinese or Syro-Arabian. There were, however, originally great varieties among those countries in respect of facility of subsistence. Afghanistan and North-Western India, whence probably the Sanskrit-speaking people came, was a rugged region. And in Europe both soil and climate were less favourable in Germany and Russia, while the more equable temperature and the fertile soil made production more abundant in the plains of Gaul and of the British Isles than in the other countries. Accordingly, the Hindoo, the Teuton, and the Slav have a lower degree of excitability, and the Celt a higher, than the other members of the Indo-European family.

Elphinstone, speaking of the Afghans, says: "Most of their games appear to us very childish, and can scarcely be reconciled to their long beards and grave behaviour."⁵ "Their countenance has an expression of manliness and deliberation."⁶ "Except on formal occasions, they use a good deal of gesture, but it is always of a grave kind, such as stretching out the arm and bending forward the body. They have perhaps more of this kind of action than the Persians, though not near so lively a people; but they by no means equal the gesticulations of the Indians." In a note to this he distinguishes between the natives of Hindustan and the Tamil race in the Carnatic: "I may be allowed, in comparing them with a foreign nation, to speak of the inhabitants of this vast empire as one people, but it must not be forgotten that

¹ Palgrave's Arabia, vol. i. p. 297.

³ Ibid. vol. i. p. 448.

⁵ Elphinstone's Cabul, vol. i. p. 377.

² Ibid. vol. i. p. 344.

⁴ Ibid. vol. i. p. 68.

⁶ Ibid. vol. i. p. 389.

there is a great diversity among the Indians themselves. Thus the tall and well-made Hindustani speaks extremely slow, and though he uses a good deal of gesture, does not approach to the violence of action employed by the small, black, and shrivelled inhabitant of the Carnatic, who speaks on the most trifling subjects with a degree of volubility and eagerness to which no occasion could rouse an Englishman.”¹

This last observation points to the deliberateness and comparatively slow movement of thought which is to be observed in the Teutonic nations, and which is most striking when contrasted with the quick transitions of thought and feeling which characterise the Celt. The latter struck forcibly the Greek and Latin writers. Thus Strabo says: “The Gauls in general are irascible and always ready to fight. They are likewise easily persuaded to a good purpose, and are ready for instruction and intellectual culture. Their impetuosity may be ascribed partly to their great stature, and partly to the multitude of people, who habitually run together through simplicity, and having no restraint whenever they fancy that any of their neighbours have suffered injury.”² Dio. Cassius says that their leading faults are expressed in three words—*τὸ κούρην τὸ δειλὸν καὶ τὸ θρασύ.*³ “The Gauls are fickle in counsel, and mostly desire change.”⁴ “Their first onset is more than of men, their last fighting less than of women.”⁵ “As the spirit of the Gauls is prompt to engage in war, so their mind is weak and yielding in the enduring of calamities.”⁶ “The Celts are more keen and quick-witted than the genuine Greeks.”⁷

The abundant production in Gaul is testified by Strabo: “To the northward of the Cevennes olives and figs are wanting, but the soil is fertile in other productions, though it hardly brings grapes to full maturity. Every other produce abounds throughout Gaul, which bears much corn, millet, acorns, and supports herds of all kinds. There is no waste land, except some tracts occupied by forest and morass, and even these are not desert, but contain inhabitants whose number is greater than their civilisation, for the women are fruitful, and excellent nurses. So numerous are their herds of oxen and swine, that not only Rome but the rest of Italy is supplied from them with salt provisions.”⁸

The natural productiveness of the original countries of the Celt still remains, and the difference of character of the Celt and the Teuton is a prominent fact in the system of Europe.

¹ Elphinstone's *Cabul*, vol. i. p. 392.

² Strabo, lib. iv. p. 196; ap. Prichard, vol. iii. p. 178.

³ Prichard, *ibid.*

⁴ Cæsar, *De Bello Gallico*, lib. iv. c. 5.

⁵ Livy, x. 28; ap. Lightfoot on *Epistle to Galatians*.

⁶ Cæsar, *De Bello Gallico*, lib. iii. c. 19, *ibid.*

⁷ Themistius, *ibid.*

⁸ Strabo, lib. iv. p. 199; ap. Prichard.

PART II.—GRAMMATICAL SKETCHES, NOTING SPECIALLY THE MAGNITUDE OF THE ELEMENTS OF LANGUAGE AND THEIR TENDENCIES TO COMBINE, VIEWED IN CONNECTION WITH THE QUICKNESS OF EXCITABILITY OF THE RACE.

1. According to the evidence adduced in the preceding part of this chapter, the races of men may be divided into five groups in respect of ready excitability of their mental action. For though the evidence is far from reaching to every individual race, it may with more or less probability be extended from those which are actually described to others belonging to the same region, and similar in mode of life and physical circumstances.

Of all mankind, the genuine African races have the most quickness of excitability, and the American races the least; and these respective characters prevail throughout these two groups with extraordinary uniformity.

Next to the genuine African races in readiness of excitability, come the Polynesian or Maori race, the Australian, and in a less degree the Malay; the dark-coloured islanders of the Pacific, and the Dravidian aborigines of India; also certain races of North-Eastern and Central Africa. And on the same side of the intermediate degree of excitability are also to be placed the Indo-European races. And these all, though there are considerable differences amongst them, may be grouped together as having quickness of excitability above the mean, though below that of the pure African races.

On the other side of the intermediate zone, but with an immobility of nerve distinctly less than that of the Americans, come the nomad races of Central Asia, and the aborigines of Northern Asia and Northern Europe.

And to the intermediate zone itself belong the Chinese, the Indo-Chinese, the Tibetan, the Japanese, and the Syro-Arabian races.

Are there now any characteristic features which are to be found in the languages of these various races in degrees corresponding to the quickness of excitability of the race?

In conducting this inquiry, it will be convenient to take the races for the most part in the order in which they have been mentioned; except that the Indo-European languages, being the highest development of human speech, had better be considered last, with the help of whatever light may be thrown on them by the previous study of the other languages.

I.—*African Languages.*

1. There are two characteristics which belong to all the purely African languages, a tendency to break speech into small fragments, and a readiness of the parts into which it is analysed to enter into combination with each other. These tendencies, however, are differently manifested in the different families of African language, and in

the different members of the same families, according to the various degrees of interest with which the whole fact is thought, compared with the interest of the parts, and according to the various degrees in which other influences tend to separate or to combine elements of speech.

KAFIR.

2. The languages of the Kafir family owe their most striking peculiarities to these tendencies. They all break their nouns into two parts, which cohere loosely and are readily detached from each other, an abstract thought of the substantive object, and a thought of what is attributed to the object to complete the idea of it. And whenever there is in the sentence a strong reference to a noun, the element which involves that reference is apt to take up the abstract substantive part as a fragment detached from the noun; in some of these languages a strong reference to a verb has a similar effect.

3. These general facts may be illustrated by the example of the Tosa language, which is spoken also by the Zulus. In it, nouns are distinguished into eight species by eight different prefixes, which belong each to a different species of nouns. In the plural, the nouns take other prefixes; but the plural prefixes are fewer, because nouns are thought with less distinction in the plural than in the singular. The following are the singular and plural prefixes of Tosa nouns, with examples of nouns to which they each belong.¹

	Sing.	Plural.		
1.	<i>um</i>	<i>aba</i>		<i>um'ntu</i> , man
	<i>u</i>	<i>o</i>		<i>u'dade</i> , sister
2.	<i>ili</i>	} <i>ama</i>	{	<i>ilizwi</i> , word
	<i>i</i>			<i>i'hase</i> , horse
3.	<i>im, in</i>	} <i>izim, izin</i>	{	<i>im'azi</i> , cow
	<i>i</i>			<i>in'θlu</i> , house
				<i>i'hani</i> , pig
4.	<i>isi</i>	<i>izi</i>		<i>isi'ta</i> , basket
5.	<i>ulu</i>	} <i>izim, izin, izi</i>	{	<i>u'bambo</i> , rib
	<i>u</i>			<i>ulu'ti</i> , rod
				<i>u'lwimi</i> , tongue
6.	<i>um</i>	<i>imi</i>		<i>um'ti</i> , tree
7.	<i>ubu</i>	no plural		<i>ubu'tumko</i> , wisdom
8.	<i>uku</i>	no plural		<i>uku'ta</i> , eating or food

Nouns formed from verbal stems, if of the first species, generally change the final vowel of the verbal stem to *i*; if of any other species, except the seventh and eighth, to *o*. In the seventh the final vowel of the verbal stem is sometimes changed to *o*, but in the eighth, which is the infinitive, it is unchanged.²

The significance of these prefixes is obscure on account of their abstract nature, and it is difficult to state the distinction between one species of nouns and another. The first prefix, however, is almost

¹ Appleyard's Kafir Language, p. 109.

² Ibid. p. 100-102.

confined to personal nouns, the seventh to nouns which express the idea of a root thought abstractly as a substantive object, and the eighth to verbal or infinitive nouns. In some instances different prefixes are used without essentially altering the meaning; as *i'zwane* and *u'zwane* toe, *um'l'obo* and *isi'l'obo* friend. But generally a different prefix gives a difference of signification; as *i'kiwane* fig, *um'kiwane* fig-tree; *ili'zwe* country, *isi'zwe* nation; *um'ntu* human being, *isi'ntu* human species, *ulu'ntu* human race, *ubu'ntu* human nature.¹ And no doubt even when the difference of prefix seems to bring with it no difference of meaning, the nouns do really express ideas in which the object is differently thought. For the prefixes express each a distinct thought of the object to which, as to its substance (Def. 4), the nature denoted by the radical part belongs. They express of themselves elements of thought so excessively fine and abstract, that it is difficult or impossible to explain each prefix by a statement of its abstract meaning. And in their abstract sense they may sometimes occur in nouns, expressing a shade of meaning which will escape every one except a native. But what is most remarkable about them is that though they are so abstract in their own signification, they for the most part supply such strong distinctions of meaning in their applications. In the noun *isi'ntu*, the human species, when it is compared with the kindred words given above, *isi* seems to mean species; but there is no such meaning in *isi'kalo* a cry, from *kala* to cry out; *is'anfla* the hand, from *anflala* to spread out, *isi'njoko* conversation, from *njokola* to converse, *isi'ta* a basket or dish, from *ta* to eat. And yet there must be a common element expressed by the prefix in all these substantive ideas, or they would not be put in so marked a manner by the prefix into the same category. That common element is an abstract signification of the prefix, which is determined in each application of it to a special meaning. The prefix is thought in its own associations in a fine sense which springs from its various uses; and this abstract signification, when combined with the root of the noun, suggests a particular meaning in which that root may belong to it. In this way a few abstract prefixes are sufficient to supply the distinctions in substance of substantive ideas. The mind in thinking such an idea partly leaves the radical element of the object, and thinks the substantive part (Def. 4) in its own associations, and then combines that element with the radical part, giving it a particular meaning adapted to the latter.

Now the first of these mental acts implies a readiness of the mind to apply itself to a small object, and to think separately an exceedingly fine element. And therefore, the use of such abstract derivative elements which in their applications are determined to various particular meanings, largely different from each other, indicates a fragmentary quality of thought. The more general such elements are in their own signification, and the more that signification differs from the particular meaning which they get in combination with a root, the more separately from the root they are thought in the first instance, and the more readily may they be detached from it. And the

¹ Appleyard's Kafir Language, p. 106.

most characteristic feature in the structure of the Kafir languages is the detachment of the nominal prefix from the radical part, by any element which is thought with strong reference to the noun.

Thus in Tosa, when one noun governs another in the genitive, the genitive relation is expressed by *ka* or *a* prefixed to the governed noun. But, moreover, a part of the formative prefix of the governing noun is prefixed to *ka* or *a*; thus, *isi'ta si'ka' Tosa*, basket of Tosa; *isi'ta s'om'ntu* (= *s'a'um'ntu*), man's basket; *uku'ta kw'aba'ntu* (= *ku'a'aba'ntu*), men's food; *izi'nto z'aba'ntu* (= *z'a'aba'ntu*), men's things.

So also when a noun is qualified by an adjective, the adjective takes the prefix of the noun, with the relative element *a* absorbed into the initial vowel of that prefix, unless the noun has a demonstrative, as *um'ntu om'kulu* (= *a'um'kulu*), great man; *ili'zwi eli'kulu* (= *a'ili'kulu*), great word. Some adjectives, probably because the idea which they express coalesces more closely with that of the noun which they qualify, drop a final *m* or *n* of the prefix of that noun. And the adjectives *mbi* other, and *onke* all, combine so readily with their noun that they do not take up into the prefix the relative *a*, and take only a fragment of the prefix of the noun to connect them with it; as predicates also adjectives do not take *a*; *ulu'ti lu'mbi* another rod, instead of *olumbi*; *w'onke um'ti* every tree, instead of *om'onke*.

Similarly for the demonstrative pronouns, the demonstrative elements combine always with parts of the formative prefixes of the nouns to which they refer.

And the third person in verbs, instead of being expressed by a general pronominal element, takes a part of the formative prefix of the noun which is the subject, with some variations for tense and mood; as *um'ntu uteta* man speaks, *aba'ntu ba'teta* men speak, *im'azi i'hamba* cow walks, *izim'azi zi'hamba* cows walk. The Kafir verb also is thought in such close reference to its object that it sometimes connects itself with the object; and this it does by taking up a part of the formative prefix of the object, giving it, where this can be done, a more consonantal utterance than when it represents the subject; as

God pres. know things all
(1.) *u.Tijo w'ya'z'azi z'into z'onke*, God knows all things. In the verb *w'ya'z'azi*, *u* is the prefix of the subject, *ya*, which signifies to go, expresses that the fact is going on, *z* belongs to the prefix of the object *izi'nto*, and *azi* is the stem of the verb.

It is remarkable how readily the fragments of nouns can be detached and taken up by elements related to them; as (2.) *um'zimba wo'na* satisfied with the things earth
u'yan'ama na'zo izi'nto z'om'l'aba, the body is satisfied by the things

of earth; the prefix *u* is part of *um*, the prefix of *um'zimba*, *wona* is this prefix *u* combined with the demonstrative element *o*, and strengthened with the demonstrative element *na*, *zo* is *z* from the prefix of *izi'nto*, combined with the demonstrative *o*, and *zom'aba* is the same *z* combined with *um'aba*, the relative element *a* intervening. Thus in a Kafir sentence, wherever there is a strong reference to a noun, that reference takes up a fragment detached from the noun; because the substantive idea is broken into two parts, one of which is at first thought independently of the other. And the fragment thus taken up retains its identity through the sentence, as part of the noun, combining but not mingling with the other elements.

4. Now these elements which are thus taken up from nouns differ from the elements of person, and from those of gender, number, and case, which in Latin and Greek are taken up from nouns by verbs and adjectives in this, that they are agglutinated fragments of ideas. The personal elements of Latin and Greek verbs are not fragments of the idea of the subject, but pronominal elements in which the mind directs attention to the subject without forming the idea of it (see Def. 8); and those elements are therefore separable and distinct from that idea. So, too, the proper element of case is distinct from the idea of the noun, being a relation external to it. Gender and number as thought in the Indo-European languages do belong to that idea, but they are not loosely coherent elements of the noun or of the adjective, but are always quite mingled with the idea of each of these, and absorbed into it, not merely agglutinated to it.

5. As a fragment in *Tosa* is detached from a noun and taken up by an element which has a strong reference to it, so a fragment is detached from the idea of a verb by a relative element connected with it, or by a member of the sentence which refers to it, when this member is separated from it by an intermediate clause. In each case the reference is thought with special strength, and this strength of reference draws out the verbal fragment. The element which is used in this way is *ti*, expressive of the abstract doing or being of a verb. The following are examples:¹—

he who he who happen be he killing he be in danger by judgment,
 (2.) *Woti o'sukuba e'bulala a'be ne'tala emat'alen*, who-
 soever shall kill shall be in danger of the judgment; *ti* expresses an
 happen infin. be
 abstract fragment of the idea *happens to be* (*sukuba = suka'ukuba*),
 drawn out by the relative. The elements translated *he* are not pro-
 nouns, but the prefix of the first, or personal species of nouns, which,
 when combined with the relative *a* becomes *o*, in the participle becomes
e, and in the subjunctive *a*. If the antecedent were a noun with the
 prefix *ili-*, the sentence would be *eli'ti eli'sukuba li'bulala li'be ne'tala*
emat'alen. In the following, *ti* is fragment of the idea of an infini-
 tive, and is therefore in the infinitive itself.

us teach that we ought infin. of *ti* we deny infin. neg. be godly
 (3.) *Lu'si fundisa ukuba si'fanele ukw'ti si'tal'a uku'na'bedeshi*
 and lusts of world we live with waking
ne'en'hanuko z'om'aba si'tale no'kurabuka, teaching us that denying

¹ Appleyard, p. 283.

ungodliness and worldly lusts we should live soberly; *lu* is part of *ulu*, the prefix of the subject which has gone before; *uku'ba*, the infinitive, or verbal noun of the verb substantive *ba*, represents the following clause under the form of an abstract idea of fact, as the object of teaching; as in English, *that* represents it by a pronoun; and *uku'ti* expresses the abstract fragment of the infinitive *to live*, drawn out by the separation of *ought* from *live*, by the intervening clause; *nenkanuko* is *in'kanuko* with the copulative preposition *na*, and *in* is contracted from *izin*, whence *z* in *zom'aba*, of the world.

When a special emphasis falls on a member of the sentence which is subordinate to the verb, and which should naturally follow it, that member is detached from the verb and put before it, but it carries with it the abstract verb *ti* to govern it, as (4.) *barti* ^{for pretend} *no'ku'zenzisa* ^{make} ^{prayers} ^{long} *benze imi'tandazo emi'de*, and for a pretence make long prayers; *ba* and *b* represent the plural prefix *aba* of the first or personal species of nouns, *enze* is the subjunctive of *enza*, make, from *enza* is formed *zenza*, make one's self, and *zenzisa* is the causative form of *zenza*, *uku'zenzisa* is the verbal noun of *zenzisa*, and *nokuzenzisa* is this noun with the preposition *na*; *nokuzenzisa* should follow the verb, but is put first by emphasis, carrying with it the verbal fragment *ti* to go before it.

The strength with which the time of occurrence is thought, may give an emphasis to the abstract element of fact, which will detach it from the verb, and bring *ti* to the first place in the sentence; as (5.) ^{Past} *wayete yena* ^{he} *ese'kweli'ne* ⁱⁿ *ili'zwe* ^{another country} *wewa* ^{hear it being said there be} *ku'si'twa*, *ku'ko* ^{country that of pl.}

isi'zwe esi'na'ma'posa, he was still in another country when he heard that there was an Ama'posa country; *w* is personal prefix *u*, corresponding to the personal pronoun *yena*, *y*, the auxiliary verb of process *ya*, etc past participle of *ti* with its personal prefix *e*, *ese* the same formation of *sa*, to continue to be, *ku* the impersonal prefix which represents as subject a fact thought as an infinitive, *si* a verbal element of process.

Now, it is to be observed in the above examples how fully and independently the abstract element *ti*, which cannot be translated into English, is thought as a verb. In the last example but one, *enze* the subjunctive is used, because it is dependent on another verb, and this principal verb to which it is subordinate is *ti*; and in the preceding example we have *uku'ti*, the fully formed verbal noun of *ti*, and *hlale* dependent on it, and therefore in the subjunctive mood.

Ti is also used with remnants of verbs which have lost their verbal significance, to express the element of being or doing which they no longer convey.

6. In the examples which have been given it may be observed how apt the Tosa conception of a fact is to break into parts which are expressed in fragmentary sentences. This, however, is due to the breaking of the idea of the verb, and is therefore only a case of the comminution of single ideas. For when a new verb occurs with a

subject of its own, there is a new sentence; such sentence being thought as a subordinate part of the larger one when the verb is in the subjunctive, but complete in itself when the verb is in the indicative. The following is an additional example of this tendency, and shows it clearly when compared with the English translation, which is the form in which the same thought would be expressed in English;

however	infn. arrive	gen. form he	in inhabited	by Amakosa	country
<i>kw'ete</i>	<i>kodwa</i>	<i>ukw'fika</i>	<i>kw'a'ke</i>	<i>kw'eli'miwe</i>	<i>n'amaḡosa ilizwe</i>
past arrive	at time	gen. war	rel. a'ukugo	the Dane	and the Kunukwebi
<i>w'a'fika</i>	<i>n'e'jeṣa</i>	<i>l'em'fazwe</i>	<i>oku'ya imi'Daṅe</i>	<i>n'ama'G'yunukwebi</i>	

being fighting with pl. white
ebe·si·'lwa n'abe'luiu, his arrival, however, in the country inhabited by the Amakosa happened at a time of war when the Dane and the Kunukwebi were fighting with the whites; *te* past tense of *ti*, with subject prefix *ku*, from *ukw'fika*; *ebe*, *be* past form of *ba* to be, *e* participial prefix for *ama*; *si* element of process. The first clause in Kafir is—happened, however, his arrival in the country inhabited by the Amakosa, he arrived at a time, &c. This last sentence, though quite complete, falls in with the preceding one without needing a connective element, and forms with it the thought which is expressed in English in one sentence. And generally in apprehending the sense of a South African statement, the mind is conscious of a succession of fragmentary sentences, and of fine elements which cohere without quite blending, though they are only fragments of single ideas.

7. For the Kafir languages are also marked by the second tendency which has been mentioned. The parts into which they divide speech combine readily one with another. This appears already in those peculiarities of their structure which have been mentioned. For if the genitive takes up a fragment of the noun which governs it, and the adjective of the noun which agrees with it, and the verb of its subject and its object, this shows the readiness of those elements to coalesce with each other; while the relative or transitional element *a*, which is taken by the genitive, shows their distinctness as connected by a relation. The same appears also in Kafir in the compounds which are formed by this language. For those compounds are combinations in which the parts are connected, often by fine relations with transition from one to another. And such combinations are facilitated by the readiness of the parts to cohere with each other, though they do not mingle.

That it is the nature of the ḡosa and Zulu compounds to have this open texture appears from the distinctness which the components retain, notwithstanding their conjunction. When the plural of a compound noun implies plurality of the second component, this may take a plural prefix of its own; as *um'nikazinḡlu* housekeeper, from *nikazi* mistress, and *in'ḡlu* house, *aban'nikazininḡlu* housekeepers, *izin'ḡlu* being the plural of *in'ḡlu*, *in'ḡlilifu* heir, *in'ḡlamafa* or *izin'ḡlamafa* heirs. But still more clearly the nature of South African compounds is shown by their retaining those fine elements of relation in which thought passes from one component to another; when a noun enters into the composition in a case governed by a verb, as in

um'nenanθlwini bridal housewarming, from *niēna* enter, and *enθlwini* locative of *inθlu*;¹ also when a nominative and its verb are compounded together in full construction with each other, as *w'laia'li'balele*, from *il'aia* the sun, and *balele* the perfect of *balela*, to be hot, the latter having prefix *li* to connect it with its subject *il'aia*, and the whole being the name of a person, and taking the personal prefix *u*. The Kafir compounds, however, and compound derivative verbs, acquire by use a complete fusion of their elements together so as fitly to express ideas which are natural units, or nearly so; and it is to the singleness of the idea which they are used to express that the fusion is due. That idea is not always apparent from the meaning of their parts, but is a special application of that meaning which must be learned by use;² and therefore they cannot be formed at will in the expression of fact. The compound derivative verbs rather grow by successive accretions of derivative elements to previous formations which have acquired complete singleness by use. They are not, therefore, formed on every verb, but only as use has determined their growth.

8. The other features of Ṭosa or Zulu speech are well worthy of note. The consonants are *k, g, t, d, t', d', t, d, t', θ, p, b, h, χ, ʒ, y, s, z, z̄, f, v, w, l, n, n̄, n, m, ʒ, ʒ̄, ʒ̄*; the vowels *a, e, e, i, o, u*; and the diphthongs *ai, ei, and au*.

The phonesis is vocalic. The vowels are long in all accented syllables, unless when followed by a nasalisation,³ which partially absorbs the sonant breath. There are no concurrences of consonants except *kl, θl*, which are felt as single consonants, and except with a succeeding *w* or with a preceding nasal; *χ* also may be followed by *y*, and *yw* occurs.⁴ Every syllable ends in a vowel, except some few which end in *m* or *n*.⁵

It is also soft, and tends to soften the consonants, even the clicks, with a preceding nasal, and the mutes with an aspiration which is due to relaxation rather than to pressure of breath. The relaxation of utterance causes also a marked palatal tendency, the labials being apt to turn into antepalatals,⁶ because the tongue when relaxed naturally lies close to the arch of the palate, and opens to let breath pass to the lips; and this relaxation of the tongue leads to the combinations *k̄l, θ̄l*, letting the breath escape over the sides as well as over the end of the tongue.

There is little pressure of breath from the chest on the organs in the utterance of the consonants, and therefore it is that *w* is apt to be inserted after a consonant before a vowel on account of the weakness of the initial breath of the latter (Def. 26); *w* being preferred for this purpose to *y* by reason of the vocalic character of the language attracting the utterance to the throat; *h* by itself is rare.⁷

The clicks are thought to have come from the Hottentots, as they are found only in the Kafir languages which are in contact with these.⁸ In Ṭosa they are both hard and soft, and they as well as *χ̄, f̄*, and *v* are only found in roots.⁹

¹ Appleyard, p. 104.² Ibid. p. 156.³ Ibid. sect. 35.⁴ Ibid. sects. 43, 50.⁵ Ibid. sect. 57.⁶ Ibid. sect. 45.⁷ Grout, Zulu Grammar, p. 2-20.⁸ Appleyard, sect. 22.⁹ Ibid. sects. 48, 51.

There is also a moderate amount of euphonic change, not enough to characterise the utterance as stiff and wanting in suppleness and versatility; but it indicates a tendency to run the end of a word into the beginning of the succeeding one. There is also an avoidance of hiatus, and sometimes a contraction of two or more syllables into one.¹

The accent is generally on the penultimate; but there is a foretone in words of three or more syllables. And besides the accentuation, there is a peculiarity of intonation which distinguishes words of similar form but different meaning.²

9. The noun takes prefixes of case, and one case-ending, the nominative being the simple stem. Personal nouns and proper names are less ready than others to enter into relations on account of their concrete fulness of idea. Such strong nouns take *ka-* in the genitive, *ku-* in the locative, while other nouns take *a-* in the genitive, and *se-ini* in the locative, *s* being generally dropped, and also the final vowel of the noun, and *-ini* becoming *-eni* if the final vowel be *a*, *e*, or *o*. There are also the prepositions *na* along, *na* with, *na* like as. Sometimes

the locative is preceded by the genitive prefix, as *um'fazi, w'a'sekini*, a woman of Grahamstown; or by *na* or *na*. And *ku* may be prefixed to a proper name with *a* between, as *Kua Pato*, at Pato's.³

The relation to the cause is expressed in a remarkable manner by reduplication of the formative prefix of the noun, the letter being prefixed to it which would represent it in connection with a genitive or adjective. With some prefixes, however, *i* is used instead.⁴ In the former expression, the relation of the effect to the cause is not thought generally, but is identified with the cause as its efficiency.

The so-called prepositions are mostly nouns.

There are few adjectives, no adjective forms for degrees of comparison. But they form diminutives in *-ana* as substantives do, and express diminution of quality by *-xa*.⁵

10. The first personal pronoun is *mi* sing., *ti* pl.; the second is *we* sing., *ni* pl.; as subject persons in the verb they are—first, *nli-*, sing., *si-*, pl.; second, *u-* sing., *ni-* pl.; as object persons they are *-ndi-*, *-si-*, *-ku-*, *-ni-*; the reflex object is *z-*, *zi-*.⁶

The demonstrative elements are *a*, *o*, *la*, *ya*, *ko*, *ke*. Of these the monosyllabic nominal prefixes take *la-* and drop their final *m* or *n*; the polysyllabic prefixes take *a* mixed with their initial vowel, and drop their final *m* or *n*; *ama-*, *imi-* become *a-*, *i-*, and take *la*, becoming *la-*, *le-*. Sometimes *ya*, *a*, or *o* is taken at the end of the prefix to express remoteness.⁷ The relative pronoun is supplied by prefixing *a-* to the relative clause in immediate succession to the antecedent, and by representing also the antecedent in the relative clause by its prefix or a pronoun, unless when the antecedent is a personal noun and the relative is subject of the relative clause, its verb being present or perfect.⁸

¹ Appleyard, sect. 59; Grout, p. 10.

³ Ibid. sects. 100–132.

⁵ Ibid. sects. 147–149.

⁷ Ibid. sects. 160–164; Boyce, Kafir Grammar, p. 38.

⁸ Appleyard, sects. 176, 443.

² Appleyard, sects. 65–68.

⁴ Ibid. sect. 114.

⁶ Ibid. sects. 170, 265, 273.

11. Almost all verbal stems end in *a*. Compound verbal stems are rare; and those which are said to be compounded of substantive and verb, or of adjective and verb, might as well be written with their parts separate. There are, however, a few which seem to be compounded of two verbal stems, as *tandabuka* love to look, *tandabusa* love to ask.¹

There are many derived forms of the verbal stem. Those which come from a foreign source usually take *-sa*.² And from native stems may be formed a verb relative to an object in *-ela*, *hamba go*, *hambela go to*; a causative by changing the final vowel to *-isa*; a neuter passive by changing final vowel to *-eka*, *tandla* love, *tandeka* become loved, *l'amba* walk, *l'ambeka* be walkable; a reciprocal by changing final vowel to *-ana*, *tandlana* love one another; a passive by changing final vowel to *-wa*, and a labial in the middle or end to an antepalatal as a less active utterance. These formations may be accumulated on one another; but no verb is found in all the forms, few in a majority of them. And the meaning of a derived verb cannot always be known by knowing that of the primitive, but in many instances requires the dictionary.³

The stem may also be doubled to express the frequentative. It sometimes takes *-kala* or *-lala* to give it a neuter sense; and sometimes gets an active or causative sense by changing *-aka* to *-asa*, *-ala* to *-aza*, *-ata* to *-esa*, *-ika* to *-iza*, *-eka* to *-eza*, *-oka* to *-oza*, *-uka* to *-uza*, *-ula* to *-uza*, *-ela* to *-eza*; there is also an active ending, *-ula*.⁴ The final *a* of the verbal stem is reduced to *i* by negation, except in the aorist and passive, which retain *a*,⁵ and present potential, which when negative changes it to *e*.⁶ In the subjunctive *-a* becomes *-e* when affirmative, *-i* when negative.⁷ In the perfect tense *-a* becomes *-ile* or *-e*,⁸ expressive of completion, and when negated the perfect sometimes takes for *-ile* the negative *-ia*.

The subject prefixes take *-a* to put them in past time or in relation to another verb whose time they take. The negative is either prefixed to them as *a* or subjoined to them as *ia*. The subject prefixes of first species *u-ba* become in subjunctive *a-ba*, and likewise with the potential auxiliary.⁹ There is a large number of little monosyllabic auxiliary verbs—*ba* be, *ya* go, *za* come, *ia*, may, wish, ought, *ma* stand (optative), *sa* be realised, *ka* attain, and these give astonishing variety of compound tense and mood, tense being thought as position in the process of the verb rather than in time. The future is expressed by the present of *ya*, followed by the stem with *ku* prefixed. The auxiliaries of the compound tenses are followed by the verbal stem, with the subject prefix attached to it as well as to the auxiliary.¹⁰ The subject prefix may, however, be omitted with the former or with the latter. But though the verb clings so close to the representative of its subject, it has surprisingly little of the subjective realisation. For all its forms which assert, indicatively or with the potential auxiliary, may

¹ Grout, Zulu Grammar, p. 120; Appleyard, sect. 195.

² Appleyard, sect. 196.

³ Ibid. sects. 197–201, 207–212.

⁴ Ibid. sects. 205, 206.

⁵ Ibid. sect. 216.

⁶ Ibid. sect. 241.

⁷ Ibid. sect. 254.

⁸ Ibid. sect. 236.

⁹ Ibid. sect. 265.

¹⁰ Ibid. sects. 241, 268.

also be mere participles, with the exception of the present and perfect indicative, when the subject of these is a noun singular or plural of the first species. Of this alone the subject-prefix is different for the verb and the participle, being in the latter *e-be-*, in the former *u-ba*,¹ the direct object is represented in the verb by an element inserted between the subject-prefix and the stem. For nouns singular of first species it is *m*; for others it is their usual element.²

Monosyllabic verbal stems are strengthened by prefixing *yi* in the imperative, *si* in the present participle, but the latter is not taken after an object infix;³ *-ya* and *-yo* are demonstrative suffixes. The latter is used with the verb of a relative sentence when expressed in one word, and when it contains the antecedent represented as its subject or direct object, or is affected with a relative element which has the force of English *that*; also with the potential participle, as *ndi'nateta* I possibly speaking, to make it more relative to the auxiliary *ndibe* I was,⁴ *ndibe ndi'natetayo*. The element of interrogation is *-na*.⁵

12. Verbs, instead of being connected by the copulative conjunction in the same tense, may show their connection by the first being so carried into the second as to affect its idea. In this way the present and future and the imperative are followed by the present subjunctive; the present indicative may be followed by present participle or aorist; the past tenses are usually followed by the aorist or by a participle; the past potential may be followed by present subjunctive.⁶

13. The subject may either precede or follow the verb; it may come last in the sentence; it generally follows *ti*. When a conjunction precedes, the subject generally goes before the verb.⁷ The adjective follows its noun except *onke*, all, and the numerals and strong demonstratives, and others which may precede. The genitive follows its governor.⁸ The direct object generally follows the verb, but it often precedes it.⁹

14. Features similar to the above may be traced through the Kafir family, diversified, however, by varieties in other respects among the members of the family.

The language of the Biṭuana, who inhabit the tableland of the Orange River, has a harder utterance than that of the Ṭosa and Zulu. It has no medial except *b*, which corresponds to Zulu *v*. Its *t'*, *t'*, *p*, *k* correspond to Zulu *d'*, *z*, *b*, *g*, and it gives up the Zulu nasalizations.¹⁰ It differs from the language of the Ṭosas and the Zulus in being more affected with attention to the nature of things and of facts; it gives less strength to the abstract substance in the noun, and shows less tendency to detach an abstract element from the verb. The prefixes of the noun consequently are less distinct, and the verb does not give off an abstract element of being or doing to combine with an element which refers strongly to it.

Still, however, the genitive, the adjective, the demonstrative pro-

¹ Appleyard, sects. 217-226, 249-251, 265. ² Ibid. sects. 272, 273.

³ Ibid. sects. 278, 279. ⁴ Ibid. sects. 180, 241-2. ⁵ Ibid. sect. 329.

⁶ Ibid. sects. 378-385. ⁷ Ibid. sects. 412, 413.

⁸ Ibid. sects. 424, 431, 444. ⁹ Ibid. sect. 414. ¹⁰ Ibid. p. 51.

noun and the verb take up a fragment of the noun which is connected with them. The components also of the compound nouns may take their own independent plurals.

15. The Kisuahili and the Kinika also, which are spoken, the former along the east coast of Africa, and in the islands, from 1° north lat. to Mozambique, and the latter more inland, from 3° to 5° south lat.,¹ have the same construction, with separable prefix of the noun; though their nouns are still more particularised by the thought of their nature than those of the Biṭuana, having more tendency to take a formative element after the radical part, and therefore particularised by it. From these the Ki-sambala, spoken in 5° south lat., scarcely differs in any grammatical feature.

16. The Oṭi Herero, which is spoken in a south-western region between 19° and 23° south lat., and between 14° and 21° east long., is more vocalic than Ṭosa, and has less development of tense, but in all its characteristic construction it is the same.

17. In the Mpongwe, which is spoken on the west coast of Africa on the equator, the thought of the substance of the noun (Def. 4) is weak, and the prefixes of the noun are consequently much reduced. Moreover, on account of diminished energy of utterance, the prefixes have affected the initial part of the stem of the noun and of the verb, having been in some degree absorbed into it, a nasal of the prefix, or even a short vowel, hardening a soft initial of the stem, and this change remaining though the prefix has disappeared.² The element of personal pronoun also sometimes follows the verbal stem, and the verb has less capacity to involve a sense at once of the subject and of the object. But with these modifications the essential structure of the language is the same as that of the Ṭosa. The prefix of the noun is taken up by the adjective, the pronoun, and the verb, as the medium of concord with the noun, and by another noun which is governed as genitive,³ and there seems to be a tendency to detach from the verb a verbal element *be*.⁴ The diminished capacity of the verb has led to a fragmentary form of expression in Mpongwe which is not in Ṭosa, the verb after having been used with the subject being sometimes repeated with an object direct or indirect.⁵ Here the idea of the verb is broken into two mental acts, a subjective conception and an objective, though these are not so differently thought as to be expressed by different elements.

18. The Dikele, which is spoken more inland, seems to have in its verb less subjectivity, and also less sense of the succession of fact than Mpongwe. But it has more prefixes for its nouns, and through these concord and regimen are expressed.

19. Dualla, at the Cameroons, agrees with Ṭosa in the system of concord and regimen by prefix, though the prefixes of its nouns are reduced compared with Ṭosa, and some of its nominal formations show more particular attention to the nature of objects. Its verbs,

¹ Dr. Krapf's Vocabulary, Preface, pp. iv. vi.

² Bleek, Comparative Grammar, p. 76-79.

³ Grammaire de la Langue Pongué, par le P. le Berre.

⁴ Grammar of Mpongwe, p. 45.

⁵ Ibid. p. 43.

while showing sense of the succession of fact in the verbal elements of compound tense, show also an objectivity approaching that of some of the negro languages in the tendency to separate the verbal stem altogether from the subject, using with the latter a subsidiary verb of general signification.

YORUBA.

20. Passing westward to Guinea, we gradually lose the remarkable structure which distinguishes the Kafir languages, though scattered instances of it occur. But we find the same tendency to break up speech into fine fragments equally strong, though under different forms, in the languages which are spoken there.

In the language of Yoruba, on the western side of the lower course of the Niger, the substance (Def. 4) which distinguishes the substantive idea from the pure verbal idea is so weak that it gets very faint expression. Yet that expression seems to be a trace or remnant of the Kafir prefix. Some substantives indeed have no distinct expression of the substance, being formed by mere reduplication from the verb, as *ped'aped'a*, fisherman, from *ped'a*, to fish; *giga*, height or high, from *ga*, to be high. But in general, the substantives are formed from the verbal roots by prefixing a vowel; and this vowel shows its weakness by its tendency to be assimilated to the vowel of the root.¹ Every word beginning with a vowel is a substantive, and in many the initial vowel is the same as that of a Kafir prefix to similar nouns. Thus, abstract verbal nouns are formed in Yoruba, as in Dualla, by prefixing *i* to the verb; and some of the Yoruba substantives seem to be identical with Kafir substantives, save that the prefix has dwindled to a vowel, as Yoruba *ille*, house, compared with Ṭosa *in ɔlu*, house.² Concrete or particular nouns of action are formed by *a*, which is also a privative prefix and a prefix of the agent. The nouns have no distinction of number; and the substance or thought of the noun, as in the connections of fact, being weak, it is not detached and taken up by an element which has strong reference to the noun, as in the Kafir languages, genitives being connected with their governor by the relative *ti* referring to it, and adjectives with their noun by reduplication.

The adjective in its simple form is predicative, and is reduplicated when attributive to express its embodiment as part of the idea of the substantive object, because in thinking the quality the general idea is not clearly before the mind to think the object at once comparatively with it. It is owing also to a weakness in the act of comparison that the adverb is not clearly distinguished from what it qualifies, but is so far affected by the thought of this, that it is limited in its use to adjectives and verbs of meaning corresponding to itself.³

The Yoruba verb carries out the fragmentary tendency which has

¹ Crowther's Yoruba Grammar, by Vidal, p. 46.

² It is, however, a striking example of the uncertainty of such comparisons that in the language of the Eskimo the word for "house" is still more like Kafir, being *igdlu*. See Kleinschmidt's Grammar, sect. 33.

³ Vidal, Introduction, p. 17; Crowther, p. 11.

been remarked in the Dualla verb, and is liable to break up into two parts, one of which has closer reference to the object than the other. The subjective part comes first and is followed by the object, so that the other part is disconnected from the subject. Even when there is no direct object the verbal stem is of itself apt to break into fragments expressive of different parts of the process of the fact, and having slight connection with the subject; *n* expresses the fact as going on, *ti* expresses completion; they go before the verb.

21. Possibly it is a sense of process which gets obscure expression in the system of tones—high, middle, and low—which is in the Yoruba language. For on comparing the different meanings of the same monosyllable, according as its tone is high, middle, or low, they seem to correspond pretty well to the thought of action or fact in its beginning, middle, or end.¹ The beginning suggests force, the middle mere continuance, the end relaxation of force. Effect, transitivity, cessation, negation, are akin to the end or reversal of force; and ideas of these kinds might naturally be expressed with a low tone. An action proceeding to its effect might suggest also the middle tone; and it is remarkable that when a verb with a middle tone or a low tone governs a personal pronoun as its direct object, the pronoun which is naturally middle becomes high, as if strengthened by the action being thought in transition to it.

22. However this may be, the above-mentioned tendency of the verb to break into fragments produces a separation of elements which from their fineness and their connection of meaning should naturally coalesce with each other. In the Yoruba sentence, the parts have the natural order. The prepositions are nouns or verbs.

(1.) ^{you} *ivo* ^{me} *d'u mi d'è*, you bite me; here the verb is broken into two parts which are separated by the object, though as parts of the idea of biting they are naturally connected. When used separately *bu* means to take a portion, as (2.) *bu isu die fun ommode yi*, cut some yam for this child, and *d'è* means to eat, but in combination they express each only a fragment of the idea of biting. So in the following sentences the verb is broken up into fragments of the process of the fact

(3.) *F'i kinni na le mi l'owo*, deliver (*fi le*) that thing into my hand. ^{put thing that lay me in hand}

(4.) *Nigbati ivo yio ha fi lo ta li o wi fun*, when you were going whom did you tell? ^{when you be about to near put go who? had you speak}

(5.) *Oko ti mo so si eije na o ba a ti*, the stone which I threw at the bird missed it. ^{stone which I}

(6.) *Ille wa yio ti pari ki nwon ki o to wa isin owo won*, the house shall have been completed before they come to ask their payment. ^{house be about to perf. finish before}

(7.) *Adire* ^{fowl}

¹ Crowther, p. 4, and Vocabulary.

move cowry a swallow
gbe owo'kan mi, the fowl swallowed a cowry. The elements of speech also in Yoruba have, as in Kafir, a facility of combination, in virtue of which ideas are expressed by several elements involving relations with transition from one element to another. Thus *alail_{se}* means a guiltless person, and consists of *a* the personal prefix, *l* with, *a* negative, *i* prefix of state, *l* with, *e* prefix of abstract noun, *se* sin; *alail_{se}* an innocent person, *a* the personal prefix, *l* with, *a* negative, *i* prefix of state, *se* sin. In such formations the noun, as in Kafir, retains its prefix, as *e'se*, *i'se*, *i'les_e*, and the combination, though consisting of so many elements, expresses only a natural unit of thought having acquired fusion of its elements by use as it grew by successive accretions.

BULLOM.

23. The Bullom language, which is spoken in a region adjoining Sierra Leone, retains more of the Kafir characteristics. The prefix *i-* is used, as in Yoruba, to form abstract verbal nouns, but these are formed also by *n-*, which is possibly akin to ᵐosa *in*, and by *u-*, which may be a remnant of ᵐosa *uku-* or *ubu-*. The personal element, however, in personal verbal nouns, instead of being a prefix, as ᵐosa *um-*, Sesuto and Dualla *mo-*, is a suffix *-no*, the idea of the person being limited and particularised by the verbal attribute (Def. 4) preceding it, as *toll_i*, to comfort, *toll_{ino}*, comforter. Other nouns have no prefix in the singular, but all nouns take a prefix in the plural, either *a-*, *i-*, *n-*, *si-*, or *ti-*, the plural substance being strong enough to get expression, whether the singular substance be expressed or not. Moreover, the article and adjective take the prefix of the noun to which they refer, except the singular prefix *n-*, which, as it is apt to express the indefinite, is probably less distinctly thought than the others; and when *si-* or *ti-* is thus taken by the article or adjective agreeing with a plural noun, that noun drops it. This shows a weakness in these two prefixes compared with the others; and greater strength with the article and adjective than with the noun, on account of the distinctness which these give. The genitive has not so close a connection with the noun which governs it, as the article and adjective have with the noun with which they agree, and it does not take the prefix of the governing noun, but is expressed simply by the preposition *ha*. The demonstrative pronoun also being thought with weaker reference to it, has less sense of the substance of the noun than the article or adjective. And as the general element expressed by the prefix of the noun is weaker in Bullom than in Kafir, the power which the article and adjective have in Bullom to take up the prefix from their noun shows, as in Kafir, the ready detachment of fragments from the constituents of speech.

There seem to be half a dozen pure prepositions.

The verb in Bullom has less connection with the subject than in Kafir, but more than in Yoruba. In the Yoruba verb the subjectivity is so reduced that it does not penetrate the verb, and the verb is apt

to break into two parts, one of which is more objective than the other; but in Bullom the principal part of the stem is connected with the subject, while it is only an abstract element of process of affecting the object that is sometimes thrown off unconnected with it. The breaking up of the verb in the latter way shows a fragmentary tendency, just as in the former. These verbal elements of process of fact, which sometimes follow the verbal stem, are *ā*, *ē*, and *ō*. The elements of tense are *ri* of the past after the verb, *ka* of the perfect before the verb, *hun* to come, of the future before the verb. Causa-

tives are formed by *-i*, negative verbs by *-ehn*, *-hn*. (1.) ^{he bring it} *u t̄i ā ŋo*,
^{imper. bring me word again} he brought it;¹ *na t̄i ā mi lum pē*, bring me word again.²
^{day the which I come here} (2.) *Inai i tre nan ā moi kaki ō*, the day on which I came here.³
^{he beg alms} (3.) *Woa tum ō buya*, he begged alms; ^{I be drunk perf. spirits} *ā yil ē ri mmoi*, I
 am drunk with spirits;⁴ *na* in (1.) is like Kafir *na* wish; there is
 also a potential *na* used between subject and verb.⁶

There seems to be also a facility of forming compounds by running the parts of a construction each one into the following, if we may judge from the remarkable instance which occurs in the following phrase, ^{wine-drinker not hid} *no-kull ō moi tukēn*, the wine-drinker is not hid;⁷ *no* is the personal element, which is here a prefix like *um-* in Kafir, *kull* signifies to drink, *o* objective verbal element, *moi* wine.

24. The phonesis of the Bullom and Yoruba languages is interesting on account of the African features which are exhibited in both.

The Bullom consonants are *k, g, g', t, d, t, d, p, b, h, y, s, s, w, f, v, r, l, ŋ, n, m*; the vowels are *a, e, i, o, o, u*; the diphthongs *ai, ei, oi, ui*. The Yoruba consonants are *k, g, t', d', t, d, p, b, h, y, s, s, w, f, r, l, ŋ, n, m*; the vowels are *a, e, e, i, o, o, u*; the diphthongs *ai, ei, oi, oi*. In Bullom *h*, when followed by *e, i, o, v*, is a mere aspiration. Both languages have the ante-palatals and nasals which are so usual in Africa, and both have the strange combinations *kp, gb*, pronounced as single consonants, which are found also in Mandingo Vei, and Susu. In Yoruba *p* cannot be pronounced without *k* preceding it;⁸ and there must be some peculiarity in the phonesis which demands this combination so difficult to our utterance. Now, the action of the organs in uttering *p* consists of two parts—the closure of the lips, and the rupture of that closure by a jet of breath sent through it. But the act of closing the lips cannot be in any way facilitated by any action of the tongue against the palate; and it must therefore be the jet of breath through the lips, which requires to be preceded by a jet of breath breaking through a closure between the tongue and the back part of the palate. The breath for uttering the labial, therefore, needs to be compressed in the back part of the mouth, and ejected thence against the lips with a force due to that compression. And the neces-

¹ Nylander's Grammar of Bullom, p. 17. ² Ibid. p. 18. ³ Ibid. p. 69.

⁴ Ibid. p. 61. ⁵ Ibid. p. 67. ⁶ Ibid. p. 25. ⁷ Ibid. p. 69.

⁸ Ibid. p. 1-5; Crowther's Yoruba Grammar, pp. 2, 3.

sity for getting the required pressure of breath in this way shows that it is not supplied, as with us, by pressure from the chest.

A vocalic character is shown in Yoruba, by the way, in which the vowel of the verb affects that of the subject pronoun and the negative which precede it, and that of the object pronoun which follows it, and the vowel of the root that of the prefix. According to the rule which prevails in languages whose vowels predominate over the consonants, an open vowel in the verb in Yoruba opens the vowel of the subject pronoun and negative, and a close vowel closes it. But the third person as object has the same vowel as the verb.¹

WOLOFF.

25. In Woloff, the language of Senegambia, the consonants are, *k, g, t, d, p, b, h, z, y, s, w, f, r, l, n, z, n, m*; *h* occurs seldom; *t, d, p, b*, are apt to be nasalised. The vowels are *a, e, e, i, o, o, u*.

26. In Woloff, the substance of the noun is not noted as a distinct element unless the noun is defined in its position. When the noun is thus defined the object which it denotes is distinguished in the thought of the speaker as present, or near, or not near, or distant. This measurement of mental distance does not denote the object, but only indicates its position in the view of the mind. The object is denoted by another element combined with this, just as in English we may say this here man or that there man, and as the French say *ceci* and *cela*. But in Woloff the element, which is combined with the position of the object, is not a general element which may be used to denote any object, but it is a part of the noun which is used to signify the object. The strong reference to the object has the effect, as in the South African languages, of taking up part of the idea of the object. But Woloff differs from those languages in the weakness of the part which is thus taken up. What is joined to the vowel of position, *i* the present, *u* the near, *o* the not near, *ā* the distant, is merely a consonant, determined, according to rules not easily understood, by the initial letter of the noun—probably by a lost prefix of general signification, for there are only six consonants (*w, m, b, d, s, g*) so used for all the nouns in the language. The syllable formed by putting the proper consonant before the vowel of position is the article which defines the noun. Thus, according to the mental position of the object—

bāye bi, bāye bu, bāye bō, or bāye bā, means the father;
ḍigene ḍi, ḍigene ḍu, ḍigene ḍo, ḍigene ḍā, the woman;
fōs wi, fōs wu, fōs wō, fōs wā, the horse.

That there is in the initial part of a Woloff noun a sense of its substance appears from the noun prefixing *i* in the plural,² for in the plurality it is the objects themselves that are thought rather than their characteristic attributes (Def. 4); number belongs to the substance (Def. 14), but the weakness of that sense of the substance is

¹ Crowther's Yoruba Grammar, Introduction, pp. 8, 9; Grammar, p. 46.

² Roger, La Langue Ouolofe, p. 32.

shown by the plural noun losing the prefixed *i* when it has the article of position. That article then takes *y*, expressive of plurality, for its consonant; and the element of plurality is not strong enough to be expressed also with the noun, thus—

bāye yi, bāye yu, bāye yo, or bāye yā, the fathers.

The weakness of the element of substance appears also in the construction of a noun with a genitive. The genitive relation is expressed by *u*, but there is nothing prefixed to *u* to represent the substance of the governing noun, as in the Kafir genitive. On the contrary, the substance of the governing noun is merged in that of the genitive when both are thought with particularisation, and then the article of

position agrees only with the latter, as *Kōr u bure bi*, the house of the king (see Sect. V. 68). If the genitive be a proper noun it cannot take a particularising element, and consequently the article will then agree with the governing noun, as *dabōr u Per di du dō* or *dā*, the wife of Peter. On the other hand, if a common genitive be not particularised, it loses its substance and becomes an adjective qualifying the preceding noun. The element of relation, *u*, then takes the consonant suited to the preceding noun, like the article of position; and this is in every case the construction with an adjective also, as *ground dry* *sufe su wow*, dry ground, or ground of dryness. The noun thus qualified may also be particularised, as *sufe su wow si, su, sō, sā*, the dry ground, according to its position to the mind.

This weakness of the sense of the substance accounts for the indistinctness with which this element is expressed in Woloff compared with the Kafir languages. And the degree in which it may be detached from the noun in the former shows, when we consider its weakness, as great a tendency to break up thought as appears in the latter.

The demonstrative elements refer strongly to the noun with indication of its position, and they ordinarily take up, as in Kafir, the letter which represents the noun referred to. They are in fact the article of position strengthened by having the demonstrative element *le* subjoined to them, or the article itself, without any addition, put with emphasis before the noun. When, however, the demonstration is stronger, the general demonstrative elements *k* and *l* may be used without taking the characteristic of the noun, but combined with a vowel of position and strengthened with the suffix *le*; *l* being used for things, *k* rather for persons.

The relative pronoun always takes up a fragment of the antecedent, for it is expressed either by the same construction as the adjective, as *sufe su*, ground which, or by the article of position.

The personal pronouns are—sing., *na, ya, nu*; pl., *nu, yaine, nu*.

There are four or five pure prepositions which do not combine with the noun, and three or four pure conjunctions.

27. But the tendency to fragmentary thought is seen most clearly in the Woloff verb.¹ Here too, however, there is a marked difference

¹ Boilat, Woloff Grammar, p. 343-353

between Woloff and the Kafir languages, which causes that tendency to appear in a different form. The verb has less intimate connection with the subject in Woloff than in Kafir. When the subject is one which is fully thought in its own associations so as to be expressed by a noun, or which is connected with other elements that are independent of the verb, the connection between it and the verb is singularly weak in Woloff. In such cases the verb is apt to assume an abstract form in which it stands separate and independent of the subject, thus:—
hare which surpasses malice among animal-s the all it is it go Past tense find
log bi gon-o-muse te roḅ yi yepe de:fḡ:dem'on jeki
 God,

yallo, a hare, which is the most malicious among all the animals, it is that it went¹ to find God, *instead of* went to find God. Even when the verb is preceded immediately by the subject, it may involve so little sense of the subject as to be expressed by a mere root, without any element to denote its inherence in the subject as a being or doing

of the subject; thus—*hare go lie by fountain the reflect*
log dem toḡo fo tene bo di kolate di
 reflect till sun wish sink

kolate bey dḡnto di bogḡ sowe; ² *toḡo* and *boḡo* have perhaps in their final letter a verbal element, but the other so called verbs are mere roots. The reference to the subject which accompanies *kolate* and *boḡo* detaches itself from these in a distinct element *di*. Yet this element is not properly verbal, for it accompanies adjectives also when their reference to their noun is strongly thought. When more adjectives than one qualify a substantive, the latter adjectives are connected with the noun by a mental reference to it which is expressed by *di*, as *horn round the and short*
bedin bu boḡḡnu bi te di gatḡ, the round and short horn.³

This weakness of the proper inherence of the verb in the subject, is a remarkable feature in Woloff; and in consequence of it the verb has less tendency than in Kafir to take up an element of the subject.

28. But in the expression of the verb itself, when it does contain a true element of being or doing, there is great resolution into fragmentary parts.

The verbal element of being or doing has three different expressions *o*, *no*, and *lo*, possessing different degrees of strength according to the need which there is for connection between the subject and the predicate. *O* is used when that need is least, because the subject is most prominent in the thought of the verb, either because the fact is an object of sense, and is conceived in its externals as if with observation of the subject, or because the subject itself is emphasised. *No* and *lo* are used when the subject is less prominent in the thought of the verb. *No* is used to express the element of being or doing in the ordinary verbal formations. *Lo* is used to express it when there is still less association of subjectivity in the predicate, as when the predicate is a noun not already connected with

¹ So this formation is translated by Boilat in his *Grammaire Woloffe*.

² Boilat, p. 402.

³ *Ibid.* p. 42.

the subject by *di*, or when it is a demonstrative adverb. The three elements *o*, *no*, and *lo*, are combined always with the personal pronouns, except in the third person singular, which is expressed only in connection with *o* when the fact is conceived most externally in its outward manifestation. The personal pronoun as subject precedes *o*, on account of its comparative prominence in the verbal formations in which *o* is used; and *o* is followed by what is asserted of the subject. The personal subject follows *no* and *lo*, and these are preceded by what is asserted of the subject, or by the element which connects with the subject that which is asserted of it. Another element *ne voici*, *no voila*, is used to express strong sense of actual fact.

Such is the readiness to detach a fragment of an idea, that if that which is asserted of the subject does not readily coalesce as predicate with the subject in which it inheres, as when it is itself a proper noun, or if there is a strong element of tense in the connection between them, in either case the inherence expresses itself in the particle *di*, and in the latter case *di* takes up the element of tense, which is either *on* denoting the past, or the vowels of position, *u* the proximate past, *ā* the distant past, *o* the future. When the predicate is a noun, and there is also a strong element of tense, *di* is repeated.

Thus with the verbal element *o*. ^{you} *Yene o di Per*, you are Peter; *yene o don Per*, you were Peter; *yene o kon di Per*, you might be Peter; *yene o ne lek_o*, you eat; *yene o no du lek_o*, you ate; *yene o sopp_o*, 'tis you that love.

With the verbal element *lo*—^{we} *Woloff lo nu*, we are Woloff; *Woloff lo nu won*, we were Woloff; *nōnu lo nu sope*, 'tis thus we love; *nōnu lo nu sope won*, 'tis thus we loved.

With the verbal element *no*—^{past} *Don no nu di Woloff*, we will be Woloff; *sop_{on} no nu*, we loved; *don no nu sopp_o*, we loved, emphatic past; *dā no nu sopp_o*, we loved, remote past; *d_o no nu sopp_o*, we will love; *d_o no nu kon sopp_o*, we would love; *d_o n'ā lene m_{on} nak*, I shall be able to deceive them; *n'ā = no ma*, *ma* is I.

Without verbal element—*De nu sopp_o*, it is that we love, *i.e.*, our loving, thought as an abstract fact.

The element *di* is so fine that it cannot be translated. It is a mere element of reference to the subject, yet it is quite detached in the above formations from both subject and predicate. It is capable of different tenses, and may even be divided into two parts, one containing tense, and the other expressing only connection of predicate with subject. The assertion is made by quite a different element, namely, *o*, *no*, or *lo*.

There is also an auxiliary for the perfect, which may be used with verbs of state or condition; as *mos no nu sopp_o*, we have loved. But there is nothing remarkable in this.

MANDINGO.

32. In Mandingo, which belongs to the highlands about the upper waters of the Niger, the substance of the noun is still more weakly distinguished. It is also thought not generally, but as defined by the attributes which form the nature of the noun, and it comes therefore at the end of the noun (Def. 23). The plural element consequently is a termination, *-lu* if the noun ends in *o*, *-olu* if it ends in any other letter. Most Mandingo nouns, however, terminate in *o*; and this *o* is frequently emphatic, and in some cases equivalent to a definite article.¹ It appears, therefore, to denote the object to which the essential attributes belong, that is, the substance of the noun. And yet it seems to denote this, not properly as part of the idea, but in some degree pronominally as directing attention to the object after having thought it. Now, when nouns are joined with adjectives, their final *o* is generally omitted or changed into *e*. The adjective having affinity for the attributive part of the substantive idea, weakens the attention directed to the substance. When a plural noun is qualified by an adjective, the plural element leaves the noun, and is taken by the adjective. Thus, *keo man*, *keolu men*, *ke bette* good man, *ke betteolu* good men. Before the adjective *bey* all, which has not special affinity for the attributive part, the noun and not the adjective takes the plural ending. The adjective is thought in closer connection than in Woloff, with the substantive object, as distinguishing its nature among the objects which the noun may denote. In general, the weakness of the substance in the substantive idea makes it less ready to be separated from the noun. And the noun consequently shows little of the fragmentary tendency.

The noun of instrument is formed by *-raio*, of person qualified with the root by *-ma*, of the agent by *-la*, *-ra*, of the action by *-ro*.

The personal pronouns are—singular, *n*, *i*, *a*; plural, *n*, *al*, *y*. The relative pronoun is supplied in Mandingo by *men*, as *wo* ^{that child I} *diiio* ^{love} *nie* *men kannu*, that child whom I loved.

The adjective follows its noun. The genitive, with postposition *-la*, precedes its governor.² There are four or five pure postpositions, and as many conjunctions.

33. The radical part of the verb is thought so much in its accomplishment among the objects and conditions, and so little in its source in the subject, that it may quite part from the subject; and a direct object always separates it from the subject as a bare root. On the other hand, the element of being or doing, which properly asserts, goes with the subject, as its nature requires (Def. 11), but yet is separate from the subject, though it be so fine an element, and the verb is thus apt to be broken into two parts. In this way, fine verbal fragments come to be used separately from the verbal root, and connected with the subject as the verb of the sentence.

Thus (1.) ^{woman} *unso* ^{child} *ye diidiio* ^{love} *kannu*, the woman loves the child.

¹ Macbrair's Mandingo Grammar, p. 8.

² Ibid. pp. 4, 5, 29, 30.

Now, this formation expresses the fact without any emphasis or any reference to time, for the African languages generally have a verbal formation which expresses fact without reference to time; and consequently *ye* expresses only the abstract relation of subject to object, thought as a doing or being of the subject, yet it is separated as the

verb of the sentence, *Kannu* being a mere root. So also (2.) *a si*^{he} *my father see* I pres. good do
m:fa de, he will see my father; (3.) *n:kare bette ke*, I do good; *kare*^{he}
^{writing do can}

expresses habitual present; (4.) *n:ye safero ke no*, I can write; (5.) *a'te*^{go can to}
ta no'la, he cannot go; *Si, kare, ye, te* are each the verb of its sentence; *de, ke, no* are roots; *te* is a negative verb which takes the infinitive *nola* after it, and this governs *ta* as its object. Sometimes assertion is made by *le*, which is a less subjective verbal element than *ye*, used like Woloff *lo* when the predicate involves less sense of the subject. The verbal root takes *-ndi* to form a causative stem, and *-ta* to express an affection of the subject, which does not tend to an external accomplishment among objects and conditions, but abides in the subject as a particular state of the subject. There is a particle *le*, which, following the verbal stem, expresses completion, and the postposition *-la*, to, subjoined to it, makes an infinitive. The negative is subjoined to subject person.

34. The Mandingo consonants are *k, g, t', d', t, d, p, b, h, y, s, w, f, r, l, ñ, n, m*; the vowels are *a, e, i, o, u*; the diphthongs *ei, oi, au, eu, æ*.

VEI.

35. In Vei, a language spoken in a small region on the coast of Guinea, to the north-west of Liberia, by a people who emigrated thither from the inland probably about a century ago,¹ the consonants are *k, g, d', t, d, p, b, h, y, s, z, w, f, v, ñ, n, m, r*; the vowels are *a, é, e, i, o, o, u*, and the diphthongs *ai, ei, ei, au*, and *ou*. There is a remarkable tendency to put *g* before *b*, usual in African languages, and which indicates weak pressure of breath from the chest. The breath which utters *b* is from the back part of the mouth, and is thrown in a jet over the tongue so as to utter *g*; *h* occurs only in the beginning of a few words.²

36. In Vei there is a vowel *e* subjoined to the noun in taking the plural *-nu*³ which is probably pronominal like Mandingo *-o*, and the elements of relation are subjoined to the noun as postpositions. Of these there are six, which may be regarded as pure elements of relation; and there is the same number of pure conjunctions.⁴

The position of facts in the general succession of fact is, as in Mandingo, more weakly thought than in Woloff, so that there is not such an apparatus of fragments in these languages as in Woloff used to express the various tenses. The verbal stem itself is weakly thought, being sometimes a mere enclitic in the sentence,⁵ and it is

¹ Kölle's Vei Grammar, Preface, p. 3.

² Ibid. p. 14-18.

³ Ibid. pp. 21, 22.

⁴ Ibid. pp. 38, 39.

⁵ Ibid. p. 44.

not so apt to break into two stems as in Yoruba. It is preceded by the direct object. The adjective follows its noun, and a noun is followed by another noun which governs it. In the expression of the fact fine verbal elements are detached, which appear through the sentence as particles distinct from the parts to which they adhere. In Vei such particles are suffixed to the subject or to the verb; some also to the object, direct or indirect, without mingling with these so as to be taken up into the idea of them, but retaining their own individuality in their various applications.¹

37. There are three verbal elements in Vei which supply particles of this kind—namely, *wa*, *na*, and *ra*. These may be compared to the three verbal particles in Woloff—*o*, *no*, and *lo*, expressing the verbal succession of being or doing connected in three degrees of nearness with the subject. Each of these elements appears in Vei under different forms, having different significations according to the openness or closeness of their vowel.

Wa is the strongest expression of the succession of fact. It may be suffixed to any member of a sentence, and gives emphasis to that member as involved in the fact. *We* has less openness of vowel utterance, but still it signifies the being or doing, though less fully than *wa*. When suffixed to the subject, it signifies realisation in the subject going on at the time supposed; when suffixed to the verbal stem which defines the fact, it signifies the process going on at the time supposed. *Wi* has still less openness, and is suited to express the sense of fact reduced in its going on by being past; but it has too much sense of the subjective realisation to denote the remote past or the merely ideal; and it is therefore suffixed to the verb to signify the simple past.

Na has less sense of the realisation in the subject (Def. 11) than *wa*. When suffixed to the subject it signifies the being or doing not in course of realisation, but only ideally in the subject, yet with full movement (*a*) towards realisation so as to denote the future. When suffixed to the verbal stem it signifies the full process of the being or doing of the stem, but not as realised in the subject, and so denotes the infinitive or the present participle (see Def. 13). *Ni* is the same element with close vowel, and expressive, therefore, of less sense of the doing or being. When suffixed to the subject it signifies the realisation in the subject reduced to the merely ideal; when suffixed to the verbal stem it signifies the process of the being or doing of the stem reduced as completely past.

Ra has less sense of the subject than either *wa* or *na*. It expresses the being or doing as thought, rather in arriving at its accomplishment in the verbal stem or predicate than in proceeding from the subject. When suffixed to the subject as *ra* or *a*, it signifies either the full realisation in the subject of the particular being or doing of the verbal stem or predicate, and is used consequently when these precede the subject, or the realisation in the subject of the accomplishment of the stem or predicate, and then denotes the past or present. When suffixed to a verb, *a* or *ra* signifies the accomplishment of what the verbal stem denotes; or it signifies the accomplish-

¹ Kölle's Vei Grammar, chap. x.

ment in the object, denoting that the verb is object or condition of the realisation of another verb, in which use it is of a postpositional nature. In this sense also it may be suffixed to a noun which is direct or indirect object of a verb. And akin to this, but without any verbal motion, is the use of *a* as a postposition, with nouns and pronouns in the possessive relation. *Re* is the same element with closer vowel, and therefore less sense of the movement of doing or being; and as it has so little sense of the subject it signifies, when suffixed to a verbal stem, not realisation in the subject of the being or doing of the stem, but rather the accomplishment of the act or state which the stem denotes, thought not in its process but in its conclusion, not in realisation in the subject, but connected with the subject as a participle or adjective. When suffixed to the subject, *re* signifies the relation of the subject to the act or state, and emphasises the subject as such; and when suffixed to the object, *re* expresses a sense of transition to the object, and emphasises it as such. *Ro* signifies accomplishment with deeper engagement. When suffixed to the subject, it signifies expression or realisation of the consciousness of the subject; when suffixed to the verbal stem it denotes either a participle with continuance, or a verb with repetition. When suffixed to a noun thought objectively, *ro* is a postposition equivalent to *within*.

Besides the above particles, there is also a verbal element *be*, which is intermediate in subjectivity between *wa* and *na*, and which is used as the verb substantive with less succession than *wa* or *na*, because it signifies rather reality than process of fact. It is also used suffixed to the subject to denote a proximate future, whereas *na* denotes a remote future.

Also *i*, which is used in Woloff as a derivative suffix to verbal stems with the signification *go*, is suffixed in Vei both to the subject and to the verb to express a sense of process of being or doing in the thought of the fact. And *ke*, to do or make, is suffixed to verbs to give certainty or emphasis. *Mu* is a suffix which seems to be akin to the demonstrative pronoun *me*. But what it demonstrates, it demonstrates as involved in a fact, as if it consisted of the elements *me* and *wa*. It is used with a predicate when the predicate precedes subject or copula and needs to be signalled as predicate, also when the subject is plural, because, owing to the indefiniteness of the substance (Def. 4), a plural noun is not thought with sufficient facility to coalesce readily with a predicate, and its union is effected by this pronominal reference to the predicate as such. *Mu* also performs the part of a relative pronoun by being suffixed to the antecedent to demonstrate it as involved in the relative clause.

38. Now it is to be observed that though these suffixes are for the most part so fine that they cannot be exactly translated into English, yet they are thought with their own individuality as added elements rather than as parts of one combined thought. Some of them are determined to different meanings according as they are suffixed to subject or verb or object, just as words are determined to different meanings by the words with which they are connected; and this shows that they retain their own significance which in these various

conjunctions suggests these various meanings, that independent significance being a general element, in thinking which the mind leaves the present combination (see 2).

39. *Wa* can be suffixed to any member of a sentence, and expresses what in English is expressed by mere emphasis,¹ as—(1.) *a'berēwa* ^{he himself} woman this give Past me to *musu'mē berēni n'd'e*, he himself has given this woman to me; (2.) *a fania'wa fo wu'ye*, he told you a lie; (3.) *akumu mu a* ^{therefore we him} kill ^{ye not do do} *fa'wa*, therefore we will kill him; (4.) *wu ma ma'ke'wa*, ye certainly (*ke*) did not do it; (5.) *mu be kere'ro'wa*, we are at war. The suffix *wa* expresses a subjoined thought, which in the preceding examples might be rudely represented in English by the word *actually*.

It sometimes stands for a whole fact,² as (6.) *aro d'o a ma?* ^{he said who it do} I said I (*wa*) not thou *n'do, n'ga ma, i'wa*, he said, Who has done it? I said, not I, thou, *i.e.*, thou hast done it. But in every application of it the sense of fact which it expresses is so fine, that it is best translated in English by mere emphasis. Yet that it expresses a secondary subjoined thought, is evident from the above examples. In the last of

them it is suffixed to a noun and postposition, *kere'ro'wa*. Here the noun must first be combined with the postposition, and then the combination is affected with *wa*. *Wa* expresses an additional thought, which, fine though it be, is as distinct as the postposition; for the noun first combines with the postposition and then *wa* is added to affect the combination.

40. *Wē* is suffixed either to the subject or to the verb. When suffixed to the subject it expresses the pure abstract thought of realisation in the subject as going on at the time supposed, as (1.) *a'wē* ^{he} me flog his wife be left there *n'gbasi'a*, he is flogging me; (2.) *a musie'wē, to'a nu*, his wife they also him fight is to be left there; (3.) *anu pere'wē a ke'ra*, they also were fighting him. Here it is to be observed that the stem of the verb which defines the fact takes the suffix *a* or *ra*, which makes it dependent on another verb as an object or condition of the latter. The principal verb of the sentence therefore to which *-a, -ra* refers is *wē*, which is a much finer element than *is* or *were*, by which it is translated; for these include the elements of tense and number, both of which are absent from *wē*, and they also involve the full idea of being, which is a more concrete thought than the abstract sense of fact which is expressed by *wē* or by its fuller form *wa*. But though it be so fine an element, *wē* intervenes between the subject and object in the above examples, as the verb of the sentence, and must as such be thought distinct from subject and object, like the verbal fragments, *ye si te* in Mandingo.

Wē, when suffixed to the verbal stem which defines the fact, signifies

¹ Kölle's Vei Grammar, p. 84.

² Ibid. p. 97.

the process of being or doing of the fact in reference to the succession of other facts, that is, as contemporary with other fact, whether past or

present; as (4.) *wumu dau kerēni ban'ge*, let us consent that the war be now finished, *wumu* is used with imperative, *ni* is subjunctive,

wē contemporary with *dau*; (5.) *mu' i d'i'wāwē Wako'ro*, we are just going down to Wako, *wē* is contemporary with *i*; (6.) *kerē ma be finished (=wē) us between*

bañ · gē mu' tē, the war is not yet finished between us, *wē* is contemporary with the time supposed; (7.) *anu kure ma tāwē kān*

donlo, their word did not yet go one way, *wē* is contemporary with the time supposed; (8.) *mo · mē · nu, bo · a · wē fira · ro*, those

people then came out of the forest, *wē* is contemporary with another fact; (9.) *a · biri banda · wē a · n' mu na*, then at that time we

came, *wē* is contemporary with another fact. In the last example, *wē* is suffixed not to a verb but to a noun, which shows the distinctness with which it is thought; for, in this position, it must contain altogether within itself the succession which is thought as contemporary with the other fact.

41. *Wi* is suffixed to the verb to signify the past or recently past, as *a n'kerēwi dambo · a*, he has called me to a conversation. But it, too, may be suffixed to a noun, being thought with such distinctness that it contains altogether within itself the element of being or doing

which is thought as past, as *musiēwi*, the woman who has been here.

42. *Na* and *ni* involve less sense of the subject than *wa*, *wē*, or *wi*, and are consequently more capable of being quite detached as separate words when strongly thought. Accordingly, *na*, when used with the subject to signify the future, is almost equivalent to the separate verb

na to come, as (1.) *i · na d'a · fēn kurumba d'e · a*, thou comest to see very great riches. When *na* is suffixed to the verb, it expresses the process of being or doing of the verb without realisation in the

subject, but abstractly like the infinitive or participle, as (2.) *a tāba (=ta a'ba) kunēna*, she went to awake her mother; (3.) *u bē*

d'ambi sen'na, he was digging yam; (4.) *wuria na d'i mi'na*, the baboon came to drink water.

In the second and fourth of these examples *na* expresses the movement of *ta* and of *na*, thought as coming to its end or aim *kune*, *mi*. In the third it expresses the process of being (*bē*) thought as in *sen*. In all of them it expresses a distinct thought of the process of the fact.

43. *Ni*, when suffixed to the subject, expresses the realisation reduced to dependence on another fact, or to what is only desired or

we him leave forest in
 supposed, as (1.) *mu'ni a to jiraro*, let us leave him in the forest ;
 you me give I it drink you
 (2.) *wu'ni n'ko n'ni a ni*, give me that I may drink it ; (3.) *wu*
 not us give eat thing ra we it eat we belly be full
ma mu ko dom'jen'da mu'ni a doñ mu bum fa, you did not
 give us food that we might have eaten it and been satisfied ; (4.) *hi a*
 us love we it know she when
mu dia mu'ni a so, if he love us we shall know it ; (5.) *a ku'ni*
 die they her wash they her matter speak
fa an'ni a ko an'ni a ko fo, when she has died they wash her,
 they speak concerning her. *Ni* in the above examples is as abstract
 an element as the *a* of the Latin verb *doceat*, yet it is thought quite
 separately from the verb, so that the object comes between it and the
 verb. And that it is distinct also from the subject is shown by *ku*
 always coming between it and the subject, as in the last of the above
 examples. It is thought in a separate mental act, and with sufficient
 strength to determine the conception of the fact as in an ideal mood.

Ni, when suffixed to a verb, signifies the remoter past, as (6.)
 he self woman this give up me to
a bere'wa musu'me bere'ni n'd'e, he *himself* has given up this woman
 to me. In this use *ni* might be regarded as similar to *vi* in *amavit*,
 but the difference between them is that *vi* is a part of the verb *amavit*,
 but *ni* is not a part of the verb to which it is suffixed, but may be
 separated from the verb and suffixed to a noun. Thus we may either
 they come war with they come war with
 say (7.) *an na'ni kere'ra*, or (8.) *an na kere'ra'ni*, the meaning being
 the same, they came with war. *Ni* is thought so separately from the
 verb that the mind before thinking it may pass from the verb to the
 indirect object or condition. In this case it affects the statement of
 fact like an adverb. And as verbal stems in the Vei language may
 be used also as substantives, so *ni* may be thought independently as a
 substantive, signifying past time, as (9.) *ni koro'koro*, old time,
 war it pass
ama'kere'ni a bañ, the time of the Amara' war is passed.

44. *Ra* and *a* have so little sense of the subject that when they are
 suffixed not to the subject but to a verb which is object or condition
 of the verb of the sentence, they almost lose subjectivity, and become
 rather mere elements of transition like postpositions, signifying the
 relation which the principal verb bears to its object or condition. In
 this use they have no closer union with the verb to which they are
 suffixed than the postpositions have with the nouns to which they are
 attached. These elements are indeed used as postpositions with nouns
 to signify object or condition, just as they are used with verbs in the
 they ni cease war make
 same sense, as (1.) *anu'ni kuru kere'ke'a*, may they cease to make war ;
 they when spend day play do entirely
 (2.) *anu ku'ni tere tomboe'ke'a gben*, when they have spent the day
 my father me give goat
 entirely in playing ; (3.) *m'fa n'ko ba'ra*, my father gave me a

I not thing wrong do thee to

goat; (4.) *m̄ma ko nama ma i'ra*, I have not done wrong to thee;

man go goat

(5.) *kaie ta bara*, the man went with the goat.

Ra or *a*, when suffixed to an intransitive verb, may signify accom-

and they consent

and they

plishment, as (6.) *amo anu daw'a*, and they consented; (7.) *amo a*

all come down

gbi d'i'ra, and they all came down. And in this use it seems to be combined with the verb in one fusion of thought. But it is not so, for instead of being suffixed to the verb, it may be suffixed to the

subject with the same signification of accomplishment, as (8.) *a gbi'a*

run away

thy brother die here

huri, they all ran away; (9.) *i'nomora ja nie*, thy brother died here. And when it is suffixed with this same signification to the

subject of a transitive verb it may be quite separated from the verb

thy guest

thy daughter kill

by the object, as (10.) *ya sundara ya denē ja*, thy guest murdered thy daughter. These examples show that *ra* and *a* are thought sepa-

rately from the words to which they are suffixed, for they have no closer connection with the verb than with the subject; and a sense of

accomplishment, though it may be annexed to the idea of the subject, must be thought separately as an added element. Equally distinct

are they when suffixed to the subject following the predicate, as

person old this it is I ra

child little

(11.) *mo koromu n'da*, I am an old man; (12.) *dem mese*

good very this it is

bre'bamu Siafara, Siafa is a very good little child.

45. *Re* when suffixed to a verbal stem is a participial or adjectival

I fear

this I am

suffix of accomplishment, as (1.) *m'mirinyare'mu Vanira*, I am

person take

they

afraid of Vanira; (2.) *mo birare*, captured people; (3.) *an'da*

plant then it ripe

fai're ke a mo, they have planted, then it is ripe, *i.e.*, they have scarcely planted it when it is ripe. *Re* when suffixed to

subject or object emphasises it as such, as (4.) *i'gare n'a mbe ma*,

I wa I what do

thou them (emphatic) great

I (as an accomplisher), what shall I do? (5.) *Y'anuware kurwa*

thou me small

ya n'doya, them (as object of accomplishment), thou hast made great, thou hast made me small. In all its uses *re* has the significance

of a verbal element, and to retain this with subject and with object, it must be thought quite distinct from both.

46. *I* suffixed to a verbal stem signifies the going on of the being,

he me kill

or doing of what the stem denotes, as (1.) *awe m'farari*, he is now killing me. But this verbal motion may be joined with the subject,

and be quite separated from the verb by the object, retaining still

he woman's

the fulness of its meaning as a distinct element, as (2.) *ari musie'a*

rice eat ra

doi'e dow'da, he has been eating the woman's rice.

47. *Ro* and *mu* express stronger elements of thought than the preceding particles, and their use consequently is less illustrative of the fragmentary nature of the language. (1.) *A fo aye, a'ro, sama* he say him to he say morning when dawn past

kui gberwi, he said to him, said he, when the morning has dawned ; woman go up soap get she mat see she think soap this it is

(2.) *musie ta kan'do sui'e bi'na, a wara d'e a'ro sui'e mu*, the woman went up to get soap, she saw a mat, and thought it was the and she one seek against

soap ; (3.) *amo a dondo gbaw'ro*, and she sought one again ; (4.) *deer be sleeping* I perf. war what bring ye be not

kere be ki'ro, the deer was sleeping ; (5.) *na kere mu bera wu bere* it in

aro, ye are not in the war which I have brought. he

Sometimes several of the suffixes are used together, as (6.) *arwe* me asking past if thou wisdom not know

ntusa'na'warwi, he has been asking me ; (7.) *hi (i) d'irima ma soni*, then lion thee eat wa do

ke d'ara i don'ga'ke'ni, if thou hadst not been wise, then the lion if they ra him catch

would certainly have eaten thee ; (8.) *he an'da (a) bi'ra'ke'wi*, if they had caught him.

48. The Vei language is not only thus distinctly marked with the African characteristic of dividing speech into small fragments, but also all the parts into which it analyses speech enter with remarkable readiness into combination with each other, and are liable to be run each into that which follows, being less grouped by closer combination of the more nearly related elements than they are in the Kafir conception of fact.

To this is due the small degree in which the words are individualised by accentuation. Mr. Kollé says :¹ "In a sentence the accent of individual words gives way to the regular undulation, in which the general flow of speech moves on. The law for this undulation is, that one accented syllable is followed by one or two, rarely three, not accented. The accent seems to serve merely a musical or euphonic purpose in the context, and not the logical one of distinguishing one word from the other. In imperative propositions the accent generally falls on the verb, which circumstance may have so much influence on what follows, as to cause several subsequent words to move in the iambic measure. But, as if not fitting them well, they always soon exchange it again for trochees and dactyls." This musical intonation of speech predominating over the accentuation of the word arises from the lightness with which thought passes through, and the tendency to give expressiveness to the utterance of the whole.

The tendency of the words to be run together appears from the so-called euphonic changes to which the final and initial letters of words are liable from their concurrence with each other. The mutual adaptation of such letters is carried out to such an extent as to show that they come into very close contact.²

49. It also appears from the facility of forming compounds.³ For

¹ Kollé, Vei Grammar, p. 44.

² Ibid. chap. vi.

³ Ibid. chap. vii.

When a predicate is by special emphasis put first, it carries with it a fragment of the copula which has less succession of being, as more immersed in the nominal nature of the predicate. This fragment is *na*, which as a separate verb means *to dwell, to exist*. The particle *na* seems also to be used sometimes after the subject to express the quiescence of the perfect or of a determined state. And *nu*, which, perhaps, is a modification of *na*, follows the subject as the ordinary expression of the past. *Ma*, which as a postposition means *to*, when suffixed to the verbal stem, denotes the continuing present or the future. *Ra* is a verbal element of being or doing supposed or desired, *-re* a suffix denoting realised state or passive, *-nde* and *-de* intensive. And the verbal stem being thought so much in its external accomplishment, and so little in the succession of the being or doing of the subject, needs strong verbal elements to express tense and mood. Such elements are *banta* have finished, *gei* complete, *fata* may, *fa* come. *Ma* to upon, *be* for, and *ra* are used as postpositions.

The following are examples of the fragmentary expression of fact in Susu. (1.) *a fe ra ba*, he thing manage he rise up him he managed the affair; (2.) *a kili a ra*, he him beat stick he rose up against him; (3.) *a a bomba uri ra*, he it take his hands he him beat stick he beat him with a stick; (4.) *a a tonkga a inii ra*, he him make chief I done thing they him make chief they made him chief; (5.) *e a ra fala munkge ra*, make he be house build I am done with working; (6.) *a lu bankri ti ra*, it good it make building the house; (7.) *a nu faie ra*, it was good; (8.) *a ra fala*, it was made; (9.) *a ra fala*, it fill rice and corn it was made; (10.) *a ra fe malun'i ra nu menkge ra*, it thing good it of rice and corn; (11.) *a fe faie na a ra*, it is a good thing; (12.) *muku na a ra*, we it he meet thing good it is we; (13.) *a na ra lui fe faie ra*, I not it do he has met a good thing; (14.) *em na ma a ra ba*, I must not do it; (15.) *fa iē ra em miñ fe ra*, water I drink bring water that I may drink.

The fine elements of thought which distinguish the ideas of verbal nouns from those of the verbs, are in Susu thought so separately from the verbal roots that they are expressed by nouns. Thus the infinitive is the verb followed by *fe*, which means thing, as *a lu be nafuli* he stay here money get be afraid kill *gota fe ra*, he remained here to get money; *gahu fe*, fear; *fuka fe*, murder. So also *se ra fala murei*, thing make persons tighten thing labourers; *balan se*, key; *se* means a material thing, *fe* is more general. These nouns *fe*, *murei*, *se*, &c., follow the verbs in accordance with the genius of the language, which requires that the attributive part of a noun shall precede the substance; and they are less closely connected with the verb than the corresponding elements are in Vei or Mandingo, because the verbal

substantives are thought in Susu with less limitation as defined by the verb, and consequently with more associations; that which is a mere abstract substance in Mandingo and Vei being a substantive in Susu. The whole expression may, however, be joined together as one word. For though "the Susu language consists of short words, they may be compounded so as to make very long ones." A noun precedes another noun which governs it; the adjective follows its noun; the direct object precedes the verb.¹

OTI.

51. The Oti language, which is spoken along the greater part of the Gold Coast, and inland in Asanti, and as far as the river Volta, bears traces of affinity to the Kafir languages. In it substantive objects are denoted with more expression of the substance than in any of the preceding languages of West Africa, except the Bullom. It has three prefixes of singular nouns, *o-*, *a-*, or *ε-*, and *n-*, *m-*, or *ñ-*. *O-* generally indicates life or spontaneous activity,² *a-* inanimate or abstract individuality,³ *n-*, *m-*, or *ñ-* the non-individual or collective,⁴ but many nouns have no prefix.⁵ In the plural, nouns with prefix *o* generally change *o* into *a*, which seems to correspond to Kafir *aba-*; some change *o* into the nasal; and nouns with prefix *a-* generally change *a* in the plural into the nasal. Nouns with nasal prefix undergo no change in the plural; but some nouns without any prefix in the singular take the nasal prefix in the plural.⁶ Personal nouns derived from verbs or from nouns take a formative suffix *fo* or *ni*, the latter expressing personality more strongly than the former, but both having great distinctness.⁷ The element of life when strong gets such strong expression in the personal suffixes *-fo* and *-ni*, that the prefix *o-* is proportionally weakened, so that it is liable to be dropped when it follows closely on another word.⁸ There is also a prefix *ε* not belonging to any particular category of nouns, but denoting only that the word is a substantive, and expressing, therefore, a mere general sense of substance. But this is so weak that it scarcely appears except at the beginning of a sentence.⁹ In the plural *-ni* is changed into *-fo*, but *-fo* is retained without change. Many nouns are the same in singular and plural.¹⁰

The element of plurality in Oti seems to be weak, for the nasal prefix cannot be regarded as expressing a proper sense of plurality. It must express in the plural the same element of thought as when it is the prefix of a singular noun, which is thought as collective. So also, *-fo* as plural-ending of a personal noun whose singular ends in *-ni*, cannot be distinguished from *-fo* as the singular ending of nouns of weaker personality, but is used in the plural because in the plural the differences of the individuals reduce the common personality. It is this reduced personality and not the

¹ Brunton's Susu Grammar, pp. 37, 38, 43.

² Riis, Oti Grammar, sect. 30.

³ Ibid. sect. 28.

⁴ Ibid. sect. 27.

⁵ Ibid. sect. 31.

⁶ Ibid. sects. 92-94.

⁷ Ibid. sect. 33.

⁸ Ibid. sect. 25.

⁹ Ibid. sect. 31; Christaller, Asanti Grammar, sect. 35.

¹⁰ Riis, sect. 94.

manifold individuality that *fo* expresses. And the true plural element of manifold individuality has little place in the language.

The weakness of the connections of the members of the sentence appears in the prefix of the noun not being used in concord and government. The only instance in which this takes place is the stronger demonstrative pronoun *yi*, which takes *o-* when it refers to a person, and *e-* when it refers to a thing;¹ and this shows great strength of reference to the noun in the demonstrative pronoun.

52. The weakness of the prefix is probably the cause of its usually having the low tone.² But the significance of the tones, high, middle, and low, which are in the Oti language is excessively obscure. They seem to correspond to the varying strength of the thought of the successive syllables, whereas the accent corresponds to the strength of the thought of the word (Def. 27). If this be so, it is an indication of the degree in which the thought of the word is resolved into parts; while the many changes which the tones of words undergo in the connections of speech indicate the partial minglings whereby some elements are strengthened, and strength is taken from others.³ These tones and changes of intonation prevail extensively in the African languages.⁴

The intonation of verbs in Oti corresponds in some degree with what has been said of Yoruba intonation (21); but the progress of action or fact, instead of having the middle tone, may be thought as the beginning continually renewed, and have the high tone; and completion, instead of being thought as cessation, and expressed with the low tone, may suggest the force of accomplishment and take the high. Negation also may think strongly that which is denied.⁵

53. A particle *-ni* is used for the copula, when the predicate is a substantive or adjective and precedes. The inversion of the sentence is due to emphasis on the predicate; and *ni* seems to refer like a demonstrative to the predicate to connect it with the subject; as my charm my eye
me suman ni m eni, my eye is my charm.⁶ If, however, *ni* is nominal it does not illustrate the fragmentary nature of the language like other verbal particles.

The Oti verb has less attraction for the subject than the Kafir verb, though more than that of any of the preceding West African languages except Bullom. In verbs which are formed from nouns in Oti, the subjectivity cannot so penetrate the nominal stem as quite to make it a verbal stem; but a verbal particle is used with the subject and followed by the stem, as *ti* is used in Tosa and Zulu before stems which have lost their verbal nature. In Oti, however, the stem has less connection with the subject than in Kafir, for it is preceded by the object, where there is one, and is thus quite separated from the subject. In this case the object is probably to be regarded as the

¹ Riis, Grammar, sect. 113.

² Christaller, sect. 48.

³ Ibid. sects. 49, 97.

⁴ Schlegel, Ewe Sprace, p. 6-8; Zimmermann, Gã Grammar, p. 5; Hahn, N. ma, p. 23; Appleyard, Kafir, sect. 68; Endemann, Sotho, sects. 41, 42.

⁵ Christaller, sects. 95-97.

⁶ Riis, Grammar, sect. 114.

object of the verbal particle, the stem being thought as an accessory noun; for the rule of the language is that the object follows the verb.¹ If this be so, then the verbal particle is the verb of the sentence; which accords with the fragmentary tendency of African speech. Thus *a'gwa* means a seat, and hence a seat in the market, and from this is formed the verb *di'gwa*, to trade, which is thus constructed

he cloth

with an object; *o'di entama gwa*, he trades in cloth (he does cloth in trade); here *di*, a particle expressing fact so abstractly that it cannot

be correctly translated, is the verb of the sentence.² So also in *mi*

pl. year ten

hunger me he

di em'fria edu, I am ten years old; *okom di mi*, I am hungry; *otu*

him

no fo, he exhorted him, *tu'fo* meaning to exhort.³

54. Oṭi takes less interest than Kafir or Woloff in the position of the fact in time, for it thinks with less interest the accomplishment of what the verbal stem denotes, or the succession which this involves, and it has less tendency to develop verbal fragments for the expression of tense, or for the modification of the verbal stem. It is less determined by the object and more by the subject than Mandingo, Vei, or Susu; but its verbal fragments are more relative to object and condition than those of Yoruba. And the repetition of the first person and sometimes of other persons with the fragments is a striking feature, showing the strength with which the thought of the subject is carried through the sentence.

Thus in Oṭi, when the verb involves the thought of change of place or continuance in a place, this reference to place detaches from the verb a verbal fragment expressive of the relation. Such fragments are not to be confounded with prepositions, for they are used also singly as verbs; and, moreover, they precede their object, whereas prepositional relations in Oṭi follow their object as postpositions.⁴

As a separate verb, *vo* means to have or to be in a place; (1.) *aberriki*^{goat} have pl. horn he house in *vo m'meñ*, the goat has horns; (2.) *o'vo duim*, he is in the house.

As a verbal fragment *vo* expresses locality; (3.) *m'a'gyaw me poma vo*^{I per. leave my stick} his house in *ne duim*, I have left my stick in his house; (4.) *mi'vo unamfo*^{I have pl. friend}

bebrì vo kru yi'm, I have many friends in this town. As a verbal

particle *vo* is too fine for translation.⁵ As a separate verb *fi* means to

come forth, to send forth; (5.) *ensu ni mogya bebrì e'fi*,^{water and blood much it come out} much water and blood run out. As a verbal fragment *fi* expresses verbally

the relation from; (6.) *enarra na m'aba fi akurā*,^{yesterday I per. come plantation} yesterday I

came from the plantation. *Na* is a demonstrative which emphasises *enarra* by the demonstrative *n*, while it connects it with the rest of

¹ Riis, Grammar, sect. 181.

³ Riis, Vocab. s. voc. *di*, *tu*.

² Ibid. sects. 44, 163.

⁴ Riis, Grammar, sect. 134.

⁵ Ibid. sect. 143.

the sentence by the transitional element *a*; (7.) *o're'ba fi Kumasi*, he is coming from Kumasi. When *fi* comes first it is quite a verb; ^{he pres. come}
 (8.) *mi'fi Kumasi na mi're'ba*, from Kumasi I am coming; ^{I dem. I pres. come} (9.) *o'ji*
^{tree on he fall down} *dua so o'jye fum*, he fell down from the tree.

As a separate verb, *ko* means to go; ^{I go} (10.) *mi'ko Akropoñ*, I go to
^{you fut. go dem. I but I fut. stay here} Akropoñ; (11.) *wo'be'ko na mi de m'e'tra ha*, you will depart, but
 I shall stay here. As a verbal particle *ko* expresses verbally the relation
^{he drive sheep pen in} to; (12.) *o'ka eikwan ko daw'm*, he drove the sheep into the pen;
^{they tie his hands his back} (13.) *vo'kekyirre n'ensa ko n'eki*, they tied his hands behind his back.
 The verbs *ba* to come, *to* to throw, *gu* to pour, *ta* to pass through, and
 others, are used in the same way as verbal particles to express verbally
 corresponding varieties of relative motion.¹ Other relations
 detach fragments from the verb in the same way. Thus, as a
^{he fut. give} separate verb, *ma* means to give, to cause, to let; as (14.) *o'bema*
^{thou dress} *wo entama*, he will give thee a dress; ^{poverty dem. cause freeman} (15.) *ohia na ma ode'ze*
^{become slave} *ye akoa*, poverty causes a freeman to become a slave; ^{let} (16.) *ma*
^{it stay there} *n'tra ho*, let it stay there. As a verbal particle *ma* expresses verbally
^{he lamentation his brother} the relation, for (17.) *o'di eikomo ma ne nua*, he laments for his
 brother.²

When a sentence involves two objects, a direct object and an
 indirect, or when it involves a direct object and a condition, the
 diversity of the two relations is apt to break the verb into two parts.
 The verb *de*, to take, to use, is then employed as a verbal particle
 governing the direct object, and the principal verb governs the
 indirect object or condition. But if the condition be the instrument,
^{sun light} means, or material, it goes with *de*. Thus: (18.) *airua de kannea*
^{and warmth give earth} *enni ahuhuru ma asāse*, the sun gives light and warmth to the
^{I my hand I put my pocket in} earth; (19.) *mi'de m'ensa mi'ze me kotokum*, I put my hand into
^{he him sit horse on} my pocket; (20.) *o'de no tra poi'ko so*, he seated him on the horse;
^{he hook he cut tree arm} (21.) *o'de alarre o'tu dua basa*, he cut off a branch with a hook;
^{they leather dem. make bag} (22.) *vo'de ehuma na pan kotoku*, of leather they make a bag.
^{pl. masons} Sometimes *de* is repeated with the principal verb; (23.) *a'bantofo de*
^{pl. stone and mud dem. they build house} *abo ni dote na vo'de to abañ*, the masons build a house

¹ Riis, Grammar, sect. 196; Christaller's Grammar, sect. 109.

² Riis, Grammar, sect. 146; Christaller's Grammar, sect. 117.

of stones and mud. In the following sentence the verb is broken into three parts; (24.) ^{goat} *aberriki* ^{have pl. horn rel. he} *vo m'mei'a o de* ^{fight defend himself} *ku gye ne'hu*, the goat has horns with which he defends himself;¹ the relative element *a* goes with the antecedent, connecting it with the relative clause.²

Other verbs, *fa*, *gye*, *yi*, of similar signification to *de*, are used like it with the instrument, means, or material.

The verb is broken to express the manner or the part of the process in which it is thought; ^{I come} ^{do} (25.) *me'ba me'be'ye*, I come to do, when the coming is thought as previous to the action; ^{I go} ^{do} (26.) *me'ko me'ko'ye*, I go to do, when the going is thought as previous to the action; (27.) ^{get} *mi'nā me'ye*, I am on the point of doing; (28.) *mi'fi me'ye*, I begin to do; (29.) *me'da'so me'ye*, I continue to do; (30.) *me'ye me'k'e*, I do for a long time; (31.) *me'k'e me'ye*, I delay doing; (32.) *me'ye mi'wie*, I do completely; (33.) *me'sai me'ye*, I do again; (34.) *me'tā me'ye*, I do often; (35.) *mi'hintaw me'ye*, I do secretly; (36.) *me'nam'so me'ye*, I do straightforwardly. And a direct object may break a verb by virtue of its close connection with the first part of the process of the fact, as (37.) ^{take him} *mi'gye no mi'di*, I believe in him; ^{I (perf.) touch food} (38.) *m'a · kã aduan* that I (perf.) examine ^{hide} *no m'a · fi'e*, I have tasted that food.³

55. With those broken verbs it is only the first person singular that is repeated as subject, the other persons are used only with the first part;⁴ but see example 21.

Now it is to be observed that when the verb is broken into parts which are thought each with its own subject, even when the subject remains the same, there is a fracture of the sentence also into fragments; and this fracture of the sentence is more complete when the fragmentary verbs have each its own object as well as its own subject. The above examples, therefore, illustrate the fracture of the sentence as a consequence of the fracture of the verb, and show also how readily such fragmentary sentences join on to each other, standing side by side without any connective or transitional element.

56. This African tendency of the parts into which speech is analysed to coalesce without mingling with each other till use has fused them into a single idea is seen also in the compounds which are formed in OŪi.

Thus a noun coalesces with another noun which it governs in the genitive, or with an adjective which agrees with it, and forms a compound noun; and a verb coalesces with a postposition which qualifies it adverbially, and forms a compound verb. "And such

¹ Riis, Grammar, sects. 201, 202.

² Christaller, Grammar, sect. 108.

³ Ibid. sect. 110.

⁴ Ibid. sect. 245.

compounds may be referred to a syntactical combination in which they originate."¹ They are generally accented as simple words.² The second component noun generally drops its prefix; and the whole compound frequently takes the prefix *a*.³ Compound nouns may consist of components which themselves are compound.⁴ Some compounds in forming their plural inflect both components.⁵

57. The following features of the Oti language also are to be noted. The consonants are *k, g, k', g', t, d, p, b, h, x', y, s, w, f, r, ñ, n, m*; *w* is very lightly uttered. Two mutes cannot concur, but a mute may be followed by *r*. A syllable can never end in a mute, nor a word in any consonant except *n* or *m*. A word cannot begin with *r*; *k, g, h, ñ* are frequently joined with *w*, or very short *u* after them before *a*, and in Fante before *e, e, i*; *w* subjoins *y* before *e, e, i*; *kwy, gwiy, hwy* become respectively *twy, dwy, fwy*.

The grammarian distinguishes nine vowels—*a, e, i, o, u, e, o, e, u*. Diphthongs are formed by a principal vowel, and an accessory *y* or *w* which is heard as the mouth is closing again; and this may also follow a combination of two vowels.⁶

The language has a palatal and nasal character, and the utterance is light and quick.⁷

The vowels are sounded either long, short, or intermediate in length; they are also nasalised.⁸ The accent in dissyllables falls on the radical, but it is attracted by a long vowel or by a final syllable ending in a liquid. In polysyllables it tends to the ultimate or the penultimate.⁹

58. Diminutive nouns are formed by *-ba*, child, generally reduced to *-wa* or *-a*, and which combines with the primitive like an adjective compounded with a substantive. Diminutives often take *a*, though the primitive noun has it not.¹⁰

Reduplication makes verbs frequentative or intensive. Sometimes also in adjectives it expresses intensity of meaning. But sometimes it only makes an adjective attributive instead of predicative, the reduplication expressing the attribution of the adjective to the substantive. This is sometimes expressed by the relative prefix *a*-, or by the suffix *-u*, which, perhaps, refers to the noun like Kafir *-yo*. Reduplication sometimes denotes the diminutive, being a special instance of the noun.¹¹

The adjective follows the noun, and does not form a plural. There are few adjectives, and no forms for the degrees of comparison.¹²

59. There is neither passive nor causative form;¹³ a verb thought transitively must have an object. The object follows the verb. The same verb may be used transitively and intransitively, the object making it transitive.¹⁴

The person elements of the verb are—singular, *mi-, wo-, o-*; plural,

¹ Riis, Grammar, sect. 51.

² Ibid. sect. 60.

³ Ibid. sect. 62.

⁴ Christaller's Grammar, sects. 8, 39.

⁵ Riis, sect. 93.

⁶ Ibid. sects. 10-12; Christaller, sects. 1-15.

⁷ Riis, sects. 1-5.

⁸ Ibid. sects. 6.

⁹ Ibid. sects. 13, 14.

¹⁰ Ibid. sect. 36.

¹¹ Ibid. sects. 38-40, 96.

¹² Ibid. sects. 95, 96, 204.

¹³ Ibid. sects. 68, 174.

¹⁴ Ibid. sects. 65, 186.

ye-, mu-, vo-. When prefixed to the simple stem of the verb they form a tense indefinite as to time. In the perfect tense they take *a, ma-, wa-, va-, ya-, mua-, va*. In the present they subjoin *re* to express the going on; in the future *be*, meaning come. When the verb is immediately preceded by its subject it has no person element. The negative *n* is inserted immediately before the verbal stem; and frequently the perfect of negative intransitives adds final *i*.¹ The potential also inserts *n* after the persons.² There is no subjunctive.

60. Pronouns, both personal and demonstrative, are strengthened by a demonstrative suffix *-ara*; *-aikasa* is a suffix of the personal pronouns denoting self; *kasa* means to speak; *-hu* is reflexive, it means the visible outside; *-de -deca*, suffix of possessives, mine, &c., may follow *aikasa, maikasa, deca*, my own. When the third person, *o, e-*, is subject separate from the verb, it takes *-no* for male or female, *-yi* for neuter, *yi* being a stronger demonstrative than *no*; ³ *-na* emphasises any member of a sentence, and generally brings it to the beginning of the sentence.⁴

The relative pronoun is supplied by *-a* suffixed to the antecedent, that it may be carried into the consequent clause, as *ne'a ovo a'ka*
 dem. serpent perf. bite
 him he fear worm

no o'surro sunsoi, he whom a serpent has bitten fears a worm.⁵

Interrogation is expressed by *-n, -na*.⁶

61. The postpositions are almost all substantives; ⁷ *mu*, the inside, or in, generally drops *u*, and when it affects a noun qualified by an adjective, it is to the adjective that *-m* is attached.⁸

The subject precedes the verb, the substantive its adjective.⁹ The genitive precedes its governor, and combines with it.¹⁰

The relations of sentences are scantily expressed; *-a* subjoined to a clause correlates it with what follows, sometimes as a co-existing condition of what follows.¹¹

GÃ.

62. In Gã, the language of Accra, the noun involves a stronger sense of its substance than in Oti, and plurality is more distinctly thought. But substantive objects are conceived with more interest in the general associations of their nature, so that the formative element of the noun tends more than in Oti to follow the radical part as defined by it, and the system of prefixes is less developed.¹² Moreover, this substantive part itself tends to be thought as belonging to a class; and the article is much used to particularise individuals. The verb also, though closely connected with both subject and object, has in it less of the very being or doing of the subject; but is thought with such small subjectivity that in some verbs the stem is pluralised

¹ Riis, sects. 70-80, 180.

² Ibid. sect. 81.

³ Ibid. sects. 106-113.

⁴ Ibid. sect. 158.

⁵ Ibid. sects. 219, 220.

⁶ Ibid. sects. 156, 158.

⁷ Ibid. sect. 135.

⁸ Ibid. sect. 136.

⁹ Ibid. sects. 159, 204.

¹⁰ Ibid. sect. 205.

¹¹ Ibid. sects. 222-226.

¹² Zimmermann, Gã Grammar, p. 22.

by a plurality of subjects or by a plurality of objects (Def. 14). With the exception of these differences, however, and what they involve, the whole structure of the language is like that of the Oti. The verbs and sentences are broken in the same way, and compounds formed similarly.¹ Thus, *bo ke le ke nakai sane le ke mi ye*
 my room art in fore near year art
mi'u le mli ne se afi le, thou and he told me this history
 last year in my room.

EWE.

63. The Ewe, which is spoken in Dahomey, thinks its verb perhaps more in its accomplishment than Oti, and, consequently, negatives it with greater strength; the personal pronouns taking their separate form before the negative particle *me*, and the predicate being further negated by the suffix *-o*, because otherwise there would be too strong a suggestion of reality. But all the structure which is characteristic of Oti prevails equally in Ewe.

HOTTENTOT (NAMAQUA).

64. The speech of the Hottentots, though peculiar in many respects, yet agrees with the genuine African languages in showing a highly fragmentary character; and has certain coincidences with some of the negro languages in its structural elements.

It differs from them all in distinguishing gender in its nouns. In this respect it agrees with Egyptian, and also, though less closely, with Bari and Galla, for these also have grammatical gender.

The Hottentot substantive is remarkable for the imperfect way in which it is distinguished from other parts of speech, that distinction not properly penetrating the idea, but the substance being felt as an added element. That element, moreover, is a personal suffix, used also with verbs as person ending, and may change as with verbs, so far as the substantive is capable of being thought in the first or second person as well as in the third,² as I a man, or I the man, thou a man, or thou the man, &c. There is nothing to distinguish the stems which take the suffix as nominal or verbal stems.³

The gender of a noun, too, may change according to the object to which it is applied, the personal suffix changing accordingly, for it is by it that the gender is expressed. Thus water in general is of the common gender, water of baptism is feminine, water as a river is masculine; belief is common, a special belief, as the Christian, is feminine; tree is feminine, tree as a piece of timber is masculine; fire is feminine, fire of hell is masculine; day is common, day as a special day is feminine, as a feast day is masculine; bone is common, bone special, as of the arm, is feminine, bone used as pipe for smoking

¹ Zimmermann, Gã Grammar, p. 105.

² Wallmann, Namaqua Sprache, sect. 47.

³ Ibid. sect. 43.

is masculine. In many cases it is at the will of the speaker to give to a noun the gender which suits his thought.¹ Collective nouns in the singular are feminine, in the plural form they are common.²

In the personality of its conception of substantive objects the speech of the Hottentot surpasses all other languages, though that personal substance does not thoroughly penetrate the substantive idea.

The substantive has, like the personal pronoun, three numbers—singular, dual, and plural, which are expressed in the corresponding personal suffixes.

There is no expression of definite or indefinite article with the noun. The personal suffix of the noun is sometimes omitted, but this does not mean that the noun is thought indefinitely. It occurs either when two substantives are so closely connected that they are thought as one object, the personal suffix being used only with the last, or when a substantive is predicate of a proposition which has a personal pronoun for its subject, the personal pronoun then sometimes absorbing, as it were, into itself the personal suffix of the substantive.³

There is no affix used with substantives to express relations of case. The genitive, which as a rule precedes its governor, takes a lighter form of the personal suffix, unless when it is followed by the particle *di* between it and its governor. Sometimes the genitive follows its governor; but it is then followed by *di* prefixed to a personal suffix, which represents the governor.⁴

65. There are simple postpositions to express on, to, of, from, with, by, in, against, and compound postpositions formed of these and nominal or pronominal stems;⁵ but most of the postpositions may be reduced to verbal stems,⁶ and some of them when governing a personal pronoun take, like verbs, the object as a personal suffix,⁶ the suffix then, if singular, having a special form.

There is a good supply of conjunctions, and the greater number of them follow the clause which they govern.⁷

66. Adjectives are formed by *-sa = -ly, -y, -able*; *-si = -ly, -y*; *-ka = -ful, -ly*, less frequently by *-re = -ly, -ro* diminutive, *-t'ama = -some, -o = -less*. There is no adjectival expression of degrees of comparison.⁸ The adjective goes before its noun, and neither then nor when it is a predicate has it a personal suffix. But if, as sometimes happens, it follows the noun, it takes the same personal suffix as the noun; so always *hoa = all*.⁹ Adverbs may be formed from any stem of verb, noun, or adjective by subjoining *-se*.¹⁰

67. The personal suffixes which play so great a part in the structure of the language are the following;¹¹ those rows of each person which are marked objective are used only with verbs and prepositions for the personal pronoun as governed by these.

¹ Wallmann, Namaqua Sprache, sect. 49.

² Tindall's Grammar of Namaqua, p. 17.

³ Wallmann, sect. 48.

⁵ Hahn, Sprache der Nama, sect. 74.

⁷ Ibid. sect. 61.

⁹ Ibid. sect. 52.

⁴ Ibid. sect. 50.

⁶ Wallmann, sect. 59.

⁸ Wallmann, sects. 45, 46.

¹¹ Ibid. sect. 27.

¹⁰ Ibid. sect. 65.

	1st Person.			2nd Person.			3rd Person.		
	Mas.	Fem.	Com.	Mas.	Fem.	Com.	Mas.	Fem.	Com.
Sing.	<i>ta</i>	<i>ta</i>	<i>ta</i>	<i>t'</i>	<i>s</i>	<i>s</i>	<i>b</i>	<i>s</i>	<i>i</i>
	<i>ti</i>	<i>ti</i>	<i>ti</i> objec.	<i>t'e</i>	<i>se</i>	<i>se</i>	<i>ba</i>	<i>sa</i>	<i>a</i>
				<i>t'i</i>	<i>si</i>	<i>si</i> objec.	<i>bi</i>	<i>si</i>	<i>i</i> objec.
Du	<i>k'om</i>	<i>im</i>	<i>im</i>	<i>k'o</i>	<i>ro</i>	<i>ro</i>	<i>k'a</i>	<i>ra</i>	<i>ra</i>
Plur.	<i>ge</i>	<i>se</i>	<i>da</i>	<i>go</i>	<i>so</i>	<i>do</i>	<i>gu</i>	<i>ti</i>	<i>n in</i>
							<i>ga</i>	<i>te</i>	<i>na</i>

The suffix *t'*, *s*, *b*, *i*, *gu*, *ti* and *n* are lighter than those in the row below them; they do not involve so open a vowel as an element of reference to a connected object of thought,¹ but combine of themselves as the person ending does with the verb and the genitive with its governor when *ni* does not intervene (64).

The personal suffixes are used not only in the formation of substantives, as has been said, but also in that of pronouns, both personal and demonstrative. The roots of the personal pronouns to which the

proper suffixes are subjoined are *ti* 1st. sing. 1st du. and pl. *si* 2nd. 3rd. *sa*, *ḡēt*. The first person dual and plural may take *sa* for its root instead of *si* to include the

person spoken to; thus *sik'om sige* are exclusive, *sak'om sage* are inclusive.² Possessive pronouns are formed by subjoining to a root *ā* the personal suffixes, as if *ā* were a relation of possession with person endings, referring to the noun. They follow the noun, those only of the first person taking the suffix of the noun. The demonstrative roots are, *a*, which is weaker than the others, *ne* this, *nou* *ḡna* that, *ni* each, *k'a* the same, *ḡnati* such.² This last is compound; and *tare*, this, seems to be formed from *ta* with the adjective element *re* (66); *tare* and *tareta* are also interrogative, as well as *ma*; ³ *ta* and *ia* are used without personal suffix for the relative pronoun.⁴

68. With verbs the personal suffixes are used as person endings only when the subject is a pronoun which is not otherwise expressed. The pronoun is thus suffixed in short energetic speech;⁵ the verb being then thought more objectively in its accomplishment, and embodied in its subject like a noun. Relative sentences, also, and conjunctive sentences with the conjunction at the end, subjoin the person to the verb;⁵ for in these the fact being the object of a relation, is thought less subjectively and more as embodied in its subject, like a noun in its substance.

When the conjunction is not at the end the thought of the relation is not carried through the fact, but combines only with a sense of inherence in the subject, and it begins the sentence with the personal suffix which represents the subject even though the subject immediately follows; thus, *k'oiba ma*, the man give, *t'iv b k'oiba ma*, and the man give, *ḡēiba ma*, he give, *t'iv b ḡēiba ma*, and he give.

¹ Hahn, sect. 14.² Wallmann, sect. 30.³ Ibid. sect. 33.⁴ Ibid. sect. 32.⁵ Ibid. sect. 36.

Nor is it only a conjunction which thus takes the person of the subject. An object or condition belonging to the sentence and standing at the beginning of it attracts the personal suffix in the same way, taking up as an abstract sense of inherence or embodiment in the subject a thought of the fact to which it belongs. Such is the tendency to think fact as embodied in its subject.

69. The tenses are, the present, the abstract past or present, the past continuing in the present, and the future. The present is expressed by the verbal stem itself, the abstract past or present by *ge*, the continuing past by *go*, the future by *nī*. The element *ge* is used also as present copula with a predicate. As an element of tense *ge* is taken by Wallmann to signify the completed past,¹ by Hahn to signify the present;² it probably signifies both.

Thus in the Bari language, mentioned above (64), which is spoken on the White Nile, the division of tense is into the completed, which may be past or present, and the not-completed, which may be present or future, and the element of the former *a* is also used as copula. In Hottentot there is also a copula *a*, which, however, is used only in ideal or subjunctive present propositions.³ The Hottentot element of the continuing past, *go*, appears in Kanuri, the language of Bornu, as the element of the past.

The signification of these Hottentot elements of tense is thus given by Wallmann,⁴ *k'oiba ma*, the man gives; *k'oiba go ma*, the man has given and gives still; *t'ī'n go k'oīna ma*, and the men have given and give still; *tita ge ma*, I gave; *k'oiba nī ma*, the man will give. There is also a compound conjugation, which he thus describes:

"In connection with the verb, the copula *ge* forms the compound verb, so that it goes before the verb in all its temporal and modal characters, and separated from it, as *k'oib ge ma*, the man gives; *k'oib ge go ma*, the man has given; *k'oib ge nī ma*, the man will give. This compound conjugation is used quite promiscuously with the simple one"⁵—that is, without difference of meaning. In the simple

conjugation, *tita ge ma*, or *mata ge*, I gave. In the compound conjugation, *tita ge ge ma*, I gave.⁶

It seems the most natural interpretation of these expressions to take *ge* as denoting fact in the abstract, and as applied to the completed, because this is thought as simple fact. But though used in this sense for the completed, it may also be used with the continuing or the future, when these, instead of being thought simply, are thought as the fact of a continuing act or state, or the fact of a future act or state.

Hahn gives a construction which is not to be found in Wallmann, see I *mūta ge go*;⁷ and if there is such a construction in the language

¹ Wallmann, sect. 35.² Hahn, sect. 42.³ Wallmann, sect. 38.⁴ Ibid. sects. 36, 39.⁵ Ibid. sect. 38.⁶ Ibid. sect. 39.⁷ Hahn, sect. 50.

it expresses the continuing past of the fact of my seeing. Wallmann gives *mar'a ge*, as a present, I give;¹ but in every other instance given by him *ge* follows the subject and goes before the verb. In such construction of it, the compound conjugation expresses the verb as a predicate connected with the subject by the copula *ge*, showing that the verb is thought with less subjectivity than in the simple conjugation. The abstract element of fact expressed by *ge* in the compound conjugation combines more closely with the subject than the present, the continuing past, or the future does in the simple conjugation; for the subject has a lighter personal suffix with the former. Whether the abstract tense of the simple conjugation combines as closely as the copula does not appear in any of the grammars.

The copula is apt to be used, in addition to the element of tense, when a conjunction or an object or condition belonging to the sentence stands at the beginning of it and takes the person of the subject; for this attraction of the subject tends to make its connection less close with the verb; and also when the subject is separated from the verb by other members of the sentence.

There is another element *ga* which is used with verbs to express a merely ideal realisation; and an element *ra* which is used in connection with verbal stems, though distinct from them, to express the process of their accomplishment.² This element *ra* is also in Vei and Susu. The verbs substantive also *hã*, to be or remain, *i* to be or come to pass, and *hã i*, to be in both senses, are used not only separately as independent verbal stems, but also after the various formations of other verbs to express these thought as being habitual.³

These verbal elements are all detached and distinct. They seem generally to take the following order whether the subject precede the verb, or be a person-ending. The copula *ge* is the nearest to the subject, then the element of tense, then the ideal *ga*, then *ra*; *hã i* and *hã i* come after the whole formation, including the verbal stem; and when there are two verbs thought as ideal, *ga* follows both.⁴

The imperative and infinitive are expressed by the mere verbal stem.⁵ The present participle subjoins *ĩã* to the verbal stem.⁵

70. Derivative verbal stems are formed by suffixing to the simple stem *he* for passive, *gei* for causative, *gu* for reciprocal if the subject-object be plural, *k'a* if it be dual, *ro* for diminutive, *ba* for relative to an object,⁶ *sin* for reflexive.⁷ Compound stems of verbs and nouns consisting of two or even more simple ones loosely joined together, are also formed with great facility,⁸ and verbal stems are often formed by doubling the stems of nouns.⁸

Negation is expressed by the negative *tama* following next after the verbal stem; and the stem thus negated generally needs the help of the verb substantive *hã* or *i* that it may be attributed to the subject as

¹ Wallmann, sect. 39.

² Ibid. sects. 37, 38.

³ Ibid. sect. 42.

⁴ Tindall, p. 53.

⁵ Wallman, sect. 37.

⁶ Hahn, sect. 40.

⁷ Tindall, p. 36.

⁸ Wallmann, sect. 17; Tindall, pp. 16, 35.

a fact.¹ Prohibition is expressed by *tā* before the verb,² negation of an ideal proposition by *tite* after it.³

71. The separateness of the verbal elements in Hottentot speech gives to it a highly fragmentary character. Thus *tita ga ra ma*, I give (hypothetically), may also be expressed with verbal stem first, *mata ga ra*; and *tita go ra ma*, I have given and give still, may change its order to *mata go ra*; the same fact may be expressed with the copula *tita ge go ra ma*.⁴

The language is also remarkable for the facility with which its elements may be run one into another so as to form combinations of a loose and open texture. Thus the detached verbal element *ra* may combine with a verbal stem, and by taking a personal suffix become a noun, as *mu'ra'b*, one that sees. So also *mu'sin'i's*, looking-glass,⁵ the second *i* being euphonic; *mu'γka · ba · sin*, to be able to see for oneself.⁶

72. There is no definite rule for the arrangement in the sentence of subject, object, and condition;⁷ but the subject seems never to follow the verb except as person-ending;⁷ when the verb has not only the pronominal subject as a suffix, but also the pronominal object, the object precedes the subject; and when a verb has a pronominal indirect object, and a pronominal direct object both suffixed, the direct object precedes the indirect.⁸ The genitive, as has been said, generally precedes its governor, and the adjective its noun.

73. The following examples are given according to Wallmann's spelling:—

and 3d sg. m. copula ten two with servant 3d pl. m. his call together and
(1.) *t'ib ge dis'iγgam'za γga'gu ā'ba ꞑkei'ꞑhū, t'ī*
all devil 3 pl. m. over authority 3 sg. f. and power 3 sg. m. abstr. give them and
hoa ꞑāua'gu ꞑama gau's t'ī ꞑgei'ba ge ma'gu, t'ī
sick be 3 pl. com. rel. fut. heal to
ꞑaisin'hā'n ā nī ꞑgou'ꞑgou se.

and 3 sg. m. copula abstr. send out them God 3 sg. m. rule land 3 sg. m. 3 pl. m.
(2.) *t'ib ge ge sī'ꞑui'gu t'ui'ꞑwa'b gau'ꞑhu'ba'gu*
fut. throw off and sick be 3 pl. com. heal subjunc.
nī au'ꞑna t'ī ꞑaisin'hā'na ꞑgou'ꞑgou ga.

and 3 sg. m. copula dem. 3 pl. m. to abstr. say prohib. thing 3 sg. com.
(3.) *t'ib ge ꞑē'i'gu ꞑua ge mi ta ꞑu'i*
road 3 sg. m. on go take staff 3 sg. com. hyp. 3 sg. com. knife 3 sg. c. hyp. 3 sg. c.
lau'b ei ꞑkū'u he'i'i ga'i goā'i ga'i
bread 3 sg. c. hyp. 3 sg. c. money 3 sg. c. hyp. 3 sg. c. and one 3 sg. c. your none 3 sg. c.
ber'i ga'i mari'i ga'i, t'ī ꞑꞑui' ā'go ꞑare'i'i
two put on over thing 3 du. m. fut. take be (have)

ꞑgam ana ꞑam'ꞑu'ka nī whā.
and what 3 sg. c. house 3 sg. c. soever 3 sg. c. into 2nd pl. m. hyp. enter
(4.) *t'ī tare'i om'i ho'a'i ꞑma'go ga ꞑkū*
there remain relve. to an end there from go out
ꞑnaba hā ē ꞑnaba'ꞑu ꞑkū'ꞑua.

¹ Wallmann, sect. 69.

² Ibid. sect. 70.

³ Ibid. sect. 71.

⁴ Ibid. sect. 39.

⁵ Tindall, p. 16.

⁶ Ibid. p. 37.

⁷ Wallmann, sect. 50.

⁸ Ibid. sect. 41.

and catch to you not *hypl.* 3 pl. com. 2 pl. copula fut. that place from
 (5.) *t'i ik'or'ua'go tama ga'ina 'go ge ni ꞑna ꞑasa zu*
 go out and also foot 3 pl. m. your from dust 3 sg. m. shake off catch
ikūꞑua t'i ꞑk'adi ꞑei'ga āgo zu t'ar'aba ꞑhaibi:k'na ik'o'
 behind 3 sg. f. for dem. 3 pl. com. upon

ik'a'sa ꞑua ꞑē'in ꞑama.

and 3 pl. m. abstr. go 'out and all place dem. 3 pl. fem. in abstr. go
 (6.) *t'igu ge ꞑua t'i ꞑhoa ꞑa·ro'ti ꞑna ge ikū*
 good news 3 sg. f. vbl. process throw off and place 3 pl. c. all 3 pl. c. at
ꞑgaiꞑua'sa ra auꞑna t'i ik'e'in hoan deba
 vbl. process heal

ra ꞑgouꞑgou.—Luke ix. 1-6.

And he called together his twelve disciples, and gave them power and authority over all devils, and to heal (future) them that were sick; *gaus t'i ꞑeiba*, the element of reference *a* (67) is taken only by the second of the two nouns.

And he sent them that they should preach (throw off) the kingdom of God and heal the sick; the object *gauihuba* beginning the sentence takes the person of the subject (68).

And he said unto them, Take nothing for the journey, whether (be it) staff, or knife, or bread, or money, and no one of you shall have two coats.

And into whatsoever house you enter, there abide and thence depart.

And them that do not receive (*ac'cipio*) you (the relative clause qualifying *ina* precedes it as an adjective), you (taken by the object at the beginning as person of subject, 68) will go out from that place and also shake off the dust from your feet for a witness (take behind) upon them.

And they departed and went through all the towns preaching the gospel and healing everywhere.¹

(7.) *k'oi'b ia ꞑari ge ha*, the man who came
 man 3 sg. mas. rel. pron. yesterday abstr. come
 1st sg. see

yesterday; *ꞑari ge ha k'oi'b*, the same; *k'oi'b ia'ta ꞑari ge mu*, the man whom I saw yesterday; *ꞑari'ta ge mu k'oi'b*, the same.²

(8.) *doe'omi zu'ta ge go hā*, I am just come from
 ship 3 sg. c. from 1st sg. copula cont. past come
 the ship; ³ *doe'omi* is printed *doeoma* in Wallmann, but this must be
 journey house
 an error. Tindall spells *doi'omi*, ship, and *ha*, come.

(9.) *ꞑū'a'ib ei'ꞑā'b ge go ꞑna*, before meal-
 eat time 3rd sg. m. on fore 3rd sg. m. copula cont. past dance
 time he has danced.³

(10.) *ꞑꞑui t'ē'ti k'aus ei'·b ge hoanā ge*
 many day 3 pl. fem. back 3rd sg. f. on 3rd sg. m. cop. all 3rd pl. com. abstr.
 gather

ꞑūꞑhū, after many days he gathered all.⁴

(11.) *t'uiꞑ goa'b ge sada ꞑgore's ose ra*
 God 3rd sg. m. cop. pron. 1st pl. incl. prayer 3 sg. fem. without vbl. pro.

¹ Tindall, p. 51.

³ Wallmann, p. 60.

² Ibid. pp. 29, 30.

⁴ Ibid. p. 61.

help
hui, God helps without our prayer.¹ Tindal says that *t'ui,γgoab* means sore knee.²

come fut. vbl. process this day man 3 pl. m. horse 3 pl. m. because sun 3 sg. f.
 (12.) *sī nī ra ne t'ē koi'gu, hā'gu au sori's*
 hyp. end though

gu toa xawe, the men will come to-day though the sun set, because of the horses³ (they are on horseback); the related clause following attracts the subject so that it follows the verb, and *ra* seems to be most nearly connected with it, as if the meaning was, are to come.

74. The phoenisis of the Hottentot language is the most remarkable in the world on account of its having the four clicks, *ǀ, ǁ, ǃ, ǂ*. Besides these, the Namaqua has the following consonants, *k, k', g, t, d, b, h, ʒ, s, z, w, r, n, m*; *b* being very near *w*; and the following vowels, *a, e, i, o, u*, and the diphthongs, *au, ai, ei, oi, ou, ui*. There are also indefinite vowels, which may be distinguished as *ä, ë, î, ö, ü*; and there are three tones expressive of meaning—high, middle, and low (52). The vowels and diphthongs are very apt to be nasalised sometimes strongly, sometimes weakly. The guttural utterances also have different degrees of depth in the throat. The clicks occur very frequently before all vowels and before *h, k, g, ʒ*, and *n*, but only in the beginning of a word. They are uttered in immediate connection with the vowel or consonant which follows them.⁴

It seems probable that the clicks are to be regarded as consonants imperfectly and indolently uttered like the indefinite vowels, their imperfection being that they have no breath behind the closure of the organ. They are initial, the breath not having yet moved forward; and they must be followed by an utterance behind them, as they draw the air from before.

75. Thus in all the African languages which are remote from Asiatic influence, the one tendency prevails, to break up speech into fine fragments which enter readily into combination with each other without losing their individuality.

The Kafir languages break their nouns into two parts, one of which expresses a very abstract and proportionally separate thought of the substantive object itself, and the other the nature which belongs to that object. And though their verbal stem may express a comprehensive thought of act or state conceived in a single idea, a fragmentary element of fact may be detached from the idea by any strong reference to it.

The Hottentot also detaches the substance of the subject to be taken up by an element through which thought passes to the fact; and throws out verbal fragments from the verb more or less separate from it, according as they are attracted by the subject.

The West African languages, except Bullom, identify the attributive nature of the substantive object with the substance (Def. 4) in too close a connection to detach this as a separate element; but they all break up the verb. Woloff throws out from it a system of frag-

¹ Wallmann, p. 62.² Tindall, p. 53.³ Wallmann, p. 65.⁴ Ibid. p. 4-7; Tindall, p. 12.

ments which furnish a copious expression of tense, and also distinguish varieties in the inherence in the subject. Mandingo, Vei, and Susu, break their verb into a fine subjective part and a coarser objective part, which may be separated from each other. And Oti, Gã, and Ewe divide the act or state into different parts of its process or among different objects, though the parts may have equal connection with the subject. With these Yoruba agrees to a great extent in its fracture of the verb, though it is very different from them in other respects.

II. *American Languages.*

1. As the African races which are most remote from Asiatic influence have of all men the quickest excitability of mental action, so the American races have of all men the least readiness to respond with mental action to an impression; and as the languages of those African races are all remarkable for their tendency to break up speech into fine fragments, so the languages of North and South America have for the most part been long noted for the opposite tendency to express thought in massive combinations.

2. The American languages have in consequence been distinguished from the other languages of the world as polysynthetic. Yet this term is not of itself sufficient to express their distinctive character; nay, its applicability cannot be denied to those very African languages which are the extreme opposite of the massive kind of speech which prevails in America. It has been seen in the preceding section (7, 22, 23, 31, 49, 50, 56, 62, 71) that the languages of Africa not only tend to resolve expression into minute fragments, but also are remarkable for the facility with which these fragments enter into combination with each other. There hence arises in all of them a tendency to form combinations of many elements, and such a tendency may properly be called polysynthetic.

The following syntactical combinations or coalitions of the elements of a sentence may serve as examples:—

Kafir—*e* *se* *kw* *eli* *ne* (*ilizwe*), *esekweline*, he
pers. pref. being still in pref. of *ilizwe*, other country
 being still in another (country);¹ (*i'gwele*) *o* *wa* *be* *be*
meal which pers. pref. past verbal
 pref. of *igwele*, took
li *tabate*, *owabelitabate*, which she took (meal);² *be* *be*
pers. pref. pl.
 were not with pref. pity
be *ne* *na* *bu* *bele*, *bebenabubele*, they had no pity.³
sense pref. of *isineke* inf. selves build
 Zulu (*isi'neke*) *s* *oku* *za* *kela*, *sokuzakela* (sense), to build
 for themselves.⁴

it is that I verbal surpass still not past good

Woloff *de* *m* *o* *gon* *ot* *ul* *won* *bak'e*, *demogonotulwonbak'e*, it is that I was no longer better.⁵

In Vei, as has been shown in the last section (49), a whole sentence may be run together into a kind of word; and in the West African

¹ Appleyard's Kafir Grammar, p. 370. ² Ibid. p. 303.

³ Ibid. p. 236.

⁴ Grout's Zulu Grammar, p. 344.

⁵ Boilat's Woloff Grammar, p. 328.

languages generally the parts of a sentence are often imperfectly separated from each other.

3. Now, such combinations consist of many parts, but they are remarkable for the fineness of their elements, which cohere without losing their individuality, though mostly mere fragments of ideas. They are polysynthetic, and yet fragmentary, for they are syntactical combinations of a nature similar to the Vei sentence whose parts have run together. The mind moves from one part to another as through the words of a sentence, but it spreads slightly into the next element before it leaves the preceding one, and thus joins the one to the other, though only one with a part of another is present to it at once.

There are indeed other complex combinations formed by the African languages, which arise not from the coalition of elements of a sentence, but from derivation and composition. Thus the Kafir verb is capable of a number of derivative formations, and these may be accumulated one upon another, as *zala*, to be full; *zalisa*, to fill; *zaliseka*, to become filled; *jana*, to be like; *faneleka*, to be fit for; *fanelekisa*, to be suited for; *fanelekisa*, to make suitable for;¹ *tanlu*, to love; *tanlana*, to love one another; *tanlanisa*, cause to love one another; the English translations, however, being less simple than the ideas which the words express.²

Now, of such formations it is to be observed that they cannot be made at pleasure with every verb, but it must be ascertained from the dictionary what formations are in the language, and what their meanings are. They are formed with analysis to express certain simple thoughts, and when use has appropriated them to these, and merged the parts in the idea which is expressed by the whole, that idea becomes simple, and the verb may again become subject to a new formation. But such new formations continue to express simple thoughts. They are confined in use to such singleness of meaning, and the significance of their individual elements is proportionally reduced. The same may be said generally of the derivative and compound formations of the African languages, of which examples have been given in the last section.

So that, though the African combinations are in many cases polysynthetic, their elements for the most part either are fragments of ideas which cohere loosely and are thought in succession; or if thought together they express by their combination simple conceptions rather than massive aggregations of thought.

4. Now of the American languages, on the contrary, it may be stated generally that most of them tend to form combinations which do express massive aggregates of thought, and all of them as compared with African speech tend in all their parts to widen the field of view that is at once before the mind, which the African languages tend to narrow. The American combinations contain elements which are themselves strong thoughts; and in thinking the parts the mind spreads beyond one such element in a single act of thought, so as to embrace a complex and extended object. Though some combinations have become appropriated to simple conceptions, the facility of the formation and use of such aggregates in which the elements retain their original

¹ Appleyard's Kafir Grammar, p. 157.

² Grout's Zulu Grammar, p. 181.

fulness of meaning, is what characterises American speech to so great an extent. And if it be desirable to have a word to express this characteristic tendency, megasynthetic would be more correct than polysynthetic; or if the African languages were called fragmentary, the American might be called massive. The latter term indeed would be the more correct; for the peculiar nature of American speech shows itself not only in megasynthetic combinations, but also in the largeness of thought directed to separate objects with aggregation of defining and particularising elements.

ESKIMO.

5. The Eskimo in their inhospitable region need to have a keen look-out for what will serve their purposes, and to pay great attention to the methods and conditions of gaining their ends. But so difficult is their life that it is the end rather than the means, the whole result of action more than its objects, to which they look with interest. Substantive objects are principally interesting to them in connection with action, use, or possession, locality also being an object of great attention. Actions are noted specially in their process or conditions. And thus thought, verbs and nouns are by the sense of result drawn into combinations, each with its own subordinate accessories, these being thereby reduced to such subordination that they can never be thought as principals, and the principals being so confirmed as such that they can never be accessories to each other, so that no compounds are formed (Def. 21). The strong interest taken in the nature of substantive objects, and of doings and beings, causes the substantive or verb, which is combined with additional elements, so to predominate over these elements as to reduce them to mere accessories which can only be used as such, so that the synthetic feature of the language is derivation (Def. 21).

Now, the derivative elements in Eskimo are so completely subordinate, that not only can they never be used separately, but they have no traces of ever having been independent words, and yet it is in separate words that the meanings of most of them must be expressed in our speech. Kleinschmidt thus describes their most notable characters:—

“These subjoined stems differ from the derivative suffixes, *-some, -hood, -ly, -ness, &c.*, first, essentially in this, that according to all appearance, they are from their origin suffixes (*ursprüngliche anhänge*), and were not formerly, like ours, independent words; secondly, in their much greater number, as almost all dependent thoughts, all our auxiliary verbs, and many of our adjectives and adverbs are expressed by such subjoined elements; and lastly, in their movableness (*ihre beweglichkeit*), as most of them are not, like our few suffixes, joined fast to certain words, but may be attached or not at pleasure according as the expression requires them or not. Stems formed by such combination are treated in all respects as simple stems.” “There are very often two, three, and more subjoined stems attached one to another.”¹ Now, the absence of all appearance of their ever having been independent words

¹ Kleinschmidt, Grammatik der Grönländischen Sprache, sect. 11.

means that they are not thought with any degree of independence ; that the Eskimo mind does not in any degree separate them from the thoughts on which they are dependent, leaving these in thinking them, but that it spreads into them while still thinking the principal element in the combination. And their continual applicability in new formations shows that they are used in their natural fulness of meaning without any such reduction as might arise from repeated use in the same formation denoting the same object of thought.

Because these elements are thought without the mind leaving the combinations in which they occur, they remain particular, and do not acquire meanings more general than the meanings in the combinations. Such general significations would belong to various applications of the elements in meanings different from what they have in the present combination, and would lead thought away from it. The particular meanings of these elements are always much the same. Accordingly, in Kleinschmidt's list of them, with a large number of examples under each, the translation given for each element at the head of its examples is generally repeated or paraphrased in each example. In this respect they differ strikingly from the Kafir nominal prefixes (I. 3) ; and as the great variety of particular meanings which these possess was shown to indicate fragmentary thought, so the sameness of meaning of the Eskimo elements in their large combinations corresponds to massive thought, for it shows that they have no general signification, but are thought particularly, immersed in the present combination. From this sameness of meaning belonging to each, it follows that so many are needed. Kleinschmidt gives 146.

6. When an Eskimo would say, " If they be destitute of food they will go home," he expresses himself in two words, *neri · sag · su* .
 want be they home go will they
er · u · krunik aier · dar · umar · put ;¹ the element *u* in the first of these words has, when it occurs in an active transitive verb, a significance somewhat like that of the Kafir relative verbal element *el*, it refers the action to an object ; when it occurs in an intransitive verb, it refers to the subject, and the reference makes the subject passive ; the element *k* in the first word is the sign of a dependent mood, signifying that the verb does not make a full assertion, but only states a supposition, or a condition, or an object of another verb ; the element *p* in the second word is the sign of the indicative mood, and asserts fully the realisation in the subject. There is an element *l* expressive of still weaker realisation than *k*, which is used with a negative and in the optative mood to express a mere wish, except with the second person ; for with it the vivid sense of the person addressed gives strength to the idea of fact. This element is also, in *lu*, the sign of what belongs to the subject of a fact, to which it is subordinated like a present participle. And another element *t*, liable to be changed to *s* or *g*, which has still less of the life of realisation, is the sign of the nominal participle, or participle which is used as a noun (15) ; it occurs in the first of the above words, combined with

¹ Kleinschmidt, sect. 90.

the abstract verbal *g*, in *ḡag*, the element of the passive participle, though this is generally formed with *g* instead of *t* or *ḡ* (8, Ex. 3). It may be observed that the indicative element is properly *b'*, which in the above word is changed euphonically to *p*, and the element of a dependent mood is properly *g*, which in the above word is changed euphonically to *k*; before a nasal it becomes *n*.

Now these elements *b'*, *g*, *l*, and *t* differ essentially from our auxiliaries *be*, *do*, *may* in the excessive abstractness of their significance; for these express merely different degrees of the sense of realisation of the stem (Def. 13). And they differ from these and from the African verbal fragments which denote realisation in being quite inseparable from the verbal stem.

7. Our own derivative verbal stems, and many even of those of the Kafir languages, have a simultaneousness of parts all present together to the mind. But in both these cases the derivative verbs belong to the vocabulary of the language.

They are not formed at pleasure out of the elements of a fact, but are to be found in the dictionary with their proper meanings; and their repeated use with those meanings causes the significance of the parts to be more and more merged in a single idea of the whole, so that the parts dwindle and the whole becomes simpler. Now there are in Eskimo derivatives of a similar nature which have become appropriated to special ideas, and in which the derivative elements have to a certain degree lost their original significance; and there are derivative elements which occur only in such words, and have so far lost their own significance that they are no longer used in new formations.¹ But most of the derivative elements are applicable at pleasure; and the words formed with them "are formed for the requirement of the moment, as one directly wants them, just as one puts words together in sentences."¹ Now in such formations there is no dwindling of the parts by limitation to the elements of a simple conception, but the parts possess their natural largeness of signification; and the synthetic tendency of the language is to be seen in the magnitude and number of the elements of thought which can be joined together and be all present together to the mind. Such derivative elements are applicable at pleasure to form substantives and verbs; and the substantives which are formed have the same combination of parts thought together as the verbs, for, like the verbs, they are treated in all respects in the same way as those which have simple stems.

8. A few examples of both will suffice, in which, and in all the examples, every element of a word after the first is a derivative element.

- angelica only almost with green makes it
 (1.) *Kuan inānāyai nik tuū yor'proq*, it is green with almost
 sick have been part. belonging their
 pure angelica;² (2.) *napar' sima · ḡor' · t(a 'a)t*, the one among
 them who has been sick, *napar'simaḡor'tāt*;³ (3.) *aylla'yag · ḡa ·*
 favourite my
inā · ra, that whereon I would specially wish to write;⁴ (4.)

¹ Kleinschmidt, sect. 106. ² Ibid. p. 127. ³ Ibid. p. 128. ⁴ Ibid. p. 130.

do place favourite have for often often (pass. part.) their to off go they
piv·jī · imar · ig · tar · tay·ka · min·nut aut·dlar·put, they
 go off to the place which they repeatedly have as their favourite place
 seek seem have (done) he me

for going to (doing so);¹ (5.) *kineṛ·palug·simav · āia*, it seems that
 tobacco ill he

he has sought me;² (6.) *tupa·katag·proq*, he is ill from tobacco;
 salt tastes it go to often I him give wont

(7.) *tarayor·ni·p'oq*, it tastes salty;³ (8.) *ornig·tari·garko tuni·sar*
 he me

āia, as often as I go to him he is wont to give to me;⁴ in the former
 of these words *g* marks the dependent mood, expressive of a condition;

touch a little just only 'tis true I it
 (9.) *ayw·pitdlar·t'ia·imar·aluar·p'ara*, I certainly have touched it only
 make ready shortly seek to too much will perhaps he it

just a little;⁵ (10.) *ini·leitor·uar·patalā·sa·rkōr·pā*,
 perhaps he will seek too much to make it ready in a short time;⁵

inner most thing for what was indeed my son little my for overcoat work
 (11.) *ilug·dlig·zar · alua · ra erni·nua·v·nut anorā·li·*

of I it
u·p'ara, what was intended indeed for a shirt for me I make into an
 overcoat for my little son.⁶

The above are examples of a few of the derivative formations in
 the Eskimo language, but it is not to be supposed that ordinary speech
 in that language consists altogether of such words. For of course
 derivatives are formed only when the conception of fact which is
 expressed in the sentence involves those elements which the derivative
 elements of the language express. These, as has been said, are never
 thought separately by the Eskimo. In analysing the fact he does not
 detach them as individual thoughts to be then combined with the
 other thoughts in a conjoint idea of the fact; but conceives them only
 with their principals present at the same time to his mind.

9. There is another form besides this aggregation of subordinate
 elements in which a synthetic structure appears in the Eskimo lan-
 guage, namely, that in which relations are thought, not properly as
 such, but by incorporation without transition. Such constructions
 are indeed in their nature synthetic, but they are not all megasynt-
 hetic; yet it will be found convenient to give them together, as they
 are all connected with another characteristic feature in Eskimo thought,
 an inaptitude to think relations. Thus the relation of a verb to its
 indirect object or condition is sometimes taken up by the verb, and
 the object or condition is represented pronominally in connection with
 it. This takes place when from an intransitive verb a derivative verb is
 formed with the derivative element *jik*, place (compare III., 73. 21), or
ut, origin or immediate cause, with *g* the abstract verbal element of
 being or doing subjoined, as (1.) *oqar·jī·g·ā*, he has him for
 say place have he him
 the place (object) of saying, i.e., he says to him; (2.) *kinu·jī·g·ā*,

¹ Kleinschmidt, p. 130.² Ibid. p. 146.³ Ibid. p. 147.⁴ Ibid. p. 149.⁵ Ibid. p. 155.⁶ Ibid. p. 142.

off go cause have he it
 he prays him ; (3.) *aut · dlar̄ · uti · g · ā*, he has it for the cause of
 going off, *i.e.*, he goes off on account of it ; *i* is euphonic.¹

Similar formations with *qat* express relations of association, as (4.)
 sleep associate have he him
sine · qati · g · ā, he has him as a sleep-fellow, *i.e.*, he sleeps with
 him. And such formations with *te se*, express relations of equality
 that to long equal is it
 of extent, as (5.) *ūmar̄tut taki · ti · ga · oq*, it is as long as to
 that.¹

The largeness of the elements combined together so closely in these
 formations gives them a megasynthetic character ; but the same cannot
 be said of those formations in which only pronominal elements are
 taken up. Some of these, however, are remarkable. The combina-
 tion of such elements, related and yet thought without succession,
 appears strikingly in the way in which the Eskimo verb takes up a
 pronominal representative of its direct object into such combination
 with the representative of the subject that the one is often quite
 indistinguishable from the other. Thus, in the foregoing examples,
 subject and object are denoted together pronominally in the verb, he
 him or he it being expressed by *ā*, he me by *aiā*, I it by *ara*. And
 so always in the transitive verb in Eskimo, the personal element at
 the end expresses subject and object combined.

Such elements are frequently met with in American speech ; and
 they have been called transitions. They form a very remarkable
 feature in American speech, but are not to be classed with its mega-
 synthetic characteristics. The connection between a genitive and the
 noun which governs it is thought with remarkable strength in
 Eskimo. For even though there is a genitive case-ending, *viz.*, *p*, the
 governing noun takes a pronominal suffix to represent the genitive
 sun of heat its putty
 noun in combination with it, as (6.) *seker̄nup kis̄arnar̄ata tasiñua*
 dry out

pak̄er̄p̄ā, the heat of the sun has dried up the putty.

10. There is in Eskimo a remarkably strong sense of the subordina-
 tions of facts as objects or conditions of other facts ; a feature of the
 language which is due, not to synthesis, but to the interest which
 those subordinations have for the race. Yet the relations of the
 principal to the subordinate facts are not expressed in transitional
 elements thought as the mind passes from one to the other, but are
 implied in the changes which the subordinate verb experiences in
 its sense of realisation and personal elements owing to its subor-
 dination.

The following is given by Kleinschmidt as an ordinary example ;²
 anything without be subj. he off go will part. he hear subj. he him
su · er̄ · u · k̄ · ame, aut̄ · dlar̄ · sa · s̄ · oq, tusar̄ · amiuk,
 give not subj. he him approve not they him
tunīnī · ñ · mago, iluar̄ · iñīl · āt, they disapproved of him,
 because he did not give to him, when he heard, that he would
 go off, because he had nothing. The subjunctive expresses a con-

¹ Kleinschmidt, sect. 123.

² Ibid. sect. 99.

temporaneous condition or cause. Another mood is used to express a supposition. The difference of the moods largely affects the personal elements; thus, in the above subjunctives, *m* expresses the reduced sense of fact in the subject.

The strong sense of the subordinations of the secondary facts appears in the various moods which express their various modes of dependence. Thus the first in the above example is subordinated to the second as a contemporary condition or cause, and is therefore in the subjunctive. In a similar way the third is subordinated to the fourth, and the fourth to the fifth. The second is subordinated to the third as having for its subject the object of the third, and therefore it is in the mood which Kleinschmidt calls the nominal participle, though it takes all the persons; being reduced by the government to a noun. And there is another form for a fact whose subject is the subject of a principal fact, and another for a transitive verb whose subject is object of a principal fact.

Another effect of the close connection in thought between the principal and the subordinate fact, is that the subject of the former, when it is the third person, is represented by a special element in the latter, whether it occur there as subject or object. Thus, in the above example, the first word denotes a fact subordinate to the second, and it has the special form of the subjunctive third person, *ame*, because its subject is the same as the subject *oq* of its principal; he would go off because he (the same) had nothing. If the subordinate subject were different from the principal, it would be expressed by *mat* instead of *ame*. So the third word has the special personal element, because it has the same subject as the fourth to which it is subordinate. Otherwise its personal element would be *mago*. This shows a strong sense of the principal fact co-existing with the thought of the subordinate fact. The principal subject is recognised as such in the subordinate fact in Eskimo, whereas in English its distinction as principal is not present to the mind.

11. The Eskimo is in one respect the most remarkable among the races of mankind, they have become completely adapted to the most rigorous physical conditions under which man lives. Their language therefore is worthy of attentive study in all its features.

It may be said to have only fifteen consonants,¹ *q, k, g, t, p, b', ç, y, s, s, r, l, n, n, m*, but *g* after another consonant becomes *ç*.

The primitive vowels *a, i, u*, are uttered with great distinction from each other, *a* deep in the throat, *i* and *u* with strong tension of the organs of the mouth. On account of the guttural depth of *a* its utterance is modified and made less deep by the tension of *k* or *t*, when either of these follows it. And on account of the tension of *i* and *u*, these are affected by the relaxation of utterance at the end of the word when they are final, so that they are then sounded with the throat more open, as *e* and *o*; which also takes place when they are attracted towards the throat by being followed by a post-palatal or guttural.²

¹ Kleinschmidt, sect. 1.

² Ibid. sect. 2.

The vowel utterance seems to have great distinctness; for the vowels are not only distinguished as long and short, but each of these is further distinguished as sharp and blunt, the sharpness being the force of breath with which the vowel is sounded in a syllable closed by a consonant, in order that there may be breath to utter the latter.¹ Concurrent vowels are frequent, and the language loves full vowels and syllables consisting of one consonant and a vowel following it.²

From the above, it appears that the Eskimo phonesis has a vocalic rather than a consonantal character. And this is confirmed by the fact that though concurrent consonants may be found in the language as written, they hardly exist in the language as spoken; for the two consonants coalesce, the first being weakened and losing itself in the second, which begins the next syllable. Two consonants cannot begin a syllable or end a word.³

The consonants are uttered with strong pressure of breath on the organs, and the guttural tendency shows that this pressure is from the chest. In consequence of this strong pressure of breath there is a strengthened breath in the second of two concurrent consonants, while the coalescence of the two strengthens the closure of the organs; thus *g* as a second consonant becomes χ , *b'* becomes *p'*, *l* becomes *dl*, *s* becomes *ss*, *r* becomes $\dot{\chi}$.³

The small development of medials is remarkable. It is to nasals that the tenues tend to be softened at the end of a word, when a word beginning with a vowel follows without pause.⁴ The change to a nasal removes the interruption to the breath without necessitating a soft closure of the organs; and hardness characterises the consonant utterance. Only the tenues can end a word, and only the tenues, or *m*, *n*, *s*, can begin one.⁵

The principal accent tends to fall on the ante-penultimate, but is attracted by a heavy syllable involving much utterance.⁶

12. The noun has a dual number as well as a plural. The dual is used only when the duality is to be expressly stated. It is not used when the duality is understood; thus, his arms or legs is plural. The plural is used not only for a plurality of an object but for an object thought as containing a plurality of parts; thus a boat becomes plural when thought with people in it.⁷ The dual ending is *k*, the plural *t*; and in taking these a final *k* or *q* is dropped, unless it be radical, and then it is transposed so as to follow the initial consonant of the last syllable and form a concurrence with euphonic change, the vowel of the last syllable coming out after the stem, and before the ending, and if it be *e*, changing to *i*.⁸

There are no prepositions, nor any postpositions except the case-endings.

The case-endings are given in the appended table; those of the demonstrative pronouns under those of the nouns. The plural case-

¹ Kleinschmidt, sect. 3.

² Ibid. sect. 5.

³ Ibid. sects. 1, 5.

⁴ Ibid. sect. 5.

⁵ Ibid. sect. 5.

⁶ Ibid. sect. 9.

⁷ Ibid. sect. 14.

⁸ Ibid. sect. 26-31.

endings serve also for the dual. The dual *k* and the plural *t* are dropped, and the case-endings are generally attached in the same way as *k* and *t*, but *-kut* is generally attached to the vowel of the last syllable of the stem untransposed,¹ an intervening consonant being dropped.

13. The stems of the demonstrative pronouns are—

ma, here.

tas, there (where thou art, or a place spoken of).

ub', here, there (place pointed to).

ik, *ib'*, on that side.

ab', right, north } looking to the open sea.

gab', left, south }

pav, eastward, landward, upward.

sam, west-, sea-, down-ward.

pik, there, above.

kan, here, below.

kig, south.

kam, within or without.

These all are used with the case-endings, otherwise only in exclamations with *-a* added. They may all except *tas* be strengthened with *ta-*.

The above stems all except *tas*, by taking *-na* in the singular, *-ko* in the plural, form demonstrative stems denoting persons in the respective places. These take the case-endings of the nouns as given in the table, but in doing so they change *-na* in the singular to *-sum* and *-ko* of the plural to *-ku*. Moreover, the stem thus formed, with *-a* added to it, is genitive in the singular, nominative in the plural; the plural stem in *-ko* is accusative.²

Like nouns also are declined, *suná*, what? *sut*, plural, *kina*, who? *kikut*, plural; they drop *-na* in the oblique cases singular.³

There is also an interrogative stem *na*, in *na*, where is it? and *naia*, where have you it?⁴

14. Besides the case-endings of the nouns given in the table, there is also an ending *p* which is generally taken like the dual *k* and plural *t*, and which forms a genitive singular.

And it is a remarkable feature of the Eskimo language, that this genitive is used for the subject of a transitive verb with a direct object; the stem-form is used for subject of an intransitive verb; the subject being supposed in each case not to have a possessive personal suffix.⁵

The singular case-endings except the Vial are formed on the genitive, their *m* being its *p*, the *n* in the plural is the plural *t* similarly softened. In the Vial *k* takes the place of the final consonant of the stem.⁶

¹ Kleinschmidt, sect. 38.

² Ibid. sect. 20-24.

³ Ibid. sect. 25.

⁴ Ibid. sect. 22.

⁵ Ibid. sect. 16.

⁶ Ibid. sect. 41.

15. The system of personal suffixes of nouns and verbs is given in the accompanying table, taken from Kleinschmidt's Grammar, in which *v* stands for *b'* and *ng* for *n*. The *e*-suffixes of the third person are used when that person is identical with the subject of the principal verb unless passive; and in the subordinate forms of the verb they are reflexive of the subject of the principal verb. In taking the possessive suffixes the vowel of the last syllable is transposed by some stems of nouns.¹

The personal pronouns as separate are expressed by the possessive suffixes and case-endings attached, for the first person to the stem *wa* (*w* here), and for the second to the stem *ile* (*ik* there).² Instead of *wa* and *ile* they may affect stems, which mean alone, all, entire, self, each, to express, I alone, &c.³

The indicative element, called in the table the *hauptcharakter*, to which the suffixes are attached, is *b'*, which, after a final consonant of the stem, becomes *p*, and unites with final *é* into *a*; final *t* before *p* is dropped.

The element of the subordinate parts, called in the table the *bindecharakter*, is *g*, which coalesces with final *q* into *î*, and with other final consonants into *k*.⁴

The subjunctive expresses a contemporary or antecedent condition;⁵ the other mood is hypothetical or ideal.⁶

The so-called objective verbal participle expresses a transitive fact whose subject is object of the principal verb.⁷

The so-called subjective verbal participle is a verb which has the same subject as the principal verb, being connected with it like a present participle agreeing with its subject.⁸

There is another form not given in the table which Kleinschmidt calls the nominal participle, because it may be used as a noun, meaning I who, thou who, &c. It is formed on *t*, with the intransitive indicative persons, and it expresses the same as the verbal participle, only that it is intransitive.⁹

It is particularly to be observed that the personal elements transitive are in the indicative preceded by *a*, the intransitive by *u*; in the subjunctive both are preceded by *ma* or *ab'*, in the hypothetical by *pa* or *ub'*; there being most vowel force in *a*, least in *ub'*.

The reflexive and passive may be expressed by the intransitive persons without any other element. The transitive suffixes are sometimes used with what is properly an intransitive verb to refer to a proximate object.¹⁰

The negative is expressed by *-nit* subjoined to the verbal stem. In the indicative this element takes *l* instead of *p*, drops *t* in the third singular, and takes *a* instead of *u* before the intransitive persons.¹¹

The conjunctions and, but, also, or, are enclitic.¹²

¹ Kleinschmidt, sects. 33, 36, 54, 75.

² Ibid. sect. 48.

³ Ibid. sect. 49.

⁴ Ibid. sect. 51.

⁵ Ibid. sect. 89.

⁶ Ibid. sect. 88.

⁷ Ibid. sect. 77.

⁸ Ibid. sect. 91.

⁹ Ibid. sect. 78.

¹⁰ Ibid. sect. 59.

¹¹ Ibid. sect. 61.

¹² Ibid. sect. 62.

F T E

E-ENDINGS.

		-ut.)			
	sing.	plur.	plur.		
E	<i>me</i>	<i>ne</i>	his	<i>in-</i>	<i>isig-</i>
	<i>mit</i>	<i>nit</i>	their both	<i>in-</i>	<i>kik-</i>
al	<i>ʔkut</i>	<i>gut</i>	their	<i>in-</i>	<i>isig-</i>
	<i>mut</i>	<i>nut</i>	his	<i>in-</i>	
	<i>mik</i>	<i>nik</i>	their	<i>in-</i>	
s.			thy	<i>ngn- [i'm-]</i>	<i>gk-</i>
			your both	<i>vingn-</i>	<i>vtik-</i>
E	<i>ane</i>	<i>nane</i>	your	<i>vsin-</i>	<i>vsig-</i>
	<i>ānga</i>	<i>nāng</i>			
al	<i>āna</i>	<i>kut</i>	my	<i>vn-</i>	<i>vk-</i>
	<i>ānga</i>	<i>nāng</i>	our both	<i>vingn-</i>	<i>vtik-</i>
	<i>īnga</i>	<i>nīng</i>	our	<i>vin-</i>	<i>vtig-</i>

D E T I

		ers.	with obj. of 1st pers.		
		you	me	us both	us
3rd p. (a-fm.)	<i>ase</i>	<i>manga</i>	<i>matiguk</i>	<i>matigut</i>	

I. ENDINGS OF THE NOUNS.

		SUFFIXES.										CASE-ENDINGS.										CASE-ENDINGS OF SUFFIXES (- ending so, 3rd, 4th, 5th, 6- and 7- end p. mean 1st or 2nd)									
		SINGULAR		DUAL		PLURAL		SING.		PLURAL		SING.		PLURAL		SING.		PLURAL		SING.		PLURAL		SING.		PLURAL					
		stem.	genitive	stem.	genitive	stem.	genitive	stem.	genitive	stem.	genitive	stem.	genitive	stem.	genitive	stem.	genitive	stem.	genitive	stem.	genitive	stem.	genitive	stem.	genitive	stem.	genitive				
3rd pers. (3-suff.)	his	a	ala	hi 2	2	hi 2	2	e (a)	2	e (a)	2	of nouns	ne	ne	hi 2	2	an-	an-	hi 2	2	an-	an-	hi 2	2	an-	an-	hi 2	2			
	their both	ak	ak	their both	ak	ak	ak	ak	ak	ak	ak	Local Ablative	ne	ne	their both	ak	an-	an-	their both	ak	an-	an-	their both	ak	an-	an-	their both	ak			
3rd pers. (2-suff.)	his	e [ne]	ne	hi 2	2	hi 2	2	ne	ne	ne	ne	of pronouns	ne	ne	his	2	an-	an-	hi 2	2	an-	an-	hi 2	2	an-	an-	hi 2	2			
	their	ak	ak	their 2	ak	ak	ak	ak	ak	ak	ak	Local Ablative	ne	ne	their	ak	an-	an-	their 2	ak	an-	an-	their	ak	an-	an-	their	ak			
2nd pers.	thy	t	vit [pat]	thy 2	2	thy 2	2	tit	vit	tit	vit	of pronouns	one	one	thy	2	an-	an-	thy 2	2	an-	an-	thy	2	an-	an-	thy	2			
	your both	ak	ak	your both 2	ak	ak	ak	ak	ak	ak	ak	Local Ablative	one	one	your both	ak	an-	an-	your both 2	ak	an-	an-	your both	ak	an-	an-	your both	ak			
1st pers.	my	pa [ra]	ma	my 2	2	my 2	2	ma	ma	ma	ma	Terminal	one	one	my	2	an-	an-	my 2	2	an-	an-	my	2	an-	an-	my	2			
	our both	ak	ak	our both 2	ak	ak	ak	ak	ak	ak	ak	Terminal	one	one	our both	ak	an-	an-	our both 2	ak	an-	an-	our both	ak	an-	an-	our both	ak			

II. ENDINGS OF THE VERBS.

		with obj. of 3rd pers.										with obj. of 2nd pers.										with obj. of 1st pers.									
		without obj.		him		them b.		them		him 1		them b.		you b.		you		me		us		me		us		me		us			
INDICATIVE	3rd p.	he	ak	d	ak	ut	ak	ut	ak	ut	ak	ut	ak	ut	ak	ut	ak	ut	ak	ut	ak	ut	ak	ut	ak	ut	ak	ut	ak	ut	
	they both	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	
SUBJUNCTIVE	3rd p.	you both	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	
	you	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	
INTERFERENTIAL	3rd p.	he	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	
	they both	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	
OPTATIVE	3rd p.	he	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	
	they both	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	ak	

(To face page 144.)

1 Subject of the principal verb.

16. The usual order is subject, object, indirect objects or conditions, verb; but emphasis may bring a member to the beginning. The genitive precedes the noun on which it depends. There are few adjectives; and these follow their substantive, whether subjoined to it or not. When not subjoined to it, they are rather nouns in apposition to it.¹

There is no distinction of present and past in the verb. The future and the perfect are expressed by auxiliary verbal derivative elements (5), of which there are several.²

The fact which conditions another precedes it, but the so-called objective verbal and nominal participles follow the principal verb. When the nominal participle precedes, it is usually taken as a noun.³

There is no verb substantive.⁴

The place of the relative pronoun is sometimes supplied by a demonstrative pronoun agreeing with the antecedent and followed by a verb which qualifies the antecedent thus referred to, and contains a personal element representing it.⁵

C R E E.

17. The American Indian races of the Algonkin family are in contact with the Eskimo in Labrador; and from thence their northern boundary extends westward over three-fourths of the breadth of North America. In the northern part of the Algonkin region, the Cree and Chippeway languages, which differ only as dialects, are spoken over a large area, the Cree in the country south of Hudson's Bay, and the Chippeway more to the south-west on the eastern side of the headwaters of the Mississippi.

Cree has the tenuis and medial post-palatal, ante-palatal, dental, and labial, also *t'*, *θ*, *θ'*, *s*, *z*, *s*, *m*, *n*, *w*, *y*, and *h*, also *q* before *u*. It prefers tenues, Chippeway prefers medials, and is very nasal.⁶

18. In Cree and Chippeway there is great facility of forming derivative verbs. But this development differs remarkably from that of the Eskimo, as the derivative elements refer mainly to the energy of the agent exerted on the object of the action if the verb be transitive, or to the state of existence of the subject if the verb be intransitive; so that those derivative elements have been very appropriately called energising signs.⁷ Different elements are used according to the way in which the accomplishment of the action engages the energy of the agent. And so strong is the sense of that energy that almost every consonant in the language is used to express its varieties in different verbs,⁶ while in the same verb it differs according as the object is animate or inanimate.

The derivative elements of the Cree and Chippeway are similar to those of the Eskimo (5) in the particularity and sameness of their meanings, and in the great number of them which are consequently needed to supply the requirements of the language; characteristics

¹ Kleinschmidt, sects. 95, 97.

³ Ibid. sects. 98, 99.

⁵ Ibid. sect. 102.

² Ibid. sects. 70, 130.

⁴ Ibid. sect. 100.

⁶ Howse's Cree Grammar, p. 37.

⁷ Ibid. p. 38.

which correspond, as has been said (5), to a massive quality of thought.

19. Their nature may be seen in the following examples,¹ in translating which into English the pronoun he him is used for any animate subject or object, and it for any inanimate: *pimute^{go}u*, he goes; *pimuteh'éu*, he makes him go; *pimute'táu*, he makes it go; *pimute'tamagun*, it makes it go. This formative *h'éu*, *táu*, when not accented, is merely transitive, as *wunni'h'éu*, he loses him; *wunni'táu*, he loses it; *saki'h'éu*, he loves him; *saki'táu*, he loves it, in which *u* denotes the subject acting on an animate object, and *e* the succession of the doing of the subject, *au* denotes the subject acting on an inanimate object, *h* the energy of the agent applied to an animate object, *t* the energy applied to an inanimate object. Other verbs take the weaker energy for their stronger transitive element, and when the object is inanimate reduce the life of the subject by closing it to *m*, as *nuggat'éu*, he leaves him; *nuggat'm*, he leaves it; *gust'éu*, he fears him; *gust'm*, he fears it; *pukwah't'éu*, he hates him; *pukwah't'm*, he hates it. But some verbs of this class take *tau* with the inanimate object, as *kaht't'éu*, he hides him; *kaht'táu*, he hides it.

Another transitive element is *m*, *t*; as *woppu*, he sees; *woppam'éu*, he sees him; *woppat'm*, he sees it; *takam'éu*, he stabs him; *takat'm*, he stabs it; *wigim'éu*, he lives with him; *wituppi'm'éu*, he sits with him.

Another transitive element is *w*, *h*; as *utommaw'éu*, he beats him; *utommah'm*, he beats it; *ukwunnaw'éu*, he covers him; *ukwunnah'm*, he covers it.

Another transitive element is θ , *t*; as *wi θ éu*, he names him; *wi θ t'm*, he names it; *á θ 'éu*, he puts him; *ast'áu*, he puts it.

Often the same root takes different transitive elements to express different verbal ideas, as *wit'i*, with; *wit'i'h'éu*, he acts with him; *wit'i'w'éu*, he accompanies him.

There are also special transitive elements with more particular meanings, as in the following table;² to understand which it must be premised that in the Cree language, owing to its strong perception of sensible life, the first and second persons as subjects precede the verb, because they are thought in the fulness of their life when they are animated by the full realisation of the indicative mood. They are thus separated from the object which follows the verb, and with which the third person coalesces, as do all the persons in the subjunctive mood. Moreover, in all the transitive formations, the animate object singular third person, of a verb in first or second person singular, is represented by *au* following the element of active energy; but when the object is inanimate it is not represented, but the verb in all its persons is the same as if it were intransitive.

¹ Howse's Cree Grammar, p. 37-48.

² Ibid. p. 86.

1st Pers. him.	2d Pers. him.	3d Pers. him he.	1st Pers. it.	2d Pers. it.	3d Pers. it he.	
-w'áu	-w'áu	-w'éu	-h'én	-h'én	-h'ám	denotes force; also, with roots of motion, by water.
-taw'áu	-taw'áu	-taw'éu	-tah'én	-tah'én	-tah'um	denotes beating or battering, after the manner of the root.
-skaw'áu	-skaw'áu	-skaw'éu	-sk'én	-sk'én	-sk'um	denotes force or causativeness; also what is adverse = <i>mis</i> -; also action with the leg (<i>meskat</i> , the leg).
-m'au	-m'au	-m'éu	-t'én	-t'én	-t'um	denotes performance by the mouth.
-n'au	-n'au	-n'éu	-n'én	-n'én	-n'um	denotes action with the hand, or other gentle means.
-pitt'áu	-pitt'áu	-pitt'éu	-pitt'én	-pitt'én	-pitt'ám	denotes action with the arm (<i>mespittun</i> , the arm).
-sw'au	-sw'au	-sw'éu	-s'én	-s'én	-sum	denotes cutting or burning, after the manner of the root.

break it he, &c.

Thus *pīku'h'um*, he breaks it by force.

pīku'tah'ám, he breaks through it by striking or hammering.

pīku'sk'um, he breaks it by mischance, or with the foot.

pīku't'um, he breaks, tears it with the mouth.

pīku'n'um, he breaks it with the hand.

pīku'pitt'um, he breaks it by pulling.

pīku'sum, he breaks it by cutting.¹

him he it he

And there are special transitive elements of sense, *-now'é · u*, *-n'um*

him he it he

him he it he

him he it he

sees, *-tow'é · u*, *-t'um* hears, *-mat'é · u*, *-mat'um* smells, *-pw'e · u*, *-st'um*

him he it he

tastes, *-skaw'é · u*, *-sk'um* feels.²

20. There is likewise an abundance of intransitive verbal elements,³ as—

he it

-s'ú, *-au*, *wowí's'ú*, he is circular; *wowí'au*, it is circular.

-s'ú, *-un*, or *-n*, *awkw's'ú*, he is sick; *awkw'un*, it is tart; *appisí's's'ú*, he is small; *appisí's'n*, it is small.

-s'ú, *-t'éu*, expressive of passive participle of state; *mēsta's'ú*, he is dried, consumed; *mēstat'éu*, it is consumed.

-kat'éu, passive participial inanimate object of action.

-s'ú, *-t'in*, *uckw's'ú*, he hangs; *uckw't'in*, it hangs; *uckw's'ú*, he is hung; *uckw't'éu*, it is hung.

s denotes animate subjective state, *t* inanimate subjective state, *e* movement or succession of action.

The third person animate of neuter verbs varies in form according to the idea of the verb, as *app'ú*, he sits; *pusek'ú*, he rises from sitting; *pimissí'n*, he lies down; *wunnesk'au*, he rises from lying; *síbuyt'éu*, he departs; *θathan'um*, he swims; *akw's'ú*, he sits (a bird in a tree); *akw'm'ú*, he sits (a duck in the water); *akw't'in*, it sits (an island in the water).

¹ Howse's Cree Grammar, p. 95.

² Ibid. p. 96.

³ Ibid. p. 25-32.

The third person inanimate is generally *-magun*,¹ but it has other forms.

The element *-k'eu*, he makes (the root), becomes transitive in *-kat'eu*, and instrumentive in *-ka'g'eu*; *-m'u* is possessive; and *-sk'au* is expressive of abundance, *-sh'u* of frequency.

21. The following² may illustrate the facility and nature of verbal formation:—

nippī, water; *nippīwi*, watery.

nippīw'u, *-un*, is watery, wet; *nippīka'g'eu*, makes water of.

nippīw'iss'u, *-au*, is water-like; *nippīsk'au*, there is abundance of water.

nippīw'iss'u, *-et'eu*, is watered; *unippīm'u*, he has water.

nippīh'eu, *-t'áu*, turns into water; *hukemau'ithim'eu*, he considers him chief.

nippīwi'h'eu, *-t'au*, watereth, wets.

nippīk'eu, makes water.

nippīkat'eu, *-kat'um*, makes water.

nippīkat'eu, it is made water.

Verbs become intensive or frequentative by reduplication. The reflexive verbs insert *s* or *ss*, and the reciprocal verbs *t* or *tt* after the energising element.

22. Now, some of the above verbal elements have great concreteness of meaning. And they all retain in the formations into which they enter the full signification which naturally belongs to them; for they are joined at will to the words of the language to give them verbal meanings,³ without requiring to be worn down by use and lost in a simple idea (see 3, 4). Moreover, they are thought with the idea of the root-word present at the same time to the mind, as is indicated by the particularity and sameness of their meanings (see 5, 18). And, besides, they never occur except in closest phonetic conjunction with such a root, uttered along with it in one act of utterance which proceeds from one volition and corresponds to one thought.

23. As these elements refer rather to accomplishment than to result, there is less synthesis; and they are less apt to consist of several parts combined together than the Eskimo derivatives. There is also less difference of principal and subordinate elements, so that the former may become auxiliaries in the expression of an idea producing composition of the roots of verbs and nouns. Yet this mode of treating roots is not carried so far in Cree as it is in some American languages. In Cree it is in general only natural appearances or events, common operations, &c.,⁴ which are expressed in compounds, and one component must always qualify another. Except under such conditions, compounds are not formed either in verbs or in nouns, probably because the interest is engaged rather with the exertion of energy and its

¹ Howse's Cree Grammar, pp. 49, 152.

³ Ibid. pp. 22, 24, 32, &c.

² Ibid. pp. 17–21, 71.

⁴ Ibid. pp. 179, 293.

subjects and objects, and concentrated on these respectively, so as to spread less on the nature of the act or thing.

These compound and derivative formations are treated in all respects like simple roots, and have the same simultaneousness of conception when they have been formed, the parts first thought being kept before the mind till the others are added.

24. The following are examples of compound verbs: ^{white head} ^{cold water} ^{wear} ^{snow-shoe} ^{wipe hand} ^{suffocate} ^{snow} ^{too mouth} ^{between wood put} ^{tire haul} ^{quick freeze} ^{on put}

wopristekwonu, he is white-headed; *tak·ippik'éu*, he makes cold water; *kik·assam'éu*, he wears snow-shoes (wears snowshoe-*eth·he*); *kossi·t'it'éu*, he cleans his hands; *kipwuttomw'akoon'éu*, he is suffocated by snow; *usami·tun·u*, he is too mouthed, talks too much: *tustawask·ust'au*, he puts it between wood, *t* is the energy of subject exerted on object; *iesku·tap'éu*, he is tired by hauling; *nuskwutt'in*, it freezes suddenly; *tet'ast'au*, he puts it on.

The adjective is not thought properly as a comparative part of the idea of the substantive object (Def. 6). But it is thought as a verb in the subjunctive mood with the relative *ga*, *hi*, preceding it as its subject, and either following or preceding the substantive, or without *ga* or *hi* it may go before the substantive in the subjunctive indefinite (38), or it is thought without proper comparison of the substantive object, and therefore without due distinction of the adjective as comparative from the noun as object of comparison. It is thought in the latter way only when frequently connected with the noun, and it is then compounded with the noun, so that when an adjective is not thought as a verb it is compounded with the noun; ^{rock} ^{mountain} and so also may

noun be compounded with noun, as *assinnī·wuti·a*, rocky mountains; ^{red berry} ^{juice}

miθkumīn·appuy, wine. There is an intermediate construction of the adjective when it is not so associated with the noun as to compound with it, and yet so far associated that it compounds with an abstract idea of it, for which the comparative thought expressed by the adjective has special affinity. When thus compounded with the general noun it is thought verbally as an affection of the substantive

object. Thus ^{long wood} ^{round} *kinw'askus·u*, it is long (*i.e.*, a stick or tree); *woni·*

^{stone} *appisk'issu*, it is round (a stone). This, however, takes place only with a limited number of categories of things, ³ for it requires habitual association to combine even so far the quality and the noun (120).

25. There is also great facility of forming derived roots by prefixing to the simple root *ab-*, *aθ-*, *ast-*, *anwe-*, to express reversals of its meaning, *oku-* to express what is strongly contrary, *iθka-* decline or removal, *at'*- alteration, *ab-* identity, *ki'e-* what is good, all of them

¹ Howse's Grammar, p. 177.

² Ibid. p. 311.

³ Ibid. p. 178.

subject to phonetic change,¹ as well as various adverbial elements;² and the verbs *-pu*³ move, and *-iθi*⁴ think, seem never to be used without a determining word prefixed. A verb thus formed may take after its energising element the adjectival *-wi*, and become the root of

a new verb, as *kʷsk·iθi·tum*, he is impatient; *kʷskriθi·tum·mi*^{think} he makes him with mouth (19)

m·é·n, he makes him impatient by speech; the accent making the transitive element causative, and the subjective realisation *tum* becoming merely participial inherence. And in general, with compound or derived roots and the more concrete elements of energy, words are formed expressing large aggregates of thought, yet treated in every respect like the simplest verbs.

26. There is also in Cree the kind of synthesis noticed in Eskimo, in which the mind connects related ideas by incorporating with one of them pronominal elements representing others. Such constructions may not be megasyntactic; but this synthesis is carried farther in Cree and Chippeway than in Eskimo by reason of the greater interest possessed by the agent and by the objects direct and indirect in the former than in the latter.

It has been already seen, in the examples which have been given of the formation of transitive verbs, that in Cree the direct object is noticed in the verb, either as involved in the application of the energy or in the thought of the subject, or as represented by a pronominal element. In the indicative mood, the full realisation so strengthens the life of the subject, that when this is first or second person it precedes the verbal formation, while the direct object is at the end; but in the subjunctive mood the subject and object always coalesce. Thus in the subjunctive, *saki·huk* I love him, *saki·hut* thou love him, *saki·hut* he love him,⁵ *saki·h·iun* thou love me, *saki·te·ian* I love it, *saki·te·iun* thou love it, *saki·t·at* he love it;⁶ where it is to be noted that *-ian*, *-e·iun*, and *-at* belong also to intransitive verbs; as *nip·e·ian* I sleep, *nip·e·iun* thou sleep,⁷ *nip·at* he sleep. Now what is particularly worthy of notice is the combination on the one hand of the subject and the object, and on the other hand of the active energy and the object, in so close a union that they cannot be distinguished from each other; for *h* and *t*, which denote the energy of the agent as applied to the object, differ in respect of the object-element which they involve, and at the same time *uk* means I him, *ut* thou him, *iun* thou me, in distinction from *e·ian*, *e·iun*, which do not take up the object, because it is inanimate. In the indicative mood also of the various transitive formations it has been seen that not only is the element of energy different according as the object is animate or inanimate, but the element of third person singular is different also, *saki·h·e·u*, he loves him;

saki·t·au, he loves it. This shows how these elements are all present together to the mind. And as the energising element *h*, *t*, is insepar-

¹ Howse's Grammar, pp. 146-160, 170, 175.

³ Ibid. p. 146.

⁵ Ibid. pp. 215, 219.

² Ibid. p. 72.

⁴ Ibid. p. 44.

⁷ Ibid. p. 195.

⁶ Ibid. p. 223.

able in thought and expression from the root, however large this may be, the whole formation plainly expresses a conception which, when completed, is included all in one simultaneous thought.

27. It has been already remarked (19), that in the indicative mood the first and second person singular as subjects precede the verb, but in the subjunctive they are at the end of the verb. Now it is remarkable that owing probably to the utter objectivity with which the object is thought the second person whose personality is most felt cannot be object, nor can the first be object to the third; they are thought in these positions as passive subjects; *ni nippa'h'au*, I kill him; *ni nippa'h'ik*, I am killed by him; *ki nippa'h'au*, thou killest him; *ki nippa'h'ik*, thou art killed by him; *ki nippa'h'in*, thou killest me; *ki nippa'h'itt'in*, thou art killed by me. There is also a passive of the double third, *pape'h'eu*, he laughs at him; *pape'h'ik*, he is laughed at by him or them. In a compound sentence the subject of the first clause cannot be object of the second, but must instead be passive subject. If the subject or object be plural, the plural element *-nan* of first person I and they, *-nau* of I and you, *wau* of second, *uk* of third, come at the end, that of the object following that of the subject if both be plural, and that of the first or second passive subject preceded by *u* for singular agent. In the indicative of intransitive verbs the first and second persons precede, and the verb subjoins *n* to its conjugational vowel, of which there are seven, differing according to the idea of the verb; the third person is subjoined; the plural element follows. In the subjunctive of intransitives, the person-endings are—sing., *-an*, *-un*, *-t*, or *k*; pl., *-ak* first excl., *-āk* first incl., *-aig* second, *-twau*, *-k'wau* third. In the subjunctive of transitives, with third person for object, they are—*-uk*, *-ut*, *-at*; pl., *-uk'it* excl., *-ak* incl., *-aig*, *-twau*. In subjunctive passive with third person agent, they are *-it*, *-isk*, *-ikut*, *-eamit*, *-ittak*, *-ittaig*, *-ikutwau*; thou by me *-ittan*, thou by us *-ittak*.¹

28. In the formation of the verb also an indeterminate subject *nāniwu*, or *āniwu*, of the same meaning as French *on*, may be taken at the end as subject instead of the third person; or its element *-iw-* may be taken as object after the element of energy. In this place also as object may be taken *-ig-*, meaning some one or some thing. Verbs with these indeterminate objects are formed as intransitives. And if the object be animate and the energetic letter be *t*, *t* is softened to *s*, if it be inanimate and the energetic letter be *t*, *t* is softened to *f*: *tukusi'n*, he arrives; *tukusi'nāniwu*, they arrive (on arrive); *saki'h-indeter*.

iw'eu, he loves; so strong is the sense of the object that a transitive verb can be abstracted from its object only so far as to think the

object indeterminately. *Kunnawoppa^{long}f'ig'eu*,² he is on the look-out; *nuti'n'eu*, he fights him; *nuti'nig'eu*, he fights; *nuti'nig'āniwu*,
recipr. refl.

there is fighting; *nuti'n'ittu'nāniwu*, *on s'entrebat*; *paskes'w'us'u*, he shoots himself; *paskes'w'us'u'nāniwu*, one shoots himself;³ *usi't'au*,

¹ Howse's Grammar, pp. 51-54, 57, 61, 263, 192-225.

² Ibid. p. 99-103.

³ Ibid. pp. 105, 106.

he makes it; *usi't'ig'eu*, he is making; *usi't'igāt'eu*, it is made, which made being passive participle of the verb to make something; *ga* yellow berry liquor *usi't'igāt'arik* (subj.), which was made; *ga sawe'min'appuy't'igāt'arik*, which was made wine (viz., the water, John ii. 9),¹ the making not being thought definitely in its application to its object. This last formation in *-t'eu* (20), is the formation expressive of passive participle. There is also the subjective or animate formation in *-su* (20), from these abstract verbs (with indefinite object), as *usi't'igā'su*, he is made; and a subjective adjectival formation, *saki'h'iw'eu*, he loves (people); *saki'h'iw'e'wi'ssu*, he is loving; *saki'h'ik*, he is loved by him; *saki'h'ik'u'ssu*, he is in the condition of being loved (by people); *saki'h'ik'u'wi'ssu*, he is naturally loved.²

29. It is not only the direct object, but also objects indirectly or collaterally connected with the verb that are incorporated in its formation. Thus *nippa'h'éu*, he kills him; *nippa't'áu*, he kills it; *nippa't'aw'éu*, he kills him for him; *nippa'tam'aw'éu*, he kills it for him; *usi'tw'·o'·ss'u*, he makes him for himself; *usi'tam'·a'ss'u*, he makes it for himself; *nippa't'ig'éu*, he kills (something); *nippa't'ig'āg'éu*, he kills (something) with (something);⁴ *usi'tam'a'g'éu*, he makes it for (others); *usi't'ig'e'tam'aw'éu*, he makes (something) for him; *itw'éu*, he says; *itw'éstum'aw'éu*, he says instead of him (interprets); *atusk'éu*, he works; *atusk'ést'aw'éu*, he works for him; *atusk'é·stum'aw'éu*, he works instead of him; *assami'k'éu*, he shoe makes; *assami'k'·aw'éu*, he shoemakes for him (as a pair for his use); *nit assami'k'aw'áu*, I, &c.; *assami'k'étam'aw'éu*, he shoe makes for him⁶ (generally); *ni saki't'·au'·au*, I love him for him; subjunctive, *saki'twau'uk*, I love him for him;⁷ and passively for first or second person, *ni nippa't'wāk*, I am his object in killing him; *ki nippa't'wāt'in*, thou art my object in killing him; *ki nippa'm'at'in*, thou art my object in killing it. In the above formations the direct object of the whole complex verb corresponds to the indirect object in the English translation; and the energy of the agent having been applied to its own direct object, which is either implied in the energising letter or associated with it as *w* or inanimate *m*, passes to its

¹ Howse's Grammar, pp. 111, 112.

² Ibid. p. 118.

³ Ibid. p. 122.

⁴ Ibid. p. 121.

⁵ Ibid. pp. 55, 231.

⁶ Ibid. p. 112-117.

⁷ Ibid. p. 120.

person, a stronger pronominal element is required. There are two elements used for this purpose, viz.: *-w* or *-wa* akin to the demonstrative pronoun *awa*, and *θ*, which occurs in the full forms of the personal pronouns *nitha*, *kiθa*. *-Wa* is combined with *-θ* in *-θua*, *-w* or *-wa* is weaker than *-θua*, and is therefore used in the above formations when the subject is first or second person, whereas *-θua* is used when the subject is third person. And as *-θua* thus implies a third person for subject, this subject need not be expressed, so that *-θua* by itself may express *his he*; the tendency being to think the elements together.

It may be observed that *m*, which occurs in the above formations in the sense of *belonging to*, is used also with the same meaning in forming possessive intransitive verbs (20); and that it is sometimes subjoined to a noun which has a possessive prefix to strengthen the expression of possession, as *nit'ustis'im*, my own glove.¹ As a prefix, it is used with nouns denoting parts of the body, some of the nearer relations of kindred, and the most familiar possessions,² as *metun*, the mouth, *me'gwi*, mother, *me'wut*, a bag.

32. The suffixes *-a* and *-θu* are used arthritically, that is, as pronominal connectives with nouns when governed by a verb in the third person. When the noun denotes an animate object, whether singular or plural, it takes *a-* or *-wa*; when it denotes an inanimate object it takes *-θu*, if singular, and *-θua*, if plural. If the verb be in the first or second person, its object takes neither suffix;³

^{woman}
saki'h'eu eskweu, the woman loves him; *saki'h'eu eskwe'wa*, he loves the woman; *saki'h'ik eskweu* (27); the woman is loved by him; *saki'h'ik eskwe'wa*, he is loved by the woman;⁴ ^{take} *uti'n'um*
^{gun} ^I
paskesiggun'ethu, he takes a gun; *n'uti'n'en paskesiggun*; I take a gun.⁵

33. The connection of government requires in such constructions that the thought of the verb having been expressed that of the noun should be connected with it as object; and in the mental act of so connecting it, there is a consciousness of attention directed to it. Such an element is what the pronoun expresses (Def. 7); and it will be stronger according as the idea of the noun involves less sense of its connection with the verb. This sense of the noun as connected with the verb is, for the reason already stated, strong when the verb is in the first or second person, weaker when the verb is in the third person, and the noun denotes an animate object, and weakest when the verb is in the third person and the noun denotes an inanimate object, and accordingly there is no pronominal connective element in the first case, a weak one in the second, and the stronger one in the third. In every case the pronominal suffix refers to the noun to which it is attached; and the sense of relation is so weak that it does not get

¹ Howse's Grammar, p. 184.² Ibid. p. 245.³ Ibid. p. 244.⁴ Ibid. p. 263.⁵ Ibid. p. 271.

expression. Such pronominal connective elements when they are attached to the object to which they refer may be conveniently called arthritic elements, as they accompany what they refer to like an article, and articulate it to the organism of the sentence (Def. 7).

34. So, too, in the genitive construction a noun coalesces with a personal pronoun as possessive prefix without requiring any demonstrative element to connect them, as *ni'gusis*, my son; *ki'gusis*, thy son; *u'gusis*, his son, though sometimes the construction with third person is *u'gusis'a*. But when the possessor is a noun, the possessed takes *-a* as well as the possessive prefix, as *eskweu utanis'a*, ^{woman her daughter} the woman's daughter; ^{Indian his} *ethinu u'gusis'a*, the Indian's son. When the possessor is itself possessed, the same construction is used for its possession, provided that its own possessor is the first or second person, as *ni'gusis utanis'a*, my son's daughter; *ki'gusis utanis'a*, thy son's daughter. But if the possessor of the possessor be the third person, or a noun, then the possessed takes *-ethua* as well as the possessive prefix, as *u'gusis utanis'ethua*, his son's daughter; *Ethinu u'gusis'a* ^{dog} *utanis'ethua*, the Indian's son's daughter; *eskweu utanis'a utem'ethua*, the woman's daughter's dog.¹

In these constructions the possessor is genitive, and is governed by that which is possessed. And although in expression the genitive precedes its governor, yet in conceiving the correlation, thought passes from the governor or possessed to the possessor or genitive (Def. 23), and carries on a sense of the governor after having been thought to the thought of the genitive. This process must be due to the separate independence with which the governor is thought, and which renders necessary a second mental act to think it in connection; and it engages more mental action in proportion as the thought of the governor is less affected by the interest of the genitive. The mind keeps hold of the governor with attention directed to it, which is greater the more independently it has been thought, and this attention is naturally expressed by a demonstrative pronominal element of corresponding strength attached as suffix to the governing noun, and referring to it. Possession is thought by the Cree as so personal that the abstract personality of the possessor generally mingles with the thought of his possession, and this combines with the former without any connective element. But when the possessor is thought concretely the possession is thought more independently, and a pronominal connective element comes into the consciousness. The interest of my possession, or thy possession (as, my son, thy son) extends to what belongs to it (as, my son's daughter, thy son's daughter) in such a degree that the latter can be carried to the former with the weaker pronominal element. But when the ultimate possessor is third person or a noun, the stronger pronominal element is required. Such constructions are arthritic (33).

35. These pronominal elements thus used are quite different from

¹ Howse's Grammar, p. 245.

case-endings or other elements of relation. They are used, as has been seen, indifferently with the accusative, the ablative, and the governor of the genitive, and in the same relation different elements are used according to the degree of readiness with which the consequent is thought in connection with the antecedent. It is the process of directing attention to one of these as connected with the other which corresponds to those elements in the consciousness, that one which is conceived with most separate independence requiring pronominal expression. This feature does not belong to Eskimo, because in it there is more correlation, as may be seen in the case-endings.

36. The stronger element θ is also used in verbal formations to represent objects so remotely connected with the verb that in most other languages their connection with the verb is not noticed at all. This element can never refer to the first or second person, because these are thought so vividly that if they are concerned in the verb, a sense of them mingles with the thought of it without any conscious direction of attention to them. Thus (1.) ^{I stay as snow it} *ni't' appin hi mispu'k*, I stay as it snows; (2.) ^{thou stay as snow it} *ki't' appin hi mispu'k*, thou stayest as it snows; (3.) ^{stay he as snow it} *appu hi mispu'v'e'ik*,¹ he stays as it snows to him; (4.) ^{there is} *unti ei' au ne'gusis*, there is my son; (5.) ^{there is he his son} *unti ei'ath'u w'gusis'a*, there is his son to him; (6.) ^{gun} *unti ei'au paskesiggun*, there is the gun; (7.) ^{I fut. tell it} *unti ei'ath'u paskesiggun*, there is the gun for him;² (8.) ^{to belong to-him his son arrive he fut.} *ã · n · au · a w'gusis'a tukkusin'eth'it' · e*, I will tell his son when he (the latter) arrives (relatively to him).³

This use of θ shows the strong sense of the objects which is proper to Cree thought. A verb in the third person always has its person elements for subject and object, though these be expressed in immediate connection with it.⁴ In *witumāmaua*, the last *a* is demonstrative of *ugusisa*.

37. In Cree there seems to be no pure element of relation except a locative *-k*.⁵ The personal pronouns as separate are, *niθa*, *kiθa*, *wiθa*, *niθanan* first pl. excl., *kiθanau* first pl. incl., *kiθavau* second pl., *wiθavau* third pl. Their essential elements are *ni*, *ki*, *u*, and these are the persons of verbs, and as possessives are prefixed, their plural part following the noun, and being followed by the plural part of the noun.⁶ Nouns form a plural in *-uk*, *-wuk*, if animate; *-a*, *-wa*, if inanimate; but if an animate noun in the plural is possessed by third person, it takes the inanimate plural *-a*.⁷ The element *m* may be subjoined to a noun which has a personal possessive to express own; it comes before the plural element of the pronoun. The locative *k* comes after the plural of possessive pronoun.⁵

Abstract nouns of quality or action are formed by *-win*, of agent or

¹ Howse's Grammar, p. 123.

² Ibid. p. 266.

³ Ibid. p. 268.

⁴ Ibid. p. 274.

⁵ Ibid. pp. 184, 242, 288.

⁶ Ibid. pp. 185, 187.

⁷ Ibid. pp. 181, 182.

instrument by *-gun*, *-eggun*, of the artificial by *-kon*, of the diminutive by *-is*, *-us*, of the passive object by *-oggun*. Some inanimate objects are denoted by animate nouns.¹

38. There are auxiliary verbal particles which, unchanged themselves, immediately precede the verb in its various formations, coming after the first and second persons. These are *ki*, perfect; *ga*, future; *pa*, conditional; *wi*, wish; *gi*, can; *ga ki*, future perfect; *ga wi*, shall wish; *pa gi*, should be able. There are also suffixes *-i*, *-ti*, *-oo*, *-oo'pun*, which, attached to the verbal formation, express the past; and *-i* suffixed to the subjunctive to make subjunctive future; *oopun* after a noun is equivalent to the late (70). The third person of future takes *gata* before third person present.² The verb to be is never either auxiliary or mere copula.

A subjunctive, indefinite as to time, is formed by opening and lengthening the first vowel of the subjunctive.³

An improbable subjunctive is formed by inserting *w* before the persons and subjoining *wi*, except to first and second persons singular, which take *i*. This seems to be originally an optative formed by incorporation of *wi*, wish. The third singular also is *-k*, and does not take *w* before it. The third plural is *āk*.⁴

The subordinate may precede the principal verb.⁵ There is neither infinitive nor participle.⁶ Imperative: *sake'h*, love thou him; *sake'h'wtak*, let us love him; *sake'h'ik*, love ye him.⁷ The ordinary arrangement is object, verb, subject, the rest in natural order. There is great freedom of arrangement.⁸

MIKMAK.

39. The Mikmaks of New Brunswick and Nova Scotia belong to the north-eastern branch of the Algonkin family. Their language likewise incorporates in its verbal formations pronominal notices of

write it you us (past)

direct and indirect objects, as *ewike'm'wiek · sep*, you wrote it to us.⁹

think self think

And it forms some compound verbs, by subjoining *del'si* or *dazi* to other verbal stems, and these are conjugated through all the verbal

attach think self you us (past)

forms, as *okotkwe · del · siek · sep*, you were attached to us.¹⁰

In the possessive construction also, with possessive prefix of third person, the noun takes a suffix, *-el*,¹¹ which corresponds to Cree *-eθ*, and is probably to be understood in the same way as the Cree suffixes, *-a* and *-eθua* (34).

IROQUOIS.

40. The Iroquois, about the lakes Ontario and Erie, had stronger sense of the subject and less sense of the object than the Algonkins. They consequently did not carry out to the same length the incorpora-

¹ Howse's Grammar, pp. 182, 183.

² Ibid. p. 199-203.

³ Ibid. p. 202.

⁴ Ibid. pp. 205, 206.

⁵ Ibid. p. 261.

⁶ Ibid. p. 312.

⁷ Ibid. p. 220.

⁸ Ibid. pp. 251, 257.

⁹ Maillard's Gram. Mikmak, p. 71.

¹⁰ Ibid. p. 91.

¹¹ Ibid. p. 17.

tion of the objects in the verbal formation, but only combined the pronominal representative of the direct object with the subject. According to the imperfect account which is to be had of their language, the synthetic tendency seems to have shown itself in the composition of nouns with certain adjectives, and in derivative adjective-endings taken by the nouns,¹ in the manifold derivative verbs,² and in the occasional composition of the noun with the verb ;³ but no examples of this are given.

The arthritic construction of nouns is frequent in Iroquois. "Certain nouns lengthen their radical whenever the extent of their signification is restricted, and they pass from a general and indeterminate sense to a particular and determinate sense. The form of this increment varies according to the termination of the noun. Generally it is *-ta*, *-sera*, *-t'era*, *-kwa*. This addition to the radical takes place in those nouns which are susceptible of it, before all the nouns of number, before adverbs of quantity, before adjective-endings, before postpositions, before nominal personals, whenever the noun enters into composition with a verb."³ What the nominal personals are is not explained. Probably they are the separate personal pronouns. Some of these connections which are thus arthritically formed are very close.

DAKOTA.

41. The Dakotas on the western side of the upper course of the Mississippi, from about $43\frac{1}{2}^{\circ}$ to $46\frac{1}{2}^{\circ}$ N. lat., speak a language which is distinguished by the particularising and arthritic feature of American speech, and by the large expression given to the elements of relation between the verb and its objects and conditions. It is not the massing of the elements of speech into large aggregates, thought all together, that is to be observed in Dakota ; but rather the largeness of particularisation and of the elements which mediate between the members of a fact and by which those members are thought as connected together. In the substantive derivatives, which are formed with the prefixes *o-*, *wo-*, *wiŋo-*, which seem to be pronominal,⁴ the prefix gives a substance to a verbal root (Def. 4). Most of the verbs consist of two parts, between which the person elements of subject and object are taken. In most instances the root takes a prefix of process, of which some twenty are given ; but very many are formed by the root taking as a suffix the auxiliary *ya*, to be or to make. The interposition of the person elements shows close union with the verb ; and the person elements of the first and second singular are different for the subject and for the possessor or the object, which indicates more subjectivity than in Cree, as if there was more spontaneity of volition. There is no subject element for third singular. The plural element *pi* of subject or object comes at the end of the formation. The only tense element is future *hta*, which follows the verbal formation. The second singular imperative takes *wo* after the verbal stem, the second plural *po*. The subjunctive and negative

¹ Etudes philologiques sur quelques langues sauvages, par N. O., p. 92.

² Ibid. p. 103, note*. ³ Ibid. p. 89. ⁴ Gabelentz, Gram. Dakota, sect. 6.

change final *a* to *e*. The suffixes *-yan*, *-han*, express contemporary going on.¹ There is no passive. Causatives are² formed with *ya*.

42. In Dakota the verb is a smaller element of the entire fact than in Eskimo, Algonkin, or Iroquois. It is not thought so fully in its accomplishment among the objects and conditions; and it is consequently much less felt throughout the fact as a centre of combination. A strong habitual interest lies in substantive objects generally, as well as in their connection with the verb; and accordingly, substantive objects are strongly particularised, and, moreover, a twofold set of elements are necessary in order to think them in their connection in the fact. The verb has to be carried on through a relation to those of the objects or conditions which it does not already reach in thought; and the object or condition has to be thought in connection with that relation, or with the verb, as the case may be. In this latter process there is a direction of attention to the object or condition thought as such in order to bring it into correlation, and that directed attention being the principal element in this act of connection, the connection gets pronominal expression (Def. 7). At the same time the smallness of the thought of the verb, which should be the great connective of the sentence, leaves more to be supplied in postpositional relations.

43. And hence arise the two striking features of Dakota, the constant use of demonstrative elements after the nouns either to define them or to connect them, and the composite fulness of the postpositions. Now the postpositions denote relations which are part of the matter of the fact; and their largeness, while it indicates that they are thought with little sense of the correlatives, illustrates the tendency of American thought to spread on its object. But the pronominal connective elements denote nothing in the fact. They only express the process of connection. And it is they that constitute the arthritic feature of the language. It is to be observed that though the verb in Dakota has not the fulness or power which it has in those other American languages which have been mentioned, the thought of the person in the verb so connects itself with the object as to take up always before it a pronominal representative of the direct object; the second person as object coalescing in one element with the first as subject; and when the third person singular is direct object it may be preceded in the verbal formation by any of the subject object combinations, the object part in them being indirect object of the verb.

The following examples will illustrate these statements:—

and spirit the dem. dem. on from definite locality think
 ³ (1.) *Onkan Jesus wakan·kin he · t̄ · iya'tan · han hetankin·*
 pl. subject the know it vbl. elem.

pi · kin sdot · ki · ya, and Jesus, through the Spirit, knew what
 they thought. (2.) *Joseph Aramate het'iyatan·han hi*, Joseph came
 then heaven man def. art.

from Arimathea.³ (3.) *Hehan marpiya et'iyatan·han wita'sta · kin*
 son his def. art. glory great power great these self have down
tihint·ku · kin wowitan tanka wowasake tanka hena hduha kut·

¹ Gabelentz, Gram. Dakota, sects. 17, 23, 30, 36.

² Ibid, sects. 31, 34.

³ Ibid, sect. 46.

wards come see verb. pl. future

kiya n wan · daka · pi · kta, then shall they see the Son of Man come down from heaven with great power and glory; *-kuya*, *-tuya* form

local adverbs of rest.¹ (4.) *Token Wakantanka · kin · e waste · dake ·*
 future he how God def. art. dem. love verbal
kta he, how shall he love God?² *witasta · kin dena Wakantanka*
 far above local suff. his poss. 3d pl. obj. be
tehan · wankan · tuya · kin ta · wa · wita ya, these men are the
 servants of the most high God.³

The demonstrative *e* mediates regularly as a connective element between the verb and its direct object² when the connection of the latter with the former requires distinct expression; sometimes when the object has already the definite article *kin*. There is also an arthritic construction for possession by a personal pronoun. If, indeed, the noun be itself thought as a possession, it coalesces with the personal pronoun, which is then prefixed without any connective element. If the idea of the noun be thought more independently, the personal pronoun, if it be first or second person, takes a demonstrative suffix, *ta*, to represent the noun in connection with the pronoun; but this is not arthritic; it corresponds to the usual formation of separate possessive pronouns. If the idea of the noun is still less ready to coalesce as a possession with the personal pronoun, then *ta* is thought as the possession, and is expressed as such by the demonstrative suffix *wa*, and the element formed by subjoining *tawa* to the personal pronoun follows the noun as a supplementary thought. Thus *mi oie*, my word;

mita woahope, my command; *Wakantanka mitawa*, my God; *ta wata*, his ship; *Wakantanka tawa*, his God.⁴ In *mitawa*, *wa* is demonstrative, and refers to *ta* as connected with *mi*. In *Wakantanka tawa*, *wa* refers to *ta*, particularising it as possessor; *wa* is in each case arthritic (compare *wa*, which is part of *ethua* in Cree (31).

44. The Dakotas speak with rather a soft phothesis, but with full pressure of breath from the chest. The medials *b* and *d* have the pressure of breath eased by a nasalisation which lets off the breath through the nose, so that they are uttered as *mb nd*, especially when preceded by the strong breath of *h* or *r*. On the other hand, the breath, owing to its habitual strength of pressure, catches the labial closure of *m*, so that it is uttered almost as *bm*. *N* at the end of a syllable is generally weakened to a nasalisation as in French; at the beginning of a syllable it is uttered as *n*; at the end of a word the volition to stop the utterance tends to make the closure interruptive, so that *n* is uttered almost as *dn*.

The consonants are *k, g, k', g', t, t', t, d, t', p, b, p', h, y, s, z, s, z, w, i', m, n*. The aspirations are remarkably strong; *k, k'* at the beginning of a word, after *e*, in the middle after *i*, sometimes become *t* and *t'*. The vowels are *a, e, i, o, u*, and when two concur each gets its full utterance.⁵

The accent in uncompounded dissyllables is generally on the first

¹ Gabelentz, Gram. Dakota, sects. 33, 60.

³ Ibid. sect. 23.

⁴ Ibid. sect. 18.

² Ibid. sect. 9.

⁵ Ibid. sect. 4.

syllable, but in compounded dissyllables it is oftener on the last. In trisyllables the accent is generally on the penultima; but if words of three or four syllables end in *tá*, *ka*, *ya*, *pi*, or *dan*, or have the prefix *wo*, the accent is on the antepenultima. Other polysyllables have it on the syllable before the antepenultima, and another accent on the penultima.¹

45. The substantive is not distinguished by any formative element from the other parts of speech, the adjectives may be used as substantives, and even the verb becomes a substantive by using the article with its subjunctive form, in which *e* takes the place of final *a*. There is a derivative ending *-tu*, forming nouns of time; also *-dan* of diminutives.²

There is no grammatical gender, nor even any element distinctive of sex.³

The plural ending both for the noun and the verb is *pi*, but it is used only for a plurality of men; and those substantives which have the suffix *dan* take *pi* before it. Often, however, *pi* is omitted when the plurality is thought as a class or when it is expressed by a numeral.⁴

The only case-endings are locatives, *-ta*, *-n*, *-g*.⁵

The genitive is known by preceding its governor. The object direct and indirect precedes the verb.⁶ The adjective always follows its substantive. It takes the plural ending only when used as substantive. It has no forms for degrees of comparison. But it is intensified by reduplication of first, middle, or last syllable.⁶

There is a definite article *kin* and an indefinite *wan* (one), which both follow the noun.⁷

46. The personal pronouns, when separate, are—sing. *miye*, *niye*, *iye*; pl. *onkiye*, *niyepi*, *iyepi*; as possessive prefixes they are *mi-*, *ni-*, *i-*, *on-*, the plural element for second and third following the noun. The subject persons of the verb are—first sing. *wa-*, second sing. *ya-*, first pl. *on-pi*, *onk-pi* before vowels; second pl. *ya-pi*, third pl. *-pi*. There is no person element for third singular.⁸ Possession is sometimes expressed verbally, as by *wa ya*, I have, qualifying the noun. There is an object element for first sing. *ma*, for second sing. *ti*, meaning I thee; for third sing. *ki*, for third pl. *wita*; for the others, they are the same as the possessive elements. The reflexive object element is *it'i* or *i-*; it combines with the *y* of the active element *ya* or *yu*, changing it to *hd*.⁹

The demonstrative pronoun follows its noun; and by following a clause which as a relative clause qualifies a noun, the demonstratives *k'on*, *ti k'on*, *kin*, *kin he*, supply the place of a relative pronoun.¹⁰

There are also interrogative and indefinite pronouns.¹¹

¹ Gabelentz, Gram. Dakota, sect. 5.

³ Ibid. sect. 7.

⁶ Ibid. sects. 11, 12.

⁹ Ibid. sects. 20, 40.

⁴ Ibid. sect. 8.

⁷ Ibid. sect. 10.

¹⁰ Ibid. sects. 23, 24.

² Ibid. sects. 6, 60.

⁵ Ibid. sect. 9.

⁸ Ibid. sects. 17, 18, 28.

¹¹ Ibid. sects. 25, 26.

CHOCTAW.

47. The Choctaw language develops to an extraordinary degree the pronominal definition of its nominal and even of its verbal ideas. It is as if the attention of the race was given with great generality of interest to the objects of observation, so that a thing or a fact possessed for them a special interest, when thought as singled out from among the things or facts which the mind associates with it. And in this process of specialisation the slow and spreading character of American thought may be seen. Objects are defined with great strength in the particularity of the present instance, though with little attention to the nature of their connections. Such a habit of thought would seem to indicate great general attention to things, though with little art to form combinations of means and conditions for the promotion of their interests. To this corresponds the account which is given of the Choctaws. They inhabited the country on the east side of the Mississippi from the mouth of the Ohio river to the Gulf of Mexico. And the traveller Bernard Romans says of them in 1772, that they might more properly be called a nation of farmers than any savages known to him; they laboured with their wives in the field, and were more addicted to agriculture than to the chase.¹ A habit of strong interest in things, though with little or no originality in the adaptations or adjustments of things, would lead the spreading tendency of American thought to go in its individual acts into the distinguishing and defining of its objects rather than into their combinations, and to develop the pronominal rather than the synthetic feature of American speech, except so far as the latter might be brought out in the formation of composite ideas of substantive objects; the spreading quality of American thought being seen, as has been said, in the combinations which are formed of pronominal elements with strong meanings.

48. There are two pronominal elements which are the basis of the pronominal formations used with nouns and verbs in Choctaw to give them due particularity and connection in the sentence. These elements are *a* and *o*; *a* may be reduced to a mere *sheva* or closed to *e* or *i* with weaker significance. In *a* attention is directed only to the particular object of thought as distinguished from all other objects; in *o* attention is given to it as an object of thought which may be denoted by the noun or verb, and as distinguished from those to which the noun or verb could not be applied. Thus *a* and its weaker forms particularise the object itself, *o* particularises it as belonging to a class or designation, distinguishing it from other classes or designations. *A* has been called definite and *o* distinctive;² but as *a* may correspond to the indefinite article, denoting a particular, as, for example, a particular man, it might be better to call *a* individualising and *o* designative. Besides these, there are the following: *k*, which

¹ Pritchard's Researches, v. p. 403.

² Byington's Choctaw Grammar, Part II. chap. i. sect. 14.

more strongly determines an object, and *h*, which also has a demonstrative significance; *s*, which renews attention to what has been thought before; and also *t* and *m*, which are connective elements. The element *t* refers to a noun connecting it with a sentence as subject, and has another form, *t'*, which is probably less definite; *m* or *n* refers to a noun connecting it as object of a relation, being combined with *a* or *o* and generally absorbed into the vowel as a mere nasalisation. The connective elements *t* and *t'* also act as copulative conjunctive elements; and *m* expresses concomitance, so as to refer to what has been mentioned before or to connect one fact with another in time or as a concomitant condition. The determinate element *k* is also used with verbs as referring to them; sometimes in combination with *b*, which is optative. This element *b* seems to be verbal, and *t*, *t'*, *m*, and *n*, involve relation, but the others seem to be pronominal, and are so regarded by the grammarian of the language, who gives the name of article-pronouns to the combinations of them which are used.¹

Another element *h* is often associated with those elements, but this *h* is a verbal element.²

The combinations of the above pronominal elements which are used after nouns have been named as follows:—

	Definite.	Indefinite or Dis- tinctive.	Contradistinctive.		Definite- Distinctive.	Distinctive- Definite.	Renewed Mention.		Emphatic.
Nomin've case	<i>at, a, et, it</i>	<i>os, oi, o'u</i>	<i>ato, ato, eto</i>	<i>okato okat</i>	<i>akog akok</i>	<i>okat okak</i>	<i>ag asog</i>	<i>okakog amo</i>	<i>ak, het</i>
Oblique case	<i>ã, ã.</i>	<i>õ, ona</i>	<i>ano, ano, eno kano, mena</i>	<i>okano oka</i>	<i>ako</i>	<i>aka</i>	<i>ag agõ</i>	<i>okakõ</i>	<i>akhã</i>

The above are the names given to the article-pronouns by the grammarian of the language, but no name or translation can give their signification as well as the elements themselves of which they are composed, and which all retain their significance in the various combinations. Other combinations also may be formed by prefixing the demonstrative *h*, or the connective *m* or *t'*, to some of the above, or by subjoining the demonstrative individualising *ha*.

Km, subjoined to a verbal stem, refers to the fact denoted by the stem, as a concomitant condition; *okm* makes the condition distinctively designative.

Kb, subjoined to a verbal stem, makes it optative, and *okb* makes the wish distinctively designative.

These conditional and optative elements may be followed by the article-pronouns as their subject or object.

49. Final *h* asserts as a verb.³ Verbal stems may be used as nouns. Verbs are thought with great discrimination, there being different stems for intensity, continuance, the instantaneous, repetition, and

¹ Byington's Choctaw Grammar, Part II. chap. i.

² Ibid. sect. 14.

³ Ibid, sect. 15.

causativeness.¹ Nasalisation of vowel of stem gives continuance, increase of stem intensity, *-t'i* causation of what the stem denotes, *-t'et'i* causation of subject of stem to realise it.² A passive is formed by internal change when the passion involves visible effect, but so variously that no rule can be laid down.³

There are no prepositions except such as are used in forming derivatives; for when a noun is governed by a verb through a relation, the relation is apt to be taken up by the verb in a derivative formation,⁴ showing the fulness with which the verb is thought in connection with the objects and condition. Qualities are thought with discriminations of degree, as verbs also are; adjectives are of a verbal nature, and, like verbs, form a plural by internal changes or by the addition of other words.⁵

50. These features of the language may all be shown to correspond to the view which is given above of the genius of the race, and which account for the great development of the defining form of American

speech in Choctaw. The following are examples: (1.) *hatak* ^{man} *at* Pharisee

Falisi yos, a man who was a Pharisee;⁶ *at* individualises the man as subject (the verb is not given), *os* distinguishes him as a Pharisee, *s*

referring to *hatak* as mentioned before, *y* is euphonic. (2.) *Atam akos* ^{Adam} *hatak* ^{man} *moma* ^{all} *i* ^{first} *tikbah* ^{past} *a tok*, Adam, who was the first of all men;⁷ *akos* affects *Atam* as an article-pronoun, *a* individualises, *k* determines, *o* distinguishes as Adam, *s* renews the direction of attention, *i* individualises *hatak moma* as object of thought referring to it as connected, *i.e.*, as object of a relation, *h* asserts, *a* individualises what precedes as object of thought, *tok* puts it in the past. The article-pronouns supply

the place of a relative pronoun. (3.) *Mihma okla* ^{people eat past woman} *impatuk* *at* *ohoyo* ^{child beside} *alla aiena* ^{man} *hokato* ^{thousand} *āsa* ^{four past} *hō hatak tal'epasipokni usta tok*, and they that did eat were 4000 men, besides women and children;⁸ *mihma* is a pronominal formation referring to the subject of the preceding sentence, as connected, though not subjectively, with the present sentence, and thereby joining the sentence which follows as by a copulative conjunction to that which precedes;⁹ *at* individualises *okla impa tuk* as subject; *aiena* is demonstrative connective, referring to *ohoyo alla* as there also; *hokato* is strongly contradistinctive of them; *āsa* fixes thought on them again as in the fact, but not the subject of the sentence; and *hō* fixes thought on them as women and children, and nothing else, thinking them as connected with the fact which the sentence states, but not as

subject. (4.) *Saso ilapp'at illi'tuk* ^{Son this dead past back alive is} *os* *falam'at okl'āya'h oke*, this son was dead and is alive again;¹⁰ *at* individualises the subject; *os* refers

¹ Byington's Grammar, Part II. chap. iii. sect. 8. ² Ibid. sect. 16.

³ Ibid. sect. 2.

⁴ Ibid. chap. iv. and chap. v. sect. 7.

⁵ Ibid. chap. vi. sects. 4, 5.

⁶ Ibid. chap. i. sect. 11.

⁷ Ibid. sect. 24.

⁸ Ibid. chap. i. sect. 25.

⁹ Ibid. chap. viii. sect. 3.

¹⁰ Ibid. chap. i. sect. 27.

to him as designated by the clause which *os* concludes, and with renewed attention (*s*) to connect with what follows; *oke* emphasises the state-

ment just made. (5.) *Atuk os hokt'i ma nanihi kamini kat hina*
side fall sow seed some way
fowl hither up devour past

lapalika yõ kaha'tok atuk õ husiputa kat ant'apat'tahli'tok, and when he sowed some seed fell by the wayside, and the fowls came and devoured it up; ¹ *atuk* fixes thought individually on the subject (*at*) gone before (*uk* designated and determined as such); *os* refers to this subject as it has been designated and with renewed attention as subject of *hokt'i*; *ma* refers to the first fact as concomitant of the second; *kat* determines and individualises, as subject of this latter fact, *nanihi kamini* and, as subject of the next fact, *husiputa*; *yõ* connects with the second fact objectively, and emphasises as designated, *hina lapalika*; *y* is euphonic; *atuk* fixes thought on *nanihi kamini* as subject gone before, and *õ* emphasises it as designated connecting it objectively in the last fact.

(6.) *ano ak kia hatak sia akinli'h oke*, I myself also am a man; ² *ano* is the distinctive first person, *o* emphasising it as designated, and therefore distinguishing it from what is otherwise designated; *ak* individualises and determines; *kia* determines it again by *k*, with specialisation by *ia* as if setting it apart; ³ *sia* is the first person thought individually, as it has already in *ano* been distinguished from objects that have other designations; *oke* emphasises the statement

that has been made. (7.) *ano as sia'h oke*, it is I; ² *as* fixes thought on I individually, and then with renewed attention as in the fact; *oke* emphasises the statement. The phrase might be roughly trans-

lated, I and no one else it is, 'tis I, so it is. (8.) *Amba abeka yokmako'h t'atuk oke*, but they that are sick ⁴ (Matt. ix. 12); *y* is euphonic, *o* refers to *abeka* distinctively, *km* as a concomitant condition of a fact, *a* concentrates thought on those who satisfy that condition, *k* thinks them with determination, *o* with distinction, and *h* gives realisation to their state; *t'* connects them, *at* as the very subject, *uk* of the fact referred to; *oke* emphasises the statement.

(9.) *At'afa kok os Falisi okma at'afa kato publikan a tok*, the one a Pharisee and the other a publican; ⁵ *kok* determines, distinguishes, and determines as thus distinguished *at'afa*; *os* distinguishes it (*o*) with renewed attention (*s*) connecting it to *Falisi*; *okma* distinguishes and determines it as thus described, and connects it thought individually (*ma*) with the next clause, but not as subject; *kato* determines (*k*) the second *at'afa* as subject (*at*) of the next clause and with distinction (*o*); and *a* directs concentrated attention to *publikan*.

In the above examples *s* seems to be somewhat arthritic.

¹ Byington's Grammar, Part II. chap. i. sect. 23.

² Ibid. chap. ii. sect. 5.

³ Ibid. chap. iii. sect. 15.

⁴ Ibid. sect. 12.

⁵ Ibid. chap. viii. sect. 3.

51. There is also a synthetic development of compound nouns; as
 cow skin bag horse ear long
wak'haksup'sukt'a, cow-skin bag; *issuba'haksobis'falaia*, mule. Such
 compounds are formed of two or three nouns, noun and adjective, two
 nouns and adjective, or one or two nouns with a verbal stem.¹

The following facts also are to be noted.

52. The Choctaw phonesis shows strong pressure of breath from the chest, and rather a vocalic than a consonantal character. While it has the usual vowels *a, e, i, o, u* (*e* and *o* being always long, *i* and *u* short, and there being no *ê*), and the diphthongs *ai, au*, it has only fifteen consonants, and of these no two can concur except as ending one syllable and beginning the next. They are *k, t, p, b, h, y, s, f, w, l, m, n*. The small development of medials is remarkable, yet the phonesis is not hard. Force of breath is what distinguishes it. The accent falls on the penultima, and a minor accent on the second syllable before it, also on the last syllable of a clause.²

53. The order is subject, conditions, object, verb; place follows time, and both may precede or follow subject; adjective and adverb follow noun and verb;³ genitive precedes governor. The case-nasal affects the article-pronouns.³

54. The personal pronouns are—sing. first *a*, second *sa*, or *si*, third *t'i, i*; pl. first excl. *pi*, first incl. *hapi*, second *hat'i*, third *i*. As separate possessives they take *-mmi*. The suffix *-lap* = -self. The personal affixes, subjective and possessive, are—first, *-li*; second, *-is*; first pl. excl. *-e*, or *-il-* before vowels; first pl. incl. *eho-*, *iloh-* before vowels; second pl. *has-*. In the imperative, they are—sing. first, *ak-*; no second; third, *ik-*; pl. first excl. *ke-*, incl. *keho-*; second *has-* *ho-*, third *ik-*. There are none for third person except with the negative *k*, or imperative. These affixes, with negative *k*, are—*ak-, t'ik-, ik-, ke-, kil-, heloh-, kiloh-, hat'ik-, ik-*. Thus *li* is the only suffix. The personal pronouns, *sa-, t'i-, pi-, hapi-, hat'i-*, are prefixed as objects; the negative *ik* precedes them. The personal pronoun when thought in English as subject of neuter or passive verbs is thought in Choctaw as object, the neuter or passive state affecting it. The personal possessive affixes given above are those of closest connection, as, my head; but for less close connection, as, my hat, as well as for indirect object, the personal pronouns take *-m*, and are prefixed to nouns and verbs. The reflexive object is *ille*, the reciprocal (each other) *itti*; *e t'itti pe sah*, we see thee, and thou us. There is also a pronoun, *ho*, used as substitute for nouns of kindred by marriage, but not for husband or wife. The third personal pronoun is the same for singular and plural, and without distinction of gender or sex. There are demonstratives and interrogatives. The object persons and subject persons do not coalesce.

Except in the first and second personal pronoun there is no distinction of number; but verbs often take up an internal change for plural

¹ Byington's Grammar, Part II. chap. v. sect. 9.

² Ibid. Part. I. sects. 1-11.

³ Ibid. sect. 13, Part II., chap. v. sects. 4, 6.

subject or object. The substantive is thought without individualisation in its attributive part.¹

55. All verbal stems end in *i*, *a*, or *o*, but when negated in *o*. An immediate definite past is expressed by *tuk*; a remote and indefinite past by *tok*; a pluperfect by *tuk a tuk*, *tuk a tok*, *tok a tuk*, an immediate future by *ʔi*, a remote or indefinite future by *he* or *hi*, and these may be combined with *tuk* or *tok*, all following the verb. The verb may also be followed by *hinla*, may, can; *pulla*,² must, will, as well as by *km*, *kb* (48).

YAKAMA.

56. The Yakama or Walawala is spoken by bands belonging to the Sahaptin family, who live about the Columbia river, east of the Cascade range of mountains.³ They live on fish, which in the season is taken in great quantities, on roots, and on game.⁴ Their energy does not go with such force to the objects about them as does that of the Algonkin races; nor do they think those objects themselves with such separate interest as the Dakota. Being and doing is thought more subjectively by the Yakama than by either of these, and though this subjectivity separates the thought of the verb from the substantives, yet these are thought strongly as concerned in it and related to it. Among the Selish or Flathead Indians, who subsist in the same way as the Yakama,⁵ but live further north and nearer to the highest part of the Rocky Mountains, life, though not more active, is probably more difficult and more dependent on circumstance; and the thought of its beings and doings seems to be more involved in external circumstance.

In Yakama, then, the principal habitual interest belongs to personal experience in using substantive objects. And while being and doing are thought in the subject and distinct from substantive objects, the relations of the being or doing to those objects are strongly noted, and its distinctness from these causes the relations to be more fully thought. The objects and conditions are thought with less sense of the generality of substantive objects than they are by the Dakota, and there is less need therefore of pronominal elements to point them out; so that these are much lighter in Yakama than in Dakota, and the characteristic feature of the former consists rather of composite elements of relation than of demonstratives continually recurring or accumulated one upon another. Nor is it only in the largeness of the relations that Yakama shows the spreading tendency of American thought; it has also megasyntactic combinations, for its subjective conception of being and doing leads thought to whatever elements there may be in the fact which have subjective associations, and tends to incorporate these in the verb.

The arthritic feature in Yakama, though much less strongly marked than in Dakota, is to be seen in its declension of the noun.

"To decline a substantive, it is sufficient to add to the stem the

¹ Byington's Grammar, Part II., chap. ii.

² Ibid. chap. iii.

³ Pandosy's Yakama Grammar, preface.

⁴ United States Exploring Expedition, iv. pp. 384, 386. ⁵ Ibid. iv. p. 446.

termination *nem*, to have the nominative. It is, however, necessary to remark that the stem is itself a nominative, and that the sign *nem* is employed only in certain cases. Custom alone can make its proper use understood."¹ It is probably a pronominal element which comes out in connecting the noun as subject with the verb, the mind still directing attention to the noun as it proceeds to think the verb, and this act of attention being expressed by a pronominal element. This view of the nature of *nem* is confirmed by the fact that it is in the genitive also, abridged to *nm*; *miawar'nem*, the chief; *maiwar'nm'i*, of the chief. The other cases are—

Plural.

<i>miawar'au</i> , to the chief.	|	Nom. <i>miawar'ma</i> , the chiefs.
<i>miawar'n'an</i> , the chief (accus.)	|	Gen. <i>miawar'ma'm'i</i> , of the chiefs.
<i>miawar'ei</i> , for the chief.	|	Dat. <i>miawar'ma'mi'au</i> , to the chiefs.
		Acc. <i>miawar'ma'm'an</i> , the chiefs.
		<i>miawar'ma'mi'ei</i> , for the chiefs. ²

The *m* of the plural case-endings evidently refers to the plurality *ma*, so that it would appear that the first *n* of the case-ending of the accusative singular refers to the noun, and is of a pronominal nature; so that there is an evident tendency to use pronominal elements to connect the noun with the relations or with the verb, though this tendency is not carried out to a great extent.

The other cases of the plural noun are composite, and show the largeness with which relations are thought, being formed on the genitive; *miawar'ma'mi'au*, to the chiefs; *miawar'ma'mi'ei*, for the chiefs. "Sometimes for euphony a syncope is made in the plural in all the cases except the nominative and vocative"³ by omitting *ma*, the element of plurality. But the compound cases, which are the striking feature of the language, are of a different nature. When a noun is governed in the genitive by another noun, which is itself governed in another case, then the genitive takes in addition to its own case-

chief gen. dat.

ending the case-ending of the governing noun; as (1.) *miawar'nm'i'au*
house dat. I go my father

niti'au nes winasa, I am going to the chief's house; (2.) *na totasa'*
gen. acc. order acc. I execute

umi'nan tawanwit'nan nes twanasa, I execute my father's order. And in general, "when a word is governed by a postposition or joined to one, all the substantives which refer to it take the postposition

me gen. in house in he is

in like manner; as (3.) *en'mi'pa nit'pa i'wa*, he is in my house."⁴

The adjectives take whatever postpositions or case-endings, simple or compound, may be attached to the nouns with which they agree. There is no element distinctive of gender or sex.

The strong sense of the subject in the conception of the verb in Yakama is seen from the strength of the personal element which is connected with the verb, and the intimacy of its union with that element.

¹ Pandosy's Grammar, p. 11.

³ Ibid. p. 13.

² Ibid. p. 12.

⁴ Ibid. p. 29.

If the subject of the verb be a personal pronoun thought separately, and immediately preceding the verb, there is yet another personal element used between it and the verb expressing the subjectivity of the person in relation to the verb, as *ink nestimasa*, *ink namtimasa*,

he write
penk itimasa, I write, thou writest, he writes; *namak natés timasa*, we (excl. ?) write; *nanam namtk timasa*, we (incl. ?) write; *imak pam timasa*, ye write; *pa timasa*, they write. And if the personal pronoun be not separately thought, or if the verb be interrogative, the verb of the first or second person is thought so strongly in its stem that it is not limited as belonging to the experience of the person, so that this fol-

lows the verbal stem; but the third person precedes, *timas'es timas'am*,
he write write we write ye they write

itimasa timas'ates, *timas'apam*, *partimasa*.¹ There being a strong sense of personal experience in the conception of the verb, the thought of the verb is apt to spread to elements of this nature, and to incorporate these in the same formation. Such elements are motion to a distance or towards a distance, disagreeableness, momentariness, long duration, at night. Derivative elements with these meanings may be accumulated on one another besides the ordinary causative, iterative, reflexive, and reciprocal formations; so that the following verb, for example,

may take all the forms of person and tense, *i'pina · sapa · to ·*
disagreeably tiresome long wait

tra · vik · tamawarsa, he keeps one waiting for him (the subject) at night disagreeably, tiresomely, long.²

57. *Yakama* has only fourteen consonants, *k, t, p, h, s, y, w, l, l', r, m, n*, and the vowels, *a, e, i, o, u*, but *u* is found in only two or three words, and pronounced by the *Yakamas* with difficulty.³ The absence of medials is remarkable. The phothesis seems to be hard, with strong pressure of breath from the chest.

58. There is no article.⁴

The essential elements of the personal pronouns are singular *en, em, pin*; pl. *née, ma, pé*. They become possessive by taking *-mi* (37, 54). As separate pronouns the first subjoins *k* in the nominative and accusative singular and plural, the second and third in every case except the *-ei*-case singular and plural of both, and the accusative singular of third. The endings *-au* and *-ei* in singular and plural, and in the third the accusative singular endings also, are preceded by *mi*. In the first and second the accusative ending is *-ana*, except first singular *-na*.⁵ The reflex object is *pina*, the reciprocal object *papa*; both precede immediately the verbal stem.⁶

59. The tenses are expressed by subjoining to the verbal stem, for the past *-na* (*wa* to be or have takes *-ta*); pluperfect *-sana*; future *-ta*; conditional *-tarnei*; imperative, *-k* second singular, *-tk* second plural; infinitive and present *-sa*; present participle *-tla*, neg. *-nal*; past participle *-ni*, neg. *-nal*. Gerund *tima'tés* or *timanat*, which is translated for writing.

¹ Pandosy's Grammar, p. 23.

² Ibid. p. 28.

³ Ibid. p. 10.

⁴ Ibid. p. 11.

⁵ Ibid. p. 16-20.

⁶ Ibid. pp. 26, 27.

When the person element of subject follows the verbal stem, the tense element comes between.¹

SELISH.

60. The Selish alphabet contains the following consonants, *k*, *t*, *t'*, *p*, *χ*, *y*, *s*, *l*, *l'*, *n*, *m*, and the five vowels, *a*, *e*, *i*, *o*, *u*.² There are no medials. The phonesis is hard, with strong pressure of breath from the chest. The language abounds in consonants; so that four or five, or even seven or eight consonants may be met with having no vowel between them. In every case of concurrence, however, *shevas* are used, when necessary, to give them utterance distinctly,³ for the Selish speak slowly and with great distinctness.⁴ They also make much use of emphasis, with prolongation of the vowel on which it falls, denoting length of an action or special quality or quantity.⁵

61. Abstract substantives of action or quality are formed from stems of verbs or adjectives by prefixing *s-*; those of the instrument from verbal stems by *-tin*, *-n* and other forms; of the agent by *sgu-*; of person addicted to, by *-emm*, or if verbal stem be frequentative, by *-ul*; of place of realisation by *sm* before noun of instrument.⁶ From nominal stems diminutives are formed by *l-*, with or without internal change.⁷

The substantive has neither gender nor case. A plural is formed by some substantives and adjectives denoting animate objects by *ul-*. Others form it by various reduplications, others from different roots. Nouns ending in *-aus* or *-eus* form it by changing *-us* to *-lis*.⁸ There are some adjectives applicable only to persons, others inapplicable to persons.⁹

62. The personal possessive affixes are *in-*, *an-*, *-s*, *kao-*, *-mp*, *-s*. The plurality of the third plural possessive is taken up into the noun, and reduplicates the vowel which precedes its last letter.¹⁰

63. The subject-persons are *tin-*, *ku-*, —, *kae-*, *p-*, —, for verbs which have no object. For those which have an object they are *y-*, *a-*, —, *kae-*, *p-*, —, which are more akin to the possessives; *-p*, which is probably a plural element, follows the verbal stem, as do all the persons of the perfect except first plural; these are *-tin*, *-ku*, *-s*, *kae-m*, *-p*, *-s*. To the intransitive persons are subjoined *-es* for the going on, *-s* for the future contingent, *-ks* for the imperative, the desiderative, and the subjunctive. These are followed by the intransitive verbal stem, which takes *-i* in the present, the subjunctive, and the future contingent, *-s* in the second singular imperative instead of a subject-person, and *-i* in the other persons of the imperative. The subject-person, followed by the intransitive stem, expresses the perfect; and preceded also by *nem* the future. Active verbs abstracted from an object subjoin *-i* to the stem like intransitives, and subjoin *-m* to the stem where *-i* is not taken.

The transitive stems also get continuance by being preceded by *es*.

¹ Padosy, p. 21-25.

² Mengarini, Selish Grammar, pp. 1, 2.

³ Ibid. pp. 62, 63.

⁴ Ibid. p. 2.

⁵ Ibid. p. 63.

⁶ Ibid. p. 64-66.

⁷ Ibid. p. 4.

⁸ Ibid. pp. 2, 3.

⁹ Ibid. p. 67.

¹⁰ Ibid. pp. 9, 10.

They subjoin *-m*, but drop it in the perfect, and instead of it they take *n* in the first singular, *nt* in the second singular and first and second plural of the perfect and second singular and second plural imperative, and *-st* in the continued perfect. And to the prefixed persons *-s* is subjoined in the future contingent, *-ks* in the subjunctive.¹ The subjunctive is used truly as such to express a dependent fact.² The root of an active verb may take the intransitive persons with their verbal element, and become passive in its meaning.³

64. The Selish or Flathead race are probably more dependent on circumstance, and less masters of their own fortunes, than the Yakama. Their interest lies in the whole condition in which they find themselves, whether this result from action or not, rather than in their own voluntary determination, or in the objects about them, thought separately as ends or as means of attaining their ends.

The Selish verb involves little sense of an energy of the subject. The felt distinctness from the root of the engagement of the subject is a leading feature of the language.⁴ The subject seems sometimes to follow the verb; and sometimes it is distinguished from the object by the prefix *t*, which is also prefixed to an ablative governed by a

strike (3d sing. perf.) thy son
passive verb, *poll's a'skusi t'Piel*, Peter struck thy son.⁵

The interest of fact seems to lie habitually in personal use of external circumstance; and that interest being thus external naturally embraces the objective elements of the fact, and tends to incorporate these in the verb.

Thus when the direct object of a verb is plural, the verb itself takes up the plurality and reduplicates its penultimate vowel, if it refers to the plurality of objects in the aggregate; but if the verb

refers to them separately its root is reduplicated, as *i'es makka'm*, I hinder (one); *i'es'makka'm*, I hinder (several); *i'es'mkk'makka'm*, I hinder (several separately). Sometimes instead of reduplication there is a change of one or more letters in the root.⁶

Frequentative verbs are formed by adding *-luis* to the root, the root itself being sometimes altered at the same time; and these verbs also take the two reduplications for plurality of objects, or change *-luis* to *-elis*.

L before the root expresses diminution, the root also being sometimes reduplicated, and this diminutive form is used not only for a diminutive doing or being, but also for a diminutive object; *-el* subjoined to person, or prefixed to verb, expresses repetition; *-eus* subjoined to root expresses coupling of two objects into one object; *-elis* combines a plurality. The element *misti* instead of *i* subjoined to the root makes the verb reflexive to self as indirect object, *zuti* as direct object; *-tunti* makes it refer to the public as its object; and these verbs are treated as intransitives; four elements prefixed to the root denote respectively hence, thence, above or on, and in.

There is no copula, but the predicate is a verb, only that it does

¹ Mengarini, p. 12-27.

² Ibid. p. 76.

³ Ibid. p. 74.

⁴ Ibid. p. 12.

⁵ Ibid. pp. 82, 91.

⁶ Ibid. p. 33.

not take *es*, the element of going on or verbal succession. All transitive verbs may take up pronominal representatives of their direct object, and also of an indirect object when personal, but both objects may be left undetermined, or the indirect only, or both, may be determined.¹ In the first two cases *-s* is added to the verbal stem, the first being treated as intransitive, the second as transitive; the third adds *lt*, and is transitive. The determinate object-persons are not closely combined with the person of the verb when this precedes the verb. The person-object *ko*, *ku*, —, *kae*, *p*, —, then goes first with distinctness. But when the subject-person follows, the second object-person singular and plural comes between verb and subject, and combines with the latter.

65. But besides these combinations of verbs with pronouns and with derivative elements, the Selish language abounds also in compounds. Verbs are compounded with one or more other verbs, substantives with adjectives, verbs with substantives, or with substantives and adjectives,² and the component substantives may themselves be derived from verbs.³ The components are abridged in composition, and generally reduced to their radical part; sometimes they are so affected by abbreviation as to be quite altered from the form which they have

I (pres.) come buy horse (intrans.)

as separate stems, *tn · es · ko · to · skagae · i*, I come to buy a horse;⁴ *tn · es · t' · sp · kan · alko · i*, I hit on the head with a stick; *tn · es · t' · az · si · skagae · i*, I tie the horse by the feet.⁵

Such compound verbs take all the forms of mood, tense, and person; and the use of the intransitive ending in them is very striking. It shows that thought does not pass from the subject through the action to the object which is incorporated in the verb, but that the mind retains the subject, adding to it the other elements, and thinking them all together in the subject as an intransitive affection of it. So that they are all thought in one simultaneous conception in the way that is characteristic of American combinations.

66. It falls in with the tendency to think the fact as a single whole rather than as a combination of related parts that there is a very small development of elements of relation in the Selish language, and those which are found in it are not thought with distinctness. The prepositions are very few, and when their object has the definite article, the preposition comes between the article and the noun.⁶ For the article does not so much particularise the noun as signalise the member of the sentence for connection with the rest.

Connected with this want of elements of relation is the use made of pronominal elements to join to a fact those members of it which are not combined synthetically. The tendency is to effect the junction arthritically, by directing the attention to the member as such, while the sense of the relation in which it stands is too weak to get expression.⁶

¹ Mengarini, p. 33-49.

⁴ Ibid. p. 49.

² Ibid. p. 50.

⁵ Ibid. p. 113.

³ Ibid. p. 67.

⁶ Ibid. p. 80.

Thus the pronoun *u*, which serves for a relative pronoun, is used as a connective instead of the relation *until*, and also to connect the time from sunrise (connec.) evening (connec.) I (perf.) hunt with the verb; (1.) *tel · skuekust u t'lug u tn · ilip, I* hunted from sunrise till evening; (2.) *ta is · its' u galip,* I slept not till morning; (3.) *lu tel sei u tn · t'aal ta* I (perf.) (iter.) good (inchoa.) (connec.) now *ie · l · gest · il's u iet'goa,* from that when I took sick I did not get well again till now; *lu* as the definite article belongs to *sei*, and the preposition *tel* comes between them. The pronominal *lu* is a stronger demonstrative than *u*. It too serves as relative pronoun, and it is the definite article. It also seems sometimes to be mainly connective; (4.) *ka · ta as · oot'ko lu tel* thy house *an · t'itgu,* if thou hadst not gone out from thy house;¹ (5.) *skeligu* (rel.) good not (fut.) fear (third pers.) death *lu gest ta ks · ngelmi · s lu st'lis,* men who are good will not fear death;² (6.) *l · ann'i u gut' · lt' · n lu is · nat'lkeit,* to thee I gave my cloak.³ It connects subject and predicate, as (7.) *great my house kutunt lu in · t'itgu,* my house is great; (8.) *ta ks · gut' · lt' · n lu* food because bad thy manner *si'ln netli teie lu an · t'ut,* I will not give thee food because thy manners are bad;⁴ the final *n* of the verb is used in the future as well as in the perfect to express what is not actual. The genitive precedes its governor, which has possessive prefix of third person.⁴

MUTSUN.

67. The Mutsun, which was spoken in California, south of Sacramento, has considerable development of tense, as if the race noted the successions of facts, but scanty development of mood, as if they had small sense of contingency, or of the connections of facts. There is little subjectivity in the Mutsun verb; and it is thought with strong reference to the object, incorporating in itself the plurality of a plural object, and pronominal representatives of the indirect object when this is personal; yet the Mutsun verb does not otherwise compound with object or condition except in the formation of reflexive and reciprocal verbal stems, but is kept distinct from these as if it were thought specially as the essence of the fact. Moreover, the objects tend to be connected with the verb by elements of relation, so that the noun develops a dative and accusative. The synthetic tendency, however, shows itself in the copious formation of derivative verbs not only with elements of process or causation, but also with a large variety of elements which express the full meanings of separate verbs, though these derivative elements are different from the separate verbs which

¹ Mengarini, p. 80.² Ibid. p. 81.³ Ibid. p. 83.⁴ Ibid. pp. 82, 86.

have the same meaning.¹ No examples of the latter formations are given in the grammar.

PIMA.

68. Passing southward over the arid plains of Utah, and the desert tableland east and west of the Colorado, we come to the plateau of Sonora south of the Gila, which contains many fertile well-watered valleys. Its principal aboriginal inhabitants are the Pimas in the north and west, and the Heve in the east;² and these races speak languages which have close affinity to each other.

The Pima language does not distinguish tenues and medials. It has strong breath and much vowel utterance.³ It develops subjective verbal elements which are always attached to the subject when this is a personal pronoun, but which have slight connection with the verbal stem, and are often quite detached from it. The verbal stem is thought, as in Selish, in close connection with the objects and conditions, but it is a much stronger element of the sentence in Pima than in Selish; its varieties in respect of the process of accomplishment are much more noted; and it is less liable to coalesce in synthesis with the objects. But though the verbal stem thus generally remains distinct from the objects and conditions, it is thought with such strong reference to these, and they to it, that they combine with it in the sentence with little or no help from the mediation of connective elements. The fact is thought in its accomplishment among the objects and conditions rather than in its realisation by the subject, yet involving strong affection of the subject and considerable development of the verbal stem. It is as if the race habitually thought of operations due to the application of the subject rather than of results or of actions or of mere occurrences, or of the uses of things. And the development of tense and mood is as if they noted strongly the position of facts in time, and had less interest in their contemporaneous dependences. Whatever be the mental habit to which the language owes its structural peculiarities, some of these tend to disguise its synthetic tendency. In particular, the separation from the verbal stem of an abstract verbal element which tends to go with the subject gives the language a fragmentary appearance, as if it was similar to the negro languages of Africa. The verbal stem too, though distinct from the objects, is thought with such strong reference to them, that when it is not simple in idea it may break into two parts, one part having more affinity to the object, and the other to the subject, and the subject going between them. And this gives to the expression of thought the same appearance of open texture, as if speech tended to be resolved into fragments like the African languages. But

¹ De la Cuesta's Grammar of the Mutsun Language, p. 33.

² Smith's Notices of the Heve, p. 6.

³ Pima Grammar, from a Spanish MS. of the eighteenth century, edited by Buckingham Smith, p. 9.

a closer study removes this impression. The principal grammatical facts are as follows.

69. The noun forms a plural by reduplication of the first or of another syllable, or by inserting after the first syllable its initial letter, or by other additions to the stem. There are no cases; but there are many words used as postpositions which do not connect themselves closely with the noun. There is no grammatical gender, nor any adjective forms for degrees of comparison.¹

70. The personal pronouns are in the nominative, *ani* I, *'ati* we, *api* thou, *api'mu* ye; in the oblique cases, *ni*, *ti*, *mu*, *amu*, which are prefixed as possessives, but in the accusative the first person has also *mu*, sing., *tu*, pl. The possessive affix of third person is *-di*, sing., *ha-*, pl.

The demonstrative used for third person-subject is *hugai*, sing., *hugam*, pl.

In the substantive the possessive relation is expressed by the possessed following with possessive affix.²

71. The parts of the verb are, *hakiarida*, to count; *ani hakiarida*, I count; *ani hakiaridkada*, I counted; *an't'hakiari*, I have counted; *an't'hakiarid kada*, I had counted; *ani hakiaridamuku*, I will count; *an't'io hakiari*, I will count; *v'an't'io hakiari*, I will have counted; *an't'io hakiaridkala*, I had to count; *ko'n'igi hakiaridana*, that I count; *do'd'an'iki hakiaridana*, O that I may count; *hakiaridani*, or *hahakiarida*, count; *hakiarida vor'a*, count ye.³

In the past tense *'a* may be used instead of *ta* to denote the long past; and *par'a*, after a noun, is equivalent to the late (38).⁴

72. Denominative verbs are formed by *-ga*, meaning to have the thing; by *-ta*, to make it; by *-ka*, to be it; by *-tuda*, to turn into it; by *-piga*, to remove it; by *-mada*, to fill with it; by *-urida*, to feel or regard as the noun expresses.⁵

The passive is expressed by the active verb with *amu*, you, for subject, and the passive subject as object.⁶

Frequentatives take *-himu*; applicatives (to an object), take *-da*; causatives (compulsive), take *-tuda*.⁷

Nouns are derived from verbs by *-daga* = Lat. *-tor*, *-trix*, *-kuma* = *ax-ma* = *-bilis*.⁸ Nouns of the object (whom, what) are formed by sub-

joining *-da* to the verb, as *mu · sikuri · sikoana'da*, what thy brother weeds; but if the verb end in *ku*, *ha*, *hu*, *tu*, *'a*, and be in the preterite, the noun is formed by changing *a* or *u* to *i*. Such nouns of the future take *-kugai*.⁹

A present participle is formed by *-dama*, past participle by *-kama*, future participle by *-agidama*, *io-kama*, or *-kugai*, pl. *kugama*.¹⁰

73. The accusatives, singular and plural, of the first and second personal pronouns are doubled. The adjective generally goes before its substantive.

The personal pronoun as subject precedes the verbal particle, the

[¹ Pima Grammar, pp. 9-12, 15-18.

³ Ibid. p. 19-23.

⁴ Ibid. pp. 80, 81.

⁶ Ibid. p. 37.

⁷ Ibid. p. 50-53.

⁹ Ibid. pp. 61, 62.

¹⁰ Ibid. pp. 34, 35.

² Ibid. pp. 12, 13, 75.

⁶ Ibid. p. 45-49.

⁸ Ibid. pp. 57, 60.

verb either preceding or following. But if the verb be compound, one component precedes and the other follows (75, Ex. 1).

If the subject be a substantive, the verb does not take a subject-person. The object precedes the verb, and the subject-substantive precedes the object. And if the object be a verb governing an object, it precedes its governing verb, and is preceded by its own object.¹

74. The synthetic tendency of the language may be seen in its formation of derivative nouns. These are formed not only from single stems of verbs, but from verbs in connection with other members of a sentence. Thus with the instrumental element *kar'a*, are formed

write sweep pierce
ohana:kar'a, a pen; *vosca:kar'a*, a sweeping brush; *dugara:kar'a*, a needle; and also the combination formed by the same element in the following sentence is given by the grammarian of the language as a derivative noun; (1.) *mu nuoki vur'a soig'nurida kar'a* (subj. vbl.)

igi, thy word is the instrument of my sadness. So, too, with the local element *kami* are formed the derivative nouns, *vs:kami*, sowing place, *kuh:kami*, standing place; and with *kami* and *mi* the combinations in the following sentences: (2.) *oppo:kuh:kami tumusi* I did hide there bring go (imp.)

an'ta vstoa ay veti:murha:ni, where the poplar stands I hid a knife, go bring it; (3.) *huhumatkama:sikoanna:kami si:mur'kad an'igi*,

I went where the people weed; (intens.) go (past) I (subj. vbl.)
 I went where the people weed; *haibani:murha:par'a:mi*, place where the cow formerly died; *pan:ta:kar'a:mi*, bakery; (4.) *huhumatkama:sikocan'ai:kami s'himi:muta'd' an'igi posa pare* not (int.) me go wish (subj. vbl. past)
pi si n' himi:ori t'igi, I desired to go where the people are to weed, but the Padre did not wish me to go.²

Now, in the above formations, *kar'a*, *kami*, *mi*, are connected in the same way with the double and triple combinations that they are with the single stems. In *soig'nurida:kar'a*, *kar'a* affects the three elements together which precede it, just as it affects *ohana* in *ohana:kar'a*, a pen. *Urida:kar'a* would mean an instrument of thought. This might take *n'* as a possessive affix; and then *n'urida:kar'a* would mean my instrument of thought; and if this were qualified by *soig'*, *soig' n'urida:kar'a*, would mean my sad instrument of thought. But it is not thus that the ideas are combined; *kar'a* coalesces not with *urida*, but with *n'urida*, denoting not my instrument of thought but the instrument of my thought; nor with *n'urida* only, but with *soig'n'urida*, denoting not the sad instrument of my thought, but the instrument of my sad thought; just as *ohana:kar'a* denotes the

¹ Pima Grammar, p. 74-76.

² Ibid. pp. 24, 25, 58.

instrument of writing. The element *n'*, however, in this formation is not really possessive, as in the English translation. *Soig n' urida* is a reflexive verbal stem of the first person singular, and *n'* is the reflexive

object, as is proved by the expression (5.) *an' igi sw'agi'ma'*
I (subj. verb.) contented
 me think

n' urida, I am pleased.¹ So also in the other examples, their first member is not to be taken as a separate word in the genitive governed

by the rest of the formation. It is not *oppo kuh'kami*, the poplar's standing-place, but *oppo'kuh'kami*, the place of the poplar's standing,
poplar stand
cow die formerly

nor *haibani murha · parha · mi*, the cow's place of former dying, but the place where the cow formerly died. In all of them the first part of the formation is the subject of the verbal member which follows it, and is affected along with this by the derivative element so as to form altogether one word.

The facility of forming such combinations, not as new words to be consolidated by use, and to be accessions to the vocabulary of the language, but merely to express the present fact, is what so largely characterises American speech (4). As it exists in Pima it indicates a tendency of thought to spread, so as to embrace at once more than one member of a fact, each member retaining its own fulness of idea though combined with the others in one conception. In consequence of the fulness with which they are thought, such elements in incorporating an additional element may take it between them, because it is felt to be differently related to them, or though usually combined in one conception, they may be separated by the difference of their affinities for other members of the fact. In the former case they furnish instances not of resolution but of synthesis; and in the latter, when separated, they are full thoughts, not fragments, as in the African languages. This fulness of thought of all the members of the fact is characteristic of Pima, in which subject, verb, and objects are well distinguished from each other, and are at the same time thought with an interest evenly spread over them and directed to the entire fact. The parts are not so merged in the whole as if the race looked habitually to results. And the tendency of interest to combinations only sometimes prevails over its tendency to the parts. The synthetic tendency, however, appears not only in the formation of derivative and compound nouns, such as those which have been given above, but also in the formation of derivative and compound verbal stems.

this powder (intens.) stones (subj. vb.) stone pick (imper.)
 (6.) *Ika tuhi s' · hohota'r'aga igi, hohot'piga · ni*, this powder is quite stone full, *i.e.*, full of stones, stone pick, *i.e.*, pick them out. my cassock (int.) thorn (subj. vb.) therefore
 (7.) *Ni'noivita s' · hoi · r'aga igi hukaidi*
(int.) you thorn pick order I (subj. vb.)
si · n' hoi · pigatani an' igi, my cassock is quite thorn full, *i.e.*, full of thorns, therefore I you thorn-pick-order, *i.e.*, order you to pick them out; *r'aga* is an element of result, affected with.

¹ Pima Grammar, p. 43.

though thou powder (int.) sweet think yet bitter think I
 (8.) *Apkad' api tuhi s' · ihori'urida, apkada siv · urid' an'*
 (subj. vb.)

igi, though you think the powder sweet, I think it bitter.¹
 my ground you weed make (fut.) I (subj. vb.)

(9.) *Ni · gaga mu sikoanna'tuda'muku an' igi*, I will make you
 weed skilful Sp. *como si*=not I that I (int.)
 weed my ground. (10.) *Sikoanna'rhağa humusi ani ko 'ni si*
 thy ground thee weed for (subju.)

mu · gaga mu sikoanni'da'na, I am not skilful (enough) in weeding to
 weed thy ground for thee; here the element *-da* applies the verb
 thy ground thee weed for go

sikoanna to the object *mu*.² (11.) *Mu · gaga mu sikoanni'da'opp'*
 (imperf.) we (subj. vb. past) but not us thee transplant for think
kada at' t'igi posa Pare pish' tutu mu sikoanni · d' · ori
 subj. vb. past

t' · igi, we were going to weed thy ground for thee, but the
 Padre did not wish us to weed for thee.³

Verbs are formed from derivative nouns, as *ohana · kar' · ta*, to do
 (something) with a pen; ⁴ and nouns are formed from derived verbs, as
 governor pl. do fut. pass. vbl. noun int. right
 in the following: (12.) *governaro tutu · mukugai, si.buh'*
 think likely Sp. *como si*=not therefore not (subj. vb.) (int.) right
ogurida'r'aga humusi hukiti pin' an' igi sibuh'
 think

ogurida, the governor's orders are not fit to be obeyed, therefore I do
 not obey them.⁵

The elements which combine with other stems to form derivative
 or compound verbs signify to have, to do, to make, to be, to think, to
 wish, to order, to go, to resist, to cease, to have skill in, to fill with, to
 take out. Those which form derivative nouns express the agent, the
 habitual agent, the instrument, the place, the result, present, past,
 likely, or future, the abstract quality, the condition, fulness of. And
 they all follow the stem which as accessory elements they affect.

The syntheses which are formed by disjoining elements which are
 usually united and introducing another element between them are
 two. The personal pronouns in the plural as objects take between
 their plural element *a-* and their personal element *-mu, -tu*, the intensi-
 verbal element *si*⁶ when they come in contact with it, probably
 because *si* has greater affinity for the personal object *-mu* and *-tu*, than
 for the indistinct plurality *a-*.

And the optative element *dodaki* takes the subject, when this is a
 personal pronoun, between its two parts *doda* and *ki*,⁷ probably
 because *ki* is more subjective than *doda*.

75. The broken expression which has such a fragmentary appear-
 ance also occurs in two cases, and is due to a similar cause, one part
 being more subjective than the other.

Compound verbs are apt to divide and to take between their parts
 the subject along with its subjective verbal element when the subject

¹ Pima Grammar, pp, 48, 49.

⁴ Ibid. p. 58.

² Ibid. p. 54.

⁵ Ibid. p. 60.

⁷ Ibid. p. 22.

³ Ibid. p. 55.

⁶ Ibid. p. 81.

is a personal pronoun. Thus the verb *huki'buá*, to forget, divides in the following example: ^{perhaps my word I did thee tell thou} 1—(1.) *na ni'nuoki an' ta m' agi huki ap*
will
t'io buá, perhaps thou wilt forget my word that I told thee. On the

other hand, in the following example, it has not divided; (2.) *ohana*
know (past) I (subj. vb.) but all I (subj. vb. past) forget
*simat'kaul' an' igi posa rusi an' t'igi hukibua,*² I knew
how to write, but I have forgotten it all. Now it is to be observed that this division takes place only with compound verbs, and that the parts, therefore, are not fragments, but full thoughts which have been compounded together; though the grammarian of the language does not give their separate meanings in any example.

The verb is thought in close connection with the objects and conditions, as appears from these so little needing elements to connect them with the verb, and also from the subject being so detached from the verbal stem with a verbal element of its own. And as the objects always precede the verb, and the more objective element of the verb goes first, that element is liable to be detached from the other by the attraction of the object.

That such expressions as *huki ap' t'io buá* in the above example are to be regarded as instances not of synthesis, as if written *huki'ap't'io'buá*, but of resolution into parts, will appear from considering the nature of those subjective verbal elements which are attached to the subject when it is a personal pronoun, and which form the most striking feature of the Pima language. Their use is the second case of broken expression, and is to be seen in almost all the examples which have been given. In general these subjective verbal elements, though distinct from the verbal stem, are closely connected with it, and if they were always so, it might be thought that they formed one conception with it. The only grammar of the language that is to be had is so inconsistent in its division of words, and so full of errors, that it gives no guidance to the decision of the question whether those elements are thought separately. The following example, however, decides

you I (subj. vb.) beef salt fill with desire
it:—(3.) *Amumu an' igi haibani onu' madu' orida,*³ I desire you to
salt the beef. Here *an' igi* is quite separate from the verbal stem, and is not combined with any other element. Is *igi* then a fine verbal fragment, such as those which abound in the negro languages? The

following uses of it show that such is not its nature:—(4.) ^I *An' igi*
mother imperf. perf.
dah, I have a mother; *an' igi dah'kada*, I had a mother; *an' t'igi*
dah, I have had a mother; *dah'kaul' an' t'igi*, I had had a mother; *an*
^{would that I}
t'io dah, I will have a mother; *dod' ani' ki dah'ka'na*, would that I
had a mother. And so always the verb to have is expressed by these subjective verbal elements when its object is animate, and when it is not possession as of property that is intended.⁴

¹ Pima Grammar, p. 75.² Ibid. p. 27.³ Ibid. p. 48.⁴ Ibid. p. 46.

Now such expressions as these, in which a substantive is used quite like a verbal stem, show how objectively the verbal stem is thought; that it is quite without verbal subjectivity, and that the whole connection between it and the subject is expressed in the subjective verbal elements. These, therefore, express in every case thoughts as strong as what they signify when used with a noun; and are to be regarded not as fragments, but as the expression of full thoughts like the verb to have.

H E V E.

76. In the Heve, which is the language of the eastern part of Sonora towards the mountains, there is no expression of the engagement of the subject with the verb, and the verbal stem, though thought objectively, has closer connection with the subject than in Pima, so that separate subjective verbal elements are not used. The objects and conditions are more detached from the thought of the verbal stem, and take elements of relation so as to develop cases. But in other respects Heve has great likeness to Pima, and an equal development of derivative and compound verbs.

TEPEGUANA, TARAHUMARA, CAHITA, CORAH.

77. The languages spoken in Sonora south of Pima and Heve, that is, the Tepeguana, Tarahumara, Cahita, and Corah, differ remarkably from both Pima and Heve in this respect, that in those languages objects are thought so independently that they have to be connected with the fact by pronominal elements. Such elements are added into one conception with the members of the fact to which they are attached, and they construct the fact arthritically (33). This strongly marked arthritic feature shows a remarkable want of a sense of relation, and a strong tendency to use demonstrative elements; but it supplies no evidence of the spreading nature of American thought, as there are no massive accumulations formed with these elements. It is, as in Pima, in the formation of derivative nouns that massive thought is revealed, at least in Tepeguana; for this language forms derivative nouns on compositions of two nouns, or of nouns and verbal stems. Thus, *kabuskibusam · ker*, chimney-top; *uski · mataka*, smoke issue der. of place wood palm of hand strike der. of instr. water spring double der. place play racket *gubi · kare*, ferule; *suldagi · deivoni · gaker*, well; *tokkar* der. vbl. noun

· udarage · ker, racket court.¹ Of these languages I have no grammar; and I have, therefore, only a very partial knowledge of their structure. But their use of arthritic elements is remarkable. The following are

examples. In Corah (1.) *ŕ'e agasteni eu · a · xevira*, thy will be done; I love (dem.) my mother
(2.) *ne'armuat'e eu · n · ite*, I love my mother; (3.) *pa'rmuat'e ew*

¹ Buschmann, Gram. d. Sonor. Spr. Abhand. Akademie, Berlin, II. Abth., pp. 133, 134.

Dios, love God; ¹ *eu* is the definite article referring to the noun which follows it, but in these constructions it is connective, and *ra* is a pronominal element referring to *χevi*, which connects *χevi* with *a*.

In Tarahumara and Tepeguana, the substantive is preceded by demonstrative elements which often serve for the definite article, but in other applications have such obscure significance that they were to Buschmann an enigmatical phenomenon (*räthselhafte erscheinung*). And he says that after many changes of opinion as to their nature in these applications of them, he had come to the conclusion that they neither define nor denote anything, but that, like the original meaning of the word *article*, they are merely joints to connect a member with

a whole.² Thus in Tarahumara (4.) *Pegro ke · Juni me · viruk*, John
dem. is killed
will marry dem.

is killed by Peter; ³ (5.) *Pegro negümare ke · Farisika*, Peter will marry Francisca.⁴ The genitive may follow its governor with *ke* between them, but this is rare.⁵

In Tepeguana the connective demonstrative is *gali* or *kali*. Thus

(6.) *nonoragidani kali · u · neoki*, recall thy word; ⁶ (7.) *meitistu*
recall thy word nothing
worth thy confession if thou not leave off thy
namokaga gali · u · uanidaraga napsi meiti dayitoage kali · u ·

skeadoadaraga, thy confession is worth nothing if thou do not leave

off thy sin; (8.) *doddomeanta kali · a · soiga kali · um · teoddi*, I have
I have done some animal a man
give this rags

done it with some animal, and with a man; (9.) *maxani ik ikusi kal · Piddoro*, give these rags to Peter.⁷ Here *gali* or *kali* connects into the sentence the subject and the direct object and the indirect object.

In Cahita the pronominal element *ta* is suffixed to the noun to

which it refers to connect it with the sentence. Thus (10.) *eki*
inter.

any one witness thou hast borne

ioremp̄ta aenok̄ta at̄aia, hast thou borne witness against any

one?⁸ Here *ta* connects the direct object and the indirect with the

sentence. Buschmann says that "the general case-ending *ta* is used

so often as accusative that one might attribute this power specially to

it if its universality did not forbid this."⁹

There is in Cahita another suffix of the noun *-ua*, on which Busch

mann gives what he calls doubtful conjectures (*schwankenden vermuthungen*).

It seems, however, to be the same as the suffix *wa* in Dakota (43), and to be part of *ethua* in Cree (31, 34), and like *ethua*

to be attached to the governor of a genitive, referring as a pronominal

element to the noun to which it is suffixed in order to connect that

noun with the genitive. The element *ra* in Corah mentioned above is of the same nature. The following are remarkable Cahita construc-

¹ Buschmann, p. 74, n. 3.

² Ibid. p. 76.

³ Ibid. p. 77, n. 10.

⁴ Ibid. p. 78.

⁵ Ibid. p. 114.

⁶ Ibid. p. 79.

⁷ Ibid. p. 81.

⁸ Ibid. p. 105, n. 3.

⁹ Ibid. p. 108.

child father mother with
 tions¹—(11.) *usi · ta atzai · ua ae · ua soko*, with the father and mother of the child. So Buschmann translates it, but is not *soco* copulative = and, like *epu* in Pima? (12.) *Atzai'ta te · ua'me sok usi'ua'ta*, in the name of the Father, and of the Son; *ua* is an arthritic pronominal element referring to the governing noun, and *ta* an arthritic pronominal element referring to the genitive, except in *usi'ua'ta*, in which *ua* affects *usi*, the genitive, as in Dakota *wa* may affect either the genitive or its governor; *usi'ua* is then affected with *ta* to represent *te*, so that here *ta* is not used arthritically. Thus these four Sonoran languages are highly arthritic.

O T O M I.

78. The Otomi language, which was spoken in the neighbourhood of the city of Mexico, and some two hundred miles north of it, differs in its structure from the preceding languages. In it the fact is thought with an interest divided equally between the parts and the whole. The members of the sentence are less merged in the combination of fact than they are even in Pima, yet not so dwelt on as to separate them from each other. They are fully thought, and with little of merely connective elements; and this tends to give to every syllabic utterance a full significance.

The Otomi consonants are *k, k', or q, q', j, t', t, t', d, p', b, h, y, s, z, z̃, ñ, ñ, n, m*. The vowels are *a, o, e, e, o, i, o, u, u, ä, ē, ī, ũ*. The utterance is with strong pressure of breath from the chest, so that *h* is strongly uttered, and an obscure *r* is heard in the energy of utterance.² There is much nasalisation.³

79. The substantive has neither case nor number, but there are words used as prepositions which precede the substantive, and an article goes before the substantive, which is *na* singular, *ya* or *e* plural.⁴

Diminutive substances are formed by *zt'i-* or *zt'u-*. Abstract nouns of the action are formed from verbs beginning with a vowel by *tt-*, from those with *s* by change to *z-*, with *h* by *t-*, with *m* or *n* by *h-*, with *p'* by change to *m-*, with *p* to *p'-*; nouns of the actor by *y-*, also by *-te* and by *-bate*, which is subjoined to stems ending in *na, ne, &c.*, the vowel of these being dropped.⁵

80. The personal pronouns are—singular *go, ge, nu*; plural *gohe, geyi* or *ihyi, yu*; they are strengthened with demonstrative *nu-*. The possessive personal prefixes are—*ma-, ni-, na-*, with plural element *-he, -gi* or *-hy, -yu* after noun.⁶

81. The subject-persons of the verb are prefixed, their plural element subjoined to the stem; they are—present *di-, gi-, i-*; past *da-, ga-, bi-*; perfect *s̄ta-, ska-, sa-*; future *ga-, gi-, da-*; future perfect *guāsta-, guāska-, guāsa-*. In third person perfect and future the stem

¹ Buschmann, p. 106.³ Elemens de la Gram. Othomi, p. 7.⁶ Ibid. pp. 106, 108–111.² Neve, Arte del Othomi, p. 1–12.⁴ Neve, p. 103.⁶ Ibid. pp. 113, 114.

takes *y* before an initial vowel, medialises an initial consonant. The copula is expressed in the three persons of present thus, *dna*, *gna*, *na*. The verbal stem by taking *-hmā* makes an imperfect of the present and a pluperfect of the perfect. There is no passive.¹

The following particles precede what they refer to, *na* = English -less, *h'u* absent, *go* reverential, *ni* or *gi* liquid, *dā* great, *bo* small, *me* of (a possession), *ga* of (a material), *na* past, *ni* future, *na* present.²

82. The Otomi has a fulness of significance in its elements which has been compared to Chinese. But a synthetic character may be observed in its tendency to abbreviate words in a sentence; for this arises from the words being run into each other, as thought spreads beyond each idea into a connected idea so as to cause a partial mingling of the two. This abbreviation of words in the effort to express them in partial combination with other words, is called syncope by the grammarian of the language, and he thus speaks of it:—

“Part of the difficulty of this idiom is syncope. And it is because beginners in speaking it do not syncopate that their periods and expressions are so rough and deficient in harmony, for which reason the natives murmur at them and regard them as ignorant. It is certainly a defect, though not so great that it is not still possible to understand what is spoken.”³ It appears from this that the abbreviation spoken of belongs essentially to the genius of the language, so that the language is not spoken correctly without it.

“First, nouns admit this syncope. But for this, it is necessary that they be joined in composition; whether that composition be of

the
noun with verb, as *na mātiā*, the charcoal-seller (*el carbonero*), compounded of *pā*, to sell, and *lehñā*, charcoal; or of substantive with adjective, as *t'ohmi*, bad face, frown, compounded of *nt'o* bad, and *hmi* face; or of noun and particle, as *nsup'inī*, mare, compounded of *nsu* which denotes the feminine, and *janī*, horse.”⁴ Some nouns syncopate in the beginning, others in the middle, and others not at all.⁴

This syncope of nouns is not used so frequently as that of pronouns, verbs, and adverbs. Most verbs regularly drop their last

syllable; thus *mātī*, to love, drops *di*, as (1.) *gori mā Ojā*, I love God, *go* is a reverential particle; *édē*, to hear, drops *dē*, as (2.) *ε*
2d pers. perf. mass
ku é misā? hast thou heard mass? *ε* is the interrogative par-

1st pers. pres.
title *εi* abbreviated; *p'ēy*, to beat, drops *y*, as (3.) *go di p'ē*
dem.

na suā, I beat John. Verbs ending in *ni*, *pi*, *te*, *ti*, *qe*, *qi*, drop

dem.
their final vowel; thus *quāni*, to confess, drops *i*, as (4.) *na Bēdnu*
3d pers perf. dem. plur. sin

bi quān ya t'oh'qi, Peter confessed his sins; *āpi*, to pray, drops *i*, as (5.) *āp Ojā*, pray to God; *yoti*, to light, drops *i*, as

¹ Neve, p. 117-130.

³ Ibid. p. 146.

² Ibid. p. 138-142.

⁴ Ibid. p. 147.

fact, so as to require connective elements, wherein attention is directed to them as specialised by the connection.

MEXICAN.

84. The structure of the Mexican or Aztek language seems to indicate that the race was bent with immediate application of volition on action aimed at its objects, and producing its effects, with force, movement, and perseverance. For while the verb tends to take up a sense of its objects, &c., the subjective person combines closely without any element of abstract doing or being. In addition to the usual formations of causative and frequentative verbs, there is a development of derivative verbs, in respect of force, duration, and movement. The verb either incorporates the direct object or takes up a pronominal representative of it, and it may also incorporate a pronominal representative of an indirect object. The objects and conditions, when thought separately from the verb, are not thought in cases as correlatives with the verb, but so independently that there is a considerable arthritic development to connect them with the verb and even with the elements of relation which may intervene between them and the verb. And in the ideas of things or persons the mind may include in one idea two or three ideas of adjectives or nouns.

85. There is considerable development of tense; not so much of mood. The subject-persons of the verb are—sing. *ni-*, *ti-*; pl. *ti-*, *an-*; there is none for third person. The object-persons which follow the subject-persons before the verbal stem are—sing. *-net'*, *-mit'*, *-k-* or *-ki-*; pl. *-tet'*, *-amet'*, *-kin-*. The reflex objects are—first sing. *-no-*; first pl. *-to-*; second and third, *-mo-*.¹ The past is formed by subjoining *-ya* to the stem, or changing final *i* to *a*; the perfect by prefixing *o* to the person and by changing the end of the stem either by dropping the last syllable or by adding *-k*, or by changing *-ua*, *-ui* to *-h*, *-si* to *-z*, *-ki* to *-k*, *-ya* to *-χ*; the pluperfect by adding *-ka* to the perfect; the future by adding *-z* to the stem. In the plural of perfect and future *-ke* is added to the singular, *-h* in the pluperfect. There is an optative prefix *ma* used also in imperative, after which the second person is *χi*. The imperative takes also a plural suffix, *-kan*, and a negative *-χ*, sing., *χtin*, pl. The imperfect subjunctive (might, &c.) adds to the stem *-ni* in the singular, *-nih* in the plural; and becomes pluperfect by prefixing *o-* to the persons.² The infinitive is expressed either by its stem preceding the stem of its governor in composition with it, or by a finite tense following the governing verb.³ The passive takes *-lo-*.⁴ There seems to be a considerable number of elements of relation.⁵

86. Not only are derivative verbs formed to express the varieties already mentioned, but these may take in addition reverential verbal elements to express reverential feeling or love mingled with the affection of the subject or with the idea of it in the speaker's mind.

¹ Olmos, *Arte*, p. 17-20.

² *Ibid.* pp. 68-84, 92-98.1

³ *Ibid.* pp. 70, 85, 86.

⁴ *Ibid.* p. 98.

⁵ *Ibid.* p. 172-178.

Thus, from *t'ia*, to make, comes *ti · mo · tla · t'iu · ili · t'ino*,¹ we ourselves (dem.) make apply (rev.) which might be translated, we reverently apply our making something (*i.e.*, to some further object); *t'ino*, however, is not an adverb, but a verb qualified by what precedes it; *tla* is a pronominal element representing the object when the object is not mentioned, for a transitive verb is not conceived without an object. If the object, though not mentioned, was supposed to be animate, the demonstrative element would be *te*; if the object were mentioned, the demonstrative element would be *k* after first or second person, *ki* with the third person of the verb, which never has a personal element of the subject, and *kin* if the object mentioned were plural; *tla* and *te* unite closely with the verbal stem, enabling it to be thought; *te* or *k* may precede the direct object as indirect object, as *ni · te · tla · maka*, I give something to some one.²

The applicative *-lia*, *-tia*, or *-ia* may also have a reverential significance, as (1.) *ni · k · no · tlazo · ti · lia in Dios*,³ I love God; and it may be strengthened by adding to it, as in this example, *-tia*, which has a similar significance.

On the contrary, the element *-puloua*⁴ has a disparaging significance; as *ni · tla · ka · puloua*, I eat poorly; *ni · no · zauh · puloua*, I fast miserably; *puloua*, however, like *t'ino*, is not an adverb, but a verb.

Compound verbs are formed by subjoining to a verbal stem *-ka*, to be; *-kak*, to be engaged in; *-ok*, to be thrown; *-mani*, to be spread out; *-nemi*, to proceed; *-auh*, to go; *-uit'*, to come; *-ki*, to join; *-ua*, to depart; *-kiza*, to spring forth; *-uet'i*, to fall suddenly. The verbal stem which precedes these loses somewhat of its final utterance, and takes the abstract verbal element *-ti*, because it loses the full verbal nature, which dwells rather in the subjoined stem.

Compound verbs are also formed by subjoining to a verbal stem *-mati*, to know or feel; *-kelia*, to receive; *-ihiyua*, to suffer; *-kaki*, to hear; *-itta*, to see; *-ue'ki*, to feign one's self; *-tla'pikia*, to feign falsely. These are transitive, and the verbal stems which precede them take the element *-ka*, which seems to give a gerundive significance.

Verbal stems also take before them, into combination with themselves, a particle *on*, which denotes extent of space or time, *ual'*, hither; *ken*, all; and *uel'*, well.⁵ And they also combine with a noun as direct object taken before them.

The following may serve as examples:⁶—

I (dem.) behold be	I sleep
<i>Ni · tla · t'is · ti · ka</i> , I am beholding;	<i>ni · kot' · t'ok</i> , I am laid asleep;
I (dem.) preach go on	I troubled come
<i>ni · te · mat' · ti · nemi</i> , I go on preaching;	<i>ni · kalan' · ti · uit'</i> , I come
I (dem.) rejoice receive	I rejoice see
troubled; <i>ni · tla · pak · ka · kelia</i> , I receive joyfully;	<i>ni · tla · pak · ka · itta</i> ,

¹ Olmos, p. 131.² Ibid. p. 121-124.³ Ibid. p. 162.⁴ Ibid. p. 131.⁵ Ibid. p. 127-129.⁶ Ibid. p. 151-161.

I myself be sick pretend I thee
 I see gladly ; *ni · no · kukuṣ · ka'tla'pikia*, I pretend to be sick ; *ni · mit'*
 myself love feel (rev.) I mat
no · tlazo'ka'ma't'itia, I am grateful to thee ; *ni'petla't'ia*,¹ I make
 mats.

Derivative nouns, too, are numerous, and may add to their formative elements *-in* to express dignity, *-ton* depreciation, *-pil'* littleness, *-pul'* contempt, *-t'ulli* evil condition. Thus *te'ma't'ia* signifies to preach to persons, *te'ma't'ti'liztli* the preaching, *tema't'tiani* the preacher, *tema't'tikat'onlli* honoured preacher. And nouns may compound with nouns and adjectives, as *kauh · neuk · zayulli*, the bee that
 timber honey bee
 breeds in wood, *a · t'ipak · tli*, clear water.² The facility with which
 water clear
 all such syntheses can be made gives the language a megasynthetic character.

87. The substantives are apt to be thought in Mexican with demonstrative elements associated with them, even when they are not distinguished by particularisation from a general idea or connected in a construction. These elements are not so strong as the article-pronouns in Choctaw, and they fall into closer union with the noun. They are *-tli*, *-tl*, *-in*, *-li* ; they express the direction of attention to what the noun denotes, *-tl* seeming to be stronger than the others ; and they are generally dropped in composition and derivation.³ In the plural *-tl* is changed to *-me*, *-tli*, *-li*, *-in* to *-tin* ; *-ni* takes *-me*, and *-ā*, *-ō*, *-ē*, take *-kē*. Other nouns reduplicate in the plural or merely drop *-tl*. Inanimate nouns have no plural except when they have possessive prefixes. There are no cases.⁴ There are numeral particles, as in Chinese, used in counting substantive objects of different kinds.⁵

88. The arthritic elements come out when the noun is constructed with a possessor and when it is governed by a verb or preposition.

my thy his our your their
 With the possessive affixes *no-*, *mō-*, *i-*, *to-*, *amo-*, *in-*, nouns ending in *-tl* generally drop *tl* and take *-uh* ; but those nouns that are thought least independently and most penetrated with a sense of personal connection, such as those which denote parts of the body, and the most personal property, do not take *-uh*, though the most of them drop *-tl*.⁶ Abstract nouns also in uniting with the possessive affixes drop *-tl* without taking *-uh*, because they refer so naturally of themselves to a possessor ; except those which come from nouns of place, for these take *-uh* instead of *-tl*.⁷ Nouns in *-tli*, *-li*, *-in*, with few exceptions give up those endings without taking *-uh*.⁷ On the other hand, plural nouns being less ready to combine with the possessives, take the full element *-hua*, adding to it *n* to express plurality.⁸ Nouns ending in *-k* and *-ki* when joined to possessive affix change these endings to *ka* and take *-uh* ; and those ending in *a*, *o*, and *e*,

¹ Olmos, p. 63.² Ibid. p. 64.³ Sandoval, Arte de la lengua Mexicana, p. 5.⁴ Ibid. p. 1-6.⁵ Olmos, p. 191-193.⁶ Sandoval, pp. 8, 9.⁷ Ibid. p. 10.⁸ Ibid. p. 6.

which express what has that which is denoted by their root, take *-uh* and insert *-ka* before it.¹

Now this element *-uh* or *-hwa* is the same which is found in Cree (31, 34), Dakota (43), and Cahita (77), and is a pronominal element referring to the noun to which it is subjoined to connect this with its possessor; and it appears from the above that it is used with those nouns which are themselves less ready to combine.

Some postpositions, when they combine with nouns ending in *-tl*, *-tli*, *-li*, *-in*, *-k*, or *-ki*, take the place of these terminations.

The pronominal element *in*, which is a demonstrative pronoun, and serves also for relative pronoun,² goes regularly before the direct object of a verb to connect it with the verb.

A noun in the genitive relation may take *in*, and either precede or follow its governor, the latter having prefix of third person.³

Also when a noun does not combine with a postposition which governs it, *in* or *i* combines with the postposition to represent the noun in that combination and the noun follows, having *in* to mediate

between it and the postposition, as *i'kampa in kallli*, behind the house.⁴ Sometimes the noun combines with the postposition, but requires the pronominal element *ti* to mediate between.⁵

These all are arthritic construction, except the combination of *i* with the postposition to represent the noun in that connection (Def. 7).

In the following examples may be seen the construction with a nominative—

Pedro kitlayekultia in Dios, Peter serves God,⁶

me of

nó'ka uetzka Pedro, riese de mi Pedro.⁷

me of speak

notef'kopa tlatoa in Pedro, Peter speaks of me.⁸

Mexico'pa itziuh Pedro, Peter goes to Mexico.⁹

CHIAPANECA.

̄ 89. The phonesis of the language of Chiapa is soft and sonant. Every word ends in a vowel; an initial mute or *i* is nasalised, and medials and soft spirants abound.¹⁰

The verb forms a past by subjoining *-k'e* to the verbal stem, a perfect by various prefixes, and a future by prefixing to the stem *ta* or *tan*.¹¹

The substantive has no cases, and only some substantives form a plural.¹²

90. There are some compound nouns of two components,¹³ as moisture mouth *atapōri · inlo*, the vaporous; *ipōta* ^{go path} *namako*, passenger; and verbal stems seem often to have as a first member *ila-* to come, or *ipa-* to

¹ Sandoval, p. 11. ² Ibid. p. 14. ³ Buschmann, Abhand. Berl., 1869, p. 116.

⁴ Sandoval, p. 53.

⁵ Ibid. p. 54.

⁶ Olmos, p. 124.

⁷ Ibid. p. 172.

⁸ Ibid. p. 173.

⁹ Ibid. p. 174.

¹⁰ Albomoz, Arte Chiap., pp. 9, 10.

¹¹ Ibid. p. 34-37.

¹² Ibid. pp. 13, 14.

¹³ Ibid. p. 17.

go;¹ but in such compositions there is nothing remarkable. On the other hand, the arthritic feature is remarkable for its massiveness.

Most nouns are incapable of combining directly with the personal possessive suffixes;² and to effect the combination they take a prefix *nba-* if the possessor be singular, and *kopa-* if the possessor be plural, for the facility of combination is different with the singular and the plural.³ These prefixes take many different forms for euphony, according to the first syllable of the nouns to which they are prefixed. They are pronominal arthritic elements, and the noun having taken these prefixes then combines with the personal possessive.

The direct object of a verb is preceded by *moloho* if it denote an animate object, and by *moho* if an inanimate;⁴ and both these seem to consist of demonstrative elements; for one of the demonstrative pronouns is *komolo*, and *h* is an element of the third person plural *sihimo*. This view of their nature corresponds with their use; for if they be pronominal connectives, the nouns which are most strongly thought in their own associations as denoting living objects will need the strongest arthritic elements to connect them in construction.

(1.) *Sihimola nina ia pame moho me simata nomba moloho me*
 these boys perf. lead pl. those horse pl.
 those man
sihimone ndipaho, these boys led those horses to those men.⁵

There is also an element *ikopo*, which seems to be regarded by the grammarian of the language as pronominal,⁵ and is certainly like the arthritic *kopa* already mentioned; and it too connects object with

verb. Thus (2.) *sihimo akahimo ikop ee me*, they love him they
 I love (imperf.) thee I am occupied
sime akahomo khe ikopo no hi, I loved thee;⁶ (4.) *sime atikahomo*

ikopo no manambiamo n Dios, I am occupied in the service of God;⁷ here *n* is arthritic like Mexican *in*, *ni* being the relative pronoun in Chiapaneca as *in* is in Mexican.

QUICHÉE.

91. The Quichée language, spoken in Guatemala, has *q, k, g, t', t, t', p, b, h, y, s, z, w, l, r, m, n*, but *p* and *b* are scarcely distinguished, and *z* is nearly *s*; the vowels are *a, e, i, o, u*.⁸

The synthetic tendency shows itself chiefly in the formation of verbal derivatives. Such formations from a single root made by subjoined elements comprise, besides, a passive and two intransitives, in which the verb is abstracted from transition to an object, four neuter derivatives, two active, two frequentative, an active and a neuter, an intensive neuter, and a distributive to many objects; and from these may be formed nouns, from some of which again denominative verbs

¹ Albomoz, p. 25.

² Ibid. p. 13.

³ Ibid. p. 19.

⁴ Ibid. p. 44.

⁵ Ibid. p. 23.

⁶ Ibid. p. 24.

⁷ Ibid. p. 23.

⁸ Brasseur de Bourbourg Grammaire, p. 1-4.

may be formed; and the neuter derivatives may become roots of causative verbs. And such formations can apparently be made at will from any simple verbal stem.¹

There is a reverential particle *lal* used before the verb. The negative also precedes it.²

92. Verbal nouns of the abstract action or state are formed by *-ik*, of the doing by *-bal*, *-nem*. Denominative nouns are formed by *ah-*, denoting a person characterised by connection with what the stem signifies; *s-* is a diminutive or female prefix. Substantives of quality are formed from adjectives by *-al*, *-el*, &c.,³ and from these again adjectives are formed by *-ah*. The adjective precedes the substantive.

There are no elements of case; but there are two or three prepositions which may follow the noun; and which, combined with nouns, form words used to express relations.⁴ Inanimate nouns form properly no plural; but animate nouns form a plural by suffixing *b* preceded by a vowel, or *-om*; adjectives and pronouns have plural forms even with inanimate nouns, as *-ak*, *-tak*, *-ik*, *-tik*. There are numeral particles or nouns used to facilitate counting as in Mexican and Chinese.⁵

93. The personal pronouns are—singular, *in*, *at*, *are*; plural, *oh*, *is*, *e*. The reflexive object is *-ib* with possessive prefix, and follows the verb; the pronouns as objects follow the prefix of tense.

The personal possessive prefixes before an initial consonant are—singular, *nu-*, *a-*, *u-*; plural, *ka-*, *i-*, *ki-*; before an initial vowel they are—singular, *w-*, *aw-*, *u-*; plural, *k-*, *iw-*, *k-*; by subjoining *-el'* to the latter are formed possessives for mine, &c. The demonstratives are *ri*, *are*, *averi*, *ha*, *a*.⁶

94. The above prefixes are also the subject-persons of the verb, being preceded by *ka* in present, *si* in past, *t'i* in future; the verbal stem may also take *-m* in the past, with or without *si* before the persons; *-tah* is an optative element, and *si't'i-* makes a past future.⁷

In the genitive construction the governing noun goes first with the personal possessive prefix which represents the genitive, but it is apt to take also the element *l*, which is a demonstrative element; for, according to the grammarian of the language, it is used also "to determine the substantive with greater precision."⁸ Thus (1.)

3d poss. blood (dem.) our Lord (dem.)
u · kik · el k'ahawal Jezn Cristo, the blood of our Lord Jesus Christ; *el* refers to *kik*, connecting it with *u*, *u* refers to the possessor.

3d poss. hair (dem.) my head
 (2.) *R · izm · al nu · wi*, the hair of my head. This demonstrative element *-l* is also used in forming nouns from adjectives, as *nim*, great; *nimal*, greatness.⁹ It expresses the strength of attention directed to the quality in abstracting it as a thing; and is of a nature similar to Mexican *-tl*. But its use differs from that of the latter in the following case. When a noun, which has close connection with

¹ Brasseur, p. 80, &c.

² Ibid. p. 64-67.

³ Ibid. pp. 4, 8, 13

⁴ Ibid. pp. 5, 10, 11, 122.

⁵ Ibid. p. 148-155.

⁶ Ibid. p. 17-22.

⁷ Ibid. pp. 44-51, 61-63.

⁸ Ibid. p. 6.

⁹ Ibid. p. 13.

a possessor, as, for example, what pertains to the body, takes a personal prefix, it is apt also to take *-l*, though there be no other noun following as genitive. Thus, *nu · bak · il*, my bone.¹ Now the Mexican ending which the noun has when separate is dropped in such a case (88). On the contrary, the Quiché ending refers to the noun as connected, and expresses a sense of it as particularised by that connection. It is thus to be regarded as arthritic, for it cements the union.

Sometimes an active verb, though followed by its object, is used in its absolute form in which it is thought as abstracted from its object. Thought in that case dwells on the action itself, and does not pass to the object so as to affect the idea of it with a sense of the relation. The object is then thought independently, and in connecting it as object with the verb there is a sense of attention directed to it which produces an arthritic element. Thus (3.) *apaf'inak s · ban · u ret' kah?* *Tios s'bau u re,*² who made heaven? God made it: *ret'* is composed of third person *r*, and a demonstrative element *et'*, and is used here arthritically.

M A Y A.

95. The Maya is the language of Yucatan. Its consonants are *q, k, t, t', d', t, t', p, b, h, y, s, s, l, m, n*. There is a strong utterance of *t* and *p*, represented by *tt pp*; *h* also is strong. The vowels are *a, e, i, o, u*.³

96. The nouns are indeclinable.⁴ The personal pronouns are—singular, *ten, tet', lay*; plural, *tóon, tées, lóob*. The possessive affixes are—singular, *in-, a-, u-*; plural, *ka-, a-es, u-ob*; but before a vowel singular, *u-, au-, y-*; plural, *ka-, au-es, y-ob*. The object-persons are the terminal suffixes, *-en, -et', -laylo*, plural, *-on, -es, -ob*.⁵

97. Verbs neuter, passive, or abstracted from governing an object, form tenses thus; present *nakal'in'kah*; perfect *nak'en*, future, *binmakak'en*.

Active verbs form present *kambesah'in'kah*; perfect, *in'kambesah*; future, *bin'in'kambes*. These are the first persons; the others are of the same series respectively as *in* and *en*. An ideal present substitutes for *bin* of future, the persons *ten*, &c., retaining *-en*, &c. The imperative is the future without *bin*, which is root of *binel* to go. Present participle takes *ah-*, past participle *-an*, future participle *-bal*, sometimes *-om*. The present participle takes *is* or *s*, for female instead of *ah*.⁶

98. The synthetic tendency shows itself principally in verbal compounds and derivatives: and exhibits the spreading or massive nature which belongs to American thought.

¹ Brasseur, p. 6. ² Ibid. p. 73. ³ Bras de B., Grammaire de Maya, p. 5-8.

⁴ Ibid. p. 8. ⁵ Ibid. p. 9-15. ⁶ Ibid. pp. 15-36, 87.

A verb may incorporate with itself a noun which is its direct object, as, *t'a · ha · a*, to carry water.¹ Or it may combine with another verbal stem, if the grammarian of the language is right in regarding the verbal terminations *ankil*, *hal*, *pahal*, *tal*, *kunah*, &c., as independent stems;² in which case the verbs formed with them are not properly derivatives but compounds. The first four of these terminations drop *al* and *il* in all the tenses except the present and imperfect, *ankil* seems to express outward realisation, *hal* and *pahal* signify to become, *tal* has apparently a neuter subjective significance,³ and *kunah* is causative;⁴ *hal* forms verbs from all parts of speech, *pahal* from substantives and active monosyllabic verbs;⁵ *pul* and *kab* form intensives,⁶ and *bal* forms passives,⁷ being sometimes added to other

endings, as *bol · on · ta · bal*, to be conquered. The fulness of signification which is attributed to these elements is similar to what has been noted in Otomi, and has been regarded in it as a Chinese character. But if these formative elements have such fulness of meaning, the verbs which they form being thought with combination of their parts into a single conception, are megasynthetic formations.

99. The arthritic construction appears in Maya, as in Quiché.

When a noun governs a genitive, it takes a possessive prefix to represent the latter, but it is also apt to subjoin to itself the demonstrative element *il* to establish its connection with the possessor by directing particularising attention to it as connected. Thus (1.) *u · pul* (dem.) house

il na, pitcher of the house.⁸

In the following example *il* is taken by a noun which has a possessive prefix without governing another noun: (2.) *qubente · aba ti* victorious his soul that he be help (gerund) thee his face near (dem.)

bolon · u · pišan Santiago ka laak ant · ik e't y · ik · na · l
our father (dem.) God

ka · yum · il ti Dios, commend thyself to the blessed Saint James, that he may help you in the presence of our father God.⁹ In the formation *yiknal*, which is used as a preposition, *l* is an arthritic demonstrative connecting the substantive *ik* with the following noun represented as genitive by the possessive prefix *y*; but that following noun itself also takes *il* to connect it with *ka*, though there is no other noun represented by *ka*.

In this example, the particle *ti* occurs twice; and in its first place it seems to express the relation to. The grammarian of the language regards it as a preposition, and translates it as signifying to, in, by, with. But in its second place in the above example it does not express any relation, but is merely explanatory of *kayumil*, connecting *Dios* with this in apposition, and being evidently a pronominal element. It occurs continually in all kinds of relations,¹⁰ and where

¹ Bras de B., Grammar de Maya, p. 22.

² Ibid. pp. 24, 37, 88.

³ Ibid. p. 57.

⁴ Ibid. p. 9-15.

⁵ Ibid. p. 23.

⁶ Ibid. p. 36.

⁷ Ibid. p. 33.

⁸ Ibid. p. 64.

⁹ Ibid. p. 40.

¹⁰ Ibid. p. 77-79.

there is no proper relation at all, just like the arthritic elements in other American languages, and its true nature is similar to

theirs. Thus (3.) ^{agent bring I alms} *ah · pul en ti kiil*, 'tis I who bring the alms.

(4.) ^{he who modest subs. active part. man he see part. ripe} *He tib · il · b · ik ti uinik ti y · il · ik ganaknak*
his crop ^{sweet speak active his work our father dem. God}

u · nal, ka u · kiki · ttan · te u · beel ka · yum · il ti Qu, the virtuous man seeing his crop ripe, then he blesses the work of our father God; ¹ *tib* signifies modest; *tibil*, that quality abstracted as a noun (58); *tibilbah*, to exercise modesty; and *tibilbik*, the gerund or participle of that verb; *ka* is a pronominal conjunction which serves for and that, connecting one clause with another; and *ti* serves

throughout the sentence as an arthritic connective. (5.) ^{know active} *Kam · be · caus. go I do child pl.*

sah bin'in·kib ti pal · alob, I am about to instruct the children; ² *ob* is the plural element of third person, *al* probably a reduplication.

(6.) ^{he did man his only son} *O·ki ti uinik·il u·pelel mehen Dios*, the only son of God made himself humanity; ³ *uinikil* denotes the abstract nature of *uinik*, man.

(7.) ^{sad mind go infin. thou do} *Ya ti uol binel · il a · kah*, I am sad at your going away.

CARAIB.

100. In the Caraib language the consonants are *q, k, g, t, p, p', b, h, y, s, s, w, l, r, n, n, u*. The insular Caraihs have a very soft phonesis; they pronounce *b* for the continental *p*, and *l* for the continental *r*, and insert vowels between concurrent consonants. The Caraib vowels are *a, e, g, i, o, u*. There are many vowel concurrences, and diphthongs and triplithongs.⁴

101. The noun has no case-endings. Many substantives form a plural in *-um*, others in *-em*. Nouns denoting inhabitants of a place form a plural in *-a*.⁵ The adjectives are verbs in third person, as are also the participles.⁶ The names of inanimate objects are referred to as female. Nouns denoting inhabitants male end in *-i*, female in *-u*.⁷

102. The possessive, and the present and future subject-person prefixes are—singular, *n-, b-, l-* male, *t-* female; plural, *w-, h-, nh-*.⁸ The object-persons are—singular, *-na, -bu, -li -lu -ti -tu*; plural, *-wa, -ho, -um*.⁹ Imperative and optative subject-persons—singular, *-na, -ba, -la, -ta*.¹⁰ The object-persons are suffixed as subjects of the inactive, of the negated, and of the perfect transitive.⁹

103. It is about the verb rather than the noun that defining elements gather. Actions and states of being have the principal interest for the race; and the development of tense shows that this interest extends to the position of these in time, their contingencies and conditions also being noted in a development of mood, but in a

¹ Bras de B., p. 54.

² Ibid. p. 56.

³ Ibid. p. 63.

⁴ Breton, Grammar Caraibe, p. 1-6.

⁵ Ibid. pp. 11, 12.

⁶ Ibid. p. 9.

⁷ Ibid. pp. xi. 9, 10.

⁸ Ibid. p. 17.

⁹ Ibid. pp. xvi. xvii. 17, 18.

¹⁰ Ibid. pp. 42, 43.

less degree. They have a sense of impulse towards accomplishment, such as might be expected in an active race; and it is only in the combination of energetic elements of this kind with the verb that syntheses are formed which can be called compounds.

Thus, *nisi* expresses desire; *hamuka* expresses wish, obligation, contingent or hypothetical realisation, thought as an affection of the subject favourable to the fact denoted by a verb;¹ and these both may be combined with verbal stems, as well as the adverbs *moni*

conceal desire connec. I

almost, and *huri* altogether; *arametanisi · ti · na*, I desire to conceal, is a compound verb whose two components are as fully thought as in the English translation, and in which *na* is the subject, not of *nisi*,

I conceal

but of *arametanisi*;² *n'arameta'hamuka*, I would conceal, is given as an optative of *arameta*.³ It may also be expressed without synthesis,

I knife

as *arameta na'hamuka*; *n'ukusin'hamuka* is given as the optative of *k'ukusin'tina*, I have a knife.⁴ It seems to be a composition of *hamuka* with the noun *ukusin*, but it is probably thought as the grammarian of the language represents it. In *kukusintina*, *k-* is an element of possession or mastery; it is used before a verbal stem, strengthened with demonstrative emphasis by *-ti*, to express skill, as

do she

k'atekati'tu, elle en fait bien;⁵ *k'atekati'tina*, j'en fais bien. The

dead almost perf. I

following are compounds with *moni* and *huri*: *auce'moni · a · tina*, I am

red quite perf. it cashew

almost dead; *ponam'huri · a · ru ului*, the cashew is quite red.⁶

104. It is not, however, by synthesis of different members of a fact that the Caraib language shows the massive character, but by the accumulation of defining elements which fill the sentence.

As the verbal stem is thought with little or no sense of the subject or distinction from other parts of speech,⁷ the subjective realisation of the verb when it is expressed is an element which, though it is attached to the stem and combined in one conception with it, is yet distinct from it and may be used as a separate verb signifying to do or to say. In this respect Caraib is like Pima, that the subjective verbal elements are distinct from the verbal stem, and may be used separately; but it is unlike Pima in the close connection which subsists in Caraib between the verbal stem and the subjective verbal elements (68, 75).

There are also auxiliary elements of tense and mood, some of which may be compared with the Teutonic auxiliaries, but others are untranslatable because they are additional to these and arise from thought dwelling more upon the verb and defining it more fully.

When the verb is thought as applied to an object, the verbal stem takes a suffix *kua*, which seems to be a transitive element; and the element *aukua* is also subjoined to the reflex object in the formation of reflexive verbs of the third person.⁸

¹ Breton, p. 44.

² Ibid. p. 57.

³ Ibid. p. 43.

⁴ Ibid. p. 38.

⁵ Ibid. p. 32.

⁶ Ibid. p. 63.

⁷ Ibid. p. 48.

⁸ Ibid. p. xvii.

A passive is formed by changing *-a* of the verbal stem to *-ua*, or *-u*.¹

The connective pronominal element *ti*, which is so much used in Maya, is also in constant use in Caraib to connect arthritically with a verb the first or second personal pronoun, when this is subjoined to it as subject without the subjective verbal element *i*, *u*, *a*; and to connect with a verb the first or second personal pronoun when subjoined to it as object.

And all these verbal adjuncts give magnitude to the verb, without there being any incorporation in it of any other member of the fact.

Thus, *arameta'kua · n · i · em*, I conceal; *arameta'kua'n'i'en'ti*,
conceal trans. I subj. vbl. pres. him
 I conceal him; *arameta'kua'n'i'en · ti · bu*, I conceal thee; *arameta' ·*
connec. thee
kua'n'i'em'buka, I concealed, imperfect; *arameta'kua'n'i'en'ti:bu'buka*,
thee
 I concealed thee, imperfect; *arameta'kua'n'i'a*, perfect; *arameta'kua ·*
perf.
n'i'a'buka, pluperfect; *arameta'kua'n'o'ba*, future, I will conceal;
fut.

arameta'kua'n'a, let me conceal; *arameta'kua n'a'hamuka'mhem*, I
haman
 would conceal, optative; *arameta'n'o'man'hamuka*, I would conceal,
 conditional; *arameta'n'i'em'bu*, ideal future (*bu*), present (*em*);²

if I
aka'n arameta'kua'haman, if I conceal; *aka'na mhem arameta'kua ·*
perf. me thou
n'o'ati'bu, when I shall have concealed you; *aka'na b' arameta' ·*

kua, if thou conceal me.³ In all these formations *kua* refers to the object, but it is not the object even pronominally. It applies the verb to an object; and when the object is expressed by a pronominal element, it is still subjoined, as may be seen in the above examples. The vowel which follows *n* in these examples expresses the subjective realisation which is the essence of the verb; *o* expresses this as less real, *a* as desired; *em* expresses the going on of the fact as present; *a* after *i*, its having passed; *ba*, its coming in the future; *buka* is a particle expressive of the past; *mhem* or *mehem*, or *menhem*, of the future; *haman*, akin to *hamuka*, expresses the hypothetical. The verbal element may be used as a separate verb: *n'i'em*, I say; *n'i'em'buka*, I was saying; and so in all the tenses.

Verbal stems often have elements in the present, imperfect, and infinitive, which they drop in the perfect, being more fully thought in the former. Such are *-ra*, *-ta*, *-sa*, *-gua*.⁴

The following examples may serve to show the structure of Caraib expression: (1.) *Aka'bo man'Kirissiane hamau menhem ma'tarironi ·*
If thou not Christian not go
fut. thou thou him to God
kua'kabati'bu aman'le menhem l'oman Ise'iri, if you will not be a Christian you will not go to God;⁵ *haman menhem* define the

¹ Breton, pp. xxi. 51.

² Ibid. pp. 30, 45, 46.

³ Ibid. p. 36.

⁴ Ibid. p. 41.

⁵ Ibid. p. 65.

preceding verbal as ideal future (see above); the formation following is a negative verb, beginning with the negative *na*, which always has the effect of changing the verb into the abstract verbal noun ending in *-ni*; to this is added *kua* to apply it to an object, and this verbal noun thus applied takes the element of realisation *ka*, which is so much used in Quichee and Maya, and becomes the stem of a verb; to it is joined the future element of tense *ba*, which is connected with the subject *bu* by the pronominal connective *ti*; the subject is emphasised in *amanle*, of which *a* is the second person; *man* seems to denote its substance, and *le* is demonstrative; and the future is not only denoted by the element of tense, but is further defined by

woman I not
 (2.) *Uelle · na bulee'kia'lam*, I am not a woman; the denial is strengthened by the demonstrative elements *kia* and *lam*.¹ (3.)

young gerund its swim lamantin
K'arah'kua · iona'ti'em t'apaya'ka'ni manattui, the lamantin when swimming carries its young;² the verbal stem of possession formed by prefix *k* is applied as a transitive action to an object by *kua*, and being made gerundive by *iona*, takes *t* third person singular feminine, and the subjective verbal *i* in the present *em*—the meaning of the word is, it does the carrying of its young; *apaya* seems to denote swim, to which is added the element of realisation *ka*, and *ni* forms the abstract verbal noun, so that the whole word means its swimming.

not hang he would them captain if they burn not
 (4.) *Matikiro'ni l'ahamukayem ubutu aka'gnem ayuka'pa lamuka*
 his house but caus. burn make they because it hang make he
l'ubana irho s · ayukae'kta'nham'annuagorum tiki · keta l · u ·
 this them

bali · em, the captain would not hang them if they did not burn his house, but because they set fire to it for this he hanged them;³ the relation to a fact is thought as a relation to its subject, and joined to this as a postposition; *u* in *lubaliem* is the subjective verbal element.

seize 3d pers. perf. me past soldier but break
 (5.) *sakku · l · i · a · ti · na · buka makere irho po · kua ·*
 I perf. his mordant and there he left me
n · o · a l · ugutti kayo naim l · isira · na, a soldier had seized me, but I broke his mordant, and he left me there;⁴ in the first word *i* is the subjective verbal element, and *ti* the pronominal connective referring to *na*, and joining it to the verb; in *pokruanoa* the verbal element is *o*, probably because it is thought in subordination to what has gone before; *lisirana* is not according to the usual formation, which would be *isira'ti'atina*. What does the Père Breton

mean by mordant? (6.) *Aramda · kua · l · u · ba · ti · bu b · a ·*
 know it dem.

subutui · ru · ni, know that he will conceal thee;⁵ in the first word *u* is the subjective verbal. (7.) *Katekuakia iualuka · y · en · ru ni ·*
 furniture

takobaye, some one has robbed my furniture;⁶ *katekuakia* is an

¹ Breton, p. 17.

² Ibid. p. 47.

³ Ibid. p. 49.

⁴ Ibid. p. 33.

⁵ Ibid. p. 48.

⁶ Ibid. p. 25.

aggregate of demonstrative elements; *yen* is the subjective verbal *i* with the element of verbal succession *m*, which seems not to be

confined to the present; *m* is changed to *n* before *r*. (8.) *Ua*^{no}

dem. past show . past thee to
likira · buka arokota · n · o · mp · ti · buka b · one, no, 'twas he whom I showed you;¹ in *nompti n* is first person, *o* is subjective verbal, *m* is verbal succession, and takes *p* euphonically before *ti*; *ti* is pronominal, referring like a relative pronoun to the antecedent. (9.)

that write who?
Lika bule · emp · ti, that which is written.¹ (10.) *Kat' abule · ta · ka ·*

y · en · li, who has written it?¹ Here *bule* is strengthened with two verbal elements, *ta* and *ka*; the object it is not expressed.

who? conceal this thee
 (11.) *Kat' arameta · bali · bu*, who (is it) that conceals thee;¹ *bali*

answers to English that. (12.) *Tokoja sile · a · baru*, she that

dem. fem. axe
 has come;¹ *baru* is feminine, *bali* masculine. (13.) *Tukura aroa*

give he me to
baru allukura · l · ompti none, the axe which he has given me.²

not know it I their wish
 (14.) *Man · subutu · i · rone nometi nha · mignali · ni*, I did not know their wish;³ *ni* is the particle which forms the abstract verbal noun, and to this *man-* reduces the verb; *ti* is pronominal connective, refer-

ring to what follows. (15.) *Alliai · ti · em atekari · en · li · bali*, who is it that has done it;³ *i*, subjective verbal; *em* or *en*, verbal succession; *bali* answers to English that.

105. In the above examples, it may be seen that the principal tendency of defining elements is to the verb, the strong demonstration of the noun occurring only where in English we use the relative pronoun or the conjunction that. But the use of *ti*, which they show, referring always to a noun or pronoun, is a striking arthritic feature.

It seems, though the grammarian of the language does not understand the formation, that it is not unusual for nouns, when they take a possessive prefix, to take an arthritic demonstrative suffix to enable

them to combine with the possessive. Thus: *ema*, way; *n · ema · li*, my

my his
 way; *mabu*, road; *ni · mabu · lu*, my road; *esubara*, sword; *lesubara · te*,

his sword; *aku*, eye; *waku* or *naku · lu*, my eye.⁴ Also, *tamu*, grand-

my my
 father; *i · tamu · lu*, my grandfather; *sike*, quid; *ni · sige · ni*, my quid;

my my
karta, rope; *nakarta · ni*, my rope.⁵

There is also a suffix *-ta*, which some nouns take in the dative

¹ Breton, p. 21.

² Ibid. p. 22.

³ Ibid. p. 23.

⁴ Ibid. p. 12.

⁵ Ibid. p. 14.

relation, of which the Père Breton says that he does not know whether it is of the nature of a preposition or of an article; but probably it is an arthritic demonstrative.

The following constructions are not arthritic (see 33), but they show how little sense of the correlation there is in the thought of the noun.

When two nouns are connected in the genitive relation, if the governing noun precedes, it always takes a possessive prefix to represent the governed; but if it follows, it does not take a possessive prefix.¹

his greatness God
Thus (1.) *l'ubutuguni semin*, the greatness of God. (2.) *Ne'sem·eraku ubutuguni*, my God's greatness; *eraku* seems to be arthritic, and to be due to the possessive. (3.) *Kairi'kua ·no·a na ·kamisen*
border
aru, I have torn my gown's border.

Prepositions always precede the noun which they govern; but in order that the noun may be thought as object of the relation, it has to be represented by a pronominal element prefixed to the preposition.

2d pers. imper. bring him to father her to mother them to
Thus (4.) *b · a · yubuka l'one baba t'on bibi nhi ·bonam*
our relation pl.
hwi'yumuli ·ku, bring it to father, to mother, to our relations.²

ARAWAK.

106. In the Arawak of Guiana the verbal stem is apt to take elements of objective process of accomplishment, and to develop a variety of derivative verbs, but there does not seem to be any subjective verbal element. The verbal stem also can incorporate adverbial elements of time, of will, and of amount of accomplishment, so as to form large aggregates of elements in one word, as *massukussukuttunuanikaebibu*, you should not have been washed to-day; but there is no mention of its incorporating a noun.³

Most nouns, when they take a possessive prefix, undergo a change of form, usually by adding a suffix, as *baru*, an axe; *da'baru^{my}n*, my axe; *yuli*, tobacco; *da'yuli'te*, my tobacco.⁴ These suffixes are doubtless arthritic elements, referring pronominally to the noun as connected with the possessive.

CHIBCHA.

107. In Chibcha, a language which was spoken in Bogota, but which became extinct about the middle of the last century, there is a strong sense of the subject in the verb, so that though a personal

¹ Breton, p. 7.

³ Brinton on the Arawak, pp. 4, 7, 8.

² Ibid. p. 8.

⁴ Ibid. p. 4.

pronoun or noun immediately precede as subject, the verb takes the proper person-element.¹ And the verb thus connected with the subject has little tendency to incorporate an object. Much interest was taken in contingency and condition, but these were expressed outside the verb.² The noun took its place in the sentence without the help of arthritic elements; and the verb was realised subjectively rather than immersed in its connections with the sentence. The noun formed no plural.³ The personal possessive and subject prefixes were—singular, *ze-, um-, a-*; plural, *zi-, mi-, a-*; *i-* was used for *ze-* before *s, n, s, t, x*. The object-persons were—singular, *sa-, ma-*; plural, *sia-, mia-*; none of third; these as objects required third person for subject. If the first or second was subject, the object-person was a separate pronoun. The object-persons were also used for subject of copula. There was no subjunctive. The tenses, &c., were, *ze bquiskua*, I do; *ze bqui*, I have done; *ze bquiña*, I will do; *quau*, do thou; *quiwa*, do ye. The verbs ending in *-suka* dropped it in perfect and future, and took *-niña* in future. The participles were the stems⁴ of the tenses, and took the object-persons for subject, but in the present participle *-skua* became *-ska*, and the perfect participle took *-a*.

108. There is no arthritic feature in Chibcha; the synthetic tendency may be observed in the two following peculiarities of structure.

In the genitive, which always precedes the governing noun, most of those nouns of more than one syllable which end in *-a* drop *a*, and those which end in *e* drop *e*; and if the last letter be then a consonant which is not easily uttered in connection with the governing noun, they take short *i* or *u* to facilitate the utterance; as *paba*, father; *ze paba*, my father; *ze pab^{thing}i'pkua*, my father's thing; *muyska*, man; *muysk^{language}'kubun*, man's language. Some nouns, however, ending in *-a*, take *s* in the genitive, which seems to be a fine element of relation or inflection of case added to *-a*. Here the genitive does not coalesce with the governing noun; but in the former, which seems to be the general rule, there is a synthesis between the two.⁵

Those adjectives which are formed from a verbal root by adding *-mage* have a strangely heavy and complex appearance, as if, though their parts may not be more numerous than adjective formations which may be met with in most languages, those parts expressed large and heavy elements of thought. Thus so simple a quality as white is expressed by an adjective formed in this way. The verb *apquihizin'suka* means to become white, and *apquihizin^{white}mage^{mantle bring}* is the adjective white; as (1.) *apquihizin^{white}mage^{mantle bring} bol socio*, bring the white mantle.⁶

But though the above may be regarded as indications of a synthetic

¹ Uricoechea, Gram. Chibcha, p. 17.

³ Ibid. p. 3.

⁵ Ibid. p. 3.

² Ibid. p. 19-24.

⁴ Ibid. pp. 5, 12-17.

⁶ Ibid. p. 54.

tendency, the Chibcha language seems to be remarkable for its small development of synthetic formations, and still more remarkable for the actual inflections of case which its nouns and pronouns possess. These inflections are *s*, *k*, and *n*, and seem to correspond respectively to the thought of going¹ (from or towards), reaching,² and resting in;² and they have the effect of detaching, as by an interval of transition, the noun or pronoun to which they belong from that which governs it.³ Now in a language of this distinctness of structure, and which has not a particularising or arthritic character, a spreading tendency of thought, if it existed in the race, should show itself in the tendency of the separate ideas to spread partially one into another through the intervening transitions. For this tendency in Chibcha we have no evidence, such as we have in Otomi, from the words being run one into another in speaking; for no information is given as to the way in which the Chibcha language was spoken. But we have very striking evidence for such transfusion of ideas in the way in which some verbs combine with distinct words, and even with nouns which they govern in cases, to express single ideas, as if by composition. Such complete union with these verbs indicates transfusion in a less degree with others, and points to the spreading of thought from part to part in the conception of fact.

Three such verbs are given in the Grammar, and a list of 129 combinations of one or other of these with other words, in which the verb more or less loses its individuality in the expression of a verbal idea which is made up by the combination.³ Thus, *hui ze'btá'skua*, I imprison; *quhiqui ze'btá'skua*, I close; *ibá'n ze'btá'skua*, I divide; *unqui ze'btá'skua*, I overturn; *sue's ze'btá'skua*, I wean; *agotá'k ze'btá'skua*, I deceive. The grammarian says that the verb *zebtá'skua* has no meaning by itself; but in *sii ze'btá'skua*, I throw here, it seems to mean, I throw.

The verb *ze'mi'skua*, I seek, sinks its individuality in the following combinations: *gua's ze'mi'skua*, I descend; *asa'k ze'mi'skua*, I attempt; *a'muis ze'mi'skua*, I assault; *zupkua ze'mi'skua*, I open my eyes; *zitan ze'mi'skua*, I fall headlong; *ze'huluka's a'mi*, I have understood.

The verb *ze'bquiskua* means, I do, and of course enters readily into combination, as *guá'te ze'bquiskua*, I raise, *es ze'bquiskua*, I embrace. The order is subject, object, verb. Principal verb goes last.⁴ Adjective follows noun, but participles and demonstratives precede.⁵

¹ Uricoechea, p. 184.

² Ibid. p. 147.

³ Ibid. p. 69-72, where the verbs are classified by the case which they govern.

⁴ Ibid. p. 73-77.

⁵ Ibid. p. 49.

⁶ Ibid. p. 53.

QUICHUA.

109. Quichua, the language of Peru, differs remarkably from all the preceding American languages, but is strongly marked with a megasynthetic character.

Its phonesis is hard and strong. The consonants are—*q, k, t, t', t', p, p', h, y, s, w, l, r, n, n*. There are no medials; but there are singularly hard double letters which may even begin a word, *qk, tt, pp*. Yet *h* is scarcely sounded. The vowels are *a, e, i, o, u*.¹

110. The noun takes postpositions attached immediately to its stem in the singular, and of these there are several. But there are two which may be regarded as case-endings, *-y* or *-ya* genitive, *-pak* dative. The ordinary plural is formed by *-kuna*, which has no separate meaning; and to it the case-endings and postpositions are subjoined. It may be omitted when there is a numeral with the noun. There are said to be several other forms of the plural number; *-ntin*, which as postposition means together with, forms a collective. There are no forms to distinguish gender. There are different words to express the same relations of kindred to a man and to a woman² (130).

111. Adjectives are indeclinable.

Genitives sometimes express a quality as adjectives; thus *runap*, of a man, manly. They also form compound nouns, as *apu* · *p* · *t'ay*,^{chief gen. that} that which belongs to a chief. There is no adjective form for degrees of comparison.³

There are innumerable agglutinated formations of nouns. *Kay*, the infinitive of the verb to be, subjoined to an adjective, forms an abstract noun of the quality; *-kaska* and *-kanka* express it as past or future. There are the affixes *-yok*, possessor of; *-kamayok*, one who exercises the occupation of; *-sapa*, augmentative; *-sasa*, with difficulty; *-t'au*, *-t'auipi*, imperfectly; *-t'ak*, *-t'ikat'ak*, size of; *-hina*, as; *-watan*, *-tulpan*, pretending to be; *-imana*, too; *-yupa*, reputed as; *-la*, endearment; *-masi*, fellow; *mana*, negative; *mitta*, recurrent; *-sonqko*, fond of.⁴

Verbal nouns of the agent are formed by *-k*, of the action by *-y*.⁵

112. The personal pronouns are—singular, first, *noka*; second, *kam*; third, *pay*; plural, first, *nokant'ik* incl., *nokayku* excl.; second, *kamt'ik* or *kamkuna*; third, *paykuna* or *paypay*. They are declined like substantives.⁶

The possessive elements are suffixed; they are, singular *-i*, *-iki*, *-n*; plural, *-nt'ik* *-iku*, *-ikit'ik*, *-nku*. The case-endings and postpositions follow these suffixes. There are also the following pronouns—*kay*, this; *t'ay*, *t'akay*, that; *pi*, who; *pipas*, some one; *ima*, what; *maykan*, which; *imaktapas*, something; *kiki pokpun*, self.⁶

113. The subject-persons also are suffixed. They are—singular, *-ni*,

¹ Markham, Quichua Grammar, pp. 17, 18.

² Ibid. p. 19-24.

³ Ibid. pp. 27, 28.

⁴ Ibid. p. 30-32.

⁵ Ibid. p. 33.

⁶ Ibid. p. 36-39.

-*nki*, -*n*; plural, -*nt'ik* -*iku*, -*nkit'ik*; -*nku*. The verbal stem seems to end in some of the vowels.

The stem of the perfect adds -*rka* to that of the present; but the perfect participle or infinitive adds -*ska*, as *munaska*, to have loved; having loved. The future participle or infinitive adds -*na* or -*nka*, *munana*, *munanka*. The persons of the future are—singular, *munasak*, *munanki*, *munanka*; plural, first, *munassun*, *munaku*; second, *munakit'ik*; third, *munanka*.

Those of the imperative are—singular, second, *munay*; third, *munat'um*; plural, first, *munassun*, *munaku*; second, *munayt'ik*; third, *munat'unku*.

The present participle is *munak*; present infinitive, *munay*.

Compound tenses and a passive are formed by the tenses of *kani*, I am or have, following the participles of the verb; the perfect participle taking -*m*, and the future participle -*imi*. The persons go with *kani* after the perfect participle, but they are taken by the future participle before -*imi*; *i* seems to be first person, and *mi* to express being.

The present infinitive with the persons form an optative, but first person singular is -*man*.¹ Elements also may be subjoined to the verbal stem, expressing the potential, the wish or obligation, besides elements of degree, process, duration, causation, repetition, decadence, abstraction from an object, the reciprocal.²

The subject-persons and object-persons combine in four transitions from subject to object; from first to second, -*iki*, I thee; -*ikit'ik*, I you; from third to second, -*sunki*, he thee; -*sunkit'ik*, he you; from second to first, -*wanki*, thou me; *wankit'ik*, thou us; from third to first, -*warmi*, he me; -*want'ik*, he us, incl., -*wayku*, he us, excl.³

114. The order is object, verb, subject; genitive precedes its governor, and adjective its substantive. All oblique cases go before the subject.⁴ The objects and conditions being thought with a strong sense of the relations which connect them with the verb, there is little synthesis of them with it, and no need for arthritic elements. It is in the ideas which are formed of the nature of substantives and verbs that thought spreads; and it is in the expression of these with their degree of attribute or accomplishment or other adjunct that synthesis appears.

The innumerable processes of agglutination of particles added to nouns causes extraordinary richness and variety of expression.⁵ And no European language can describe an action with anything like the precision and accuracy, combined with brevity, of which Quichua is capable; the most remarkable feature of the language being the power of constructing words by means of affixes with large meaning joined to the root.⁶

¹ Markham, p. 45-48.

² Ibid. pp. 47, 49, 52-57.

³ Ibid. pp. 50, 51.

⁴ Ibid. pp. 59, 60.

⁵ Ibid. p. 29.

⁶ Ibid. pp. 60, 61.

GUARANI.

115. The timid and submissive Guarani who, notwithstanding the weakness of their character, overspread such vast regions in Brazil and Paraguay, must have had in a remarkable degree the qualities by virtue of which the weak supplant the strong; for they were in contact with some of the most formidable races in the world, such as the Caraihs in the north and the Abipones in the south. Now the strong commands fortune, the weak waits on fortune; and it is by watching what fortune brings, in order to improve her favours, that the weak find their opportunities of advancement. It is not isolated accidents that interest such a race, but rather the circumstances which help towards a desirable result; for the power of combination of circumstance is what improves the gifts of fortune. And it is the mental habit of watching and combining what comes into actuality that is impressed on the Guarani language as its distinctive character. The objects of thought which constitute the fact are conceived in Guarani with fine distinctions of actuality; but though thought tends to dwell on them in this respect, the idea of the part is subordinate to that of the whole; and there is a tendency to synthetise the sentence, the parts, though thought largely, coalescing in the whole without arthritic elements.

116. The phonesis is soft and very nasal. Every word ends in a vowel; the consonants are liable to change; and the pressure of breath apparently weak. There are no aspirates, nor sibilants, nor *r*; nor *r* after mute.¹

117. The noun has neither case, number, nor gender. The adjective follows the substantive.² The postpositions *pe*, *rehe*, *guara* express genitive relations, but not possession, and the noun which has them follows the governing noun. The possessor precedes the possessed, and may coalesce with it.² The object or condition may either precede or follow the verb.² The verb may incorporate in its stem a noun or verbal stem which is its direct object. The diminutive noun takes *-i*, *-i*.³

118. The personal pronouns are—singular, first, *t'e*; second, *nde*; third, *ko*; plural, first, *ore* excl., *nãnde* incl.; second, *pẽẽ*; third, *ko*. They are prefixed as possessives, except that the possessive of third person is *y-*, and that of the reflexive is *o-*; *y-* changes to *h-*, and *o-* to *gu-* before *r*, *h*, or weak *t*; *yo*, or before nasal *nõ*, is reflexive possessive plural. The subject-persons of the verb are—singular, first, *a-*; second, *ere-*; third, *o-*; plural, first, excl. *oro-*, incl. *yã-*; second, *pẽ-*; third, *o-*; but *ore* and *nãnde* are first plural subject persons of neuter verbs. If the subject be a personal pronoun, the object, even though expressed, is represented by an object-person with the verb. The first and second personal pronouns themselves are prefixed as objects to the verbal stem; but *y-* for the third person, *yẽ-* for the reflexive, *yõ-* for the

¹ Montoya, *Arte de la Lengua Guarani*, pp. 1, 2, &c.

² *Ibid.* pp. 2, 3.

³ *Ibid.* p. 7.

reciprocal (one another). These object-persons are preceded by the personal pronouns as subject. If, however, the subject be first person, the second, whether as object or possessive, is *oro-* singular, *opo-* plural. And if the subject be second person and the object be first person, the second as subject is *-epe* singular, *-epeype* plural, and the first as object is *te-*. The verb takes *-i* in the indicative when it has an object-person. The object-persons take *-re* when prefixed to verbs beginning with *ro-*, *no-*.¹

119. There are several particles expressive of various elements of actuality, which are variously combined with each other and used with nouns or pronouns and verbs to express the modes of actuality in which they are conceived. Such combination is best understood from the meanings of its elements.

Thus *ha* seems to express the process of the verb (Def. 11); *ra* seems to be the strongest element of coming into actuality, *na* weaker, *ta* weaker still, as in the optative or desiderative, *a* more abstract; *rae* the same as *ra*, with an element of remotion; *re* the same past, *ne* future actuality; *mo* ideal fact, *ma* with more actuality than *mo*; *ke*, *ge*, past actuality, or non-actuality thought as remotion; *ne* is an emphatic particle of a demonstrative nature; *b* seems to be a demonstrative element referring to what has the nature of a noun; *bi* emphasises nouns, *bina* and *bia* emphasise verbs thought objectively; *bae* denotes what is qualified by a verb, as if through a relative pronoun; *bo* the abstract verbal noun; *ba* the condition or indirect object of a verb; *bee* a verb contingent and removed from reality (*e*), and therefore with faint subjective realisation so as to be referred to objectively by *b*; *po* expresses the abiding of an action in the subject instead of its being thought as passing to an object, and in this sense *po* is associated with an element of actuality *ro*, so as to form *poro*; *pira* expresses the abiding of a passive state in the subject; they are probably akin to *pe* and *be*, which express in or junction; *ko* strengthens as a demonstrative; *gua* seems to be a verbal element meaning to belong. The above meanings explain the particles which are in use, and which may be seen in the following examples.

- (1.) ^{eat} *Karu'ha're'ra a'yu*, I come from eating (*i.e.*, having been eating²). (2.) ^{eat} *Karu'ha'rã'ngẽ'ra a'yu*, I come from having had to eat, the first *ra* gives the sense of future, *ngẽ* of past; ^{he go} *o'ho'rae*, he went (but I did not see him go; this sense of separation is implied in ^{I go} *e*³); *a'ha'rae'fut.* *ne*, I will go (willingly³); *a'ha'tãmo'rae*, surely I would go; ³ here the *e* of *rae* expresses the separateness of completion, and thus strengthens the expression of purpose; the *ta* of *tamo*, intended actuality.
- (3.) ^{what chance thee take God thee help not} *Mãrãmõ herã ndere'rekoni Tupã nde'pitãbo'e'jramõ'rae*, what chance will take thee (*i.e.*, what will become of thee) if God does not

¹ Montoya, Arte, pp. 4, 9-13.² Ibid. p. 25.³ Ibid. p. 20

help thee.¹ Verbs which begin with *h*, *r*, or *n* require *ra* to be added to their object when this is prefixed to them ;² and when verbs take up a pronominal object prefixed, they may take *-ni* as if referring to the object ;³ this explains *ulererekoni* ; *amō* expresses ideal existence, as if we said, what chance that may be ; *ramōrae* expresses supposed

determined fact. (4.) ^{I self declare not for not I God take neg.} *t'e nē · mōmbewēj rāmō · i nē · a Tūpārari*, on account of not having confessed I do not take the communion ;⁴ here *rāmō* expresses the reduced actuality of a fact which is thought only

as the condition of another fact. (5.) ^{it wine it self make} *I-kāū rāmō o nē mō nā*, it turned into wine ;⁵ *rāmō* denotes a fact dependent on *o nē mō nā* ; and

that fact is, a thing (*i*) being wine. (6.) ^{I give him to belong} *A mēē y t'upe guārāmā*, I gave it to him to belong to him.⁶ (7.) ^{I did certainly I see him bring} *t'erako ahefa he ru*

indeed ^{he} *binā*, I certainly saw that they brought him indeed (but),⁷ ^{kill} *yukarako*, he killed him certainly (for I saw it).⁷ (8.) ^{I it do already} *A yapo imā*

me bid before ^{before} *t'e quāyeymboe*, I had done it before they bid me, and am doing it

now.⁸ (9.) ^{I him love me love fut.} *A h'aihu t'eraihurāmō ne*, I will love him if he love me ;⁸ *ne* is always at the end of the clause as here ; it affects not the verb but the entire sentence, and is to be regarded not as a mere element of tense, but as an independent expression of future actuality.

(10.) ^{I I love much God fut.} *t'ene a'haihu katu Tūpā ne*, I certainly will love God much ;⁹ the first *ne* is demonstrative. (11.) ^{I die thou come before fut.} *A mānō amō ule ru ymboe ne*, I

shall die before you come ; *amō*, expected actuality. (12.) ^{I him teach} *t'ero mboe ·*

^{he know} *rāmō amō oiquaa*, if I teach him he will know.¹⁰ (13.) ^{I take} *A reko rāmō*

^{I give} *amēe bee amō*, I would give it if I found it.¹⁰ (14.) ^{would that I} *Kuri kuri o t'e*

^{good I go heaven to} *mārān gatutāmōrae mārā a ha iba pe*, would that I were good that I

might go to heaven.¹¹ (15.) ^{heaven in we go into end neg. live} *Iba pe nānule hwa gēpe api re j ya iko*

(fut.) *ne*, in heaven, where we shall go, we shall live for ever ; *nānule hwa gēpe* is thought as qualifying *iba* ; and the subject of *iko* is understood.¹² (16.) ^{my father die he self declare} *t'e · rub o mānō bae rāmā o nē momben*, my father who

was to die confessed. (17.) ^{my father die I see} *t'e · ru o mānō bae ran gēra a he fa g*, I saw my dead father ; *o mānō bae rāmā* means he who was to die, and

¹ Montoya, Vocabulario, sub *mārā*.

² Ibid. s. *re*.

³ Arte, p. 40.

⁴ Vocab., s. *ramo*.

⁵ Arte, p. 74.

⁶ Arte, p. 3.

⁷ Ibid. p. 19.

⁸ Ibid. p. 20.

⁹ Vocab. s. *ne*.

¹⁰ Arte, p. 23.

¹¹ Ibid. p. 22.

¹² Ibid. p. 29.

died; *omãñõ·baerãngē*, means he who was to have died, and did not die; *omãñõ·baekëra*, means he who was not to have died, and did die;¹ the last element of the particle of actuality seems to express the event; *bae* is the demonstrative representing what is defined by

being the subject of the verb. (18.) *O^{he self}·^{jest}·mbojaruai·ha·bãmõ tere*
rekonã, he keeps me as a butt for his jests;² *ba* in *haba* is demonstrative, representing that which is defined by being the indirect object or condition of the verb; the place of the verb takes *pe* instead of *ba*; *ãmõ* expresses the occasional or accidental use

of a butt for jests. (19.) *t'e·y·mboe·hagëra a·mõmbeu·yebi y·*
t'upe, I repeated to him what I had taught him;³ here there is no demonstrative representing what is defined by being the object of the verb.

(20.) *t'e Peru t'ery·mboerãmõ t'e·kaneone*, I will be weary teach-
 ing Peter. (21.) *t'e Peru t'e·omboerãmõ o'iquaane*, Peter will know if I teach him;⁴ when the subject of the sentence becomes

object, it is distinguished by *o* instead of *y*. (22.) *Ima a'mi t'e·*
mãrãngatu, formerly I was wont to be good;⁵ *mãrã* seems to be an indefinite pronominal element. (23.) *Ase·reko mãrãngatu·këra Tãpũ*

o·hepi·bëë iba·pe ne, God will reward good works in heaven.⁶

(24.) *Ara·kanĩ·rãmõ Jesu Christo o·po·akatuã·koti o'moi y'mãrãngatũbae ne*, in the day of judgment Jesus Christ will put the good at his right hand;⁷ *rãmõ* imparts to *arakani* a contingent or ideal fact, *bae* indicates those who are defined by being the subject of the verb, they are good.

The auxiliary elements which express tense all denote modes of actuality. And though the grammarian of the language says that every noun is capable of three tenses, taking *ke* for the past, *rama* for the future, and *rãngē* for the past future, these elements may all be used with other meanings. *Ke* occurs with the present, signifying separation;⁸ and *omãñõ·baerama* means he who was to die and died, *omãñõ·baerãngē*, he was to die and did not. The interest of the race lies rather in the actualities of fact than in its position in time, and it is in thinking the former that the Guarani mind tends to spread in its ideas. The elements of actuality are thought with the ideas to which they are attached present at the same time to the mind, and so they form large simultaneous conceptions such as are characteristic of American thought. Nor does thought spread on the parts so as to

¹ Arte, p. 30.² Ibid. p. 33.³ Ibid. p. 34.⁴ Arte, p. 35.⁵ Vocab. s. *ima*.⁶ Ibid. s. *teqã*.⁷ Ibid. s. *po*.⁸ Ibid. s. *cue*.

lose a sense of the whole, for its tendency towards the whole manifests itself in synthetic combinations.

I God take	I God love
Thus, <i>a'tüpā'pisi</i> , I take the communion;	<i>a'tüpā'raihu</i> , I love God;
I things seek	I things do go on
<i>a'mbaeri'yerure</i> , I seek things;	<i>t'embrae'apogitekobo</i> , I go on working; ¹
I stone remove	I eat be inclined
<i>a'ita'og</i> , I remove stones;	<i>a'karu'se</i> , I am inclined to eat; ²
priest thing	
<i>abarambae</i> , priest's thing. ³	

The use also of the future element *ne* at the end of a clause, as may be seen in some of the preceding examples, shows a readiness of the parts of a sentence to coalesce in one thought which agrees with the synthetic character of American speech.⁴

KIRIRI.

120. The Kiriri who dwell in Bahia seem not to give strong attention either to separate objects or to the result. Their verb seems to indicate remarkable want of activity, for it is never transitive, and little sense of contingency, for there is small development of mood. And it is probable from the fertility of their region that the race are under little necessity either to watch closely the things about them, or to attend carefully to the results either of action or of accident.

There is no development of arthritic construction, nor are there large synthetic combinations; but there is still enough synthesis to show the spreading tendency of American thought.

So frequent is composition, that most nouns and verbs which have more than one syllable are compounds.⁵

Two nouns, correlated as genitive and governor, are sometimes compounded together, the genitive being sometimes first and sometimes last. There seems to be closer combination in the former than in the latter, for a personal possessive is prefixed to the whole combination when the genitive is first, and is placed between the two components when the genitive is last.⁶

So also when a verb is compounded of two others, the personal element, instead of being prefixed, is sometimes between the two, as if one was thought more subjectively than the other; but still they form one word.

One of the most remarkable features in this interesting language is the way in which certain adjectives are constructed to agree with their nouns. Adjectives of number, of size or shape, of colour, and of dryness or hardness, take certain particles when they agree with nouns. They all take the same particle for the same noun, so that nouns are divided into classes by the particles which those adjectives take in concord with them. The adjective in Kiriri generally follows the noun, except the numeral adjectives which precede it; and the above-

¹ Arte, p. 53.

² Ibid. p. 54.

³ Ibid. p. 2.

⁴ Latham's Elements of Comparative Philology, p. 531.

⁵ Gabelentz, Kiriri Grammar, p. 40.

⁶ Ibid. p. 23.

named adjectives all take the particles of concord as prefixes. There are twelve such prefixes, and they correspond respectively to the twelve following classes of nouns :—

Be corresponds to nouns denoting hills, banks, bowls, &c.

Bu is the most usual particle, and corresponds to most nouns, but especially to houses, arrows, implements, ears of corn, and living things except birds:

Kro corresponds to birds, stones, stars, and round things, as berries, fruits, eyes.

Kru, to fluids and rivers.

Epru, to bundles and clusters.

He, to wood and bones, or to things made of wood.

Ho or *hoi*, to ropes, flexile plants, cords, and serpents.

Ya, to things of iron or bone, or pointed things.

Mui or *mu*, to eatables.

Nu, to holes, wells, openings, fields, enclosures.

Ro, to clothes, cloth, hides.

Woro, to routes, conversations, discourses, stories ; these latter must be thought as routes.

These particles are sometimes dispensed with by the numeral adjectives, but the other adjectives which have been mentioned, with four exceptions, require them.¹ They remind one of the prefixes of nouns in the Kafir languages, which are taken in the same way prefixed to an adjective in concord with the noun. But they differ essentially from these in this respect. The Kafir prefixes are part of the idea of the noun ; that idea breaking into two parts, one of which may be taken up without the other. The Kiriri particles form no part of the nouns to which they correspond, but only of the adjectives which refer to these, and which in qualifying the nouns form these partial notices of them and spread thus far into the thought of them. The elements thus taken up express apparently a sense of the various surfaces of things as possessing certain superficial qualities expressed by the adjectives. These particles are described as compounded with the adjectives,² and they therefore must be understood to form synthetic combinations with these, whose magnitude depends on the strength of meaning which they possess. But on this subject no information is given.

The use of these particles arises probably from a failure to keep before the mind the whole of the general idea when forming by comparison with it the comparative thought of the particular object. When the comparison refers specially to a part of that idea, the elements in respect of which principally the comparison is made are used to represent the whole, and are taken up into the comparative thought which is formed (24).

The main features of this language are as follows :—

121. The Kiriri consonants are *k, g, d', t, t', d, d', p, p', b, h, x, y, s, z, w, l, r, n, n, m*. The vowels are *a, e, e, e, i, u, o, o, o, u*. There are no diphthongs. The accent is generally on the last vowel, but a nasalised vowel always has the accent. Sometimes in a compound

¹ Gabelentz, pp. 29, 30.

² Ibid. p. 29.

each component has its own accent. *T* and *p* are generally followed by a strong guttural aspiration. The phothesis is very guttural, and seems to involve strong pressure of breath.

122. The noun is said to be unchangeable from gender, number, or case, but personal nouns are followed by *a* to express plurality, and some nouns of kindred by *te*.¹

The nominative is known by immediately following the verb; and the genitive by immediately following another noun. The other cases are expressed by prepositions.¹

123. The first and second personal pronouns in their separate form are—singular, first, *hiet'ä*; second, *ewat'ä*; plural, first, excl. *hiet'äde*, incl. *ket'ä* or *ket'äa*; second, *ewat'äa*.

The demonstratives are—*ixi*, this; *erid'a*, these; *ero*, that; *eroa*, those; *roho*, that same; *rohoa*, those same; *koho*, that.

The subjective and possessive personal affixes have five different forms, according to the noun or verb to which they are prefixed. These are:—

	Singular			Plural			
	1	2	3	excl.—1—incl.	2	3	
I.	<i>hi-</i>	<i>e-</i>	<i>i-</i>	<i>hi-de</i>	<i>ku-a</i>	<i>e-a</i>	<i>i-a</i>
II.	<i>hi-</i>	<i>ey-</i>	<i>s-</i>	<i>h-de</i>	<i>k-a</i>	<i>ey-a</i>	<i>s-a</i>
III.	<i>hid-</i>	<i>ed'-</i>	<i>se-</i>	<i>hid'-de</i>	<i>k-a</i>	<i>ed'-a</i>	<i>se-a</i>
IV.	<i>hi-</i>	<i>e-</i>	<i>si-</i>	<i>hi-de</i>	<i>ku-a</i>	<i>e-a</i>	<i>si-a</i>
V.	<i>d'u-</i>	<i>a-</i>	<i>su-</i>	<i>d'u-de</i>	<i>ku-a</i>	<i>a-a</i>	<i>su-a</i>

The first set are used with most nouns beginning with *i*, and with many others; the second with some nouns beginning with *a* or *e* or taking an initial *a*; the third with some nouns beginning with *e*; the fourth with nouns derived from verbs of passive signification and from neuters which themselves take these affixes; the fifth with nouns beginning with *u* (which is dropped after them) and with many others.² These may be called five declensions.

124. There are no transitive verbs; all verbs govern through prepositions. There is no verb substantive, nor any passive form.³

The first set of subject affixes are taken by many neuters, by most verbs beginning with *i* and by six of passive signification, the second by four neuters which begin with *a* or *e*, the third only by verbs beginning with *e*, the fourth by all verbs of passive signification except the six of the first and by several neuters, the fifth by all neuters beginning with *u* (which is dropped after them), and a few others.⁴ These may be called five conjugations. The reflexive pronoun is *d-* with second and third, *di-* with first and fourth, *du-* with fifth. As possessive these signify *suus*, as subjects *ipse*met.⁵

The perfect tense subjoins *-kri* to the verbal stem, the future *-di*; but if the verb is followed by a noun or adverb, *-di* is subjoined to the last word of the sentence. The imperative and permissive use *do* before the verb, the precative *bo*. The infinitive is expressed by the present indicative, which is also used with prepositions as gerund

¹ Gabelentz, pp. 7, 8.

² Ibid. p. 8–15.

³ Ibid. p. 16.

⁴ Ibid. p. 17–20.

⁵ Ibid. p. 9.

and supine. The present participle ends in *-ri* and takes instead of pronominal prefix, *d-* if it be of the second or third conjugation, *di-* if of the first and fourth, and *du-* if of the fifth. The verbs of passive signification make an active causative participle in *-ri* with the prefix *du-*. Participles, present and future, are formed in *-kriri*, *-ridi* with same prefixes. Passive participles also are formed in *-te* for present, *-krite* perfect, *-tedi* future, these suffixes being subjoined to the stem with its person-prefixes, which then denote the agent; and these formations may denote not only the subject of the passive, but its origin, mode, place, or instrument. The indicative present expresses also the noun of doing or being with the persons as possessive.¹

125. Two or more substantives in apposition are connected by the preposition *do*, which is the preposition of accusative and dative. The genitive follows its governor without a preposition, unless it signifies the material, when it is preceded by *do*, or the place, when by *mo*. The genitive may be compounded with its governor, preceding this or following it. In the latter case a possessive prefix comes between the two. A substantive may also combine with an adjective following it.² There is no relative pronoun; its place is supplied by the participles.³

126. The following classes of substantives do not take the possessive prefixes immediately, but with the mediation of a general noun (131), which has the meaning stated with each or given as the description of the class. The general noun with possessive affix precedes, and the other noun follows in apposition with *do* between.

The names of domestic animals take *-enki*, cattle; of wild catables, *-vapru*; cooked things, *-ude*; roasted things, *-upodo*; vegetables, *-ud'e*; cultivated bread-fruit, *-wani*, cultivation; fruits gathered green, to be kept, *-ubo*; things found, *-wito*; booty, *-borovumu*; things shared, *-ukisi*; presents, *-uba*; things carried, *-e*, a load. Sometimes mediating substantives are used different from the above.⁴

127. All simple verbs are monosyllabic; and it is probable that all words of more than one syllable are compounds.⁵

The negative is suffixed to the verb.⁵

When the subject is immediately expressed, the third person is still taken, unless the verb begins the sentence; but the first and second are not taken. Some compound verbs take the person in the middle. The perfect indicative drops *-kri* when an adverb or preposition precedes.⁶

128. The prepositions, when governing a noun, whether expressed or understood, take a possessive prefix to represent it, according to the declension to which the preposition belongs.⁷

Some adverbs begin the sentence; others are suffixed to a noun or verb; others require a separate word before them.⁸

The particle *-be* is sometimes suffixed to the indicative, especially when negated; *-bo* suffixed to verbs means entirely, *-ku* forms adjectives; *-dè* is interrogative, *-do* signifies completion, *-hu* answer, *-nid* already, *-ru* the customary, *-tò* frequentative.⁹

¹ Gabelentz, p. 20-23.

² Ibid. pp. 27, 28.

³ Ibid. p. 31.

⁴ Ibid. pp. 34, 35.

⁵ Ibid. p. 40.

⁶ Ibid. pp. 42, 43.

⁷ Ibid. p. 51.

⁸ Ibid. p. 54.

⁹ Ibid. pp. 57, 58.

The verb usually stands before the subject. Direct object follows subject, and after it the other cases.¹

CHIKITO.

129. The Chikitos, who live in the middle of South America, on the watershed of the basins of the Amazon and Paraguay rivers, are a lively, active race, who lead a life of much enjoyment, and find little difficulty in supplying their wants. Their country, consisting of low hills covered with forests and intersected by numerous small streams, confines the people to the places of their birth, where they live in little villages, and cultivate the soil; and so scattered were they in D'Orbigny's time that there were only 14,500 in five degrees of latitude by five of longitude.²

Their utterance is clear and soft,³ so soft that *b* is scarcely felt in utterance,⁴ and the absence of *d* and *g* is probably due to the mutes being so soft that sonancy would destroy them. There is a strong nasal tendency, so that if any inflection introduces a nasal or nasalised vowel into a word, every *y* in the word becomes *ɲ*, every *r* becomes *ɳ*, every *b* becomes *m*.⁵ There is probably no weakness of breath from the chest, as there are *t'*, *s*, *s*, *z*, as well as *h*. The consonants are—*k*, *t'*, *t*, *t'*, *p*, *b*, *h*, *s*, *s*, *z*, *y*, *w*, *r*, *ɲ*, *n*, *m*. The vowels are *a*, *e*, *i*, *u*, *o*, *u*, and are liable to be nasalised. There are no concurrences of consonants, and those of vowels are rare.⁶

The words have a tendency to run each into the following, so that a final vowel becomes an initial of the next word if this begin with a consonant; and if that consonant be *t'*, *y*, or *ɲ*, the vowel, if *a* or *e*, becomes *i*. If a word ending in a vowel be followed by a word beginning with a vowel, the former is dropped or the latter has *h* prefixed to it.⁷

130. There are, as in Carai'b, two genders, male and female, the former belonging to men and to supernatural persons, the latter to women and all other objects. But the peculiarity of this language is, that a woman never uses the first gender; to her even men and gods are of the second gender.

Also the nouns, *isaa'aras* Spaniard, *no'neis* man, *yort'oboret'* demon, *yut'aus* stranger, and names of trees and animals, which all begin with *o* or *u*, lose their first letter in the mouth of a woman.

There are also one or two nouns used only by the women, and some to which the women only, others to which the men only, attach possessive affixes. The relations of kindred to a woman and to a man are expressed by different words (110), and the latter as well as that of friend or slave to a man are often distinguished by incorporating an additional syllable *-to*.⁸

131. Nouns of kindred and of parts of the body never occur without

¹ Gabelentz, p. 61.

² Charlevoix, History of Paraguay, Book X.; Prichard's Researches, vol. v. p. 538; Arte de la Lengua Chiquita, p. 1. ³ Arte de la Lengua Chiquita, p. 1.

⁴ Ibid. p. 2.

⁵ Ibid. p. 3.

⁶ Ibid. pp. 2, 4.

⁷ Ibid. pp. 2, 3.

⁸ Ibid. pp. 5, 6.

a possessive affix. On the other hand, the names of animals and trees never take a possessive affix. The former, when possessed, are preceded by the general noun for animal with the possessive affix; domestic possessions are similarly preceded by a general noun. But objects of less distinct individuality, or less close connection, do not require one, the sense of possession being stronger than in Kiriri (126, 139, III., 31).

Every noun when not constructed with a genitive ends in the singular in *-s* or, if *e* precede, in *-t'*; in the plural, this is changed to *-ka*; and to many nouns when without a possessive *o-* is prefixed by the men, or *u-* if the first consonant is followed by *a*. To the names of men, the men prefix *i-* in the singular, *ma-* in the plural.¹ There is no plural for a noun constructed with a genitive, but it may be followed by *taiki* to express plurality. Diminutives are formed by *-ma*.² All nouns may take a suffix of the future *-bo*, *-mo*, *-o*.³

132. There are five sets of possessive affixes, as in Kiriri:

		I.	I'.	III.		IV.		V.	
SINGULAR.	1st	<i>i-</i>	<i>i-</i>	<i>ya-</i>	<i>isa-</i>	<i>yu-</i>	<i>su</i>	<i>t'</i>	$\left\{ \begin{array}{l} i- \\ u- \end{array} \right.$
	2d	<i>a-</i>	<i>ai-</i>	<i>a-</i>	<i>a-</i>	<i>au-</i>	<i>au-</i>		
	3d m.	<i>i-stii</i>	<i>i-stii</i>	<i>ya-stii</i>	<i>ya-stii</i>	$\left\{ \begin{array}{l} au-stii \\ yu-stii \\ u-stii \end{array} \right.$	<i>yu-stii</i>	<i>-stii</i>	<i>-stii</i>
	3d fem.	<i>i-s</i>	<i>i-s</i>	<i>ya-s</i>	<i>ya-s</i>	$\left\{ \begin{array}{l} au-s \\ yu-s \\ u-s \end{array} \right.$	<i>yu-s</i>	<i>-s</i>	<i>-s</i>
PLURAL.	1st incl.	$\left\{ \begin{array}{l} o- \\ u- \end{array} \right.$	<i>oi-</i>	<i>ba-</i>	<i>ba-</i>	<i>ou-</i>	<i>ou-</i>	$\left\{ \begin{array}{l} ot'- \\ ut'- \end{array} \right.$	<i>ut'</i>
	1st excl.	<i>t'oi-</i>	<i>t'opi-</i>	<i>t'upa-</i>	$\left\{ \begin{array}{l} t'upa- \\ t'oisa- \end{array} \right.$	<i>t'opu</i>	<i>t'opu-</i>	$\left\{ \begin{array}{l} t'ob- \\ t'ub- \end{array} \right.$	<i>tub-</i>
	2d	<i>au-</i>	<i>api-</i>	<i>apa-</i>	<i>apa-</i>	<i>apu-</i>	<i>apu-</i>	<i>ab-</i>	<i>ab-</i>
	3d m.	<i>i-sma</i>	<i>i-sma</i>	<i>ya-sma</i>	<i>ya-sma</i>	$\left\{ \begin{array}{l} au-sma \\ yu-sma \\ u-sma \end{array} \right.$	<i>yu-sma</i>	<i>-sma</i>	<i>-sma</i>
	3d fem.	$\left\{ \begin{array}{l} yo-s \\ yu-s \end{array} \right.$	<i>yopi-s</i>	$\left\{ \begin{array}{l} upa-s \\ yupa-s \end{array} \right.$	<i>yupa-s</i>	$\left\{ \begin{array}{l} yopu-s \\ opu-s \end{array} \right.$	<i>yopu-s</i>	$\left\{ \begin{array}{l} ob-s \\ ub-s \end{array} \right.$	<i>ub-s</i>

In the first declension, an initial *k* is changed to *t'*, and an initial *t* to *t'* in the first singular and first plural excl. When the vowel of the first syllable is *a*, *u* is used in prefix instead of *o*, except in first plural excl.

The differences between the above affixes seem to be phonetic, and to arise from the initial part of the noun. An initial *r* seems to introduce *s* into the first person.⁴

¹ Arte, pp. 8-10, 17.

² Ibid. pp. 16, 17, 29.

³ Ibid. p. 52.

Ibid. pp. 12-16.

133. The adjectives are verbs used adjectively, except some thirty which are nouns connected with the substantive, by taking a possessive affix which represents it, as the subject-person of the verb connects the others.¹

There is no adjective form for degrees of comparison. The only numeral they have is one; but they learned to count in Spanish.²

134. The separate personal pronouns are—singular, first, *aš'ni*; second, *aš'hi*; third, *aš'tii*, male; plural, first, *aš'oni*, incl.; *aš't'omi*, excl.; second, *aš'ano*; third, *aš'ma*, male, *aš'ino*, female; *aš* is a demonstrative prefix. There is no pronoun for third singular female. The above are used only in the nominative, when there might be a doubt whether *ni hi*, &c., was subject or object.³ The prepositions take the persons which they govern as possessive affixes; and when they govern a noun they precede it, having taken a possessive affix to represent it. But the genitive is expressed by merely following its governor, having dropped *-s* in singular, *-ka* in plural; unless it be genitive of possession, for then the governor takes possessive affix to represent the genitive which follows.⁴

The demonstrative pronouns are *naki* male, *na* fem., this; *naki* male, *ni* or *n* fem., are used for definite article; *n-* is apt to be taken by a genitive to represent governing noun; *baama* male, *baa* fem., these; *nukii* male, *nu ku* fem., that; *amma* male, *amio am* fem., those; also *ku't'akii* male, *ku't'a t'a* fem., this, *manuki* male, *manu* fem., that.

The second person singular prefix attached to a preposition serves for reflexive pronoun of oblique case for male or female singular and for male plural; the second plural serves for female plural (135), but for reflex possessives the prefixes of third person are used.⁵

There is no relative pronoun.⁵

135. The subject-persons of the verb in the present indicative are almost the same as the possessive affixes of the noun, so that there are five conjugations of the verb. The differences are that in the conjugations the prefixes of the third persons singular and plural drop *i* and *y*, except in the second conjugation; *b* is taken instead of *y* in the third singular of third, and in the third plural fem. of first; in the suffixes, *s* is dropped throughout the conjugations; and where there is no suffix, the element *ka*, which expresses the verbal succession of the accomplishment, is subjoined, except in the third fem. singular and plural.⁶

In the subjunctive the prefix of the second singular is taken in third singular male and female, and in the third plural male, and that of the second plural, in third plural fem. The second plural is used in Pima as an abstract subject like French *on*. It is doubtless weaker than second singular, and both may be weakened by direct address leaving so little to be denoted by speech. Hence they are used in Chikito for reflexive object, this being weakly thought because it has just been thought as subject. In the future and in the objective present indicative, which involves a pronominal object, the third persons

¹ Arte, pp. 17, 18.

² Ibid. pp. 19, 20.

³ Ibid. pp. 21, 22.

⁴ Ibid. pp. 22-26, 29, 30.

⁵ Ibid. pp. 30-32.

⁶ Ibid. p. 34.

take the possessive prefixes. The verbal stem may be used as a noun with or without *-ka*, *-ki*, *-ko*, *ku*, the vowel agreeing with the vowel of its last syllable.¹

Each of the conjugations comprises verbs of all kinds, actives, passives, neuters, intransitives, except that the second seems to belong only to actives.¹

If the initial consonant of the stem is *t*, it changes, as in nouns, in the first singular and first plural excl., to *t'*, and if it be *k* it changes to *t'*.¹

Sometimes a passive differs only by a slight change from an active. Sometimes the difference is greater, or there is no active corresponding to the passive. The element of succession which is subjoined to the stem is altered by incorporating third fem. as object, or by the verb being determined by a particle or verb preceding it. There are some twenty different elements for objective verbs. The object-person, *ni*, *hi*, &c., follows the element of succession.²

The future is expressed in some verbs by *-na*, *-ra*, *-ba*, *-ma*, or *-a* attached, but other verbs express it by the present with an adverb; there is no other tense.

The imperative subjoins *-t'o*, *-t'a* instead of *ka* to the second person present; but in the objective form it substitutes for this *-e*, *-i*, *-t'oi*, *-t'ai*, *-t'ēē*, *-t'ōō*.³ Transitive verbs may be abstracted from an object and thought intransitively. Some verbs then pass from the second conjugation to the third; and the intransitive form may govern a plural object.⁴

The pronouns *ni*, *hi*, &c., subjoined to a predicate imply the copula, but sometimes *ka* intervenes, and sometimes they are subjoined to *tah* for a verb substantive.⁵

The negative *-i* is subjoined to the verb after *ka*; there are also, for negatives, *ko-* and *t'e—pi*. The object follows the verb.⁶

136. The Chikitos are not obliged to give very close attention to natural objects, nor are they rigidly bound to a traditional routine of life. There is considerable sense of the life of the subject in their verb as well as of the succession of doing or being, but little tendency to combine verb and object except pronominally in one idea of accomplishment. Yet the synthetic tendency is remarkable.

The final *s* or *t'* of the noun, which changes to *ka* in the plural (131), is probably of the same nature as the Mexican *-tl*, &c. (87). For, as some of the Mexican endings are dropped when the noun has a possessive affix, so the Chikito ending is dropped when the noun governs a genitive. And the ending being dropped in the singular, that of the plural into which it changes is dropped in governing a genitive.⁷

The plural elements, *-ka* and *ma-*, seem to correspond to Mexican *-ke* and *-me*, and *o*, which is prefixed in Chikito on account of the strength of the attention, is one of the Mexican endings.

When the genitive is a possessor, the possession, though it loses its

¹ Arte, pp. 35, 50.

⁴ Ibid. pp. 42, 43.

² Ibid. pp. 36, 37.

⁵ Ibid. pp. 45, 46.

⁷ Ibid. p. 29.

³ Ibid. pp. 40, 41.

⁶ Ibid. p. 52.

demonstrative element, does not directly combine with the possessor, but always takes a possessive pronoun to represent the possessor; as

^{house} ^{God}
(1.) *i'poo'stii Tupas*, his house God, *i.e.*, house of God; *i—stii* is possessive. Also when a noun is object of a relation, the idea of it will not combine with the relation directly, but has to be represented by a pronominal element in combination with the relation, as (2.)

I speak her to the woman
t'uraka imo n'pais, I speak to the woman.

These constructions are similar to what are found in the Carair language, and show weak sense of correlation (105).

The readiness of nouns to coalesce in genitive relations, other than that of possession, facilitates synthesis between them. And, consequently, compositions are frequent, consisting of noun and genitive as well as the kindred ones of noun and adjective.

The sense of process in the verb leads to a great development of derivative verbs, expressing parts of process or varieties of process, continuatives, initiatives, completives, doing it well, ill, gratuitously, hastily, usually, before the time, &c., besides causatives, intensives, and frequentatives; and the derivative elements have remarkable distinctness of meaning coalescing in one conception with the root,

though adding to it strong modifying elements. Thus, ^{I lie} *i'naniki*·
^{cause}

naka'ka,¹ I lay, *i.e.*, cause to lie; here the last *ka* is the verbal succession of the act of lying, the preceding *ka* that of causing; so fully are the derivative element and the simple verb thought together.

As verbs can be formed from nouns they can in the same way be formed from nouns compounded with adjectives. And though verbs are not apt to incorporate their objects except pronominally, they very often take up into their stem a noun which is an instrument or other condition of the fact. And thus verbs are frequent which have two components in their stem. These compound stems may be further enlarged by being affected with derivative elements. And thus the language possesses a well-marked synthetic character, as may be seen from the following examples:—

^{hand rugosity}

Eë · biriyi · s, muscle, vein, or wrinkle of the hand; *kupe · kuu · s*,

temple; *t'aki*, hair; *kupe · t'aki's*, lock of hair on the temple; ^{stuff} *asi* ·

^{yellow} *suriki'o*, to be yellow stuff; ^{I hammer strike} *i · t'aku · basi · ka*, I am struck with a

^{I head strike} hammer; *i · t'a · basi · ka*, I am struck on the head; *taĩ* is head,

^{I lip wrinkle} ^{intens.} and *t* changed to *t'*; *t'anu · paki · tã · ka*, I have the lip much wrinkled.

The names of living beings alone seem to be incapable of entering into such compositions.²

¹ Arte, p. 46.

² Arte, *Precis Linguistique*, p. xv.

BAURO.

137. The Moxos, who adjoin the Chikitos on the north-west, are described as having more gravity than the Chikitos;¹ and the Bauros, who belong to the Moxo family, and dwell on the affluents of the Mamore, are described as more industrious than any of the nations of those countries.² In the language of the Bauros there is no consonant concurrence nor final consonant, and *r* is very soft.³ There is no such general ending loosely attached to the noun as is found in Chikito in the final consonant (131), because the noun is thought with more substance of its own (Def. 4). The noun has no cases; there is a plural ending *-nobe*, but little used.⁴ The personal pronouns are—sing. *ni*, *pi*, *re* (male), *ri* (fem.); pl. *abi*, *ye*, *ne*; they are strengthened when separate with *-ti* and *-tiye*;⁴ *ni*, &c., suffixed to a predicate, imply the copula; they may also be prefixed to *tibay* for verb substantive. They are prefixed to all verbs as subject person, but their vowel is apt to be absorbed by initial vowel of the stem. The present subjoins to the stem *-bo*, to express actuality; but *-bo* sometimes, and *-bobo* always, denotes the reflexive.⁵ Verbs ending in *o*, change *o* to *a* in the future; others change the vowel of the person to *a*, and *-bo* to *-po*; others do not distinguish the future from the present.⁶ There are no other proper formations of tense or mood. A present participle is formed by *-na* added to the verbal stem. A passive is often formed from the active by dropping the last syllable, and inserting *ka*, *kai*, *ko*, or *ke*, after the person.⁷

138. The Bauros, in accordance with their industrial interest in external things as objects of action, give more individual substance (Def. 4) to their substantive ideas, and do not tend so much as the Chikitos to put their noun into synthesis with the verb. There is, however, a considerable synthetic development in the Bauro verb; to some extent by composition, but to a greater extent by a large variety of derivative elements, which refer, some to the engagement of the subject, more to the external relations of the fact. The noun and genitive, too, are apt to coalesce in one word, and certain nouns enter readily into composition. The arthritic constructions of the noun, which are absent from Chikito, are found in Bauro.

139. When the governing noun and genitive do not combine in a synthesis, such as, ^{tiger} *iskini* · ^{foot} *puyi*, tiger's foot, they are always, as in Chikito, constructed with a possessive affix, as (1.) *re* · ^{its} *puyi* ^{foot} *iscini* · ^{tiger}. But, unlike Chikito, the noun which takes a possessive prefix often requires a pronominal suffix to help its connection with the possessor. Many nouns drop a final syllable, or two final syllables, in combining with a possessive prefix; and merging their individuality in the possessor, they combine without requiring a

¹ Prichard, vol. v. p. 529.

³ Ibid. p. 1.

⁶ Ibid. pp. 10, 66, 67.

² Arte, de la Lengua de los Bauros, p. 111.

⁴ Ibid. p. 3.

⁵ Ibid. pp. 8, 64-66.

⁷ Ibid. pp. 70, 72.

pronominal suffix. Other Bauro nouns do not drop elements of substance in combining with a possessor, and yet can enter into such combination without the help of a pronominal suffix. But there are others which require the demonstrative suffix *-na* to effect their union. The following are examples of these three

constructions: ^{drink} ^{my} ^{garment}
^{arrow} ^{word}
^{urine}
^{net} ^{thirst} ^{tongue}
^{knife} ^{my}
^{lungs} ^{blood} ^{flesh}
^{thy} ^{cotton}
^{liver}

eroneko, n'erone, my drink; oraniko, noranik, my garment; korireko, ni'kori, my arrow; abekoroti, nabekari, my word;

tenetiko, ni'tene, my urine. The syllables dropped seem to be formative elements which give substance to the noun. On the other

hand, the following nouns suffer no change: *ihoikof'o, ni'hoikof'o, my*

knife; iye, ni'iye, my net; tipiri, ni'tipiri, my thirst; epenene,

n'ipenene, my tongue; ehimehime, ni'himehime, my lungs. The fol-

lowing have the arthritic construction: *iti, n'itina, my blood; enaskie,*

n'enaskiena, my flesh; p'enaskiena, thy flesh; kohobore, ni'kahoborena,

my cotton; eperrena, neperrenana, my liver. Now, the first of

these three constructions is of nouns into the idea of which the sense of possession enters, so that their individual substance is merged. The nouns of the second construction are those whose ideas are ready to become subject to possession without suffering change. Those of the third are thought too independently for their close connection with a possessor, and therefore need an arthritic element to connect them.

The sense of possession is stronger to affect substantive ideas than in Kiriri or Chikito, so that no general nouns are required for its expression (126, 131).

It is to be observed that plural nouns do not, as in Chikito, lose their plurality when combined with a possessor.²

140. The synthetic development of the verb is by derivative formations wherein a variety of derivative elements may be united to the simple stem. And these are so numerous and in such constant use that the author of the grammar calls the system of derivation the source of the language.³ In this way a passive is formed, a desiderative and a causative, neuters are made transitive, verbs are affected with conjunctions and other elements of external relation, they are defined in place and in time, and incorporate as direct object not only pronouns, but also certain nouns. Frequentatives and intensives are formed, not synthetically but by reduplication; but certain verbal stems are taken synthetically into composition with other stems. And these combinations may be made at will as an ordinary mode of construction.

Passives may be formed, like ^{he} ^{throw}
*rekamiski, he is thrown,*⁴ from

¹ Arte, p. 4.

² Ibid. p. 60.

³ Ibid. pp. 21, 22.

⁴ Ibid. p. 16.

he throw

remiski'ko by dropping the objective element at the end, and inserting a subjective element in connection with the person. But they may also be formed by subjoining a heavier element *kono*, some verbs requiring one method and some the other, and some admitting either ;

I speak I deceive
n'abeko, n'abeko'kono, I am spoken ; *ni'koperoroko, ni'koperoroko'kono*,
 I am deceived.¹

Desideratives are formed by *-ni*, but they involve no synthesis worthy of note.

Causatives take *ka* or *ma*, subject to euphonic change between the person and the stem ; and neuters are made transitive by subjoining *t'o* at the end ; some at the same time insert *ma* after the person ;

I judge I
 thus *n'et'obobayne*, I judge, *ni'm'et'obobayne't'o*, I adjudge.²

This suffix *-t'o* is used to form both nouns from verbs and verbs from nouns—*n'emaniko*, I love ; *n'emaniko't'o*, my love ; *ni'niko*, I eat ; *ni'niko't'o*, my eating, or food ; *ni'bane*, my pay ; *ni'bane't'o*, I pay ; *ni'yiko'bane*, my equivalent ; *ni'yiko'bane't'o*, I pay an equivalent ; *ni'tira*, my thing ; *ni'tira't'o*, I appropriate.³ The suffix *t'o* is an active element thought as a substantive in the former and as a verb in the latter. Nouns are formed from verbs also by *-ra*, as

judge
n'et'obobayne'ra, my judgment.³ And verbs are formed from nouns by inserting *ka*, as *ni'scera*, my son ; *ni'ka'scera*, I have a son.³ It is remarkable how the element of relation *bane*, signifying after or

I leave
 behind, is incorporated with the verbal stem ; thus, *ni'hino'bane'ko'bo*, I leave behind, abandon ; *n'abeko*, I speak ; *n'abe'bane'ko'bo*, after I had spoken ;⁴ *ni'kot'o*, I depart ; *ni'kot'o'bo'bane*, after I had departed ;⁵ *bo* expresses actuality. So also with other conjunctive and adverbial elements ;

I fear before I go again
ni'ipi'mirai'ko'bo, I fear beforehand ;⁶ *ni'yon'apiro*,

I go again ; *re'kai'piro*, it bears also ;⁷ *n'abeko*, I speak ;

only he die already
n'abekiyi'ko'bo, I am only speaking ;⁷ *re'peno'pobo*, he died already ;⁷

try first reflex. we speak mutually
no'hiko'skio'bo, I try myself first ;⁸ *ab'abeko'koko*, we speak to one

I speak loc. I put within
 another ;⁹ *n'abeki'yo*, where I spoke ;¹⁰ *ni'imo'kio*, I put within ;¹¹

I fear
ni'ipi'kino'bo, I am afraid of another.¹²

In the following the verb incorporates a noun—*Ni'ni'pai'ko*, I eat on the ground ;¹³ *n'eko'ye'ni't'o*, I believe the

¹ Arte, p. 18.

² Ibid. p. 23.

³ Ibid. p. 24.

⁴ Ibid. p. 26.

⁵ Ibid. p. 91.

⁶ Ibid. p. 27.

⁷ Ibid. p. 28.

⁸ Ibid. p. 31.

⁹ Ibid. p. 34.

¹⁰ Ibid. p. 33.

¹¹ Ibid. p. 35.

¹² Ibid. p. 27.

¹³ Ibid. p. 29.

I go water I cut wood
 word; ¹ *ni'yon'ore'ko*, I go by water; ² *ni'piri'se'ko*, I cut
 I cut cloth I go day
 wood; ³ *ni'piri'mai'ko*, I cut cloth; ⁴ *ni'yono'hare'i'ko*, I go by day;
 I go
ni'yono'yatio, I go by night.⁵ These nouns, and those which denote
 parts of the body, are the only nouns which are compounded with
 verbs, but these may be compounded with any verbs with which
 they are connected as in the examples.

The following verbal stems may combine with other verbal stems—
baka-, to cease; ⁶ *-apiko*, to go; ⁷ *itimo-*, to feign; *-hikobo*, to feign; ⁸
 and *inomo-*, to commence.⁹

Nouns, too, may be formed with some of the above elements
 my room
 joined at will to other nouns—*ni'penaki'bane*, my room that was; ¹⁰
 cloth pay
okoremoko'bane,¹⁰ payment for cloth—this *bane* appears to be a noun;
 black ground cotton bee liquor
retomo'pai, black ground; ¹¹ *kohoro'pi*, cotton thread; ¹² *ororip'ore*,
 poor cloth dead place
 honey; *ati'mo*, poor cloth; ¹³ *epena'ki*, place of the dead.¹⁴
 The nouns which are ready to enter into composition with other
 nouns are the second members of the above compounds.

Most of the preceding formations are remarkable for the strength
 of their elements, as well as for the facility with which they are
 made in the construction of a sentence. And the position of the
 abstract verbal elements *ko*, *bo*, *f'o*, at the end of the formations,
 shows that they are thought with all their parts in one simultaneous
 conception; for these elements are thought in combination with what
 precedes them referring to the whole, and must be thought with the
 whole present to the mind.

ABIPONE.

141. The Abipones of Chaco, south of the Chiquitos, live a
 purely hunting life, roaming over great distances, capable of enduring
 fatigues and hardships almost incredible; an amazingly vigorous race,
 who, without any agriculture, subsist entirely on what they can take
 or find.¹⁵ In the slight sketch which is all that we have of their
 language, no distinct mention is made of any construction which
 is of an arthritic nature. But there is abundant evidence of
 synthesis.

“This language abounds in very long words, consisting of ten,
 twenty, or more letters. The tall Abipones like words which
 resemble themselves in length.”¹⁶

The personal pronouns, as subject and object, are taken up by the

¹ *Arte*, p. 29.

² *Ibid.* p. 30.

³ *Ibid.* p. 34.

⁴ *Ibid.* p. 35.

⁵ *Ibid.* p. 36.

⁶ *Ibid.* p. 31.

⁷ *Ibid.* p. 32.

⁸ *Ibid.* p. 33.

⁹ *Ibid.* p. 36.

¹⁰ *Ibid.* p. 26.

¹¹ *Ibid.* p. 29.

¹² *Ibid.* p. 30.

¹³ *Ibid.* p. 35.

¹⁴ *Ibid.* p. 36.

¹⁵ Dobrizhoffer's *Account of the Abipones*, vol. ii. p. 110-113.

¹⁶ *Ibid.* vol. ii. pp. 161, 162.

verb, and are so fused into it, that they differ in one verb from what they are in another, and often it is impossible to distinguish the subject from the object.¹ There are no examples given of a verb incorporating a noun related to it—unless some of those about to be mentioned are to be regarded as such—nor of a noun being compounded with a genitive or with an adjective. The synthetic tendency of the language is characteristic of the habits of a race observant of locality, and of what can be turned to use.

“The Abiponian tongue might not improperly be called the language of circumstances, for it affixes various particles to words to denote the various situations of the subject of discourse; either *hegem*, above; *ani*, below; *aigit*, around; *hagam*, in the water; *ouge*, out of doors; *alge* or *elge*, on the surface, &c.”² These particles are taken up into the stems of verbs so as to incorporate with the being or doing its place or direction. They are subjoined to the stem, as are also—*-tapek*, now; *-kaŕ'it* and *-ŕat*, causative; *-ken*, be accustomed. Nouns also take *-it*, denoting what is made of them; *-hat*, their native soil; *ik*, tree; *-ŕeki* or *-layt*, vessel or containing-place; *-late*, place of action.³

The following are examples of such formations—*Hakiriogŕan'e*
^{now}
tapek, I plough now (while I am speaking), *e* seems to be euphonic;
^{above} ^{caus.}
ayer'hegem'ege, a high thing; *ayer'kaŕ'i'hegem'ege*, I make a thing
high, put it in a high place; *roelaki'ken*, he is accustomed to fight;
^{otter} ^{wheat}
niŕ'iŕeher'rit, a (cloak) made of otters' (skins); *nemelk'e'hat*, a field of
^{soap} ^{fight}
wheat; *keyeŕan'ŕeki*, a wash-tub; *nahamatŕa'late*, the place of the
fight; *noetaren*, I am healed; *noetaren'a'taŕan'ŕat*, medicine; *noe'taran'a'taŕan'kate*, a medical instrument.³

CHILIAN.

142. The language of the natives of Chili, which is spoken also by the Moluches of Patagonia, is highly synthetic. It is not easy to make out from a brief sketch of the grammar, given in Molina's History of Chili, whether there is any arthritic construction in the language. In the declension of the noun, *-ni* is given as a genitive case-ending and apparently regarded as of the nature of a postposition, though called an article, because the prepositions of case are combined with the article in the Romance languages. The author says afterwards that “the genitive or at least its article is commonly placed before the noun which governs it;”⁴ but he gives no example. If this
^{man} ^{city}
means that, *ni luentu kara* would be the correct construction for man of the city; it looks as if *ni* was not indeed arthritic, but a

¹ Dobrizhoffer, vol. ii. p. 179–181.

² Ibid. vol. ii. p. 188.

³ Ibid. vol. ii. p. 188–193.

⁴ Molina's History of Chili, vol. ii. p. 348.

possessive prefix representing *kara* in connection with *huentu*; and *n'* is given as the Moluche possessive¹ of third person. In the Lord's Prayer, translated into the language as spoken by the Moluches, Our

Father is translated, *int'in in f'ao*,² where *in* is like the Mexican connective and relative; and, moreover, *iney* is given as the Chilian relative, but it is more likely that *in* serves as possessive prefix first person plural, for it is the first plural ending of the Moluche verb.³

Ni is equivalent to the preposition to in the expression, *ni pagitum*
lion
 come I
cupa'n, I come to hunt lions.⁴

The noun subjoins a dual element *-gu*, and a plural *-gen*, with case-endings, *-ni* genitive, *-meu* dative; it also forms a plural with *pu-*. It annexes postpositions to its stem, and to *-gu* and *-gen*. The verb has person-endings, singular, dual, and plural, *-gu* is third dual and *-gen* third plural.

143. Sometimes the noun combines with another noun related to it as a genitive so as to form one word, as *millalonko*, head of gold.⁵

But it is in connection with the verb that the synthetic tendency prevails most. There are no less than nine tenses, each tense except the present having a distinct element between stem and person-ending: *elun*, I give or have given; *elut'en*, I give; *elubun*, I did give; *eluye'n*, I gave; *eluye'bun*, I had given; *eluan*, I will give; *eluye'an*, I shall have given; *elua'bun*, I had to give; *eluye'a'bun*, I ought to have had to give. These tenses may each take the element of a subjunctive mood between the element of tense and the person-ending,⁶ or may take instead of the person the element which is characteristic of the participle or that of the gerund. The stem may at the same time subjoin to itself a negative or derivative element, passive, causative, intensive, relative to an object, or elements having still stronger meanings, as wish, come, go, doubt, pass, seem, know, be able. It may take up other verbal stems;⁷ and usually it incorporates with itself the noun which is its direct object.⁸ If a personal pronoun is direct object, it is taken into close union with the person of the verb;⁹ the first and second persons as object following the subject person, except that second person as object precedes third person as subject. The third person singular as object is *-vi-* attached to the stem in all persons, tenses, and moods. However complex the verbal stem may be, it takes after it the elements of tense and mood which bind its parts into one conception. And thus

eat wish with not him I
 an entire sentence, as *i'duan'klo'la'vi'n*, I do not wish to eat with him, may be conjugated through all the parts like a simple verb.¹⁰ The verbal stem ends in a vowel, different vowels being attached to different roots¹¹ to express the appropriate succession of being or

¹ Molina's History of Chili, vol. ii, p. 358.

³ Ibid. p. 357.

⁶ Ibid. p. 337, &c.

⁹ Ibid. pp. 349, 360.

⁴ Ibid. p. 349.

⁷ Ibid. pp. 345, 346.

¹⁰ Ibid. p. 346.

² Ibid. p. 364.

⁵ Ibid. p. 348.

⁸ Ibid. p. 349.

¹¹ Ibid. p. 336.

doing. The adjective is always before its substantive. The subject may be placed either before or after the verb; so also may the object.¹

144. Thus in all the languages of America, so far as our information reaches, a large and spreading character of thought prevails. In some this shows itself in large aggregations of parts of the fact. In others it appears rather in the largeness of thought with which single objects are distinguished and defined. Thought tends to spread on combinations or on single objects according as the habitual interest of the race lies more in entire facts integrated in the result, or in the single objects of thought with which they are concerned; and such interest, whether in the former or in the latter, may be partial, applying to some combinations or to some objects and not to others.

Now if there be races whose life imparts interest more or less generally to combinations of objects in facts, and others whose life imparts interest to objects thought separately, there will probably also be races whose conditions of life are such that these two interests habitually balance each other. In such a race, a largeness in the several acts of thought must show itself partly in the fulness of the thought of each element, and partly in the joining on of each part of the fact to that which follows.

Such seems to be the nature of the Otomi language, and also in a great degree of the Chibcha. And when the different directions in which thought may spread are taken into account, there may be seen through all the varieties of American speech the one tendency to include in each act of thought a large object.

The same diversity of comparative interest in combinations and in single objects which affects the form of the massive thought of the American exists also in Africa, and causes a difference in the form of the fragmentary thought of the African. It has been already observed (I. 48) that in the African languages of the Kafir family there is a tendency to group the elements of facts into closer combinations than are usual in many of the negro languages. But this does not hinder the fragmentary nature of the former from being as clearly apparent as that of the latter.

On comparing the American languages with the pure African languages, we find a massive character in the former, and a fragmentary character in the latter, quite as general and as striking as the slow excitability of the American and the quick excitability of the genuine African. It is from such diversity of mental action that this very diversity in the structure of language has been deduced in Book I., chap. i., 5-8, and it is a striking confirmation of the theory there laid down, that in the two great divisions of the human species which exhibit most strongly the difference in the supposed cause, language presents equally strongly in all its details the theoretic difference in the effect.

That theory may be considered as proved, if in the languages of the other divisions of the human species the theoretic effect is found

¹ Molina's History of Chili, vol. ii. p. 348.

to follow the theoretic cause according to the degree in which this is known to exist.

III.—*Oceanic, Indian, North-East African, and Central African Languages.*

1. The languages to be treated of in this section are not grouped together on account of any supposed ethnological connection between them, but solely in reference to the degree of ready excitability which is manifested by the corresponding races. This has been shown in the preceding part of this chapter, so far as the evidence went, to be less than that of those African races which are most remote from foreign influence, but greater than that of all other races of men except those of the Indo-European family.

Even in respect of this one quality, however, the races to whom these languages respectively belong are by no means on a par; some of the Oceanic having more ready excitability than any others in the group. Those languages shall be taken first which belong to the races of quickest excitability and the others afterwards in succession according to their proximity or affinity, to see whether the fragmentary character of the language corresponds to the mental readiness of the race.

POLYNESIAN.

2. In the Polynesian language, called so from its being spoken throughout the many islands east of the meridian of the Friendly Islands as well as in New Zealand, the structural features possess a special interest owing to the peculiar nature of the region, and to the wide prevalence of the race indicating a special adaptation to that region. These features will first be briefly sketched as grammatical facts, before those characteristics of the language are noticed which bear on the theoretical question of the present chapter. And in this sketch each statement is to be understood as referring to Maori, the language of New Zealand, when the other dialects are not mentioned, and as true for these also when the necessary phonetic changes are made.

The Polynesian phothesis is in a high degree vocalic. The consonants in Maori are only *k, t, p, h, w, r, ŋ, n, m*.¹

In Hawaiian and Tahitian the *k* has become a mere catch in the throat, which may be written *ʔ*, but is often omitted; and the *t* of Maori and Tahitian is written *k*, more properly *k'*, in Hawaiian, though the grammarian of the language regrets that the same letter was not used as in the other dialects; *ŋ* too has become *n* in Hawaiian, and has been dropped in Tahitian, so that these seem less guttural than Maori.² In Maori also, *w* is sometimes aspirated as *wh*; while in

¹ Maunsell's *New Zealand Grammar*, p. 1.

² Alexander's *Hawaiian Grammar*, p. 3; Gaussin, *Dialecte de Tahiti*, &c., pp. 29-35.

Hawaiian it approaches more to *v*, and still more in Tahitian.¹ Tahitian also has *f*, represented by *h* in Hawaiian, and by *w* in Maori.² *R* is sometimes strong and sometimes weak in Maori; *l* corresponds to it in Hawaiian; and though it remains *r* in Tahitian, there are two or three instances of its being dropped, so that it is probably weak.³

These differences seem to indicate that there is more force of breath in Maori than in the other two, but all three agree in their love of vowels, suffering no concurrence of consonants, abounding in concurrent vowels, and requiring every word and syllable to end in a vowel.⁴

The vowels are given as *a, e, i, o, u*, but Maori at least has also *ē* and *ō*.⁵

The accent sometimes makes a different word as it falls on the last syllable or on the penultima,⁶ at least in Hawaiian.

3. There is a remarkable development of the article. The definite article, which in the singular is *te*, in the plural *ia*, is used to distinguish the logical extension of the noun from all other objects, as

i ma te kaupuke, went by ship (by nothing else), as well as to particularise an object within the extension of the noun. In the former sense it is sometimes applied to proper names. There is also an indefinite article *he*; and in the same sense the numeral *tahi*, one, is used with the article *te* prefixed to it for the singular, and *e* for the plural; *etahi* having the same meaning as the French *des*.⁷

Besides these, there is an emphatic article *ko*, used to emphasise the subject or the predicate, as *e tākoto nei ko te pihī ko te poro*, (it) lies here, both the piece and the end; *ko koe te haere*, the person that is to go is you. It sometimes makes a nominative absolute.

The noun is thought with such a sense of the general that it cannot have *ko* without being particularised.⁸

Another article, *a*, is arthritic, expressing the direction of attention to a substantive idea in connecting it as member of a sentence (Def. 7), as *e hoe ana ki akarana ki te kai mana a te paraoa*, he is paddling to Auckland for food for himself, flour. Here thought still keeps hold of *mana* in directing attention to *te paraoa* in order to connect it with the latter. *A* is used with proper names and personal pronouns on account of the concrete fulness with which they are thought, and which makes them less ready than common nouns to be thought in a correlation; but the personal pronouns as subjects do not require *a*, the relation is so natural to them; nor is it needed after the prepositions *o* and *a*, for these, as expressing possession, have more affinity for the idea of a person. Names of places take *a* when they are the subject, but not when they are the object, as the latter relation is natural to them.⁹

4. Nouns have neither gender nor case. In a few instances a

¹ Maunsell, p. 8; Alexander, p. 3; Gaussin, p. 32.

² Gaussin, p. 33.

³ Maunsell, p. 8; Gaussin, p. 34.

⁴ Gaussin, p. 17; Alexander, p. 3.

⁵ Maunsell, pp. 1, 3.

⁶ Alexander, p. 5.

⁷ Maunsell, p. 10-15.

⁸ Ibid. p. 106-108.

⁹ Ibid. pp. 13, 14, 110.

plural is formed by internal change; some trisyllables lengthen the first syllable in the plural.¹ There are many compound prepositions, but of pure simple prepositions only some expressing by and to, besides the genitive prepositions *a* and *o*.² Between the two latter there is a remarkable distinction, *a* being used for what belongs to an agent with whose action it is concerned, *o* for passive possession; both combine frequently with an element which represents the governor of the genitive, *n*-pronominal, *t*-article, *m*-effect instrument (akin to Tagala *mag*). When the element in combination is the definite article (*t* Maori, *k* Hawaiian), the governor follows the governed, at least in Hawaiian; for the article represents the governor, and it would be contrary to use for an article to follow its noun, while *a* or *o* must immediately precede the genitive.

Thus, ^{a beating} ^{me} *he patu m'o ku*, a beating for me (to suffer), *he patu m'a ku*, a beating for me, a beating instrument for me to use; ^{oven} ^{you} *he hani m'o u*, an oven for you (to cook with), *he hani m'a u*, an oven for you (to be cooked in). Hawaiian ^{the chief house} *k'o ke alii hale*, the chief's house; *ko* must precede *hale*, because *k* is the article of *hale*.³

5. The same word may be used as substantive, adjective, adverb, or verb.⁴ The adjective follows its substantive, but it is rather a substantive in apposition, for it becomes a verbal noun when it agrees with a verbal noun.⁵

The first personal pronoun in Maori is singular *ahau* or *au*, dual *tāua* incl., *maua* excl.; plural, *tātou* incl., *matou* excl.; the second is singular *koe*, dual *korua*, plural *koutou*; the third is singular *ia*, dual *raua*, plural *ratou*. There are three demonstrative particles, *nei*, here; *na*, there near you; *ra*, there more remote.⁶

6. There are only two verbal elements of succession of doing or being in the language, and they may be taken either as participial or assertive. These elements are *i* and *e*. They do not properly express either tense or mood, but rather the time required at the moment thought of for the realisation of the fact to which they belong; *i* being shorter than *e*. Thus *i* is used for the past, because being realised it requires no time

for its realisation, as ^{angry} ^I *i riri au*, I was angry;⁷ sometimes for the present when thought in connection with something as immediately contemporaneous, as ^{emph. that} ^{angry at} *ko ia i riri ai*, it is *that* he is angry at,⁸ *ko* being emphatic; sometimes as a supposed present, for this takes no time, as ^{happen an} ^{axe} *i pono he titaha*, if an axe happen (to be my payment).⁸

On the other hand, *e* is used in a continuing present, as *e noho mui*, he is sitting here; also in the future, real or contingent, and in the

¹ Maunsell, p. 19-21.

² Ibid. p. 55.

³ Ibid. pp. 119, 120; Alexander, p. 7.

⁴ Alexander, Part II. sect. 3; Maunsell, p. 43.

⁵ Maunsell, p. 121.

⁶ Ibid. pp. 27, 30.

⁷ Ibid. p. 36.

⁸ Ibid. p. 139.

imperative,¹ all which suppose an interval prior to realisation; *ana* after the verb is a particle of continuance equivalent to English *-ing*.²

There is also a verbal element *ka*, which, however, differs in its nature from *i* and *e*, being rather a verbal stem than an element of verbal succession. *Ka* is sometimes present, as *ka pai* (it) is good; very frequently it is future hypothetic or contingent, as *ka mate koe*, you will be killed; *ka haere ahau ka riri a Hone*, if I go John will be angry.³ A new fact is frequently introduced by *ka*.⁴ Akin to *ka* is the particle *kua*, which introduces a fact as completed.⁵ Prepositions also expressing movement towards are used before a verb to give impulse to a command, purpose, or desire.⁶

A passive is formed by subjoining to the verbal stem, *-ia*, *-iia*, *-hia*, *-hia*, *-tia*, *-ina*, *-kina*, *-a*, *-na*; and from these, by changing *-ia* or *-ina* to *-aia*, are formed verbal nouns of the act state object or condition.⁷ The negative is apt to go first, and to involve the copula in a negation.⁸

Ka prefixed to a numeral generally denotes the completion of the number, *e* is a prefix of the numbers between 1 and 10. *I* and *kua* are occasionally prefixed to numerals.⁹

The verb is apt to be followed by directive particles, which form a striking feature of the language. These are—*afu*, from the speaker; *mai*, towards him; *ake*, up to him; *iho*, down to him. There are also *ai*, relative to what has gone before, and *ano*, which strengthens the assertion.

As conjunctions *na* and *a* carry on thought from one fact to another without expressing the relation between them.¹⁰

7. The verb being thought with little subjectivity is apt to be treated as a noun. This takes place if the sense of its realisation in the subject is weakened by its not being the predicate in the statement of fact in which it is a member, the fact which it states being only a subordinate part of another fact, or by its being thought strongly in its objective accomplishment, or by a special emphasis affecting the subject so as to detach it. In consequence of such weakening of the subjective realisation the verb may change into the nature of a participle in apposition with its subject (see below, Example 12), or the subject may change into a possessive, the verb being thought as belonging to it, or if the verb has a direct object, it may be thought in its accomplishment in this object, and then the object, with the verb affecting it in apposition, may be thought as belonging to the subject changed into a possessive (see below, Example 14.)

Actions also, instead of being thought properly as realised by the agent, are apt to be thought in their accomplishment as passive affections of the object, especially when the action is part of another fact.¹¹

8. As to what concerns the subject of the present chapter there is not in Polynesian a detachment of such fine fragments of the noun

¹ Maunsell, pp. 40, 136.

⁴ Williams, Dictionary.

⁷ Ibid. pp. 45-47, 51.

¹⁰ Ibid. p. 87-96.

² Ibid. p. 42.

⁵ Maunsell, pp. 139, 140.

⁸ Ibid. pp. 166, 167.

¹¹ Ibid. pp. 160, 161.

³ Ibid. pp. 138, 139.

⁶ Ibid. pp. 40, 41.

⁹ Ibid. pp. 126, 127.

and of the verb as is to be found in the pure African languages. Yet, with the exception of these languages, expression is more broken into small parts in Polynesian than in any variety of human speech. And it possesses another peculiarity of structure which corresponds to what has been deduced in Book I, chap. i., 7, as the effect which a minor degree of quickness of mental action will tend to produce, when there is little generalisation of the nature of things and facts. The Polynesian dialects are all remarkable for a prevalence of dissyllabic roots. They also have a tendency to reduplication of part of a root or doubling the whole of it; such as takes place more or less in all the families of language to express greatness, smallness, intensity, frequency, and other varieties, when these are thought, not as particularisations of the radical idea, but as second thoughts of it which supply the element of speciality which the first thought wanted.¹ But the prevalence of dissyllabic roots shows that the mental habit is to think even natural units of thought in two parts of which neither is subordinated to the other as a mere particularisation of it. And this it is which in the deduction above mentioned has been connected with a minor degree of quickness and such thought as the Polynesians possess. For the other condition also which is required by that principle is present in Polynesian thought. The natives of those islands in their easy life have no need to generalise their experience of the essential nature of things and facts. They have but to take what they find, and they think therefore with concrete particularity.

HAWAIIAN DIALECT.

9. The following are examples of the Hawaiian dialect:—(1.) *k'e* give away here I prep. of obj. this to you
haawi ak'u nei au i keia i a oe, I give this to you.² *K'e* is thought to be *k'a e*,² *k'a* the article and *e* verbal participle (the person who); *ak'u* verbal directive, giving the direction of the action in the view of the speaker, *i* preposition of object; *a* after *i* arthritic (3). After verbs of motion *io* is used instead of *ia* before personal pronouns and proper names; for those verbs pass more strongly, and therefore their object, having less need of connection, takes a weaker arthritic element, *o*, which is a weaker vowel than *a*. These elements complete come hither now I
a, o, and *o*, are articles (see 18). (2.) *Ua hele mai nei au*, I have come here;³ *ua* affirms the completion of an action or the resulting state,⁴ *mai* is the verbal directive, *nei* means either here or now. not I work again your work
(3.) *Aole au e hana hou i k'a'u hana*, I will not do your work again;⁵ the assertion is involved in *aole*, for the subject follows the verb; *e* expresses the succession of being or doing, thought as uncompleted, whether future or in progress; *i* is the

¹ Bleek's Grammar of South African Languages, sect. 430; Riis, Oji Grammar, sect. 41, 2; Bohtlingk's Yakut Grammar, sect. 780.

² Alexander's Hawaiian Grammar, Part II. sects. 4, 32.

³ Alexander, sect. 6. ⁴ Ibid. Part I. sect. 48. ⁵ Ibid. Part II. sect. 8.

preposition of the object; *k'au* consists of *k'* definite article, referring to *hana*, a active genitive, *u* thee. (4.) *E olelo pu maua me Manono*, I will speak with Manono: ¹ *olelo*, which probably should be written *olelo*, is the same word as Maori *korero*, to speak; *pu* must be some auxiliary element of the same idea; this example is remarkable for the tendency to mass objects together which appears in the use of *maua*, as if there was a weak sense of the individual substance (Def. 4); *me Manono* is exegetical of *maua*. The aggregate of two is used for the connection in such expressions as

Hoapili laua o Kalanimoku, i.e., *Hoapili* and *Kalanimoku*; ¹ and in these *o*, the inactive element of the genitive, always precedes the second member to determine the combination as pertaining to it (49, VI.

170). (5.) *Ho'ono'ono ia i k'e'k'ahi k'eik'i i mea e ho'orino mai i a*

mak'ou, he set a boy as a thing to revile us; ² *ho'o* is a causative prefix, much in use, which is felt as a distinct element in the formation, combining without fusion, or else coalesces with the root into a single idea to be learned from the dictionary (II. 3); *o* emphasises the personal pronoun, *ia*, as subject; *i*, preposition of object; *k'e*,

definite article, *k'ahi*, one; *e* and *ia* as already explained. (6.) *o k'a*

mak'e k'a mea e mak'au ai, the thing to be afraid of is death; ³ *o* emphasises the predicate, *e* is prospective being or doing taken participally; *ai* is a relative element referring to the antecedent *k'a mea*.

(7.) *o k'eia k'au e ha'avi ak'u nei i a oe*, 'tis this I give to you, ⁴ my giving to you is this; *o* is the emphatic article with the demonstrative *k'eia* as predicate; *k'* definite article referring to the

act; *a* active genitive element; *e* doing in progress. (8.) *E holo mai*

ana ia, he is sailing hither; ⁵ *e* is the abstract succession of

being or doing thought as in progress, *mai* verbal directive. (9.) *Pela*

k' o k'a mak'ai hai ana mai i a au, thus was the constable's telling me, ⁵ i.e., so the constable told me; *pela* consists of *pe*, which denotes likeness, and *la* demonstrative, and being at the beginning of the sentence it acts as the verb, and involves the assertion or fact; *k'* is the definite article referring to *hai ana*; *o* is the

inactive genitive of *mak'ai*. (10.) *Aole au e k'apa ak'u i a ouk'ou*

he poe k'auwa, I will not call you servants; ⁶ *i* is the preposition by which verb passes to object, *a* is the arthritic of *ouk'ou*.

(11.) *E uk'u mak'ai ia k'a mea nana k'a waiwai*, the person who

¹ Alexander, Part I. sect. 39.

² Ibid. Part II. sect. 17.

³ Ibid. sect. 24.

⁴ Ibid. sect. 4.

⁵ Ibid. sect. 29.

⁶ Ibid. sect. 38.

owns the property shall be well rewarded.¹ (12.) *He k'aao a k'·o·'u*
a tale def. me
mother tell hither that to arthritic me
mak'uahine i hai mai ai i a 'u, a tale which my mother told
 me ;² *k'* is definite article referring to *mak'uahine* ; *a* is active, *o* inactive
 genitive ; *k'aao* is of *mak'uahine* as active ; *k'*, i.e. *mak'uahine*, belongs
 to *u* as inactive ; *i* is succession of being or doing reduced by being
 past ; *ai* refers to an antecedent ; *ia* as already explained ; *i hai* is
 participial supplementary or in apposition to *mak'uahine* (see 7).

emph. art. thou def. art. man dem. steal my horse
 (13.) *'o oe k'e k'anaka n'ana i aihue k'o'ru lio*, the man
 who stole my horse is thou ;³ this is the possessive construction of a
 relative clause ; in *nana n* represents the fact, which as an action *a*

my he send hither
 belongs to *na* as possessive (see 7). (14.) *N'aru no ia e ho'oruna mai*,
 I will send him,⁴ (mine is he to send hither) ; there is strong
 emphasis on *I*, expressed by the strengthening demonstrative particle
no, which corresponds to Maori *ano* (6), and this has the effect of
 weakening the sense of realisation of the verb in the subject ; the
 subject consequently becomes possessive, and the object with the
 verb affecting it as an apposition, is thought as belonging to that
 possessive, being represented by *n*, and connected by the active article

neg. my hear his character
a with *ru*. (15.) *Aole a'ru lohe i k'o'na ano*, I have not heard his
 character ;⁵ the negative is treated as a verbal element, and is the
 predicate of the sentence, and the verb not being predicate is put in
 the possessive construction (see 7), there is not my hearing of his

make first pass. forth continuing dem. the road
 character. (16.) *E hana mua ia ak'u ana no k'e alanui*, the
 road is being made first ;⁶ *no* affirms strongly. (17.) *Ma'laila i*
there

guard securely pass. away that
malama malu ia ak'u ai 'o Laieikawai, 'twas there that Laieikawai
 was guarded securely ;⁶ *malaila* acts as the verb of the sentence ;
ai refers to *maliala* as antecedent ; *i* is the element of past being or
 doing (6).

The broken or fragmentary nature of this language appears most
 clearly in the separateness of the fine verbal elements which make up
 the verbal idea. Thus, in the last but one of the above examples, *e* is
 the abstract element of being while yet unaccomplished ; and the verb
 of which it is an element contains at least three other elements, viz.,
hana mua ia. In the last example, *i* is the element of past being,
 and the verb to which it belongs contains at least the three elements,
malama malu ia. *E* and *i* belong to the whole three elements by
 which they are each followed, and not to one of these elements more
 than another. If therefore *e* were thought in one conception with
hana, and *i* with *malama*, that one conception should also contain the
 following adverb, *mua* or *malu*. Now the construction of the above

¹ Alexander, Part II, sect. 40.² Ibid. sect. 55.³ Ibid. sect. 54.⁴ Ibid. sect. 46.⁵ Ibid. sect. 43.⁶ Ibid. sect. 27.

two examples is not peculiar. Their parts have no special affinity such as leads to the synthetic combinations of the American languages; but always the verbal element, stem, adverb, passive element, verbal directive, locative, emphatic particle, subject, are thus arranged whenever they occur, the object following the subject if the verb be active. The adverbs in these two examples, therefore, have no closer connection with the verbal stem than that which exists between any verbal stem and the adverb which qualifies it. They cannot be supposed to be thought in one conception with the preceding verbal stem unless in every case the adverbial qualification is thought in synthesis with the verbal stem which it qualifies. But the connection which exists in general between an adverb and that which it qualifies is no closer than that of noun and adjective; and where there is no special affinity between them the verbal stem and qualifying adverb must be thought like noun and adjective, the mind first thinking the verbal stem and then the adverb, and then by a subsequent act combining the two. It is thus that *hana mua* and *malama malu* must be thought in the above examples, and thus, too, that *e hana* and *i malama* must be thought; for there is no closer connection between these than between the former. These fine verbal elements, as well as the passive element and the elements of direction and continuance, are all thought as separate words, so broken and fragmentary is the structure of the language.

MAORI DIALECT.

10. The dialect of New Zealand scarcely differs at all in structure from that of Hawaii. The Maori verb is very apt to become a noun, being thought in its objective accomplishment. The possessive construction of the verb (see 7) in which the being or doing is treated as a thing and the subject as its possessor, is frequent, especially when a relative pronoun is understood, as (1.) *n'a'ku i patu*, I struck (the past striking was mine); *n* refers to the fact, *a* is the active genitive. (2.) *N'o'ku i haere mai nei*, I arrived here; *o* is the inactive genitive, *i* verbal succession reduced as past. (3.) *M'a'ku e korero*, I will speak; *n* refers to a present or past fact, *m* to a future fact,¹ *e* verbal succession unaccomplished. (4.) *Ko Tiake anake t'a matou i kite*, Tiake was the only one whom we saw; *t'a matou* is possessive, *t*, definite article, *a* active genitive. The emphatic article *ko* seems to be somewhat more used in New Zealand than the corresponding article *o* in Hawaii; for it is used before common nouns not only in the beginning of a sentence, but also in subsequent positions. (5.) *Ko te timurua atu o konei ko te pakeketarua o waho*, the ebb here is low water outside; ^{the ebbing away of here} *te* ^{the low water of outside} *timurua atu* ^{the} *o* ^{the} *konei* ^{the} *ko* ^{the} *te* ^{the} *pakeketarua* ^{the} *o* ^{the} *waho*, the ebb here is low water outside; ^{the} *ua* forms the verbal noun, *o* is the inactive

¹ Maunsell's New Zealand Grammar, p. 154.

² Ibid. p. 107.

genitive (4); *pakeketa* is probably akin to *paketu*, to clear off; according to this translation the subject begins the sentence. So also in the

following:—(6.) *Ko ruia kau i kai 'na*, the tops only were eaten; ^{top only eat pass.} ¹ *i* verbal element lightly thought as in the past.

The abstract element of fact, *ka*, which expresses the sense of fact thought definitely and as distinct from what may have gone before,

seems to have no corresponding element in Hawaiian. ² (7.) *I te*

oro'omeata 'na ihaia e te Atua te raii me te whenua a

kihai whai ahua te whenua i takoto kau a iaro ana i te

ki ruia ki te mata o 'na wai, na ka mea te Atua kia marama,

a kua marama, a ka kite te Atua i te marama e pai

ana, wehe 'a ana e te Atua te marama i te

pouri, a hua 'ina ana e te Atua te marama hei ao.

In the beginning was made by God the heaven with the earth.

And the earth was unsettled in form and lay alone, and the face

of the deep was hid with darkness, the Spirit of God was moving

on the face of the waters. And God said, Let there be light,

and there was light. And God saw the light that it was good

(and), in continuance God divided the light from the darkness.

And God called the light day. ³ What fixes the time is apt to go

first, and the verbal particles refer rather to parts of the whole

time of occurrence than to position in the total succession of facts,

that is, in time in general; *a* expresses the succession of one fact

to another; *ana* expresses the going on of being or doing; *o* is

the inactive genitive element; *na* is a demonstrative element which

may introduce a fact; *ka* denotes a new fact which is thought as distinct; *e* expresses fact not concluded. It may be observed that there is a tendency to use the passive construction; and most commonly the imperative of an active verb is expressed by the passive.

11. What are called compounds by the grammarian of the language cannot be regarded as truly such. They are merely words in juxtaposition without any elision, ⁴ both of them accented; ⁵ and one of them often governing a word independently of the other. ⁶ They are due to a tendency to think elements of fact as connected rather than

as related, e.g., *ma 'te matapihi 'tia mai*, give it me by the window.

¹ Maunsell, p. 106.

² Williams, Dict. New Zealand, *Ka*.

³ Maunsell, p. 138.

⁴ Ibid. pp. 17, 35.

⁵ Williams, Dict., *Intro.*, p. 13.

⁶ Maunsell, p. 118.

TAHITIAN DIALECT.

12. The dialect of Tahiti is of similar structure to that of Hawaii—
 perf. paddle two plural man to open angle prep. obj. art. fish
qua hoe e to^oo-piti tau ta^aata i tai e hi i te i^a, o Roo
 art. name inact. of art. one art. name of art. other perf. put
te i^a o te tahi o Teahoroa te i^a o te hoe, qua tu^u
 prep. of obj. art. act. of they two hook to low into art. sea entangle forth
i t a raua matau i raro i te moana, fifi atu
 there art. book in art. hair inact. of that god there inact. of say
ra te matau i te rouru o taua atu ra o Ruahatu, parau
 down there they two fish perf. draw down there cause to approach up there
iho ra raua e i^a, qua huti iho ra e fa^aata ae ra
 to art. side canoe see down there they two man art. tangled art. hair
i te pae va^a, hio iho ra raua e ta^aata te mavera te rouru.
 Two men paddled out to sea to angle for fish; the name of the one
 was Roo, of the other, Teahoroa. They put their hook down into the
 sea; the hook caught the hair of the god of Ruahata; they thereupon
 said it was a fish; they thereupon drew up, bringing it near to the
 side of the canoe; thereupon they saw the tangle the hair was a
 man; ¹ *qua* is Maori *kua*; the numerals do not combine with the noun
 as part with it of one idea of an object, but remain distinct and com-
 bine like a participle (Def. 13); *e* denotes a fact unaccomplished, and
 with a numeral involves a sense of succession; *to^oo* is Maori *toko*,
 which is prefixed to every number of persons from one to ten; *rua*,
 two, was under *tabu*,² and *piti* was used instead; the verbal particles
 are often participial; *atu*, *iho*, *ae*, are verbal directives, *iho* expressing
 quick succession in time; *mavera* in Maori means broken into masses.

SAMOAN DIALECT.

13. The language of the Samoan or Navigators' Islands differs
 somewhat in its structure from the more eastern dialects, but is still
 only another dialect of the same language, and is as fragmentary as the
 others.

The subject is less bound to follow the verb than in the more
 Eastern dialects; for the grammarian of the language says that the
 nominative is sometimes at the commencement of the sentence and
 sometimes at the end.³ And though the article of the nomina-
 tive is preceded by the emphatic *o*, when it is at the beginning
 of the sentence, showing that it is thought with emphasis, such
 emphasis seems to be more usual in Samoan. When the subject is at
 the end of the sentence it is preceded by *e* when the verb is active,
 but not when it is neuter. This *e* must be a verbal element express-
 ing active force, which is essentially the same idea as that which is
 expressed in Hawaiian and Maori by the preposition *e* before the
 agent after a passive verb. The subject seems to approach more than

¹ Gaussin, Dialecte de Tahiti, p. 255.² Ibid. p. 107.³ Violette, Samoan Grammar, p. 73.

in Hawaiian or Maori to be thought as the source of fact. And accordingly the element of subjective personality is stronger in the Samoan dialect; and the personal pronoun when subject generally follows the verbal element of tense and precedes the verbal stem instead of following both, as in Hawaiian and Maori; it may even go first in the future of present prospect or in a strong actual present. The third singular, however, is less apt than the others to come forward towards the first place.

Not only has Samoan a stronger sense of the subject as such, but it seems also to think the verb with stronger interest, the mental energy directed to it being sufficient to think reciprocal verbs and causatives of reciprocals as well as the simple causatives and reduplicated verbs of the other dialects. It has a passive, and the verb is also sometimes thought in Samoan more closely connected with the object than with the subject, the subject sometimes following verb and object, which it never does in those other dialects. And with this sense of transition to an object is probably connected the development of reciprocal verbs, for it is the sense of a multiplicity of such transitions that originates those verbs.

14. There are no other differences of structure worth noting between Samoan and those dialects, as may be seen from the following

examples:—(1.) *ʻo le aliʻi ua alu i Apia*, the chief has gone to
emph. the chief perf. go to
past kill the wife the man

Apia; ¹ (2.) *na fasi le avā e le tane*, the man killed his wife; ¹ (3.)

ua faʻatōa malolo ananafi le alu, the chief has begun yesterday to be well; ¹ *faʻa* corresponds to Hawaiian *hoʻo* and New Zealand *whaka*, and like these it is used to form causatives; in *faʻatōa* it has

perf. go Peter to
 coalesced with *tōa* into a single idea. (4.) *Ua alu Petelo i Apia*, Peter has gone to Apia; proper nouns which in Hawaiian are regularly preceded by *ʻo* when they are subjects, take it in Samoan only in the beginning of the sentence, the proper name being perhaps itself more strongly thought in Samoan in accordance with its stronger sense of personality.

This strong sense of personality appears in the personal pronouns when governed by the preposition *i*. In Hawaiian and Maori this preposition, and the other prepositions which involve it, signifying *to* or *at*, when they govern a personal pronoun generally subjoin *a*, which is an arthritic element generally brought out in thinking a personal pronoun as object or condition of a verb. But in Samoan *i* not only subjoins *a*, but also *te* before a personal pronoun, this *te* being the element which connects the personal pronouns, all but the third singular, with the verb in the actual present or the present future; possibly akin to an element *ti* in Maré and *ti* in Lifu, two of the Loyalty Islands, which express an abstract element of fact.

perf. I caus. appear to he def. art. of he error
 Thus (5.) *ua au faʻa ali i a te ia l oʻna sesē*, I have shown

¹ Violette, p. 23.

I wish towards happy pass. you
 him his error; ¹ (6.) *ou te tatalo ia manu ia outou*, I wish that
 I go a day if
 you be happy; ² (7.) *ou te alu i se aso*, I will go one day; ³ (8.) *a*
 past perf. fact to I a hatchet then perf. I work
na ua ia te au se to² poo ua au galue, if I had had a
 hatchet, I would have worked.⁴ The first *ua* expresses completed
 realisation, and is translated *is*; it is also used in the present with
 a sense of completed realisation.

The verbal elements of tense are often participial, as in the other
 dialects. Thus (9.) *e leai se tagata ua fa²apea o na mata²utia talu*
 formerly
anamua, never was a man of whom the fear was so great since old
 times.⁵ The clause after *tagata* belongs participially to *tagata*, and so
 the relative is supplied, *fa²apea* being used as the stem of a verb.

never a man so of him fear since
 (10.) *o le tagata na alu*, the man who has gone.⁶ *Ai* is used also
 as a relative to refer back to the antecedent, as in the other dialects.

imper. thou tell hither that which chief past thou see that at the place
 (11.) *Ia e tau mai o le fea ali²i na e iloa ai i le malae*,
 tell me what chief (that) you saw at the place;⁷ *mai* is verbal
 directive.

I give away
 The demonstrative *na* also serves for relative. (12.) *Ou te av²atu*
 a thing love to the man that find def. of me horse
se mea alofa i le tagata na te maua l o u solofanua, I will give a
 present to the man that will find my horse;⁸ *atu*, verbal directive.

past rob we sleep
 (13.) *Na gaoi o matou momoe*, he robbed while we slept.⁹ The pro-
 noun of third person singular is often omitted when subject; *o*
 expresses fact going on; *moe* is reduplicated for the plural subject
 because thought in close connection with it, and yet with weak sub-
 jective realisation (Def. 14).

15. There is an approach to composition in Samoan as in the other
 dialects. It consists of words connected together without the inter-
 vention of prepositions. Thus: *o le ipu inu ava*, the cup for drink-
 ing ava; ¹⁰ *o le mama aulo*, ring of gold; ¹⁰ *fai fale*, house-make; *teu*
 ring gold make house prepare
aiya, prepare meal.¹¹ The verb may also join on to an adverb which
 is much in use,¹² or to a noun governed by it, and then take the pas-
 sive ending, as in Hawaiian the passive ending may be taken after
 the adverb. It is thus that what the grammarian calls compound
 adjectives formed of a passive verb and a noun are probably to be

stop wind pass. fleet attack pass.
 understood, as *puni mataqi a*, stopped by the wind; *fua tau ina*,

¹ Violette, p. 46.² Ibid. p. 37.³ Ibid. p. 36.⁴ Ibid. p. 42.⁵ Ibid. p. 61.⁶ Ibid. p. 69.⁷ Ibid. p. 70.⁸ Ibid. p. 71.⁹ Ibid. p. 73.¹⁰ Ibid. p. 63.¹¹ Ibid. p. 38.¹² Ibid. p. 80.

attacked by a fleet.¹ Here *fua* must be understood verbally and *tau* adverbially, for in Polynesian any word may be the stem of a verb. Noun and adjective also may join ;¹ and *fara* may be prefixed to an adjective to express an approach to the quality, the adjective being doubled to denote the small degree of the quality.²

In none of these compounds are the elements properly joined together. In all of them the mind passes from one compound to the other, scarcely mingling the two, and then completes their combination. In this respect, as well as in its fragmentary character, the language is like the other Polynesian dialects (11).

TONGAN DIALECT.

16. The Tongan language spoken in the Friendly Islands differs more than Samoan from the other dialects of the Polynesian language ; but it must still be regarded as a dialect of that language. The principal differences which distinguish it from the other dialects are these :—

(1.) Its substantives are less defined by articles, and there is less sense of locality. Instead of the definite and indefinite articles of the other dialects, Tongan has only one article *he*, which is sometimes translated *a*, and sometimes *the*. This article directs attention to the substantive object as an entire object of thought (Def. 4) without particularising it amongst others. The emphatic article *ko* is used like *eo* in Hawaiian, except that it may sometimes be used before a common noun at the beginning of a sentence without the noun having the article or any other defining element.³ The possessive of the personal pronouns may precede the noun which is possessed without its having an article to represent the latter.

(2.) There is no more sense of relations in Tongan than in the other dialects. There does not seem to be that nice distinction of active and passive in the genitive relation, which is denoted by *a* and *o* in the other dialects, nor is there any preposition before a noun which is governed by another as a genitive. There is no preposition before the accusative ; but in this it agrees with Samoan, and, as in Samoan, the verb passes immediately to its object and the subject may follow.

(3.) The Tongan verb has no passive voice. Yet the passive ending *ia* or *ea* is used to form adjectives. The want of a passive verb is probably due to a greater interest in action, and consequently less tendency to think accomplishment passively in its object. The verb, however, seems to be a lighter element in Tongan than in Samoan, for it does not take up connected elements so as to form derivative verbs like Samoan, and only forms causatives with *fūka* like the other dialects. In other respects the structure of Tongan is in the main similar to that of the dialects already considered. It agrees with Samoan in placing the personal pronoun as subject after the verbal element of tense and before the verbal stem, except the third singular, which generally, as in Samoan, follows both as determined by the

¹ Violette, p. 30.

² Ibid. p. 31.

³ Mariner's Tonga Islands Grammar.

verb. In the past, however, and in the future, the third singular personal pronoun abbreviated to *i* may follow the verbal element of tense, the past or future fact being less strong to determine it. There is no tense in which the personal pronoun comes first as in the Samoan actual present, and present future. It has three verbal directives, *mei*, *atu*, and *ani*. The personal pronoun when subject may be repeated after the verbal stem in its more objective form to strengthen the idea of it. And these seem to be all the characteristics which distinguish Tongan among the Polynesian dialects. Owing to some of these, expression is not broken in Tongan into so many fragments as in some of the other dialects; but those fragments into which it is broken are as fine and separate as theirs.

FIJIAN.

17. The language of the Fijians differs from the pure Polynesian in the following respects:—

(1.) It has a stronger sense of the subject as the source of fact, so that when this is a personal pronoun it goes before the verb, preceding both the verbal element and the verbal stem, except the third singular, which is more objective, and which, like the noun proper and common, follows both. When the personal pronoun as subject follows the verb, it is preceded by the article *ko*, because it is thought more objectively like a noun, and is strengthened by the inherence of the verb.

(2.) The verb, when transitive, is thought more in reference to the object than to the subject, so that the object generally follows the verb and is followed by the subject when this is a noun.¹ There are several passive forms. The verb is also thought with more interest than in Polynesian, so that there is a greater development of derivative verbs, intensives, and reciprocals, as well as causatives, and a greater tendency to attach to the verb connected elements; especial note being taken of the verb in reference to its transitivity or intransitivity. There is a stronger sense of relation to an object, but much less sense of the direction or locality of the action than in pure Polynesian.

(3.) Substantive objects are thought with little use of articles to particularise them. The emphatic article *ko* is used as in Polynesian, except that it is not limited to the subject or predicate; but there is only one other separate article, *na* or *a*, which expresses an act of attention directed to a substantive object, but without any definition or distinction of the particular from the general, such as is expressed by the Polynesian definite article. The personal pronouns have four numbers—singular, dual, trial, and plural, the trial denoting a small plurality. The first person, as in Polynesian, has inclusive and exclusive forms. Nouns have no proper number; but the word *vei* preceding them denotes plurality. There are nouns which denote ten objects of a particular kind, as *bi*, ten turtles; *bolq*,² ten fishes; others for one hundred.

With the exception of the above differences Fijian agrees for the

¹ Hazlewood's Fijian Grammar, p. 56.

² Ibid. p. 11.

most part in structure with Polynesian. There is the same indefiniteness of tense and of mood; nearly the same poverty of prepositions, and want of distinction between the parts of speech; the same separation from the verbal stem of fine verbal elements which give a certain vague expression of tense, and which, though generally followed immediately by the verbal stem, are thought in as separate a mental act as the corresponding Polynesian particles; and there is the same tendency to doubling to express a special application of a root. A few examples may show that the language of Fiji has its fine fragments like Polynesian.

I neg. verb know art. its doing
 18. (1.) *Au sa seña ni kila na kena iḡakafaka*, I do not know how it is done; ¹ *sa* is an element of realisation like Hawaiian *ke* and New Zealand *ka*; *ni* is an element of relation which connects a verb with an infinitive which it governs; *na* is always required before the direct object of a verb on account of the strength with which the transition to the object is thought; *kena* consists of demonstrative *ke*, referring to *iḡakafaka*, and *na*, referring to the possessor; *iḡakafaka* is the verbal noun of mode of action, from *ḡaka* to do, *i* being an

one art. man sit in art.
 element similar to Hawaiian *i*. (2.) *E ndua na tamata ka tiko e na*
 land Uz
vanua ko Usi, there was a man in the land of Uz; ² *e* is an element of numeration; *na* directs attention to the substantive object; *ka* is a verbal element which before a verbal stem expresses an intransitive state, after a verbal stem transition of an action; the verb of the sentence is latent in *e*; *ko* is the emphatic article. (3.) *Sa ḡambori*

offer up
 art. son his
Aisake na lue'na ko Eparaama, Abraham offered up his son Isaac; ³ transitive verbs end in *a* when governing a common noun, but in *i* when governing a proper noun, there not being the same sense of transition to the latter because the object is not singled out but already defined by a proper name; words of kindred, like *lue*, and nouns expressing members of the body or parts of a thing, can directly

art. what fut. do
 subjoin the pronoun as a possessive suffix. (4.) *A ḡava e na ḡakava*

emph. art. he to they they hate him
ko koya vei ira era ḡati koya, what is it that he will do to them who hate him? ⁴ *na* expresses the future or the potential; the verb of the sentence is involved in *a ḡava*, it is what; *e* is perhaps a demonstrative element, ⁵ more probably a verbal element; *va* is a transitive suffix; *era* acts as relative, *e* being more strongly demonstrative than *i*; *ti* is a transitive suffix, which before a common noun would be *ta*, but before a personal pronoun or proper noun is *ti*; the transitive suffix differs, probably according to the sense of force in the

I love trans.
 transition of the action. (5.) *Au sa loma'ni ira era sa loma'ni au*,

emph. art. he save
 I love them who love me. ⁶ (6.) *O Jesu o koya vakambula'i*

¹ Hazlewood's Fijian Grammar, p. 6. ² Ibid. p. 10. ³ Ibid. p. 12.
⁴ Ibid. p. 26. ⁵ Hazlewood's Dictionary, *na*. ⁶ Hazlewood's Grammar, p. 26.

we from art. wrath fut. follow hither
kenda mai na gundru e na muri mai, Jesus, who saveth us from the wrath to come; ¹ *vakambulai* seems to be thought participially, as it has no verbal element like *sa*; it is the causative of *bula* formed as in Maori; *i* is the transitive element before a personal pronoun; *nda* is the first person plural, inclusive of the person spoken to, *ke* a demonstrative element; *mai* is the verbal directive.

art. man that I past speak to him to build art. my house
 (7.) *A tamata ka'u a vosa vua me tara na no'igu vale*, the man to whom I spoke to build my house; ¹ *vua* is contracted from *vei ya*; *no'igu* is composed of *na* referring to *vale*, *o* arthritic article of *igu* (see 9, 34),

art. yam art. thing vb. el. buy by dem. art. pot
 and *igu* me. (8.) *A uvi na ka sa ndauvol'i ki'na na kuro*, yams are the things with which pots are generally bought; ² literally, the things (that) pots are generally bought by them are yams; *nda* is a prefix of frequency or intensity; *i* is passive suffix expressive of

art. what they cheer at that art. man emph. art.
 intransitiveness. (9.) *A gava era sa tama ki'na na tamata o*
 that art. what sit there emph. art. king
igori? a gava sa tiko ki'na ko tui Viti; what do those men

run art.
 cheer at? What, the King of Viti is there. ³ (10.) *Sa ndro'ta'ka na*
 knife thief

i'sele na mbutako, the thief ran away with the knife; ⁴ *taka* is a double transitive element by which the action of *ndro* passes to *isele*; the relation implied in the transition gets no distinct expression; *isele*

climb art. axe
 is the noun of instrument of *sele*, to cut. (11.) *Kambata'ka na matau*
 emph. art. this tree

o, igo, climb with this axe. ⁴ (12.) *Kambata na kau, climb the*
 speak lean
 tree. (13.) *Vosa'ka na tamata*, speak to the man. ⁵ (14.) *Sa kala'kala*
 stand art. banana

toka'na vudi, the banana leans; ⁶ *toka* and some other such verbs

are used as auxiliaries in expressing a continuing condition. (15.) *A*
 what art. thing vb. el. fut. do to him art. man kill art. native
gava na ka sa na gaka vua na tamata sa na moku'ta na kai
 emph. art. this and take away art. report evil from they art.

Filisitia o igo, ka kavta tani na i'ronoro'ono ga vei ira na
 for vb. el. man from where emph. art. he art. native not
Isireli? ni sa tamata mai'vei ko koya na kai Filisitia tawa
 circumcised emph. this that defy art. his army art. God living
gili o igo, me mbole'a a w'ona veimatavailu na Kalou bula:

What shall be done to the man that killeth this Philistine and taketh away the reproach from Israel? for who is this uncircumcised Philistine that he should defy the armies of the living God? ⁷ The force of interrogation brings the subject to the head of the sentence; *gaka*, like the shortest form or root of most verbs, may be used as a passive; ⁸ in the active sense, the root is reduplicated if intransitive, and if

¹ Hazlewood's Grammar, p. 26.

² Ibid. p. 27.

³ Ibid. p. 28.

⁴ Ibid. p. 31.

⁵ Ibid. p. 33.

⁶ Ibid. p. 44.

⁷ Ibid. p. 54.

⁸ Ibid. p. 37.

transitive it takes a transitive suffix, unless when the verb runs into a noun to make a kind of compound; in *mokuta* and *kauta ta* is a transitive suffix; *iroioroio* is the verbal noun, from *roio*, to hear; *tamata maivei* follow *sa* as a verbal stem, this uncircumcised Philistine is a man from where; *mbole'a* is a subjunctive, for the absence of *sa* shows that it is not a principal but a subordinate fact; *a* is transitive suffix; in *nona*, the first *n* refers to *veimatarailu*, and *na* to *Kalou bula*.

The verbal particles in the above examples are quite as fine and as separate as in the Polynesian dialects, except those which are suffixed to the verbal stem, for these adhere to it much more closely than the passive element *ia* does in Polynesian.

19. There is also a similar formation of imperfect compounds (see 11). The simple verb may run into a noun without an article and

form a kind of compound verb as in Polynesian: *ʔaka were*, make garden
make garden
garden; *bulu wi*, set yam.¹
set yam

Nouns of kindred, or of parts or members, being thought as parts of correlations, not as independent objects, are ready to coalesce with other elements; they can take up a pronoun as possessive suffix, and

they are ready to coalesce with an adjective; as *a tamata yano'levu*,
art. man body big
a big-bodied man. Some other nouns also may coalesce with the

more usual adjectives; as *a koro valevinaka*, a town having good
art. town house good
houses.² Nouns and verbal roots coalesce and sometimes become fused

together by use; as *mbuka'wana*, fire in a live state; *uʔi wai*, river.
fuel burn run water

A passive verb and a noun may coalesce and be used as an adjective; as *tauwi male*, touched with sickness.²
touched sick

Two verbs may coalesce; as *sele'ndrutia*, to cut off; and the first sometimes takes its own transitive suffix; as *sele'v'ndrutia*.

These compounds are all of the same nature as those of the Samoan language. Their parts are thought in succession. One runs into another without any expression of relation, and therefore without any interval of transition. In the last example the components are each a part of the idea of cutting off, thought not separately, as in Yoruba (I. 22), but one mingling with the other.

A similar coalescence of successive thoughts is to be seen in such formations as *vaka'yano'kaukawataka*, to cause to be strong
caus. body strong trans.

in body;³ *vaka* is the same as Maori *whaka*, and thought passes through it to the next elements and they are all carried to the object through *taka*. But the large formations which thus arise show how thought is attracted by the interest of the verb.

A readiness of words to coalesce in succession is when other tendencies help naturally accompanied by derivative formations, such as

¹ Hazlewood's Grammar, p. 32.

² Ibid. p. 20.

³ Ibid. p. 43.

the Fijian verbs and adjectives formed with *vei-*, plurality or reciprocity (see 13); *dau-*, intensity or frequency; and *vaka-*, assimilation.

ANNATOM.

20. Passing westward, we get out of the influence of the Polynesian language and find in their purity the speech tendencies of the dark races which inhabit the islands.

The Melanesian phonesis is more consonantal than the Polynesian, admitting concurrent consonants and final consonants. Some of the languages have twelve consonants, some thirteen, including medials as well as *tenués*.¹

21. The language of Annatom, the most southern of the New Hebrides, makes little distinction between substantive, adjective, verb, and adverb,² though some adverbs are used only as such.³ Like Polynesian also, it incorporates no sense of number in the idea of the noun, and only personal nouns are preceded in the plural with a separate element of plurality. Its personal pronouns have four numbers as in Fijian, the trial number being used only for three objects, and not, as in Fijian, for a small plurality; and the inclusive and exclusive first persons are distinguished in the numbers above the singular, as in Fijian and Polynesian. Substantive objects are thought with less distinction from others than in the pure Polynesian; for there is only an article, *in* or *n*, which expresses attention directed to an object as an entire object of thought (Def. 4), and which is prefixed to adjectives and verbs when used as substantives, and an article, *a*, which is used before personal nouns in the nominative. Possession is thought somewhat differently from what it is in Polynesian. There does not seem to be any distinction between active and passive possession; the separate possessive pronoun has no demonstrative element, and it follows the noun instead of preceding it, as it does in Polynesian. Nouns of kindred, and nouns denoting parts of a person, take the possessive as a suffix as in Fijian. There is a better supply of prepositions than in Polynesian.

The verb, as in Fijian, is thought more in connection with the object than with the subject, so that the object follows next after the verb, and the subject follows the object, except when the object is connected with a following clause as by a relative pronoun; and yet the verb is preceded by an element of person, the subject, even when a personal pronoun, being generally expressed besides in its proper place. The verbal stem is preceded, as in Fijian and Polynesian, by a verbal element which expresses more distinctly than in them the elements of tense and still more those of mood, and which combines with the personal element. The verbal stem is often formed with suffixes, but whether any of these express a sense of transition to an object does not appear. Two of them are directives signifying

¹ Gabelentz, *Melanesischen Sprachen*, vol. i. sect. 511.

² *Ibid.* sect. 146.

³ *Ibid.* sect. 161.

upwards and downwards, but they are thought rather as derivative elements than as directing a simple verb; what the other suffixes denote has not been ascertained. There are also several prefixes of obscure signification used in the formation of verbal stems; *imi-* or *mi-*, which as a preposition means to, gives a transitive or causative meaning. There is no passive voice; the passive is expressed as the act of an abstract subject.¹

Now, the remarkable feature which distinguishes the language of Annatom from both Fijian and Polynesian, namely, the coalescence of a personal element with the element of tense or mood, takes away the evidence which in these languages shows most clearly a fragmentary nature. For the separation of so fine an element as the verbal element in Fijian and Polynesian marks both these languages as fragmentary, though there is more of such separation in the latter than in the former; but in Annatom that element loses its extreme fineness by its coalescence with the person. Now that coalescence arises from the degree in which the verb is thought as realised by the subject, and while it removes the evidence of fragmentary thought, it furnishes no evidence of an opposite nature.

22. Annatom reduplicates and doubles its roots to express a special application of them in which they are very slightly modified. And it tends to form compounds rather closer than those in Fijian and Polynesian, in which one word runs into the other. In some of these, as in Fijian, a verbal idea is expressed in two parts which are thought in succession, but with partial mingling of the first with the second, as *atn · amud*, to consume.²

23. The following are examples of the language, in which it will be seen that the verbal element with the person is still a fine element, and is detached from the verb: (1.) *er · is amen ara an'liin pege* and *watch sheep of them in the night* *um aminu' inain siip ura an nepeñ*, they abode in the field and kept watch over their flock by night; ^{3d pl. past dwell they in land} *siip* is English. (2.) *Er · is ahilek* him they two among pl. of persons *man* kindred of them two and pl. of persons *yin a · rau ehele ilpu atimi ehpan ira · rau im ilpu* man neighbour of them two *atimi eblaammem u · rau*, they sought him among their kinsfolk and neighbours; *a* is the personal article before *rau*; ^{3d pl. past seek} *ilpu* is a personal noun of multitude used for a plural number. (3.) *Et · pu* caus. turn away he people ^{3d sing. poten. many to} *imi · adumoi' pan a'ien nupu Israel ini ahinai ehele Ihova* God their

Atua ura; and he shall turn many of the people of Israel to Jehovah their God.⁵ (4.) *Er ahtai akli man et faiv vai jardin et* two and not lost of dem. any ^{3d sing. subj. one in front of God} *ero um eti ahnag ira · n tah yi ebi an nuhup o Atua*, five

¹ Gabelentz, Melanesischen Sprachen, vol. i. sect. 160.

² Ibid. sects. 140-142.

³ Ibid. sect. 164.

⁴ Ibid. sect. 165: 2.

⁵ Ibid. sect. 166.

young birds are sold for two farthings and not one of them is lost before God; ¹ *man* qualifies *ahli*, *faiv* and *fardii* are English; the numerals, and the adjectives *ahinañ*, many, and *ef'e*, other, are treated as verbs, because by the mental habits of the race the notation of different individuals cannot be so closely combined with the noun as to be part with it of one idea of the substantive object, but has to be combined with it as an attribute which remains distinct from the idea of it, belonging not to its substance but to itself like a par-

3d sing be pl. persl. brother my 3d sing. five that
 ticipule (Def. 13). (5.) *Et eteug ilpu etwa · k et faiv mika*
 3d sing. subj. tell to them he that 3d pl. subj. not also come
yi asuptegnain ehele ra a'ien va ri ðim lep yetpam
 they into art. place art. torment this
a'ra an n · uarin n · ohagred ineinkhi, I have five brethren, that he
 tell them lest they also come into this place of torment; ² the plural
 if 3d sing. thou

noun is thought as a singular aggregate. (6.) *El et Kristo a · iek*
 2d sing. opt. caus. manly us three thou
na · nu imi · atamain gataið a'iek, if it's Christ thou art, save
 (make manly) thyself and us; ² *gataið* is first person trial inclusive.

1st per. adv. of perf. come into art house of thee pers. art. I but
 (7.) *Ek mun ham anliin n · eom w'num a · inak, ða*
 2d sing. poten. not give me art. water for art. foot my thou yet 3d sing.
na · i eti alupai nak in · vai uri neduo'k a'iek, ða et
 adv. perf. wash art. foot my with tear her pers. art. art. woman this
mun iri neduo'k irai idunta'n a in · takata ineigki, I
 have come into thy house, but thou wouldst not give me water for
 my feet, yet this woman has washed my feet with her tears. ³ (8.)

1st. sing. past not come pers. art. I to call to them 3d sing. right
Ek · is eti ham a · inak par ahlaig vai ra et atoh
 conduct their
nedo ura, I came not to call them whose ways are righteous. ⁴ (9.)

2d sing. hypoth. make feast great pers. art. thou invite pers. pl.
Na · u urt auanetta alupas a · iek, im'agay ilpu
 poverty man
ihki atimi, if thou makest a great feast invite the poor; ⁵ *atimi*
 qualifies *ihki*.

ERROMANGO.

24. In Erromango, which is also one of the New Hebrides, a different language is spoken, which in some principles of its structure agrees with the language of Annatom, in others differs. ⁶

It agrees in its imperfect distinction of the parts of speech so far that the same word may be substantive and adjective, or noun and verb, and also in its personal pronouns having four numbers. These numbers, however, are not incorporated with the pronominal stems, but loosely connected with them as an external adjunct. There is also the distinction of inclusive and exclusive in the first person dual, trial, and plural. The noun may take a collective prefix *ov*, to denote

¹ Gabelentz, Melanesischen Sprachen, vol. i. sect. 166.

² Ibid. sect. 167.

³ Ibid. sect. 168 : 3.

⁴ Ibid. sect. 210.

⁵ Ibid. sect. 218.

⁶ Ibid. sect. 231.

plurality, similar to Fijian *vei*, or a suffix *su*, which probably denotes all.¹ The article *n* distinguishes the noun as such¹ (see 21), but there does not seem to be any personal article. The genitive follows its governor, sometimes with a preposition between. There are about as many pure prepositions as in Annatom.

The verb has, as in Annatom, a present, past, perfect, and future, but it has not the subjunctive, hypothetical, and potential moods. The person, as in Annatom, mingles with the verbal element as a prefix to the verbal stem, though this prefix seems to be often omitted;² but, unlike Annatom, the subject, whether personal pronoun or noun, precedes the verb. There is no passive form, but the verbal stem may be used either as active or passive.² The verbal radical may take directive suffixes to form derived verbs, one denoting up and the other down. The adjective, which in Annatom and all the languages to the east constantly follows the noun, here precedes it sometimes, and sometimes follows.

25. The language of Erromango is less broken than that of Annatom, for the element of person and tense blends quite with the verbal stem. It, however, forms compounds, and uses reduplication and doubling like Annatom.

TANA.

26. So also does the only known one of the languages of Tana, another of the New Hebrides. In it the genitive follows its governor, sometimes partially coalescing with the latter so that the governor drops a final *n*, sometimes preceded by a preposition, and sometimes by a possessive pronoun. There is no proper article. The personal pronouns have the four numbers, and the first person the inclusive and exclusive forms. Nouns of kindred and nouns denoting parts of a person take the possessive pronoun as a suffix. The subject precedes the verb and the object follows. The adjective follows its noun, the possessive pronoun may either precede or follow. There is scarcely enough known of the language to show the intimate nature of its structure.³

SESAKE.

27. The language of Sesake in the southern part of the island of Api or Tasiko, one of the New Hebrides, forms the usual kind of compounds in which one word is run into another without either of them quite losing its individuality. It also uses reduplication or doubling very much, *i.e.*, doubling the whole or reduplicating part of the root in the expression of simple ideas unaccompanied by any modifying element, such as frequency or intensity; and sometimes it adds a prefix or a suffix to its doubled formations. It forms causatives and transitives with the prefix *paka-*, *pa-*, or *a-*, adding sometimes the suffix *-ki*, which as a preposition means to, near. And

¹ Gabelentz, *Melanesischen Sprachen*, vol. i. sect. 232.

² *Ibid.* sect. 233.

³ *Ibid.* sect. 265.

kini, *-ni*, and *-ti* are also used as suffixes to verbal stems; *ni* as a preposition means in, and *kini*, on; so that they probably act as transitive suffixes.

28. The subject, as a rule, precedes the verb, and the object follows; but a special interest may cause the object to precede the verb, and then the subject follows the verb.

The noun has a definite article *na*; but some nouns, at least the word *kopu* house, take, instead of *na*, the short form of the third personal pronoun *e*. Number does not exist as an element in nouns; its place is supplied in the plural by a variety of words which follow the noun as adjectives or appositions; and there is a word *rundua*, a reduplication of the second numeral *rua*, which with the pronoun *e* before it follows a noun, to denote a couple. The personal pronouns have all two forms, a longer and a shorter. They have plural forms, and these followed by *rundua* with the short plural form before it supply a dual. The first person has inclusive and exclusive forms. After the preposition *ki*, as after the corresponding prepositions in Polynesian, the pronouns of second and third person singular are apt to take forms beginning with *a*. A noun governed as a genitive follows, with the article *na* before it, the noun which governs it; and is sometimes equivalent to an adjective. The adjective always follows the noun which it qualifies. The personal pronouns as possessive follow their noun, with *a* before them. But nouns of kindred and those which denote parts of a person take the personal possessives as suffixes, the dual of the latter being denoted by subjoining the separate word *rundua* with the short pronoun before it. There is small expression of relations; for though there is the usual number of prepositions they are seldom used; and there are scarcely any conjunctions.

The short forms of the personal pronouns always precede the verb as its person, the subject even when a personal pronoun being at the same time separately expressed. The most subjective and the most abstract elements of person combine most readily with the verb; and accordingly the short forms of the first plural exclusive and of the third plural precede the verbal stem without any verbal element intervening, that of the first singular often does so, and that of the third singular always when the subject immediately precedes; but, with these exceptions, a verbal element intervenes between the person and the verbal stem except in interrogative and negative sentences, for in these there is no assertion. These verbal elements express neither tense nor mood, but only the element of realisation of the verbal stem in the personal element which represents the subject. They express that element of realisation differently, as it seems, according to the idea of the act or state which is realised, and according to its subjectivity and consequent closeness of connection with the person. For there are four such elements, *ka*, *ko*, *nda*, *ndro*, besides the double one *ndro ko*; and of these *ka* at least sometimes takes a softer form, *ga* or *nga*, which, according to the euphonic laws of the language seems to indicate that the element of person is in closer union with it.

29. Now, the detachment of these fine verbal elements shows the

fragmentary nature of the language, as may be seen in the following

examples: (1.) *e ñga to na vĩaĩa na wokana*, there is food
3d pers. verb. el. sit art. food art. inside its
 therein.¹ (2.) *Ku ñga ti ndo na tano*, sit not on the ground;²

there is no expression of relation, *ti* is negative of imperative, *ndi* is
ye verb. el. not sit art. ground
 the indicative negative. (3.) *Saĩgiki a nda mwelua na vanua*
soon 1st pers. verb. el. leave it art. land

a nimui, I will soon leave your land;³ adverbs of time begin the
you
 sentence, other adverbs follow the verb; there is no expression of
art. club this

tense, each verbal element being used in all tenses. (4.) *Na mbwe wo*
1st pers. hit him dem. art. club

a poka nae weina na mbwe, ('twas) this club I hit him with a
 club, *i.e.*, this was the club with which I hit him.⁴ Here the first
 person combines with the verb without a verbal element; *weina*

strengthens *nae*; there is no expression of relation. (5.) *Pa nou ki*
imp. say to
he 3d pers. verb. el. come see we

nia e ñga ve punusi au, say to him that he come to see us;⁵
pa is used with the imperative, it means go; initial consonants are
 apt to soften in connection with preceding word, as *ve* for *pe*, *ndo* for

to. (6.) *Pa tape'a ndo palo na kapu*, hold it over the fire⁶ (that
imper. not go near art. edge you come fall

it be over the fire). (7.) *Pa ti pa malandini na matiu ku pe rowo*,
imper. take put art. thing
 go not near the edge lest you fall.⁷ (8.) *Pa tape ndoroe na loriki*

this 3d pers. house I art. night
rose e kopu a nginau, lay this thing in my house.⁸ (9.) *Na boii*
3d pers. six he 3d pers. make art. thing all

e latesa nai e pati na loriki mau, in six nights he made all
 things;⁹ the numeral *la tesa* is connected with *boii* as a verb is con-
water art. dirt

nected with its subject (see 23). (10.) *Noai na lepa*, water of dirt,
he 3d pers. make him art. dust art. earth
i.e., dirty water.¹⁰ (11.) *Nai e pati a na avuavu na tano*, he

made him of the dust of the earth;¹¹ *pa totowa na kau*, measure
imper. measure it art. tree
 the tree.¹¹ (12.) *Kulawo au wa na mata na masmas*, you stuck me in
you stick I hither art. eye art. knife

the eye with a knife;¹² here *ku* has no verbal particle, which seems
 contrary to the rule; *wa* is a verbal directive; there is no expression
3d pers. verb. el. speak to 3d pers. pron.

of relation. (13.) *Adam e ñga vasa pa ki nia*, Adam
 spake to her;¹³ *pa* is a verbal directive, it means go forth.

¹ Gabelentz, vol. ii. sect. 30.

² Ibid. sect. 33.

³ Ibid. sect. 45.

⁴ Ibid. sect. 47.

⁵ Ibid. sect. 48.

⁶ Ibid. sect. 50.

⁷ Ibid. sect. 51.

⁸ Ibid. sect. 28.

⁹ Ibid. sect. 29.

¹⁰ Ibid. sect. 38.

¹¹ Ibid. sect. 41.

¹² Ibid. sect. 42.

¹³ Ibid. sect. 56.

AMBRYM.

30. In the language of Ambrym, another of the New Hebrides, the same tendency prevails as in Sesake to soften the initial consonant of a word in the connection of speech; this being frequently done by prefixing *m* even to *k* and *t*.

Doubled words occur expressing simple ideas of action, concrete object, adjective, and adverb.

31. There is no article. The personal pronouns have the four numbers, and the first has inclusive and exclusive forms. They are connected with nouns as possessives in a strangely cumbrous fashion. There are, as in Fijian, three general elements, which denote respectively property, food, and drink; these subjoin the personal suffixes, and are followed by the noun as in apposition to 'particularise them, and this again is followed by a particle *ge*, as if to refer to it arthetically as connected in possession (II. 139). This construction seems to indicate a weak sense of property (see II. 126, 131, 139). Nouns which do not come under these categories take themselves the possessive suffixes, and are followed by *ge*. And nouns which denote members of the body take the suffixes and dispense with *ge*. Thus, property my land name my eye my
mene · ñ viri ge, my land; *sa · ñ ge*, [my name; *meta · ñ*, my eye. Nouns of food seem to dispense with *ge*. And some nouns, as *ma*, house, seem to take after the singular possessives not *ge* but *im*.

There are two forms of the personal pronouns, of which one seems to be more subjective than the other. The former go before the verb, and are often preceded by verbal particles, which sometimes have before them the personal pronoun in its other form.¹ Thus (1.) *na gtu* 1st pers. take from at thou
te ne neñ, I take from thee; (2.) *na sene va ne neñ*, I give to 1st pers. give forth to thou
thee; (3.) *e na rohe neñ*, I strike thee; (4.) *ni e na* I verb. 1st pers. go far from at thou I verb. 1st pers. speak forth
va hatin te ne neñ, I go far from thee; (5.) *ni e na .fi va* 1st pers. not know I speech man
to thou *ne neñ*, I speak to thee; (6.) *na tlo kelea ni fi ta Loliwara*, I know not the language of the people of Loliwara.

The second singular seems not to take a verbal particle, though the subjective person, which always precedes the verb, be preceded by the other form of the pronoun.

If the subject be a noun, it seems generally to require a verbal particle between itself and the verb, and to dispense with the person.

Sometimes the pronoun is followed by a verbal particle, and this by we two incl. verb. strike he
the verb without any person, as *ken'ron e rohe ñea*, we two strike him.

¹ Gabelentz, vol. ii. sect. 69.

The verbal particles seem to be *dro* and *be*, the latter assuming the different forms *ve*, *me*, *e*, and sometimes changing the vowel. These particles show that the language is fragmentary.

The adjective *lil*, many, takes the verbal element *be* to connect it with its noun (23), as *vantin be lil e manene*, many men eat.¹

The subject precedes and the object follows the verb; if the object be the third person, it is suffixed, *-a*. The subject sometimes takes *-a*, perhaps in place of an article.² The adjective and genitive follow their noun. There are no conjunctions, and few prepositions.

VUNMARAMA.

32. In the language of Vunmarama, also in the New Hebrides, the personal pronouns are similar to the Fijian. There is a verbal particle *ma* between the subject and the verb. The noun has neither article nor plural, and there are few prepositions. The subject precedes and the direct object follows the verb, and is followed by the indirect object. There is a double negative *hav* before the verb, with *tehe* at the end of the clause, which is negatived. An initial *b*, *t*, or *d* is nasalised after a final vowel.

33. Doubling is used as in the other languages.³

MARÉ.

34. The language of Maré, the most eastern of the Loyalty Islands, which are a rugged and unfertile group,⁴ has the general characteristics of these island languages. There is a chiefs' dialect or language,⁵ but it is the language of common life which has been studied. The parts of speech are not properly distinguished by any elements incorporated in the idea of them; the same word may be used as substantive or adjective, as adjective, verb, or adverb.⁶ Common nouns, however, are distinguished by articles, and the verbs by separate verbal elements. Number is not incorporated in the noun, but expressed by putting before the noun a separate element of duality or of plurality. The first personal pronoun has inclusive and exclusive forms; and there is a supply of prepositions about equal to that of Annatom.

At the same time, this language is distinguished by peculiar features. Common nouns have not only a definite and an indefinite article, but also take an additional article, which expresses the degree of strength with which they are thought by reason of the position which they occupy in the fact, or the stress which it puts on them. The Polynesian *ko* is in Maré also the article which accompanies the common noun when subject or predicate. In Polynesian, *ko*, when taken by a common noun as emphatic subject, requires the definite article to accompany

¹ Gabelentz, *Melanesischen Sprachen*, vol. ii. sect. 77.

² *Ibid.* sect. 73.

³ *Ibid.* sects. 78-98.

⁴ *Life of Bishop Patteson*, vol. i. p. 361.

⁵ *Ibid.* p. 325.

⁶ Gabelentz, vol. i. sect. 318.

it, but in Maré it is taken also with the indefinite article. Moreover, *ko* is found with the direct object also in Maré, but this is exceptional. There is another article *ono* used with both subject and object, less emphatic apparently than *ko*, and it has a weaker form *o*, which is used with the direct object, and which is found exceptionally with the subject, too, instead of *ko*. The genitive, and sometimes other cases, also take this article *ono* or *o*, which confirms the view of the *a* and *o* in Polynesian (9), and of *o* in the Fijian possessive pronoun (18), that they are arthritic articles. There is in Maré no such distinction between an active and an inactive genitive as is expressed in Polynesian. Nor is it in respect of personality that the distinction is made in Maré between common nouns and proper nouns, or personal pronouns; but rather in respect of the definiteness which they acquire from standing for an individual. The Polynesian *ko* is used before proper names and personal pronouns when subject or predicate of a proposition; but it is *ke* or *kei* which emphasises them in that case in Maré, probably because they do not need definition, and therefore take a weaker article. And their genitive, instead of taking *o*, takes the preposition *ni* before it, there being a sense of transition to them on account of their definiteness. They sometimes take *o* as direct object. The personal pronouns, however, when governed in the genitive by nouns of kindred, or of parts of a person, take neither *ni* nor *o*. The first person singular as possessive may be taken in a suffix by all substantives (compare II. 34), and is suffixed also by prepositions. Common nouns are treated as proper so soon as they become applied to a particular person.

The personal pronouns have only three numbers—singular, dual, and plural. The nouns may be in the plural preceded by a separate plural element, or abstract noun of multitude; and natural pairs, and sometimes other nouns when thought strongly as two, and even with the numeral expressed, are preceded by a dual element altered from the second numeral. Nouns, however, may be used as plural or dual without any addition. There is a reverential form for the pronoun of the second person singular, and also for that of the third person singular.

The verbal elements are detached from the verbal stem, and do not take up an element of person. They give very vague and indefinite expression to tense and mood. *I'i* denotes fact or occurrence in the abstract, *na* the quiescence of completion as in the perfect, or a state of being or action; *a*, the succession of being or doing; *me*, fact or occurrence in quick succession, or thought lightly; *ʔo* in idea or potentiality, *nei* in idea, *nei ʔi* in futurity; *ha* expresses the continuance in the present of a completed fact; *hu ʔi*, a future, and *ma* a negatived fact; *θu* is infinitive, *ba θu* future; *ne* seems to be a pronominal element representing a correlative object, used with both verbs and nouns. None of these particles, however, really assert; they are used participially as often as verbally. The verbal stem may be understood either actively or passively. When thought passively with the agent expressed, it is preceded by *na*, and followed by the agent with *nei* before it. If the verbal stem, with *na* before

it, is preceded by the agent with *nei* before it, it is thought as a state of action belonging to the agent (see 7; 9, Example 13; 55); *nei* expresses a prepositional relation as to a genitive.

The subject, whether personal pronoun or noun, generally precedes both verbal element and verbal stem, but sometimes it may follow both. The direct object follows the verb unless when the subject follows the verb; and then the object follows the subject. If, however, there be an indirect object, it precedes the direct object. The adjective and the genitive follow the noun to which they belong. The adjective is often participial, preceded by the verbal element *me*.

Causative or transitive verbs are formed with prefix *a-* and suffix *-ni*, which is probably a transitive or prepositional suffix; and suffixes of direction are taken by verbs as derivative elements, signifying up, down, away to; and other suffixes and prefixes are used in the formation of nouns and verbs.

35. Compounds are frequent from the coalition of words, and verbal stems also expressing a simple thought in two parts, which are run into a single word (II. 3). Doubling also is used, but seems not to be so frequent as in other South Sea languages.

36. The detachment of such fine elements as the verbal particles shows that thought is ready to break into separate acts of great fineness, and gives to the language a fragmentary character, as may be seen

from the following examples. (1.) *Buid'e me hue iawe sera ri malu*
 and vbl. tell to accus. art. def. art. pl. elt. man num. elt. dem. def. art.
ne t'i laenata d'ew' o re nodei iome xara ome re

dual counts of five and num. elt. one and also companion they
rue tubenine ne xara su ne ile ko re rekani buid'e, they
 returned from the sepulchre, and told the eleven men and their companions; ¹ *me* intimates quick succession of fact; *ri malu* is an instance of the rule that nouns have no article after a preposition, which directs thought strongly to the substantive object; the sense of the general may be overpowered also by the noun being connected with a possessive pronoun or with a participle, so that no article is taken, but here *rekani buid'e* has the definite article *re*; *laenata* expresses a single idea in two parts, for it consists of *lae*, to take, and *nata*, to make known; the numerals in these languages are preceded by elements which correspond to the act of counting; such is *xara*; *ome re rue tubenine* is the numeral for ten, meaning, perhaps, both the sides, *i.e.*, the two hands; ² *ko* is used exceptionally after *d'ew'* on

account of emphasis of thought. (2.) *Mani nubone ne nodei re*
 brother he and plural disciple of he

t'eluaieni nubone ne nodei kokonie ni nubone, his mother and his brethren and his disciples; ³ the nouns of kindred have the personal pronouns as possessives immediately after them, but *kokonie* is connected with *nubone* by the preposition *ni*; *t'eluaieni*, though con-

¹ Gabelentz, *Melanesischen Sprachen*, vol. i. sect. 320.

² *Ibid.* sect. 319.

³ *Ibid.* sect. 324.

nected with a possessive pronoun, has the article. (3.) *Nei nubone*
 vbl. of state say God def. art. own father he
na ie Makaze ko re nide t'et'eni nubone, (because) he said
 God was his own father;¹ *nei* attributes to the agent, as belonging
 to him, the action reduced to a state or mode of being by the clause
 being a subordinate member of a fact.² When the verb is passive,
nei follows it; *ko* precedes noun as predicate, and *t'et'eni* has the

article, though connected with possessive. (4.) *Nubo nei ko re*
 king of Jews save thou
doku ni si Juda awarumani nuboko, if thou be the king of
 the Jews, save thyself;³ *nei* is an ideal verbal element; *ko* pre-
 cedes noun as predicate; *si* is abstract noun of nation or country,
 and joined with the name of nation or country forms a proper noun;

ko emphasises *nubo*, to express thyself. (5.) *Nubodeko ma pareu*
 thou not neg. fact fear
 accus. art. God for we vbl. die together
o Makaze, wen' o re eil'e t'i taño sese, dost not thou fear God,
 seeing that we die together;⁴ the interrogative sentence does not
 differ from the assertive; *eil'e* is strengthened by the two articles.

he perf. give art. def art. pl. thing all into hand
 (6.) *Nubone na kanorne ono re nodei at'e ileodene d'ew' o re aranine*
 of he
ni nubone, he hath given all things into his hand;⁵ *ne* seems to give
 to the verb *kanu* connection with the object by representing it, so

I perf. see
 that the action is thought as affecting its object. (7.) *Inu a na ule*
 thou under at tree fig
nubo hadu ri iene o re suke, I saw thee under the fig-tree;⁵ *a* gives
 succession or duration to the act before its completion by *na* (before

that Philip called thee); *iene* has no article after *ri*. (8.) *Enid'e ha*
 know we vbl. of state worship
ule ono re nei enid'e na hne, we know what we worship;⁶ *ha*
 expresses a completed fact continuing in the present, we are acquainted

with; *ono* is here an accusative article; *re* defines what follows as a
 substantive object; *nei* as explained above; *na* makes *hne* to be

thought as a state or mode of being. (9.) *Nubone ha tako ome*
 he live up again
nubone ha roi'lo iawe, he is not here, he is risen;⁶ *lo* is a directive

suffix to *roi*. (10.) *Ilo re nome me roi ibetu'lo na iose'lo te o*
 then the man be well immediately perf. take up away
 bed of he and he go
re gut'oe ni nubone ile nubone me hue, and immediately the man was

made whole, and took up his bed and walked;⁷ *me* expresses fact in
 quick succession; *na* completion of act before he walked. (11.)
 dem. here ye pot. witness to me word I vbl. of state

Ome ke buni'e t'o aingeni du nu ono re eneñot'o ne'go na

¹ Gabelentz, *Melanesischen Sprachen*,^r vol. i. sect. 326.

³ *Ibid.* sect. 326.

⁴ *Ibid.* sect. 333.

⁶ *Ibid.* sect. 336

⁷ *Ibid.* sect. 337.

² *Ibid.* sect. 371.

⁵ *Ibid.* sect. 334.

speak

ie, ye yourselves can bear witness for me the word which I spake; ¹ *t'o*, potential fact; *ono*, accusative article; *kei* is the nominative article of proper nouns and personal pronouns in the beginning of a sentence, elsewhere *ke*; *ne*, same as *nei*. (12.)

give I water there I not again thirst
bué inu o re wi o melei inu age iawe t'o didi'kuane, give me that water that I thirst not again; ¹ *t'o*, potential fact; *didi* means to
 thou dwell together with I in
 desire, *kuane* to drink. (13.) *Nubo nei t'i menene sese ne inu ri*

dwelling my
nameneéne iégo, thou shalt be with me in my dwelling; ² *nei*, ideal
 great do evil man there
 fact; *nei t'i*, future fact. (14.) *Maiái ko re t'éné'nia o re nome o melei*
 to pl. elt. man holy of thou

t'ew' o re nodei nome müt'ot'e ni bua, great is the evil-doing of this man to thy saints; ³ *ko* marks the subject, *o* the genitive or the object;

buá is the reverential pronoun for *nubo*, thou. (15.) *Age ilo .ne ko*
 house of father my into house merchandise

re uma ni t'it'a .no bane uma itit'i, make not my Father's house a house of merchandise; ⁴ *ne* gives connection with object to *ilo*; *ko* is here used with the object on account of the emphasis with which

I voice of man cry in desert
 it is thought. (16.) *Inu ko re laneñot'e ni nome t'i kaie ri wot'e*
 make straight way of lord

a'neti'di'ni ono re lene ni doku, I am the voice of one crying in the wilderness, Make straight the way of the Lord; ⁵ *ko* goes with the predicate; *nome* and *doku* are thought like proper names; *a'netidi'ni* is

they speak mourn voice
 causative from *netidi*, straight. (17.) *Buid'e t'i ie mane o re laneñot'o*
 vbl. great

me maiái, they cried with a loud voice; ⁶ *t'i* is the simple element of fact; the idea of crying is broken into two parts, but this may be due to the effort of the missionary to convey the idea; *o* the article of object or condition; *re* defines *laneñoto*, which is further defined by *maiái*,

I not neg. fact know
 connected participially by *me* (Def. 13). (18.) *Inu deko ma ule*

he but he perf. send I ideal fact baptize with water perf. say
nubone, roi ke nubone na u'teni inu t'o bapataizo ri wi na ie
 to me thou fact see spirit fact descend

du nu, nubo t'i ule ono re uie'ne t'i dedelu, I knew him not, but he that sent me to baptize with water said to me, Thou shalt see the Spirit descending; ⁷ *ke* goes with personal pronoun as subject after other words; *wi* has no article after *ri*; *ono* goes with the object; *uie*, the spirit or soul, takes *ne* to represent its correlative, namely, the person of whom it is part; most of the verbal particles are taken participially.

¹ Gabelentz, Melanesischen Sprachen, vol. i. sect. 339.

² Ibid. sect. 353.

³ Ibid. sect. 356. ⁴ Ibid. sect. 358. ⁵ Ibid. sect. 361.

⁶ Ibid. sect. 364.

⁷ Ibid. sect. 368.

LIFU.

37. In Lifu, which is another of the Loyalty Islands, a language is spoken which has close affinity to Maré, but which differs from it in many particulars of its structure. The same word may, as in Maré, be used for noun or verb. But substantive objects are thought with much less attention in Lifu than in Maré. There is only one article, and there is no distinction of subject and object by the interest with which they are generally thought, so that the double articles which are such a striking feature in Maré are quite absent from Lifu. There is the same distinction, as in Maré, of nouns thought as proper nouns and of personal pronouns from common nouns. And the former in the genitive are preceded by *i*, a lighter preposition than *ni*, which they take in Maré. The first person singular as possessive is, as in Maré, a suffix *-ne*, and the other personal pronouns when possessive sometimes dispense with *i*. Common nouns in the genitive when not thought strongly follow their governing noun without a preposition, even though they have the article; but when thought strongly with the article they take *ne* before them. Plurality is a separate word, as in Maré, but still more concrete, for there are four plural words in Lifu, two, *noŋei* and *itre*, used before all kinds of nouns, and two, *aie* and *aïetre*, before personal nouns, *aie* being reverential. *Itre* is probably of a somewhat pronominal nature, for it may be used without the nouns and occurs without the article, neither of which ever happens with *noŋei*; *noŋei* = *noŋe'i*, multitude of. There is an approach to a dual number of nouns expressed by the numeral, and the personal pronouns have three numbers with forms of the first, inclusive and exclusive of the person addressed. There are also reverential forms, not only of the second and third personal pronouns singular, but also of the first plural inclusive; and there are feminine forms for the second and third singular. In accordance with the less attention given to substantive objects in Lifu, is the greater tendency to think them irrespective of their qualities. The adjective, which in Maré either immediately follows its noun, or when it requires a connective element, takes the verbal particle *me* to give it participial inherence, follows also in Lifu, but as a rule requires a connective element before it, and always takes one which does not properly express inherence, but seems to be merely a relative pronominal element. There are only two nouns which take adjectives without this element, *ga*, an abstract noun of locality, and *gotrane* side. This element, *ka*, does not exist in the language as a relative pronoun, but is found only in the interrogative adverbs, how, where, whence. The numerals also are preceded always by it. The act of numbering substantive objects is so strongly felt in the Maré consciousness that it often gets expression before the numeral in the element *χara*; but in Lifu the corresponding element *ala* is used only when there is a stronger mental reference to the substantive objects, the substantive not being expressed. When the substantive is expressed there is not sufficient interest in the successive individuals to give this strength to the act of numeration.

The Lifu verb differs from the Maré verb. The verbal elements are, as in all these languages, detached particles; but the expression thus given to the elements of fact in Lifu varies from that of Maré in a characteristic way. It has a stronger sense of objective fact and of accomplishment than Maré, and often uses an objective demonstrative element *kola* before its active verbs. It uses *hna* (= Maré *na*) before verbs, thought as denoting an inactive state of accomplishment or a state of action which is part or consequence of another fact. It has also a stronger sense of the succession of the being or doing, and makes a greater use than Maré of *a*, which expresses this element; but *a* is not used with *hna*, because *hna* involves it. It has less sense of the contingent or ideal, or of the quiescence of completion; and accordingly it has no elements used like Maré *t'o* and *nei*, nor does it express a perfect with *hna*, as Maré does with *na*. It has, on the other hand, a future element *tro* or *troha*, which, as a verb, means to come, and is not limited to the designation of the future, while Maré has no distinct expression for the future; and it has a preterite thought as affecting the present, which is expressed by *ha*, a particle which has a similar signification in Maré, but which in Lifu is thought as determined by the verbal stem, and is subjoined to it, whereas in Maré it precedes the verbal stem like the subjective verbal elements generally in all these languages. In Lifu there is more sense of the result, and there is a tendency to combine facts with other facts as parts of them, not only when they are involved like relative clauses in the subject, objects, or conditions of those other facts, but also when thought as consequent to them, the subject being different. The realisation of these consequent facts is thought like that of the relative facts in subordination to the realisation of the fact with which they are combined; their subject being thought as dominated by the other subject. In both cases the realisation is reduced to that of a mere state, whether of action or inaction. Such a subordinate state of action is expressed like the Maré construction by *hnei* before the subject, followed by *hna* before the verbal stem (see 34, 55). A passive is expressed, as in Maré, by the verbal stem having *hna* before it, and by its being followed by the agent with *hnei* before it. The realisation of what is thought without any agent as a mode of being is expressed without *hnei* by *hna* before the verbal stem. With the strong sense of fact in its accomplishment among the objects and conditions is probably connected the great use of the verbal particle *ti*, which seems to express the realisation of fact so thought, and also the double negative, of which the first negatives the realisation in the subject, and the second the accomplishment in the objects and conditions. The verbal particles in Lifu are used participially as in Maré. But the subject, which in Maré generally precedes the verb, in Lifu follows, unless the verb has the element *a*, or *kola*, or *ti* before it; sometimes it follows though these particles precede. If there is no verbal element, but only a predicate, the subject sometimes precedes this, but generally follows it. There is no element of person beside the subject. The object follows the verb, and the indirect object follows the direct object. The supply of prepositions is about equal to that of Maré.

38. The language of Lifu is similar to ^tMaré in its system of word formation, but it has fewer suffixes of direction forming derivative verbs; though *θa* hither, and *θu* hence, often accompany imperatives. Doubling is very frequent, and composition is so loose that the components may be separated by intervening words.

39. The verbal particles are fine detached fragments, as in the other languages, and the use of particles such as that of objective fact *ti*, and that of succession *a*, which may be added to other verbal elements, renders more marked the fragmentary character of the language.

(1.) ^{he} *Añeit'e* ^{eat} *a ðai*, he ate; ¹ *a* signifies succession, *ἦν ἐσθίων*, Mark i. 6.

(2.) ^{ye} *Nipunie* ^{say} *a whaθa*, ye say ¹ (are accustomed to say), Mark vii. 11.

(3.) ^{he} *Nindra ti a muna ti ño'ne la hnitre*, he was there in the desert; ¹ *ti* expresses the realisation of a fact thought in its accomplishment among the objects and conditions, and is apt to be repeated with these; *a* as before; *ne* represents, as in Maré, the correlative of *no*,

viz., that which it governs. (4.) *Wha ño'ne la hni atre a kola lopi*,
art. pl. thought evil

la ño'fei hani ka nazo, out of the heart of man proceed evil thoughts; ¹ *kola* seems to be of *ka* demonstrative nature, directing thought objectively to the verb; there is a preposition *ko* meaning to, and *la* is used as the article and occurs in *lae* there, as well as in other pronominal formations; *ka* connects the adjective and noun. We see from this example that the course of thought may throw an emphasis on a subordinate member of a sentence which will bring it

to the beginning of the sentence. (5.) ^{he} *Nindra ti kola nikati θa*
into art. ship ^{mount up}

kowe la he, he ascended into the ship. ¹ (6.) ^{he} *Nindra ti a kola θotra*
to they

koi anatre, he cometh to them ¹ (Mark vi. 48); this coming, walking on the sea, is thought in its accomplishment under the conditions, for that is the wonder, and therefore *ti* is used; the act is thought in its progress *a*, and with strong attention as an objective fact *kola*; *i* is

a preposition expressing proximity, subjoined to *ko*. (7.) ^{but many} *ne kosaue*

art. pl. man before fut. come after and art. man behind
la ño'fei atre hna pa a tro a tro'pi, *memine la atre hna pi a*
fut. come before

tro tro pa, but many that are first shall be last and the last first; ² *hna* denotes the being in a state; *a* before *tro* expresses the interval before the future comes; *a* after *tro* the succession of the realisation

from its beginning on the arrival of the future. (8.) ^{neg. can neg.} *θa atreine ko*

I to give but to art. pl. man
ni tro a homa'ne'pi, *no tro a homa'ne kowe la ño'fei atre hna*
prepare already on behalf they

nindrawane ekθ ni'ne θatrewhai anatre, I cannot give, but it shall be given to them for whom it has been prepared; ² *θa ko* is the double

¹ Gabelentz, Melanesischen Sprachen, vol. ii. sect. 134.

² Ibid. sect. 158.

negative, *θa* being, as is usual in these languages, of the nature of a verbal element which in the imperative is *θe*, while *kō* concludes what is negated, affecting it when it has been thought objectively; *tro* is not here a future element except as the act is future in reference to the power to do it; *a* as before; *ne* represents pronominally the object of *homa*, causing the verb to be thought as affecting the object; *pi* is verbal directive of *homane* towards the indirect object; it is not necessary to think the following *homane* as passive, but there cometh a giving away; *hna* verbal element of state; *ni* is the abstract preposition of connection which in Maré is used with the genitive; *ne* represents its

object; the clause beginning with *hna* qualifies *atre*. (9.) *Matre tro*
do art. pl. work great by art. two hand
a kut'a la noʔei huliwa atrawhate hne'ne la lue iwanakoime i ninra,
that such mighty works are done by his hands¹ (Mark vi. 2); *tro* is
not future but consequential; *kut'a* need not be passive, come to the

doing; the use of *lue* is an approach to a dual of nouns. (10.) *Tro*
we incl. to art. pl. habitation place near that I preach also
sa kowe la noʔei hnalapa ga easeni matre tro ni a t'ainoʔe pena
to they
koi aiatre, let us go into the next towns that I may preach to them
also;² *hnalapa* is a noun of state, from *lapa*, to dwell; *tro* is not

future though prospective; here *a* is separated from *tro*. (11.) *Trawha*
perf. art. any affliction or art. persecution for art. word thing and
ha la ketre akotre memine la elahni pi'ne la trene eweka a'me
they offend

hnei aiatre hna θikotre, when affliction or persecution ariseth for the
Word's sake immediately they are offended;³ *ame* is a relative connective
which is used before a consequent fact to unite it with the preceding
fact when its subject is different from the preceding subject; the construction
hnei -hna, which is used after *ame* as well as in relative clauses, is understood
by Gabelentz as a passive construction; *hnei* being taken as the preposition
by before the agent; here, however, *hnei* can hardly mean *by*, and Gabelentz
translates the clause, *und sie ärgerten sich*. It is in truth analogous to the
possessive construction of active verbs which is found in Polynesian and in
Tagala (9, 55). The clauses translated into Lifu by this construction are active
or neuter clauses, while in the Lifu translation of passive clauses, *hnei*

with the agent follows the verb. (12.) *Tune lo hna t'inihane hnei*
like as write by
pl. reverl. prophet and

ane profeta, as it is written by the prophets.⁴ (13.) *A'me hna*
baptize in

hapataizone hnei Joane e Joridano, and was baptized by John in

Jordan.⁴ On the other hand, (14.) *θa nunu drae petre kō a'me hnei*
he come again into
nindra hna hlepa ti hmaif'a e Kapernauma, and again he entered
into Capernaum after some days;⁵ *θa* subjective negative, was not;

¹ Gabelentz, Melanesischen Sprachen, vol. ii. sect. 133.

² Ibid. sect. 166.

³ Ibid. sect. 170.

⁴ Ibid. sect. 128.

⁵ Ibid. sect. 135.

hō concludes the cause, negating it objectively; *hna hlepa*, a state of action, *hlepa* scarcely admits of being thought passively; *ti* verbal element of objective fact; *hnei* attributes the state of action to the

and pl. persl. these and pl. persl.
agent, as to a genitive. (15.) *Ame hnei aiatre drei Joane me anetre*
hear art. pl. deny food they
dreñe la noñei Farisaio hna amet'idina aiatre, and the disciples of
John and of the Pharisees used to fast;¹ the former could not hear
John, for he was in prison; *dreñe* seems to be used as a noun for

hearer; *aiatre* is used as reflexive pronoun. (16.) *Tro-ŋa kowe la*
house thou to art. pl. brother thou to tell to they art.
umà i eō kowe la itre ŋini i eō tro a amama'ne koi aiatre la hne'ne
art. Lord do thou

la ŋohu hna t'elohma'ne koi eō, go home to thy brethren to tell them
what things the Lord hath done for thee;² *ŋa* is verbal directive
inwards; here the agent *la ŋohu* is so strong a thought that *ne* is
required to connect *hnei* with it; the construction is used here to

and persecute
incorporate a relative clause. (17.) *Ame hnei Herodia hna elahni*
to he

koi aieit'e, therefore Herodias had a quarrel against him;³ *hna* a
art. man has
state of action. *Ame* is used also as follows; (18.) *ame la atre trene*

thing give again to he
eweka, tro a homa'ne hma'it'a koi aieit'e, whoso hath, to him shall be
given;⁴ *ame* is a relative connective particle, referring to *atre* to
connect the subsequent clause with it; *me* as a preposition means

come lo
with, and as a conjunction and. (19.) *Kola ha tro a trawha fe*
after me art. man great but small I

ŋupe'ne la atre atrawhat no ka t'ohi'ni, there cometh one mightier
than I after me;⁵ *kola*, an element which emphasises objective fact,
is here taken verbally in the perfect, and used to strengthen the
affirmation as of a settled fact; *la* may be used as indefinite article;
ka is the connective of adjectives with what they qualify; these
languages have no degrees of comparison in their adjectives.

The verbal particles in the above examples are some of them very
fine fragments to be so detached as they are from the verbal stem.
Some combinations of them seem to exhibit thought as comminuted
as it is in African speech; but a closer inspection shows that it is not
so. The element *kola* is not a fragment of the verb, but a demonstra-
tive giving emphasis; *tro* is a comparatively coarse element, and is to
be regarded as an auxiliary verb. The really fine particles are *a* and
ti; their combinations with *tro* and *kola* are not so remarkable as
their combinations with each other, and the latter might at first sight
be considered as equalling the fineness of the African fragments.

Indeed, the Lifu expression, *nindra ti a kola ŋotra*, he cometh,
reminds one of Woloff. But when we compare Woloff with it,

¹ Gabelentz, *Melanesischen Sprachen*, vol. ii. sect. 135.
Ibid. sect. 172.

⁴ Ibid. sect. 162.

² Ibid. sect. 161.

⁵ Ibid. sect. 168.

though ^{you} *yene* ^{voila} *o* ^{eat} *no du l_uko*, you ate, is not more fragmentary than

Lifu, there is nothing in Lifu to compare with ^{fut. of *di*} *do* ^{we} *no nu di Woloff*,
we will be Woloff (I. 28).

DUAURU.

40. The Duauru language, spoken at the southern extremity of New Caledonia, is known only from a small composition of one who seems to have had imperfect knowledge of the language.¹ What seems to be deficient in the language may have been wanting only to the knowledge of the writer; but what is given as part of its structure is more trustworthy.

The prefix *re-*, *vei-*, forms verbs mostly transitive from nouns and verbs; *va-* forms collective nouns, like Fijian *vei-*; *ia-* forms verbal nouns expressing the doer, sometimes the deed, which latter in Polynesian has *-ia*; and there are other derivative prefixes of unknown meaning. There is a transitive suffix *re*; and there are two suffixes of direction *ru* up or away, and *ro* down or hither. Verbs are often accompanied by these as adverbs of direction, and by *me*, the same as Polynesian *mai*. There is the usual kind of composition and doubling.

The same word may be substantive, adjective, or verb. Gentile nouns have *d'i* preceding, like Maré *si*. Sometimes *va-* is taken by nouns for plural. The genitive is preceded by *o*. The imperative of the verb is sometimes preceded by *mo*, as it is in Polynesian by *me*;² and the infinitive sometimes by *ko* or *mo*. The verbal stem may be taken actively or passively, but sometimes the passive seems to be preceded by *e*.

The genitive adjective and participle follow the noun on which they depend. The subject generally precedes, but sometimes follows the verb. Transitive verbs require an object, and if there is no other they take *re* it, or *unie* a man. The supply of prepositions seems to be about equal to that of Annatom or Maré.

There are no fragmentary elements except *e* and *a*, and perhaps infinitive *ko*, in the Duauru tract, but that there are no others in the language is not so certain; ^{make} *e ue e Jehovah*, is translated by Gabelentz is made by Jehovah, but it is more natural to give the same meaning to both *e*'s coming so closely together, and to regard them both as active, being repeated with the subject on account of its emphasis; *a* seems to have a future significance.

BAURO.

41. Our knowledge of the language spoken in Bauro, one of the Solomon Islands, is based on equally scanty materials. But the genius of Gabelentz has given an insight into its structure.

There is the usual want of distinction among the parts of speech.

¹ Gabelentz, *Melanesischen Sprachen*, vol. i. sect. 401.

² Maunsell's *New Zealand Grammar*, p. 40.

Causative verbs are formed with prefix *ha-*, corresponding to Polynesian *faka-*, *haka-*, *haa-*;¹ and transitive verbs are found with a suffix *-tena*, which seems to be a preposition² expressing transition to the object, also *-si* or *-hi* when the object is expressed. There are directive adverbs, *mai* hither, *hora* away, *dio* down hither, *rou* up away.³ Composition and doubling are found as in the other languages.

There are two articles, *ni* before common nouns, and *ia* before proper nouns and personal pronouns. The genitive is sometimes preceded by *na*, *a na*, or *nan*; *nan* seems to be a contraction of *na ni*, and *a na* is probably possessive pronoun of third person.⁴ The personal pronouns have singular, dual, and plural numbers, and the first person has inclusive and exclusive forms. There are verbal particles which precede the verbal stem, *na* for the fully past, *oha* for the future, *oi* for the imperative, *ra* for the passive.

The adjective and genitive follow their noun. The subject generally precedes the verb, but often follows, especially when the verb has an adverb. The object follows the verb, but is preceded by the indirect object. There seem to be few prepositions.

The verbal particles *na* past, *ra* passive, give the language a fragmentary character.

The language of Gaudalcar, another of the Solomon Islands, is similar in structure to that of Bauro.

MAHAGA.

42. The language spoken in Mahaga, a district in the south-eastern extremity of Isabel Island, one of the Solomon Islands, is remarkable for having no verbal particles such as form so characteristic a feature in the other languages. It has indeed short forms of the personal pronouns which are persons to the verb, the third being used even when the subject is expressed; but they do not seem to involve any verbal element, for they are not subject to any modification arising from the idea of the verb. The absence of these subjective verbal elements is accompanied by a power possessed by the object in determining the conception of fact such as is unusual in these languages; for the object sometimes precedes the verb and sometimes follows it.⁵ The object may precede the verb in Sesake also, but its doing so is exceptional in that language,⁶ and in the other insular languages it follows.

The same word may be substantive, adjective or adverb, noun or verb.

There are two articles, a particularising definite article *na*, and an indefinite article *sa*, one; when a noun is taken generally it has no article. The noun takes no plural element. But the personal pronouns have the singular, dual, and plural numbers, and the first has inclusive and exclusive forms. As possessives they are suffixed to all nouns; and they are strikingly like the Fiji personal pronouns.

¹ Gabelentz, *Melanesischen Sprachen*, vol. i. sect. 451.

² *Ibid.* sect. 452.

³ *Ibid.* vol. ii sect. 200.

⁴ *Ibid.* vol. i. sect. 455.

⁵ *Ibid.* sect. 324.

⁶ *Ibid.* sect. 40.

my thy his our incl. our excl. your their
 Thus, Fiji: *-ngu, -mu, -na, -nda, -imami, -muni, -ndra*; Mahaga :
 my thy his our incl. our excl. your their
-ngu, -mu, -na, -nda, -mami, miu, -ndia. Separate possessives are
 formed by attaching the suffixes to *ni*, but if they refer to food or
 drink *ga* is used instead of *ni* (31). Sometimes the personal pronoun
 follows the noun as a genitive. But when one noun follows another
 as genitive, the governing noun takes a possessive suffix to represent
 the governed. When the subject has a numeral the verb has a
 singular person, showing that the numerals are thought as singular
 aggregates. "With me" is expressed by *we* too. Some verbs,
 especially *atu* to go, and *matagu* to fear, instead of taking the
 elements of person before them, take occasionally the possessive
 suffixes to denote their subject (see 44). The negative may be used
 as a verb. The adjective follows its noun and is generally connected
 with it by *ke*, which is identical with the third person singular. The
 subject may either precede or follow the verb. Even when the object
 is expressed, the verb and an adverb affecting the verb take a pro-
 nominal suffix to represent the object; or the adverb alone may take
 it. Adverbs of time begin the sentence, and are treated as verbs.
 The transition to the place or the instrument may be so included in
 the verb that the noun denoting either of these may be the direct
 object of the verb. There are scarcely any pure prepositions.

43. The formation of words in Mahaga is similar to that of the
 other languages. The prefix *va-* forms causatives; *vei-* forms recip-
 rocals, as in Fiji, but the Mahaga reciprocal verb takes also the suffix
-gi. Verbs also take the suffixes *vi, hi, gi, ti, li, mi*, which are mostly
 transitive or directive. Loose compounds are formed, some of which
 consist of a noun thought as genitive, and following its governing
 noun without the intervention of possessive suffix or article; and in
 general the compounds may be understood as two words, or as com-
 pounds. Great use also is made both of doubling and of reduplication
 for the expression of simple thoughts.

Thus this language, although from its deficient subjectivity it does
 not possess fine verbal particles like the other languages, yet shows
 close affinity with some of these.

NEW CALEDONIA.

44. A language in New Caledonia has a development of verbal
 particles of tense, there being no particle used in the present, but *ōn*
 in the past, *me* or *ba* in the future, and *me u* in the conditional.
 These elements precede the verbal stem, and are preceded by forms of
 the personal pronouns. The particle *ba* also forms a noun of instru-
 ment by being prefixed to a verbal stem, and it is used to denote
 duration.

Some nouns take suffixed forms of the personal pronouns as pos-
 sessive; and these forms are suffixed to certain verbs as subjective
 persons, instead of the verb being preceded by the usual forms.

These verbs seem to be expressive of internal subjective states,¹ or such beings or doings as so determine the subject that it is not thought independently of them. The supply of prepositions seems to be similar to that of Annatom or Maré.

45. These Melanesian languages, which are so numerous that a different one is supposed to be spoken by about every 5000 people,² seem to have a considerable similarity of structure. The detachment of fine verbal particles from the verbal stem, which is to be seen in most of them, manifests a power to think fine fragments separately. But, on the other hand, the close combination with the verbal stem of other elements, such as those of transition and direction, gives them a less fragmentary character than that which belongs to Polynesian, and in general expression is not quite so broken in the speech of the dark races as in that of the remarkable race which has overrun the eastern islands. There is not so great prevalence of disyllabic roots in the Melanesian languages as there is in Polynesian, as the race has a more careful character—more mindful of the general conditions of utility and success. They are, therefore, more apt to generalise and think objects as in their nature abstract or as particular instances of a general (see Book I., chap. i., 7).

The appended table gives the principal pronominal forms in the Melanesian languages.

TAGALA.

46. In the Tagala language, which is spoken in Luzon, the largest and most northerly of the Philippine Islands, there is such a modification of the tendencies of these Oceanic languages as to make it one of the most remarkable of all the known forms of human speech. The structure of the Bisayan language, spoken in Mindanao, the other great island in the same group, far to the south of Luzon, is said to be the same as that of the Tagala.³

In Tagala there is the same want of subjectivity in the verbal stem as has been observed in the rest of these island languages, and consequently as great facility as in any of them for other parts of speech, nouns, adjectives, pronouns, adverbs, to take the verbal particles and become verbs. Even prepositions can take up the nature of a verb, showing that they are not thought properly as transitional elements of relation (Def. 8).

47. Substantive objects are thought with little particularisation by articles. The article *an*, used with common nouns, is neither definite nor indefinite, but marks the substantive as such by directing attention to it as an entire object of thought, in the same way that the article does in some of these languages (16, 17). A different article *si* is used with proper nouns, probably, as in the Loyalty Islands (34), on account of their greater distinctness as an entire

¹ Gabelentz, *Melanesischen Sprachen*, vol. ii. sect. 357.

² *Life of Bishop Patteson*, vol. ii. p. 581.

³ Crawford's *Malay Grammar*, Dissertation, p. 122.

SINGULAR

DUAL

	aré.	Lifu.	Duauru.	Bauro.	Mahaga.	New Caledonia.
SINGULAR	1st po su	<i>ini</i>	<i>iïgo ra</i>	<i>inau</i>	<i>in<u>u</u> -ïgu ku</i>	<i>nao na linao na</i>
	2 ^d t, rev. po sul	<i>nipa t'ïlie, rev.</i>	<i>iïgu, ño -ño</i>	<i>ioi -mu</i>	<i>igoï -mu ko</i>	<i>to na lio io</i>
	3 ^d one oneño, po sul	<i>nindra ananindra, rev.</i>	<i>ni re</i>	<i>ia -na</i>	<i>-ke na</i>	<i>iel na liet ta</i>
DUAL	1st ^{ce} po sul	<i>nigo</i>		<i>igaraa</i>	<i>ro gita ko ro</i>	<i>di na lindi di</i>
	1st ^e po sul	<i>nïho</i>		<i>amiria</i>	<i>ro gami ku ru</i>	<i>aba na liba aba</i>
	2 ^d po sul	<i>nïho</i>		<i>murua</i>	<i>ro gamu</i>	<i>ot na liot</i>

³ Arte, sect. 21, &c.⁶ Ibid. sect. 19.⁴ Ibid. sect. 24.⁷ Ibid. sect. 2.⁵ Ibid. sects. 25, 57.⁸ Ibid. sect. 20.

	Filjan.	Anatom.	Eromanga.	Tana.	Sesako.	Ambrim.	Vunamaram.	Maé.	U.	Da uera.	Isura.	Malaga.	New Caledonia.
1st pers. pron. poss. pers. subj. pers.	iau, au -ayu	aigak uyak, -k ek-	iau	iau	mau, au -njo ka, a	nia -á na	mau -k	iau	ini	igá ra	inau	inau -ayu ku	ma na na linao na
2d pers. pron.	ibo, bo, o	aick, yeuk	kic	ik	núyá, kou	acis	ko	nubo bis, rev.	nipa fúli, rev.	igá, ao	toi	igi- ku	to
3d pers. pron.	-mu	ngam, an na-			-ma ku, ko	-m o	ma					-mu ku	na líb lo
1st pers. incl.	keudaru	aké, au	koa in duru			áca	ka	nabue nedonea, rev.	nindra anzindra, rev.	ni	ta	ta	ta
2d pers. incl.	-ndaru	uf'au, -g'au há-				lo randa to ru	á rú ro	nda ru					na líb di
1st pers. excl.	keirau	gaurau	kam in duru			nigami a randa	gemaru	ka ru	cahe	nibo		amira	ro gami aba
2d pers. excl.	-irau	urrau -urua eyr-				a ru	-maru ma ra	ma ru					na líb aba
1st pers. pron.	keamndrau	gaurau	kim in duru			nimú bo randa	gumuru	ki ru	meca	nibo		marua	ro gamu ot
2d pers. pron.	-mandrau	ngamirau -mirau aru-				bo ru	-moro ma ru } nu ru }	mi ru					na líb ot
3d pers. pron.	rau	arau	iranduru	irau	na ve e randa	nira	ra uru	bucéone	nindra	na	larua		le na líb le
1st pers. incl.	keudatou	kataig	koa in diúil			ka sul -á sul eu	ta tel						
2d pers. incl.	-ndatou												
1st pers. excl.	keitou	guntaiq' }	kam in diúil			gona sul -masul ma su	ka tel						
2d pers. excl.	-ndatou	guntaiq' }	kim in teel				ki tel						
1st pers. pron.	ratou	akt'ig' -aktait taik	ivor in diúil	iruhar		na sul sul bu ak	ra tel						
2d pers. pron.	-ndatou												
1st pers. incl.	keuda	kaig'a	koa	ketabar	núyinda tu	ka bo ná	ta	ciq'e	nipa ananga, rev.	ke	gatu	gita	lit
2d pers. incl.	-nda	uf'a, -ig'a in-				-áka tu	ná						na líb dia
1st pers. excl.	keimani	kauma ngama, ma eyr-	kaun, ka	keumaba	nigami au -ngama au	gama -ma ma	kauní, ka mai	kaig'e	nianue	ke	uau	gama -maui ki ti	abe na líb abr
2d pers. excl.	-imani												
1st pers. pron.	keumani	kauna ngama -nia ak-	kimí		nimú ku -mui	gimi -mi	kimí mim	kaig'e	nianue	igá, no	mo	igamu -mii	ni na líb ot
2d pers. pron.	-muni												
1st pers. pron.	ira	aru	iraru	ilaha	na ru cu -nda ru	nie ra -ra e	ra	kaig'e	nindra	ne	rau	irai -ndia ke na	ke na líb ta
2d pers. pron.	-ndru	aru, -ra er-											
1st pers. excl.	oigo	inera	imo		iro	ko	ko		o'ia	ku		ari	
2d pers. excl.	-oigori	inera	ime		iro	oto	oto		o'ia	ku		ari	
3d pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
4th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
5th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
6th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
7th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
8th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
9th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
10th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
11th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
12th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
13th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
14th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
15th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
16th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
17th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
18th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
19th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	
20th pers. excl.	oiva	o'uwo	me	si	si	si	si	ha	o'ia	ku		ari	

object of thought; *s* seems to be an element of locality. There is a singularly weak sense of possession, so that in common nouns and in the demonstrative pronouns there is no distinction between the genitive and the accusative, both being denoted in demonstrative pronouns by prefixing *n*, and in common nouns by *nañ* going before them, in which latter *añ* is the article, and in both *n* represents the governor, whether it be substantive or verb. Possession by a named person is more strongly thought; and proper nouns have a possessive used exclusively as such, expressed by *ni* preceding them, in which, doubtless, *n* represents the governor. These genitives, with *nañ*, or *ni*, or *n*, when governed by a noun, denote only possession.¹ Proper names may also be preceded by *kay*, which is said to include dative, accusative, and ablative, and means *to, with*; and common nouns, when in a dative or ablative relation, may be preceded by *sa*, denoting a general relation of locality, which is determined to various meanings according to the sentence in which it occurs.²

48. There is great use made of demonstratives, as if the noun needed their help to be thought as an object; for the demonstrative pronouns are not only put before their noun but repeated after it, and the demonstrative adverbs are used to define the relation to, in reference to a noun which is affected with the corresponding

demonstrative pronoun; as *yaon tawo'ñ yaon*, that man; *d'oon sa man that tawo yaon*, to that man; *ito'ñ tawo'n ito*, this man; *d'ito sa tawo'ñ ito*, to this man;³ *ñ* is connective (50). There are four demonstrative pronouns, *ito*, this; *yari*, this nearer;⁴ *yaon*, that; *iyán*, that, more emphatic.⁵

49. There is a deficient sense of individuality, as if there was a weakness of the element of substance in the substantive ideas. Hence there is a tendency to mass individual objects in such expressions as that which has been observed in Hawaiian (see 9, Example 4). Thus, *kami ni Pedro*, I and Peter; *kayo ni Juan*, thou and John;⁶ *ni* is the particle which precedes the genitive of proper nouns; *kami kayo* is the aggregate of the two individuals thought as pertaining to Peter or John because he is one of them (VI. 170). In the same way, *na Pedro* may mean Peter and his company, or Peter and his house, or Peter and any persons or things not named which form with him one group of which he is the principal object;⁷ it may be declined as a proper noun, *si na Pedro* nominative, *ni na Pedro* genitive, *kai na Pedro* dative, &c.; here *na* (50) is a pronominal element referring to the whole group, but constructed with Pedro as pertaining to him by his being one of them. Ye and John is expressed by *kayo ni na Juan*;⁸ here *kayo, ye*, is thought as a particular case of *na Juan*, which has just been explained, and therefore belonging to it as to a genitive.

¹ Arte y Reglas, de la lengua Tagala, por el P. Fr. Francisco de S. Joseph : Arte, sect. 10.

² Ibid. Reglas, sect. 765.

³ Arte, sect. 21, &c.

⁴ Ibid. sect. 24.

⁵ Ibid. sects. 25, 57.

⁶ Ibid. sect. 19.

⁷ Ibid. sect. 2.

⁸ Ibid. sect. 20.

In *kayo ni la*, ^{ye} ^{they} ye and he,¹ and in *sila ni no*, ^{they} ^{you} they and you,¹ *la* includes *kayo*, and *no* includes *sila*, so that *ni* expresses a genitive relation. *Mag* is an element expressive of increase or multiplicity, which, amongst its many uses, serves to denote a combination of correlatives which refer to each other, as father and son, master and servant; and when prefixed to one expresses both; thus, *mag-paiinooon* ^{master} ^{father-in-law} means master and slave, *mag-bianan* ^{father-in-law} ^{son-in-law} father-in-law and son-in-law.² Such expressions indicate a tendency to mass objects in an aggregate when brought together in a correlation.

50. There is an extraordinary weakness of the sense of relation, which appears in the deficiency of prepositions and conjunctions. To this cause is due the great use of the pronominal element *n* to connect those members of the sentence which are thought in closest connection with each other, as an adjective or demonstrative pronoun or adverb with the word which it affects. The way in which *n* is used for this purpose is similar to what has been observed in the genitive and accusative particles *ni* and *nai*, in which *n* represents the governor in relation with the governed noun. So in the general connective particle *na*, *n* represents the element which precedes, carried on by *a* to the element which follows. If the former end in *n*, the connective may sometimes be subjoined to the latter; except in those cases, if the former end in *n* or a single vowel, *na* euphonicly coalesces with it, dropping *a* and generally changing *n* to *i*.³

51. The noun, as in all these languages, does not involve in itself any element of number, and plurality is expressed for nouns and demonstrative pronouns by the separate element *man*a put before them. There is no dual number, except in the personal pronoun *kita*, which means I and thou.

I my me my I and thou poss. obj. poss.
 52. The personal pronouns are *ako*, *ko*, *akin*; *kita*, *ta*, *kanita*;
 inclusive inclusive
 we our us our we our us our thou thy thee thy ye
tayo, natin, atin; *kami, namin, amin*; *ikao ka, mo, iyo*; *kayo kamo*,
 singular plural
 your you (obj.) your 3d per. nom. poss. obj. poss. nom. poss. obj. poss.
nino, ino; *siya, niya, kaniya, sila, nila, kanila*. In all these the possessive generally follows its noun, but the objective used as possessive precedes.⁴ In the second person *ikao* precedes its verb and *ka* follows it; *kayo* and *kamo* are dialectical varieties. The possessive, whether of noun or pronoun, as a rule follows its governing noun, and the subject its verb; and when they precede they are thought more independently. Sometimes when another word precedes it, the pure possessive of the personal pronoun may go before its ^{certainly thy} ^{field that} noun,⁵ as *tanto mo'n bukid yaon*; here, however, the possessive may be taken as predicate, that field is certainly thine. The interrogative

¹ Arte, sect. 20.² Reglas, sect. 340.³ Ibid. sects. 926-936.⁴ Arte, sects. 13, 33.⁵ Ibid. sect. 14.

who whose whom whose which what

pronouns are : *sino nino kanino* ; *alin, ano* ; *si* in *sino, siya, sila*, is the nominative proper article ; *alin, ano* are both declined like common nouns.

53. There is no separate verb substantive. When the subject, owing to emphasis, precedes the predicate or the verb, the particle *ai* is used between them ; but this particle seems to be of a demonstrative or relative nature, referring back to what precedes to connect it with what it belongs to, like the same particle in Polynesian (see 9, Examples 6, 12) ; and like Hawaiian *ai*,¹ it drops *a* after a word ending in *a*, and on other occasions. It is used sometimes to connect a preceding clause which does not of itself combine, because it is not in its normal place.² The adjective follows its noun, but does not seem to be much used. The subject generally follows an active verb and is followed by the object, but the use of active verbs is limited. There is no element of person in the verb.

54. The Tagala verb is said to have five tenses, and a mood used for imperative, subjunctive, and infinitive, as *sulat sumulat suimulat*,
write imp. subj. inf. perfect
present future pluperfect future perfect
suimusulat, susulat, nakasulat, makasulat, the inserted *um* or *uim*
tie imp. subj. inf.
 being followed by the vowel of the first syllable ; *silo, sumilo*,
perfect present future
suimilo, suimisilo, sisilo, though here *u* may be euphonically changed to *i*.

Now the so-called pluperfect and future perfect can scarcely be regarded as pure tenses, for their element *ka* is a derivative element which has for one of its significations what comes up to the full measure of what the root denotes (64, 3) ; it affects the root *sulat*, so as to signify finish writing,³ and is an element in the fact itself, which is spoken of, rather than in the position of that fact in time. The future perfect is given also, and probably with more correctness, as *makasusulat*, which is the regular future of the derived verb *makasulat*. The elements *ma* and *na* are similar to the *m* and *n* which in Maori are used to represent a fact in the possessive construction where *m* represents a future fact, and *n* a present or a past (10). So in the above Tagala tenses, *i* is associated with *m* both in the present and the past. The analogy is stronger in the Tagala verbs which are formed with *ma*, as imper. subj. infin. *mabasaq*, perfect present break (neuter), *nabasaq, nababasaq*
future
mababasaq. Now, the present and past are quite distinct from each other as to position in time, but they have close affinity in reference to the process of the fact if the present be thought as an accomplishment going on, and the past as accomplishment absolutely ; and this being the view taken of fact where the verb is so objective, having so little sense of the subject as in Tagala and Polynesian, the future may naturally be thought as that which has in it a capability of

¹ Alexander's Hawaiian Grammar, Part I. sect. 53.

² Arte, sect. 37.

³ Ibid. sects. 53, 54.

⁴ Ibid. sect. 59.

accomplishment. Such difference is expressed in Maori by making *m* represent the future, and *n* the present and the past. In Tagala, *m* has a similar significance without any reference to time; for it belongs not only to the future in the *m* conjugation as above, but in both the above conjugations to the subjunctive, to that which is commanded or desired, to the bare idea of the fact in the infinitive, and also to the idea of the fact in the present and perfect of the *um* conjugation being in these brought to accomplishment by being combined with *i*. The movement of accomplishment in the present, and the movement towards accomplishment in the future, are expressed by reduplication, so that all the elements of tense seem to refer to position, not in the general succession of facts, but in that of the process of accomplishment. It is to be observed that the present, when it denotes not accomplishment going on, but rather engagement of the subject going on, as when we say I am eating, I am threshing, is expressed in Tagala not by the present, but by the imperative subjunctive.¹ It is thought not as coming out into actuality, but rather as a potential energy; because the tendency is so strong to think doing and being in its end as forming its result, that when not thought so the sense of its actuality is diminished. When the present does not signify the actual, but rather the exercise of an occupation, it may drop *i* in the *um* conjugation.²

That the Tagala tenses refer principally to the process of the fact, appears from the future being used for the habitual present,³ because both involve a strong sense of going on, and the present for the habitual past for a like reason.⁴ And so strong is the sense of process that a different particle is used to express when, in reference to those tenses which involve movement of process, namely, the future and the present, from that which is used in reference to the past in which process has ceased. With the present and future *kun* is used to signify when; but for the past there are three different particles, owing probably to the weak definition of time in the verb; *nan* being used ordinarily to signify when in the past, *nioñ* to express it emphatically as we say then when, and *sa* with more distinct reference to a particular point of time; ⁵ in *nan* and *nioñ*, *n* pronominally represents one of the contemporaneous events, and *an* or *ioñ* the other.

55. There is a very scanty development of mood. The imperative when thou come here serves also for subjunctive, as (1.) *kun ikao ai dumatin ailo*, when you come here; ⁶ and with *nawā utinam* for optative; ⁷ but Tagala also uses a remarkable construction which is found in Polynesian too, and in Maré and Lifu, and which serves for a subjunctive mood without requiring a special form of the verb. This consists essentially of such a reduction of the subjective realisation of the verb, that the fact is thought as belonging to the subject, like a substantive thing, rather than is realised in it; so that the subject in Tagala becomes a genitive. In Tagala and Polynesian, the verb remains unchanged;

¹ Reglas, sects. 5, 71.² Ibid. sect. 968.³ Ibid. sects. 3, 68.⁴ Arte, sect. 55.⁵ Ibid. sects. 55, 57.⁶ Ibid. sect. 59, and Reglas, sect. 70.⁷ Arte, sect. 49.

in Maré and Lifu it takes a neuter element (see 7 ; 9, Example 13 ; 10 ; 34 ; 36, Examples 3, 8 ; 37 ; 39, Examples 11, 14, 15, 17).

This construction is not noted by Fr. Francisco, but it is to be found among his examples ; as (2.) *yaon tavon yaon nakita mo* ^{that man saw thy} here yesterday he art. stole *d'ito kahapon ai siy'ai nagiakao*, that man whom you saw here yesterday is he that stole ;¹ *ni* is connective (50) ; the demonstrative *yaon* is repeated after the noun, according to what has been observed above (48) ; *nakita* is in the past tense, active voice ; *mo* is genitive, because it stands for subject in a relative clause ; *ai* refers back to the subject of the sentence ; *aii* is the article, and makes the verb *nagakao* participial.

56. There are three conjugations of the verb in Tagala, namely, one with *um* and two with *m* ; for with the latter the conjugation differs according as the *m* and *n* affect the root itself, or only an element prefixed to the root.

(1.) An example of the *um* conjugation has been given for a root beginning with a consonant (54) ; the following is for a root beginning with a vowel : *aral, umaral, umaral, uumaaral, aaral*.²

(2.) The *m* conjugation, affecting the root immediately, agrees with the *um* conjugation in the future, but it reduplicates *n* in the present, go imper. &c. perfect present future *alis, malis, nalis, nanalis, aalis*.³ If the root begin with *p* or *b* the nasal takes the initial's place owing to the felt affinity between *p* or *b* and *m* (60), *pasok, masok, nasok, nanasok, papasok*.⁴

(3.) The *m* conjugation affecting the prefix *mag* is as follows : verbal learning imper. &c. perfect present future *pag'aral, mag'aral, nag'aral, mag'aaral*.⁵ The *m* conjugation affecting the prefix *man* is similar, but if the root begins with *p, b, s, t, or k*, the initial consonant is apt to be changed into the nasal of the same organ, and it is this nasal that is reduplicated in the present and the future, *binag, maminag, naminag, namiminag, mamiminag*.⁶ If the root begins with a vowel the *n* of the prefix often becomes *ni*.

The *m* conjugation affecting the prefix *ma* is as already given : *lumbai, malumbai, nalumbai, nalulumbai, malulumbai*.⁷

If the verbal stem begin with *p* and be a polysyllable, the beginning of it is felt as a prefix, and the conjugation corresponds ; *panayi, manayi, nanayi, nananayi, mananayi*.⁸

Um is evidently a stronger expression for the potential or ideal accomplishment than *m*, and it is very remarkable how it and *ni* are taken up into the root. With roots beginning with a vowel they

¹ Arte, sect. 39.² Reglas, sect. 7.³ Ibid. sects. 8, 9.⁴ Ibid. sect. 10.⁵ Ibid. sect. 13.⁶ Ibid. sects. 33-42.⁷ Ibid. sects. 562-566.⁸ Ibid. sect. 11.

seem to be more external, but this is due only to the phonetic impossibility of including them within the first syllable. Roots also which begin with *m* absorb into it the conjugational *m* or *n*, and do not take *um*; but roots beginning with *n* may take it.¹ The sense of process of accomplishment penetrates into the idea of the verbs of the *um* conjugation; and in the future the potentiality disappears in the sense of the movement towards accomplishment which is expressed by the reduplication of the root. In the *m* conjugation, when the *m* and *n* immediately affect the root, the latter has such close union with the sense of process, that in it too the future has too much movement towards accomplishment to admit the potential element; that element is too remote from the actual to suit it. On the other hand, an external *n* does not satisfy its sense of the accomplishment actually going on in the present, and *n* is reduplicated. When the verb is formed from a root by means of a prefix, the idea of the verb is less penetrated with a sense of the process of accomplishment; this is weaker, the future admits the potential *m*; and the *n* of the present is not reduplicated.

The verbs which are conjugated with *um*, or with *m* affecting the root, are those which signify a process of change² or movement in the subject,³ or an action directed towards the subject which is thought without involving in the idea of it any end or aim which attracts interest in itself,⁴ or an action thought in the doing of it even though it be transitive to an object.⁵ These all involve a sense of the process rather than of the end; whereas those verbal ideas, in which the end or outcome of the doing or being makes itself more felt, break into process and end, expressed by prefix and root, and belong to the third conjugation. This distinction will be seen when the formation of these latter verbal stems comes to be considered (see 60). It is to be observed, with regard to those roots which are most penetrated by the process, that the penetration is only partial; for they, like the other roots, are dissyllabic, and it is only the first syllable that takes it up.

57. There are three passive conjugations quite unconnected with the three active or neuter conjugations just spoken of. They arise from the different connections of the verb with its objects and conditions, and are due to the nature of the idea which the verbal stem expresses, only so far as it affects those connections.

The use of these passive forms is the most peculiar and characteristic feature in the Tagala language. "All the principal mechanism of this language," writes Fr. Francisco, "rests on the three passives. So that he who is well founded in them is, as it were, master of this language. And he who is imperfect in this which is the substance and foundation, cannot possibly say a thing right."⁶

Such is the tendency to think the fact in its accomplishment in the objects and with the conditions, that the verb tends to combine with the direct object as a result realised or to be realised in it, or with the instrument, cause, occasion, or necessary condition, as a result realised or to be realised in it, or with the indirect object or

¹ Reglas, sect. 12.

² Ibid. sect. 17.

³ Ibid. sect. 20.

⁴ Ibid. sect. 55.

⁵ Ibid. sects. 48, 49.

⁶ Ibid. sect. 58.

place or local aim as a result realised or to be realised in it. The verb then becomes passive, with one of these for its subject, and having different forms according to the way in which it is thought as realised passively in these subjects ; for what the accomplishment of an action is to its direct object, is different from what it is to its instrument or to its indirect object, place, or local aim. The agent becomes genitive, but the other relations of the sentence are not changed.¹

It may facilitate the conception of these Tagala passives to observe, that when, as in this language, the verb is thought in close connection with the objects and conditions, it is apt to take up into its own idea its relations to these. Thus, for example, in the two following sentences—on account of this cause you ran with the food to that man; and—on account of this cause you ran for the food to that man, the two relations with and for would in Tagala be thought in the idea of the running, and food would be the direct object of the verb so thought in the two sentences. But the other relations in the sentence can in like manner be taken up into the verb, as run-on-account-of this cause, run-to this man ; and these all may be turned into passives, as the food was run-for, the food was run-with, this cause was run on-account-of, that man was run-to. Such are the Tagala passives.

The three passive conjugations are the *i* conjugation, the *in* conjugation, and the *an* conjugation. The *i* conjugation is formed, as write imper. &c. perfect present future the following, from *sulat*—*isulat*, *isinulat*, *isinusulat*, *isusulat* ; *in* is inserted in the first syllable in the perfect and present, but as this cannot be done when the verbal stem begins with a vowel, *ini* or *ina* is then prefixed. Sometimes, even when the initial is a consonant, instead of *in* being inserted, *ina* or *ini* is prefixed, and the use differs in different places. When the verbal stem begins with *h*, instead of *in* being inserted, *ini* and sometimes *ina* is prefixed.²

The *in* passive conjugation is formed, as the following, from *hanap*—
 imper. &c. perfect present future
hanapin, *hinanap*, *hinahanap*, *hahanapin* ; when the verbal stem begins with a vowel, *in* cannot be inserted in the first syllable of perfect and present, and it is prefixed.³

The *an* passive conjugation is formed, as the following, from *sulat*—
 imper. &c. perfect present future imper. &c.
sulatan, *sinulatan*, *sinusulatan*, *susulatan* ; from *aral*—*aralan*,
 perfect present future
inaralan, *inaaralan*, *aaralan*.⁴ Often *h* is inserted at the end of the root before *in* and *an* ; this *h* is radical, and having been dropped because Tagala does not admit *h* at the end of words or syllables, it reappears before *in* and *an* as the initial of these syllables.⁵

When the passive realisation of the verb is in the instrument, cause, occasion, or necessary condition as its subject, the verb must be in the *i* conjugation ; as—(1.) *ano'ni dahelan'ni'abut mo w'ijan*

¹ Reglas, sect. 140.

² Ibid. sects. 60–63.

³ Ibid. sects. 64, 65.

⁴ Ibid. sects. 66, 67.

⁵ Ibid. sect. 72 ; Crawford's Malay Grammar, Dissertation, p. 103.

thither to

doon kai Pedro? for what cause did you reach that to Peter; ¹ *dahelan* is subject of *ini'abut*, the perfect of the *i* conjugation of *abut*; *mo* is genitive of second personal pronoun; *niyan* is the general case (47), which is connected by *n* with the verb; what cause is reach-on-account-of-ed by you with that to Peter.

When the passive realisation is in the indirect object or place or local aim, the verb must be in the *an* conjugation; ² as (2.) *takbohan*
 nom. such a one this food
mo si kowan n'ito'ri kanin, run with this food to such a one; ² *takbohan* is imperative of the *an* passive conjugation of *takbo*; *mo* is genitive of second personal pronoun; *si kowan* (52) is subject of *takbohan*; *nito* is the general case (47) in which *n* represents the governing verb; *n* is connective (50); let such a one be run to by you with this food.

When the passive realisation is in the direct object the verb may be either in the *i* or in the *in* conjugation, according to the idea of the verb. If the verb be thought as tending from the agent, it takes the *i* conjugation when realised passively in the direct object of the action; if it be thought as tending towards the agent, it takes the *in* conjugation. ³ Some verbs may be thought in either way, as reach this to him, or, reach

reach this to him reach that
 that (for yourself); (3.) *i'abut mo yeri d'iyen*. (4.) *Abut'in mo iyan*; ⁴ *yeri* is subject of the passive verb imperative *i'abut*, and *iyen* of *abutin*; *mo* is the genitive of the second person singular, let this be reached
 run this
 by you to him, let that be reached by you. (5.) *I'takbo mo ito'ri*
 food thither to house of art. governor

kanin doon sa bahay n'ai maginoo, run with this food to the house of
 run art. food thither to house of art. governor
 the governor. (6.) *Takboh'in mo an kanin doon sa bahay n'ai maginoo*, run for the food to the house of the governor; ⁵ *kanin* is nominative in both, being the subject of the passive verb imperative, *mo* is genitive; let the food be run-for (or-with) by you to the house of the governor. Other verbs denote in themselves an action from the agent, as give, throw, and are not capable of being thought as towards him. ⁶ And others, on the contrary, can be thought only as in the latter direction, as take, receive, pull. ⁵ And all actions are conceived as having either of these directions. ⁷ In Polynesian the verbs are thought in connection with directives, but these are relative to the view of the speaker (6); the Tagala directions are to or from the agent.

On the nature and uses of the three passives, it may be observed that there are more passive elements in the *i* conjugation than in either of the others, and that *i* being prefixed determines the whole idea to a passive sense, whereas in the others there is no passive prefix. The passive element, therefore, prevails most in the *i* conjugation. And, accordingly, it is used with the direct object when the action goes from the agent, because the verb then most completely parts with the sense of his activity; and with the instrument, cause, or necessary condition,

¹ Reglas, sect. 78.

² Ibid. sect. 79.

³ Ibid. sect. 74.

⁴ Ibid. sect. 78.

⁵ Ibid. sect. 79.

⁶ Ibid. sect. 82.

⁷ Ibid. sects. 85-112.

for the accomplishment, when thought as a result realised in these, is so closely connected with them as indispensable to it that it tends to be thought apart from the energy of the agent. The *in* conjugation and the *an* conjugation are less passive; for the action which goes towards the agent cannot, in combining with the object, so completely part with a sense of the agent as such; and the indirect object or place or local aim has no efficiency of its own to antagonise the sense of the activity of the agent. The verb, when realised passively in the indirect object or non-necessary condition, takes a form significant of locality, just as the common noun in those oblique relations is preceded by the general element of locality *sa*; and the element which it takes is characterised by *a*, expressive of the transition of relation to an external correlative. Owing to the sense of process or succession in the Tagala verb, the time of an accomplishment has an affinity for the verb as strong as an indispensable condition, and when the fact is thought as a result realised in the time of its occurrence, it is expressed by the *i* conjugation.¹ It often happens that a member of a fact may be variously thought so as to be the subject of different passives;² and sometimes in hurried speech the niceties of expression with the passives are disregarded.³

What causes the passive to be used with any member of the fact for its subject is the emphasis with which that member is thought in connection with the accomplishment; and such is the tendency in favour of this construction, that it is generally used with the direct object when thought with such particularity as the definite article expresses,⁴ unless there is an emphasis on the agent.⁵

58. The tendency to think fact in the entire accomplishment is accompanied in Tagala by a remarkably synthetic structure of verbs and verbal nouns and adjectives, the nature of which merits close attention in reference to the subject of this chapter, in order to see whether the polysynthetic formations are such as belong to a fragmentary or to a massive quality of thought (II. 3, 4). Now the Tagala formations are like the Kafir nouns (see I. 3), and unlike the derivative formations of Eskimo and of Cree (II. 5, 18), and of other American languages in this respect, that while the formations are exceedingly numerous, the supply of derivative elements used in them is not large, being about a dozen; and that most of these have a large variety of meanings, springing in each from a general signification belonging to it. When an element of speech is thus used to express different meanings, it must be because those meanings have a common element which is thought with sufficient strength to suggest on each occasion the same expression. It is that common element thus generally thought which is associated with the common element of expression as its own proper signification, and which the mind thinks in adopting that expression. The expression, however, is adopted to convey the present meaning; and there is thus in each application of such an element a twofold mental action. There is

¹ Reglas, sect. 160.² Ibid. sect. 200.³ Ibid. sect. 197.⁴ Ibid. sect. 183.⁵ Ibid. sect. 186.

first the thought of a general signification belonging to it in its various uses, and then a determination of it to a special meaning in its present application. If the meaning of the element, instead of varying much, varied little in its different applications, there being more elements in use, and each having a restricted range of meaning, then the present meaning would suggest the use of the expression without the mind leaving the particular application. But where the range of meaning is large, the mind, in using the element, partly leaves the present combination to think the element generally, and then comes back with it to turn it to its present use. If the transitions were completely accomplished, the elements would become separate words. But the mind does not quite leave the combination to think the derivative element. It mingles with the thought of that element a partial sense of that combination in its most nearly related parts. And thought thus spreads from one element into another so as to concatenate them together.

59. Now the essential difference of fragmentary from massive thought, as it appears in language, is the smallness of the object of thought which is at one time before the mind. In the massive languages may be found fine elements as well as in the fragmentary, but in the former these will be massed with other elements by being thought with those others present at the same time to the mind ; in the latter they will be thought more or less separately. In the fragmentary languages thought may spread from one element into another so as to mingle them partially one with another, and concatenate them in large combinations ; but such elements will be small in themselves and in the extent to which one mingles with another, so that there will really be only a contracted object present at once to the mind, namely, one small element and part of another. The smallness of the object of each act of the mind is the measure of its fragmentary action. And to estimate Tagala thought in this respect, as shown in its synthetic formations, the magnitude of the elements, as well as the degree in which they mingle, must be taken into account. The range of their various meanings will show the degree of separateness with which they are thought in each application of them. And the common signification from which those meanings spring will show the degree of fineness which properly belongs to the element.

The derivative elements thought in their general significations with partial separateness in the Tagala formations have not that excessive fineness which in the Kafir nominal prefixes characterises highly fragmentary thought ; and yet they are fine parts of ideas, and present to the mind small objects of thought. In order that their nature may be understood, they must be studied in their various uses.

60. One of the most important and most extensively used of these elements is *mag*, with the general signification of increase. In has been already mentioned in sect. 49 as forming with a noun of relation a derived noun, which denotes a combination of such relative and a correlative, and it is akin to *mana*, the plural element of nouns. But its principal use is in the formation of verbal stems. In these the *m* changes into *n* in the perfect and the present, and into *p* in

the verbal noun and in the passive,¹ being assimilated in the former by the *n*, which expresses the actual, and reduced in the latter to the *tenuis* with stoppage of the breath, to represent that it is abstracted as a noun from the movement of succession which is in the verb, or thought as a passive in the end of that movement (56). In verbal stems *mag* has the following meanings:—(1.)

Plurality of subjects, frequency, or both these together, as from
imper. *imper.*
sulat: *sumulat*, write; *mag'sulat*, write many or often; from *tanis*:

imper. *imper.*
tumatañis, weep; *mag'tañis*, weep many or often.² The future of frequentatives may³ be used participially as a frequentative noun, the future expressing the sense of habitual (54). (2.) Reciprocation of subject and object, or of direct object and indirect object or condition,

imper. *imper.*
as from *avai*: *umavai*, quarrel; *mag'avai*, quarrel with one another;⁴
imper.

from *babao*, in front: *mag'babao*, put in front one of another;⁵ from
imper. *imper.*

lapit: *ilapit*, be joined; *pag'lapitin*, be joined to one another.⁶ The being joined to one another seems to be thought as a weaker passive (57) than one thing being joined to another, perhaps because the single subject is thought more completely as subject than the reciprocal subject, which is partly indirect object. (3.) Correlation with a relative denoted by the root, as from *bianan*, father-in-law;

mag'bianan, be in correlation with father-in-law, *i.e.*, be son-in-law.⁷

The correlation, which is predicated of the subject, involves the first correlative, and it is the second member of the correlation that is expressed by the root, because in an imperfect analysis the first member is liable to be merged in the correlation, the relation being thought in apposition to it, and therefore with it present to the mind (see 49). (4.) Production, use of means to an end—*bahai*, house;

mag'bahai, make or sell a house; *lanis*, vinegar; *mag'lanis*, make or sell vinegar; *alak*, wine; *mag'alak*, make or sell wine; *bato*, stone;

mag'bato, work stones or cut them from the quarry; *dahon*, leaf; *mag'rahon*, put forth leaves; *asin*, salt; *mag'asin*, make salt, or sell it,

or use it in food; *palai*, rice; *mag'palai*, sell rice, pay tribute in rice; *sabon*, soap; *mag'sabon*, sell soap, wash with soap; *mag'tagalog*, speak Tagala, dress, eat, &c., like the Tagala; *mag'castila*, speak Spanish, do the Spaniard (*i.e.*, produce him in yourself); *pandai*, smith; *mag'*

pandai, work as a smith; *mag'pare*, officiate as padre.⁸ With roots signifying movement,⁹ and some others, *mag* is causative, as *alis*,

imper. *imper.* *imper.* *imper.*
malis, go; *mag'alis*, take away; *lapit*, *lumapit*, approach; *mag'lapit*,

imper. *imper.* *imper.*
bring near; *panhik*, *manhik*, ascend; *mag'panhik*, raise; *babao*, *mabao*,

imper. *imper.* *imper.*
go in front; *mag'babao*, put in front; *bili*, *mili*, buy; *mag'bili* sell¹⁰

(cause to buy): *bahai*, house; *sa bahai*, in house; *sumabahai*, be in

¹ Reglas, sects. 15, 25.² Ibid. sect. 24.³ Ibid. sect. 349.⁴ Ibid. sect. 293.⁵ Ibid. sect. 301.⁶ Ibid. sect. 298.⁷ Ibid. sect. 344.⁸ Ibid. sects. 353-362.⁹ Ibid. sects. 20, 21.¹⁰ Ibid. sect. 28.

house; *mag'sa'bahai*, put in house;¹ *dito*, here; *dumito*, be here; *mag'dito*, put here.² (5.) Doing or being, thought as accomplishing
 imper. imper.
 an end—*aral*, *umaral*, teach; *mag'aral*, learn (get instructed); *ahit*,
 imper. imper.
um'ahit, shave (another); *mag'ahit*, get shaved (whether by self or by
 imper. imper.
 another); *gapas*, *gumapas*, reap (as a reaper); *mag'gapas*, reap (as
 imper.
 the master who gets reaping done); *gamot*, medicine-cure; *gumamot*,
 imper.
 cure (another); *mag'gamot*, be under treatment for health; *binag*,
 imper. imper.
minag, baptize (perform the rite); *mag'binag*, get baptism (as the
 baptized, and the party who bring him to be baptized); *kaliz*, sword;
 imper. imper. imper.
kumaliz, strike with sword; *mag'kaliz*, bring a sword; *bilin*, *milin*,
 imper.
 take a turn (by going round); *mag'bilin*, give a turn (by leading
 imper. imper.
 round); *pilit*, *milit*, force (another); *mag'pilit*, force (yourself to do
 something).³ In these the *mag* formations have more sense of an
 end to be accomplished than the *um* or *m* formations, and it is to be
 noted that even in these in which *mag* is most intimately combined
 with the root, it is uttered separately, so that *g* does not form one
 syllable with an initial vowel of the root.⁴

It appears from the above that *mag* may have different meanings with the same root. Sometimes those different meanings are distinguished by the context; sometimes by accompanying difference of formation. Thus, when *mag* denotes plurality or frequency, the root is reduplicated and *mag* accented⁵ when it is necessary to distinguish the formation from another *mag* formation of the same root, as *bili mili* buy, *mag'bili* sell, *mag'bibili* buy many.

There is also distinction needed between the verbal noun of the *mag* formations, and the verbal noun of the more simple verbs of the same root which are conjugated with *um* or with *m* affecting the root; for the verbal nouns of both are formed with *pag*. The distinction is made by reduplicating the root in the verbal noun of the *mag* formation;⁶ to sum up the whole succession as one entire object of thought (Def. 4). But what is remarkable in the use of this element, as indicating the degree of readiness of the Tagala mind to concentrate itself on small objects, is the great diversity of its meanings in its various uses. Between some of these there is no connection to cause one to suggest the same expression as the other, except a fine abstract sense of increase which seems to pervade them all, but which takes such different forms that in thinking it as a common element it must be well abstracted from its particular concomitants, and thought rather in its general associations. This indicates a considerable tendency towards fragmentary thought, though far from what is to be seen in pure African speech; for a sense of increase is a much larger element of thought than that which constitutes the meaning of most of the

¹ Reglas, sect. 766.² Ibid. sect. 20.³ Ibid. sects. 48-51.⁴ Ibid. sect. 13.⁵ Ibid. sects. 29, 30.⁶ Ibid. sect. 23.

Kafir nominal prefixes or of the detached fragments of the West African languages. Similar observations are applicable to the other derivative elements, as will be seen from an account of their various uses.

61. The element *man* involves a sense of increase like *mag*, but has less force, and signifies continuity rather than multiplicity or single productive actions. It often changes the initial letter of the root by the assimilating influence of *n*, so that if the initial be *p* or *b*, it becomes *m*, if *s* or *t* it becomes *n*, if *k* it becomes *ñ*; and it is this nasal that is then repeated in the present and in the future. If the root begins with a vowel, *n* often becomes *ñ*, and the syllable which that vowel forms with *ñ* is repeated in the present and in the future. The meanings of *man* are:—

(1.) Plurality, when prefixed to the roots of verbs which denote a process of change in the subject. With this meaning there is no assimilation of the initial letter of the root, nor nasal reduplication in the present or future; thus *galiu*, good; ^{present}*guimagalii*, improves; ^{present}*nangagaliñ*, improve (many); *sama*, bad; ^{present}*suimasama*, becomes worse; ^{present}*nansasama*, become worse (many).¹

In this meaning the continuity is not given by the prefix to the root, but is in the root already, the prefix being only adapted to it by taking up continuity; and hence probably it is that the *n* does not exert any assimilating influence.

(2.) Nouns of office or profession (continuous productive occupation) are formed by *man* without assimilation of initial letter of root or nasal reduplication, as futures which are used participially and express the habitual present (60, 1); thus *ahit*, ^{future}*aaht*, will shave; *man'aaht*, barber; *kolam*, ^{future}*kokolam*, will bewitch; *mañ'kokolam*, wizard.²

(3.) Continuity of increase, acquisition, use, or possession; the initial is assimilated, and the nasal reduplicated, as described above. When prefixed to words denoting game or natural productions it forms verbs expressive of going in search of these or taking them; thus *paho*, a species of fruit; ^{present}*namamaho*, goes in search of it; *sisiu*, chicken; ^{present}*maninisin*, goes in search of, to catch and eat, chickens.³

With nouns denoting instruments it forms verbs, which mean to go on using those instruments;⁴ thus *bolos*, a harpoon; *molos*, strike with it; *mamolos*, go fish with it;⁵ with other words it has various meanings coming under the above head; *binag*, ^{imper.}*minag*, baptize; ^{imper.}*maninag*, administer baptism to many;⁶ *sonor*, *sumonor*, follow; *manonor*, follow much (these involve increase with continuity);⁷

¹ Reglas, sect. 47.² Ibid. sect. 660.³ Ibid. sect. 40.⁴ Ibid. sect. 41.⁵ Ibid. sect. 34.⁶ Ibid. sect. 33.⁷ Ibid. sect. 35.

bahai, house; *mag-bahai*, make a house; *mamahai*, live in a house;¹
^{imper.}
boto, bone; *namomoto*, affects the bones² (gains or holds possession of
^{present}
them); *banaga*, stranger; *namamanaga*, lives as a stranger² (does the
^{present}
stranger continuously) (60, 4); *bini*, deaf; *nabibini*, is in process of
^{present}
deafness³ (is getting deaf and is deaf); *namimini*, feels a weakness
^{present}
of hearing⁴ (is getting deaf, in the beginning of deafness as if
acquiring it).

The verbal noun of all these verbs is formed by changing the *m* of the prefix into *p*, and reduplicating the root.⁵

There are also nouns denoting the instrument, which are formed by prefixing *pan* to the root without reduplication, but with nasalisation of its initial letter, when this is *p*, *b*, *s*, *t*, or *k*; the *n* seems to change to *ni* in instruments for taking game and natural productions when the root begins with a vowel,⁶ indicating apparently closer union, for the vowels are essentially guttural, being sounded in the throat. The meaning of *pan* seems to be continuous production, thought as abiding potentially in an instrument.

62. The element *ma* is akin to *mag* and *man*, but weaker than either. It signifies increase or growth in what comes to completion without involving a sense of productive energy.

(1.) Prefixed to nouns or to roots or stems of verbs it forms adjectives or nouns expressive of abounding in that which those words denote; as from *palai*, rice, *ma'palai*, abounding in rice; from *laban*, resist, *ma'laban*, one who resists much; from *mag'avai*, quarrel with each other, *mapagavai*, those who quarrel often.⁷

(2.) Prefixed to roots of verbs, or to passive verbal stems of the *i* or *an* conjugation, it means capability of doing or being what the root or stem expresses. Though these formations are in their nature nouns, yet if they are thought in the future they may reduplicate after *ma*, and if in the past they may change *ma* into *na*.⁸

(3.) Prefixed to abstract nouns it forms adjectives expressive of possessing the abstract, as *dunui*, wisdom; *ma'runui*, wise; ⁹ verbal stems may be formed from these by prefixing *mag*: *magmarunui*, take for wise, do the wise man.¹⁰

(4.) Prefixed to doubled words it expresses realisation in a high degree of what the word denotes, but it is only in the present that this is denoted as actual; in the imperative-subjunctive or ideal mood, it is denoted as only apparent; as from *tawo*, man, *natatawotawo*, is in very truth a man; from *bagyo*, a magpie, *mabagyobagyo*, though not a magpie is very like one¹¹ (as if there was in it the potentiality of a magpie).

(5.) Prefixed to roots of verbs or to passive verbal stems of the *i* or

¹ Reglas, sect. 37.

² Ibid. sect. 33.

³ Ibid. sect. 564.

⁴ Ibid. sect. 33.

⁵ Ibid. sect. 47.

⁶ Ibid. sects. 641-650.

⁷ Ibid. sects. 542, 738.

⁸ Ibid. sects. 553-560.

⁹ Ibid. sect. 568.

¹⁰ Ibid. sects. 552, 569.

¹¹ Ibid. sects. 573-575.

an conjugation it expresses passive completion, consummation ; as *ma'kaen*, be eaten ; *ma'i'sulat*, be written completely.¹

(6.) Prefixed to other words it forms neuter verbs, expressive not of what is done purposely, but of what comes to pass ; as from *basag*, imper. *masag*, break (active transitive), *mabasag*, break (neuter) ; these with a plural subject add *-ña* to the prefix like the plural element of nouns.²

63. The element *pa* has the general signification of motion towards.

(1.) Prefixed immediately to words which of themselves define direction, and to other words with the local preposition *sa* intervening, this element forms stems denoting movement towards the defined end ; thus from *bukir*, field, *pabukir*, go afield, *napabubukir*, goes afield ; from *doon*, there, *paroon*, go there ; from *bahai*, house, *pasabahai*, go to the house, *napasasabahai*, goes to the house.³

(2.) Prefixed to words which define posture, it forms stems which express the having come into that posture ; thus from *dapa*, on the face, *naparapa*, fell on his face, *napaparapa*, is on his face ; from *tagilir*, on one side, *napatagilir*, was on his side.⁴

(3.) Prefixed to the roots of active verbs, it means to ask for, or to permit, the action which the verb denotes ; thus from *ampon*, protect, *pa'ampon*, ask for protection ; from *talo*, conquer, *patalo*, let conquer.⁵

(4.) Prefixed to words thought only as such, it means to utter the word ; thus from *dile*, no, *parile* say no.⁶

In the above meanings (1, 3, and 4), this element is thought rather as simple movement than as effective force ; and the verbs which it forms are thought with a strong sense of an end distinct from the movement. These two parts do not combine into an idea of an accomplishment ; it is only the end of the movement which is thought as an accomplishment, and it is therefore this element and not the prefix *pa* which is reduplicated in the present and future to express an accomplishment not completed, whether of an action or of a passive effect. Not being combined into an idea of an accomplishment, these formations do not take any element of production or accomplishment to be applied to them except what is necessary to distinguish the actual. The accomplishment being confined to what follows *pa* in the formation, the production of accomplishment, active and passive, is expressed by *pa*, and of the former the present and past are denoted by *napa*. The verbal noun takes *pag*, and does not reduplicate.

In the second meaning *pa* is little more than a preposition, and combines with the root so as to be reduplicated in the present active. The formation seems to occur as active in the present and perfect only. In the passive the meaning is, to be put in the position, and *pa* is followed by the reduplication as in the other formations.

In the three following meanings this element is thought with effectiveness, embodying itself in the accomplishment so as in the the active to be part of the root. In order to become an active

¹ Reglas, sect. 577.² Ibid. sects. 562, 563.³ Ibid. sects. 584, 585.⁴ Ibid. sect. 612.⁵ Ibid. sect. 588.⁶ Ibid. sect. 629.

verbal stem it has to take the prefix *mag*, and in the present and future *pa* is reduplicated. In the passive, however, *pa* is felt as production of the passive effect rather than as part of the effect itself; and the root which denotes the effect is reduplicated in the present and in the future. In the verbal noun *pag* is prefixed, and *pa* is reduplicated.¹

(5.) Prefixed to the roots of active verbs, *pa* means to command or to allow the action which the verb denotes; thus, from *sulat*, *suinnsulat*, writes; *nagpapasulat*, commands or allows to write.²

(6.) Prefixed to roots of verbs or to nouns which denote sources of influence, *pa* may mean to submit one's self to the action or influence; thus from *arao*, the sun, *nagpaparaao*, he suns himself; *daos*, complete, *nagpaparaos*, lets (another) finish (his business).³

(7.) Prefixed to roots of verbs and nouns *pa* may mean to accord, to give; thus from *buhai*, life, *nagpapabuhai*, grants life; *kaen*, eat, *nagpapakaen*, gives to eat.⁴

(8.) This element *pa* may also mean more or with more force; and may either precede or follow a verb. When it follows it means more in the sense of continuance; when it precedes it means with more force, or in a greater degree.⁵ It is remarkable that a particle so loosely connected with the verbal element is yet included in the passive of the *i* formation so as to be preceded by *i*; thus from *tago*, hide, *ipatago*, be hid more carefully.⁶ There is an accent on *pa*, and it is pronounced distinct from the rest of the formation,⁷ showing how open in their texture these formations may be.

When prefixed to the root of a verb in an active imperative sense it dispenses with other elements; thus from *lapit*, *lumapit*, draw near; *palapit*, draw nearer.⁸

64. The element *ka* has the general signification of coincidence.

(1.) Prefixed to roots of verbs it forms nouns which denote one who is engaged along with another in that which the root signifies, that other being denoted by a genitive; thus from *arai*, quarrel,

^{my}
kaarai ko, my enemy (companion in quarrelling).⁹

(2.) Prefixed to words it means equal in that which the word denotes; thus from *buti*, handsome, *kabuti*, equally handsome.¹⁰

(3.) In combination with other derivative elements it often means what comes up to the full measure of what the root signifies; thus from passives in *-an*, taken participially and thought as nouns signifying the ground on which the root may be realised (57), nouns are formed by prefixing *ka* to denote that which is competent to the realisation of the root; as *bahay*, house; *kabahayan*, materials out of which a house may be built;¹¹ *banal*, just; *kabanalan*, justice;¹² prefixed to a doubled word without *-an* it means sufficient to cause that which the word signifies.¹³

¹ Reglas, sect. 206.

⁴ Ibid. sects. 240-242.

⁷ Ibid. sect. 635.

¹⁰ Ibid. sect. 435.

² Ibid. sects. 205, 222.

⁵ Ibid. sect. 634.

⁸ Ibid. sect. 638.

¹¹ Ibid. sect. 455.

¹³ Ibid. sect. 469.

³ Ibid. sect. 232.

⁶ Ibid. sect. 635.

⁹ Ibid. sect. 423.

¹² Ibid. sect. 440.

(4.) Prefixed to a root of a verb reduplicated, *ka* signifies coincidence with a defined time, of the moment of ending what the root signifies,¹ and if the root be doubled, *ka* signifies coincidence with a defined time, of the moment of beginning it;² prefixed to a passive in *-an* it means such coincidence of the proximity of the action which the root signifies,³ for this passive may belong to the proximate as its subject (57), and consequently denote that subject when taken participially as a noun; for the passives in their most abstract form, that is, the imperative, subjunctive, infinitive, thus originate nouns; prefixed to *pag* followed by a root *ka* means time coincident with the beginning of the action; but if another *ka* follows *pag*, this *ka* has meaning 3, and the formation means time coincident with the completion of an action,⁴ *pag* being in both the nominal form of *mag*.

65. There are also some other elements and combinations of the foregoing elements with special meanings.

Paka prefixed to a root of a verb intensifies its meaning,⁵ or gives a sense of will and efficacy,⁶ taking *mag-* to form the active verbal stem and *ma-* the neuter. It is compounded probably of *pa* with meaning 8 or 5, and *ka* with meaning 3.

Maka, compounded of *ma* 2 and *ka* 3, is prefixed to roots of verbs with the meaning, to be able to do what the root denotes;⁷ *ka* combines with *ma* and not with the root, and the root is reduplicated in the present and future.

Maka prefixed to words expresses causation of what the word denotes,⁸ *ma* apparently having a sense of production, and *ka* probably having meaning 3; the root is reduplicated in the present and future; and the future in the sense of (54) habitual present may be taken as a noun to signify causer,⁹ being then uttered more briefly.¹⁰

Paka in the passive form is used to express what is made equivalent to what the root denotes. Here *ka* has the meaning 2; thus from *babui*, a pig, *pinakababui*, was equivalent to a pig; that is, was given as an equivalent for a pig;¹¹ from *matay*, die, *pinakamatay*, was taken for dead.¹²

Ma is a prohibitive prefix different from the foregoing elements, and may be strengthened by *ka*¹³ probably in meaning 3.

Magin is prefixed to words with the meaning to become that which the word denotes; its forms are as if *gin* were a verbal root with neuter prefix *ma*, &c.¹⁴

Maysi prefixed to verbs denotes that the act is attributed to many and to all equally (see *Sin* on next page).¹⁵

Mala, conjugated like neuter verb *la* with prefix *ma*, is prefixed to denote frequency.¹⁶

Maki, similarly conjugated, is prefixed to active verbs or nouns

¹ Reglas, sect. 460.

² Ibid. sect. 466.

³ Ibid. sect. 471.

⁴ Ibid. sects. 775, 776.

⁵ Ibid. sect. 475.

⁶ Ibid. sect. 483.

⁷ Ibid. sect. 490.

⁸ Ibid. sect. 493.

⁹ Ibid. sect. 500.

¹⁰ Ibid. sect. 501.

¹¹ Ibid. sect. 502.

¹² Ibid. sect. 504.

¹³ Ibid. sects. 506-539.

¹⁴ Ibid. sect. 667.

¹⁵ Ibid. sect. 363.

¹⁶ Ibid. sects. 682, 686.

with the meaning to join others in, or seek share of, the action or thing.¹

The prefix *man* may have *hi* subjoined to it with a reflexive signification, the verb to which the compound *manhi* is prefixed still changing into the corresponding nasal an initial *p*, *b*, *s*, *t*, or *k*; *hi* is reduplicated in the present and future, and the formation means a process having reference to self.²

Pa, with meaning 2, may have *ti* subjoined to it, and with *mag* prefixed signifies to take the position with will and force.³

Taga prefixed to roots of verbs, means one whose business it is to do for another that which the root denotes.⁴

Sin prefixed to words means equal in what the word denotes; if predicated of several the root is reduplicated; if of one compared with another, that other is denoted by a genitive and *ka* prefixed to *sin*; a verbal stem is formed with *mag*.⁵

Sai as prefix means an entire aggregate.⁶

Pagka prefixed to a word means the being, mode of being, substance, of what that word denotes,⁷ *pag* being the nominal form of *mag*, and *ka* having meaning 3.

Besides these combinations, which are in some degree special in their meanings, others may be formed by combining variously the elements previously given so as to express many fine varieties of idea.

66. Connected with the derivative elements *mag*, *ma*, though not used like them in synthetic combinations, there is a particle *mai* which deserves special notice. It is used to assert a correlation without taking either correlative as its subject or governing either as its object. Like *mag* with a correlative (49), it is generally followed by the second term of the correlation,⁸ but, unlike *mag*, it does not combine with that term; and, moreover, the first term of the correlation is expressed, and *mai* asserts the connection between the two. It does not itself express any element of relation except a sense of increase, which may belong to either term by virtue of its connection with the other, and both consequently are nominatives.⁹ Such connection serves sufficiently to express possession, because the second term in the correlation is distinguished by following *mai*; and though neither term is thought properly as subject or object, yet a sense of increase thought in passing from one to the other suggests a certain impersonal idea of possession of the second by the first. Both terms must be thought indefinitely to be so indifferent as they are to this relation.¹⁰ Other relations are denoted by being expressed after *mai* to define it, but still *mai* merely connects the two correlatives. *Mai* is also used substantively with a noun following it for possessor of what the noun denotes taken generally.¹¹ It may also be taken without any first correlative to express abstractly the presence of a substantive object.¹²

There is a corresponding negative particle *wala* which seems to

¹ Reglas, sects. 702, 724, 725.

⁴ Ibid. sect. 691.

⁷ Ibid. sect. 795.

¹⁰ Ibid. sect. 924.

² Ibid. sect. 663.

⁵ Ibid. sects. 751-758.

⁸ Ibid. sect. 917.

¹¹ Ibid. sects. 918, 919.

³ Ibid. sect. 625.

⁶ Ibid. sect. 763.

⁹ Ibid. sect. 916.

¹² Ibid. sect. 925.

express originally a sense of separation; at least such seems to be the sense of *wal* in *walat* to extend, and *walai* to leave

Examples of the use of these particles will be found in 68, Examples 7-9.

67. The derivative elements all indicate in the same way as has been explained in connection with *mag*, a readiness in Tagala thought to think a small though not a very small object; and its roots are mainly dissyllabic, thought being particular and concrete as in Polynesian (8). In the vocabulary at the end of Fr. Francisco's grammar, and which contains over nineteen hundred words, there are none of less than two syllables, and only a small minority of more than two, many of these probably not primitive.

68. Examples are necessary for showing the nature of the language: pass. approach of thee this thither (47) man connec. that

(1.) *i · lapit mo ito diyan sa tauo · ñ iyan*, bring this to that man;¹ the verb becomes passive in the object *ito* as its subject (see 57), the agent becoming genitive; the relation *to* is expressed partly

take thou art. a man thither
in *diyan*, *sa* being more general. (2.) *Moha ka n'ai isa'ñ tauo doon*
(47) chief

sa maginoo, take a man from the chief;¹ the verb does not become passive in the object because this is indefinite (57); *moha* is imperative of *koha*, which is irregular;² *nai* is the article *ai*, connected by *n* with what governs it, this being represented by *n*; in *isa'ñ*, *ñ* is connective (50); *isa* is the numeral for one, *doon* consists of *d* to, and the demonstrative *yaon*, which is different from *iyon* on which

art. man sin now
diyan is formed; *sa* (47). (3.) *Ai tauo'ñ ma'kasalan'an iayon*
may become just some connec. day

ai sukut magin banal bala · ñ arao, the man (that is a) sinner now may become righteous some day;³ for *makasalan'an* (see 62, 1; 64, 3); *sala* takes *n* before *an* like some other roots which end in vowels;⁴ *ai* refers back to the subject to connect it with the verb (see 53); *magin* is given as a derivative prefix, but in this example it is printed separate.

much pity Lord (47) man he
(4.) *Lubhan i'kina'awa n'ai Paninooon Dios sa tauo ai siya i*
pity neighbour

ma'awa sa kapowa, the Lord God greatly takes pity on a man by reason of his being pitiful to his neighbour;⁵ the verb becomes passive in the cause as its subject, which is the clause following *ai* and referred to by *ai* like a noun; the passive which is taken in such a case is the *i* form; *ikina'awa* is the present of the *i* passive of *ka'awa*, *ka* being taken with the neuter state *awa*, because whereas a purposed action may naturally take up a thought of a necessary condition or of its time, and can then be connected with this without an intervening element, that which comes without purpose as a neuter state needs an intervening element to connect it with its time or its necessary condition, and cannot become passive in either as its subject without the element *ka* to conjoin it;⁶ *nai* is genitive of the article *ai*; *i* is abbreviated from

¹ Arte, sect. 7.

² Reglas, sect. 56.

³ Arte, sect. 40.

⁴ Reglas, sect. 974.

⁵ Arte, sect. 60.

⁶ Reglas, sects. 161, 162.

ai, and refers back to the subject to connect it. (5.) *Ba'bahay'in ito'n*^{house this}
 timber

kalpa, this timber is for making a house; ¹ *bahay* is a noun signifying house, and becomes the future of a passive verb of the *in* conjunction by taking *-in* and being reduplicated, this timber is to be housed.

(6.) *Bi'bianan'in kata*, I will make thee my father-in law; ² *bianan* is a noun signifying father-in-law, made into a passive verb of the *in* conjunction in the future; *kata* is an inclusive dual of the first person, which is used to signify not only thou and I, but also thou by me.³

^{taken thou art. book there (47) pl. conn. chest}
 (7.) *Mai kinoha ka kaya an libro doon sa matia libro'n sa ka'kaban*, you have taken one of the books that were in the chest; ⁴ *mai* expresses a correlation between *ka* and *libro*, which are both nominatives (see 66); the relation is defined by *kinoha*, the perfect of the *in* passive of *koha* to take, and the first term therefore of the correlation is *an libro*. Though *an* is the article, it is not definite, for *mai* is used because the subject is indefinite; ⁵ *kaya* seems to be adverbial, qualifying *kinoha* and akin to the preposition *kai* and the element *ka*, which denotes conjunction; the latter is prefixed to *kaban*, chest.

^{encounter I a man}
 (8.) *Mai na'pagsalobon ako'n isa'n tawo*, a man met me; ⁵ *salobon* which seems to consist of the local preposition *sa* and a root, *lobon*, expresses the idea of that relative position; *pagsalobon* is the abstract noun of this taken as a verb, and means a meeting; and *na* is the actual neuter realisation of a meeting (62, 2, 6) which denotes the past when there is no reduplication; this verb defines the relation, and the

second term of the correlation follows next ⁶ (see 66). (9.) *Wala ako'n*

^{bleed (47) him}
pa'kakarlit'in sa kaniya, I have no one whom to tell to bleed him; *wala* is the negative which corresponds to *mai*, there is not; *pakakarlitin*, the first correlative, is the future passive, taken participially of the

^{this conn. church art.}
 verb *pa'karlit*, tell to bleed (see 63, 5). (10.) *Ito'n simbah'an an pinabury*
^{(47) us principal son his}
pag'baon'an sa amin nan maginoo sa anak niya, this church is where the principal told us to bury his son; ⁷ *simbahan* is the *an* passive of *simba*, to worship, and is the form which that verb should take when it becomes passive in the place to which one goes to worship (57). Taken as a participial noun it denotes that place; *pag'baon* is the verbal noun of *baon*, burial, taken as a verb, and means the burying; *papag'baon* means to order burying (63, 5); *pinapag'baonan* is the perfect tense of the *an* passive of this verb, which has become passive in the place to which the order referred, but is here taken as a participial noun preceded by the article *an*, and predicated of *simbahan*; *maginoo* is the agent preceded by the article in the genitive; the other relations are the same as if the action had not

¹ Reglas, sect. 147.

² Ibid. sect. 156.

³ Arte, sects. 16, 17.

⁴ Reglas, sect. 192.

⁵ Ibid. sect. 195.

⁶ Ibid. sect. 219.

⁷ Ibid. sect. 211.

celebrity he art. he beauty
 become passive. (11.) *Ipinagpapapuri niya an kan-iyá buti*, he
 courts celebrity for his beauty; ¹ *puri* means celebrity or praise,
papuri, to seek praise (63, 3, 6); *magpapuri*, to act for praise; ²
ipinagpapapuri is the present tense of the *i* passive of this verb,
 which has become passive in the cause *buti*, changing *mag* into *pag*
 (60); *niya* is the agent in the genitive; *kaniya* is a stronger form of
 the genitive of *iya*, having not only *n* to represent its governor in
 connection with it, but also the preposition *ka*, which expresses
 conjunction to connect them together; *an* is the article referring to

buti, which is the subject in the sentence. ³ (12.) *Paparamitan mo*
 principal this conn. boy
sa maginoo ito n bata, get the principal to give clothes to this boy;
damit changed euphonically to *ramit* means clothes; *paramit*, to give
 clothes; *paparamit*, to tell or cause to give clothes; the imperative of
 this verb become passive in the indirect object, and therefore of the *an*
 conjugation, is *paparamitan*, with *bata* for subject; *mo* is the agent
 in the genitive; *maginoo* is in the same relation *sa* as if the action had not

become passive. (13.) *Napapayparamit an fiskal sa maná maginoo*
 boy connec. dance
sa maná bata n mag-sasayo, the fiscal commanded the principals to
 order clothes for the dancing boys; ⁴ *magparamit* means to effect
 the giving of clothes (see last example), and becomes nominal, chang-
 ing *mag* into *pag* when *pa* (63, 5) is prefixed; *napa* is the past (63);
mag-sasayo is the future taken participially, and in the sense of the
 habitual present (54). (14.) *Naypapaniibughoan*, in honour prefer-
 ring one another; ⁵ the present tense taken participially of a formation
 whose root is *paiibugho*, zeal, and which, with *mag* in the sense of
 60, 2, and *an* in that of reference to, as in the *an* passive, signifies
 an action of many directed towards one another. This formation is
 to be distinguished from that given in 60, 2; thus *toloñ* means to
 help; *magtoloñ*, to help one another, as when two men together lift
 a rock; *magtoloñan* means that sometimes one gives help to the

other, and sometimes the latter to the former. ⁶ (15.) *Ano yawan*
 reach plural man
ipinag-uabut-an nioñ maná tawo, what is that which is handed by
 those men from one to another? ⁷ (16.) *Papaybakahan in mo iyai*
 two man
dalawa ka-tawo, tell those two men to throw at each other; ⁸ *baka*
 means to throw; *magbakahan*, throw at each other; *papaybakahan*,
 tell to throw at each other; this becomes passive in the direct object
 thought with particularity, and is in the *in* conjugation, because
 the action of telling is not thought as going from the agent (57);
katawo means the men thought in conjunction with each other.

¹ Reglas, sect. 236.² Ibid. sect. 232.³ Ibid. sects. 250, 251.⁴ Ibid. sect. 256.⁵ Ibid. sect. 310.⁶ Ibid. sect. 325.⁷ Ibid. sect. 314.⁸ Ibid. sect. 318.

MALAY.

* 69. The Malay language, though it has great etymological affinity for Tagala, differs remarkably from it in its structure and conception of fact. The interest which prevails in the Malay view of fact is not, as in Tagala, result of process of accomplishment, but rather seems to be action directed traditionally to substantive objects, for so the sentence exhibits the verb following the subject and carried through large relations to the objects and conditions. Yet the verb is as little penetrated by the subjectivity which ought properly to belong to it (Def. 11), as in any of these island languages. It takes up, indeed, as in Tagala, certain prefixes of a verbal nature, but it does not, except in the Javanese passive, incorporate in itself an element of process like the Tagala verb. And "the same radical word will often stand for noun, adjective, or verb, according to its position in a sentence."¹ "Many words can without the smallest change stand for noun and verb, noun and particle, verb and particle, substantive and adjective."²

70. Unlike Tagala, the Malay language is copious in so-called prepositions and conjunctions. These, however, except two, *di* (on, at, in) and *ka* (to), which are almost like case elements, have remarkable fulness, as if the thought of the verb involved so little sense of the objects and conditions as to need large connection with them, and as if the connective elements were not thought properly as relations with a due sense of the correlatives as such (Def. 8), but rather as intervening substantives or participles; and most of them are as ready as substantives to become verbs. Thus in Dayak the preposition *awi*, by, may also mean to do; *me'lawan*, against, to withstand; *hapan*, with, to use.² The members of the sentence are less connected than in Tagala. There is less use in Malay of *na* or *ni* as a medium to connect them; sometimes this is used to connect the genitive with its governor; in Dayak, when the former ends in a vowel or *h*, it takes *-n*,³ and when it ends in a consonant it is followed by *ain*,⁴ to refer to it pronominally. There is less strength and particularity of demonstration in determining the noun, for the demonstrative pronouns are fewer than in Tagala, and are not used, as in it, at once before and after the noun.

71. The Malay consonants are *k, g, t, t', d, d', s, p, b, h, s, w, y, l, r, ñ, n, m*. The vowels are *a, e, i, o, u*. Consonants of the same organ are not carefully distinguished.

72. The demonstrative pronouns in Sumatran are—*ini*, this; *itu* and sometimes *nun*, that;⁵ in Dayak *to*, this, *te*, that; and the compounds *deto*, this; *dete*, that, with stronger meaning.⁶ The relative pronoun in Sumatran is *yeñ* or *neñ*, but the latter is little used except in poetry;⁷ in Dayak, *ile* or *awan*;⁶ in Javanese *kani* or *sini*.⁸

There is no use made of an article in Malay to distinguish the noun

¹ Crawford's Malay Grammar, p. 9.

² Gabelentz, Grammatik der Dayak Sprache, p. 9.

³ Steinthal, Charakteristik, p. 170.

⁴ Gabelentz, p. 24.

⁵ Ibid. Dissertation, p. 20.

⁶ Ibid. p. 18.

⁷ Crawford, p. 28. †

⁸ Crawford, p. 27. †

⁹ Ibid. pp. 2-4, 9.

as such. The remote demonstrative, however, is used not only to signify that, but also to particularise as a definite article; and the relative pronoun, too, is thought as particularising the noun by what it connects with it.¹ Proper nouns have no article. *Sa*, which is the numeral one, may be prefixed to a noun to mark it indefinitely as singular.

73. There is no element of number involved in the noun. In Sumatran plurality is sometimes expressed as a collective by reduplication.² In Dayak it may be expressed by *karé* preceding the noun.³ There is no distinction of case or gender; and even difference of sex is not thought strongly enough to produce different nouns for boy and girl, brother and sister, &c., but such ideas are expressed by the same noun qualified as male and female.⁴ There is a general tendency in Sumatran to denote natural objects by a general noun followed by an adjective or genitive,⁵ rather than by an abstract root with a modifying element. This probably arises, as in Burmese, from the concreteness of thought (V. 21). There is great use made of the relative pronoun to supply a substance in which the particularising attributes may inhere.

Also in the counting of familiar objects words are used to serve for units, which express ideas that are part of the idea of the object which is counted.⁶

74. The personal pronouns are the same, whether subject or object. In Sumatran they have only singular forms, except the first, which has two plural forms. In Dayak, however, the first person has a dual and all of them plural forms, while the first person plural has two forms, an inclusive and an exclusive; but the distinction is not strictly observed.⁷ Sumatran *aku, ku, daku; ai, kau, mu;*

	1st sing.	2d sing.			
	1st plural				
3d sing.	incl.	excl.	1st sing.	2d sing.	3d sing. 1st du.
<i>iya, diya, ina;</i>	<i>kita, kami.</i> ⁸		Dayak, <i>aku, yaku;</i>	<i>ikau;</i>	<i>ie; kor;</i>
1st plural					

incl.	excl.	2d pl.	3d pl.	
<i>ita, ikei; keton; ven.</i>				

In Sumatran *-ku, -mu,* and *-na,* are suffixed as possessives of first, second, and third singular. In Dayak, *-ku, -m,* and *-e* are possessive suffixes of nouns and objective suffixes of prepositions. They may in both be plural as well as singular, and are used in Dayak as subjective suffixes to some of the most subjective verbs, as those which mean to know, to see, to say, to find.⁹ In Sumatran, *diri,* self, may take the personal suffixes or be suffixed to the personal pronouns.

75. In Sumatran, and the same may be said of the other dialects, "some radical words without any change in their form are transitive, and some intransitive verbs, while others are equally both; but radicals generally are made verbs and verbal nouns by the application of certain inseparable prefixes and suffixes, or by the union of both

¹ Crawfurd, pp. 27, 28; Gabelentz, pp. 24, 25.

³ Gabelentz, p. 18.

⁵ Crawfurd, p. 71.

⁸ Marsden's Malay Grammar, p. 45.

² Crawfurd, p. 11.

⁴ Crawfurd, p. 10; Gabelentz, p. 18.

⁷ Gabelentz, p. 22.

⁹ Gabelentz, p. 23.

these. With the exception of some pronouns, nouns representing material objects, the prepositions which stand for the cases of languages of complex structure, and a few conjunctions and adverbs, any part of speech may by the application of the inseparable particles thus alluded to be converted into a verb."¹

These particles, as written by Marsden,² are in Sumatran *men-* or *me-*, *ber-* or *be-*, *-kan* and *-i*. The first of these, *men-* or *me-*, is of very general use, and forms both transitive and intransitive verbs. It seems to be akin to Tagala *mag* and *man*, but has no such diversity of meanings as these have, its sense being always to bring into realisation that which the radical denotes. It undergoes no change from tense, but it is liable to be assimilated by the initial letter of the radical. If this be a nasal or *l* or *r*, the prefix is merely *me-*; if a vowel, it is *mei-*; if it be a mute consonant the *n* of the prefix is changed into the nasal of the same organ, and the initial if tenuis is dropped; if the initial be *s* the *n* becomes *ŋ* and the *s* is dropped. Thus from *idup*, alive, is formed *meŋidup*, to live; from *dupa*, incense, *meŋdupa*, to fumigate with incense; from *paŋda*, equal, *memada*, to be equal.³ The prefix *ber-*, *per-*, or *be-*, is intransitive, and means to be possessed of what the radical denotes (see 61, 3). Thus from *estri*, wife, is formed *berestri*, to have a wife; from *buwah*, fruit, *berbuwah*, to bear fruit; from *putih*, white, *berputih*, to be white.⁴ The suffixes *-kan* and *-i* give a transitive or causal meaning, and are used either with a simple root or with one which has *men-* or *ber-* prefixed to it.⁵ They seem to be elements of transition to an object; *kan* is akin to the preposition *akan*, to; and such also is the meaning which *-an* has in the *an* passive of Tagala and in the formation mentioned in sect. 68 under Example 14; *i* is the preposition of the object in Polynesian.

Verbal nouns are formed by the prefix *pen-*, signifying for the most part the agent or instrument.⁶ This prefix combines with its radical like *men-*, except that it sometimes changes its *n* to *r*; and the formation seems to correspond to the Tagala formation with *pan-*, denoting the instrument (61); *per-* forms nouns of an intransitive nature.⁷

Abstract nouns of the action or state are formed with *-an*, or with *pen-* and *-an*,⁸ which seem to correspond in form though not quite in meaning to the nouns which spring from the *an* passive taken participially in Tagala.

Abstract nouns are also formed with *ka-* and *-an* like the Tagala formation in 64, 3.⁸

Verbal stems in Malay are apt to be thought like nouns, especially when they denote what is past or completed (9, 15; 10, 1-4); and with the preposition *di* or *de* before them (81, 4, 7, 8) they may mean a past state of action or of the effect of action (36, 3; 39, 11).

Such seems to be the true nature of this formation, of which Marsden gives the following examples and translations:⁹ *de s̄aruh^{order}na*,

¹ Crawford, p. 29.² Marsden, p. 52, &c.³ Crawford, p. 36.⁴ Ibid. p. 30.⁵ Marsden, p. 56; Crawford, p. 31.⁶ Marsden, p. 93; Crawford, p. 42.⁷ Marsden, p. 98.⁸ Crawford, p. 38.⁹ Marsden, p. 69.

he ordered; *de per'buāt'na*, he performed; *de taikap'na pen't'uri*, he seized the thief; *de pārañ'kan'na ulih segala pahlawan*, he was attacked by all warrior
 attacked by all the warriors; *de daiar ulih rāja*, it was heard by the king. "In these last two examples," says Marsden, "a passive form is given to the verb by the preposition *ulih*, although the sense is active."¹ On the other hand, Crawford joins *di* as a prefix to the verbal stem, and takes the formation as being always passive, and *-na* as if *ulih* was understood before it.² This construction of *na* would correspond with Tagala; but *-na* could not be taken so in the last example but one. If the formation is to be understood as sometimes active and sometimes passive, most probably the relation of the subject to it is not properly either the one or the other, but merely, as has been said, that of a genitive to which they may equally belong as a part to a whole; *-na* would then be, as it is in every other case, a possessive suffix, and *di* would govern a noun expressing a state.

The prefix *ter-* gives intensity to adjectives and adverbs, and forms derivatives from roots with a sense of completion as passive participles. This prefix, however, cannot be used at will; the formations belong to the dictionary rather than to the grammar.³

The prefix *se-* gives an adverbial sense to other parts of speech, whether primitive or derived;⁴ it is probably akin to the Tagala preposition *sa*.

In Dayak the derivative particles are much the same as in Sumatran,⁵ but *men-* and *pen-* seem to be more transitive than in Sumatran, and have sometimes *a* instead of *e*; and *ber-* seems to have dropped its *r*. There is also a causative prefix *pa-* or *mempa-*.

In Dayak the transitive suffix is *-an*, used with verbs, but not often; and there is a prefix *han-* not in Sumatran, which gives a middle or reciprocal meaning.

Not only are abstract nouns formed as in Sumatran with *-an*, with *pen-* and *-an*, and with *ka-* and *-an*, but also with *ka-* without suffix, with *ka-* and *-e*, and with *-e* without prefix.

Verbs may be formed from the abstract nouns which have *ka-* without suffix by prefixing *men-*; they sometimes mean to come up to equality (64, 3).

Verbal adjectives are formed with *tara-*, having the sense of the Latin participle in *-ulus*, as well as with *tar-* in sense of past passive participles.

Adjectives and adverbs are formed with *sa-*. And *han-* or *ha-* is occasionally found forming nouns, adjectives, and adverbs with a sense of junction.

In Sumatran as spoken, the prefixes and suffixes are little used.⁶

76. Neither in Sumatran nor in Dayak is there any element of mood or tense forming part of the verb. Nor are these expressed by verbal particles, but by words of independent signification preceding the

¹ Marsden, p. 69. ⁵

² Crawford, p. 31.

³ Ibid. pp. 33, 34.

⁴ Marsden, p. 99.

⁵ Gabelentz, p. 10-15.

⁶ Crawford, p. 52.

verb. The imperative is the verbal stem itself.¹ The verb has no person,¹ except as mentioned in 74.

Dayak forms a passive by changing *men-* into *in-*, the final nasal being the same in both ; and if the active prefix has no final nasal the passive prefix is *i-*.² This is akin to the *i-* passive in Tagala, and like the Tagala passive it is always followed by the agent in the genitive.

Javanese forms a passive by inserting *-in-* in the first syllable of the verbal stem, like the present and past tenses of the Tagala passive ; as *pundut*, to take ; *pinundut*, to be taken ; *sapa*, who ; *sinapa*, to be inquired after.³

77. The subject in Malay generally precedes the verb, and the object follows it. The adjective and the genitive follow the noun on which they depend, and the adverb the verb.⁴ The order of the words seems to be more liable to be changed in Dayak⁵ than in Sumatran, emphasis on a member of a sentence causing it sometimes to precede instead of following.

In Dayak the indirect object which, when it is a noun, generally follows the direct object, follows the verb when it is a pronoun, because it enters more readily than a noun into relation with the verb by reason of its lightness. The relative pronoun must always be subject of the relative clause, for the attraction of the antecedent causes it to begin that clause, and this place belongs properly to the subject. This often requires the verb of the relative clause to be passive. In Sumatran the relative may be object (see 81, 6). In Dayak a transitive verb cannot stand without an object, so strongly does the action refer to its object ; and verbs of motion include in their idea the transition to place so as to govern this as direct object without a preposition, showing the strong sense of movement as directed. The words which define the time stand at the beginning of the sentence, as if fact was thought as determined by its season.

The words which define tense precede the verb.

The Dayak genitive and its governor may not only be connected by the pronominal element *n* or *ain*, but also by the third possessive suffix *-e* joined to the governor. The former resembles the Tagala construction, and in it *n*, though taken up euphonicly by the governing noun when it ends in a vowel, yet belongs properly to a particle intervening between it and the genitive, and represents the governing noun in relation with the genitive (47). In its full form as an intervening particle it is in Dayak *ain*, and combines with the genitive when this is one of the personal possessive suffixes ; as *ain'ku* my, *ain* thy, *aine* his. The other construction is *hum'a'e ama'ku*,⁶ house of my uncle ; and in it *e* represents the genitive in connection with the governor.

78. There is in Malay, as well as in Polynesian, a tendency to form an improper kind of compounds,⁷ by thinking elements of a fact

¹ Crawford, p. 45-50 ; Gabelentz, p. 26-29. ² Gabelentz, p. 30.

³ Crawford, Dissertation, p. xxiv. ⁴ Crawford, p. 58 ; Gabelentz, p. 40, &c.

⁵ Steinthal, p. 170. ⁶ Ibid. p. 171.

⁷ Crawford, p. 63 ; Marsden, p. 27 ; Gabelentz, p. 16.

rather as connected than as related ; so that elements which occur often in connection with each other get agglutinated together. It arises from a weak sense of relations, and a consequent tendency to think ideas in juxtaposition with insufficient distinction.

79. Reduplication also and doubling are much used in Malay, as in all these languages, to express not only intensity, duration, frequency, plurality, reciprocity, smallness, likeness, but also such modifications as the embodiment of a root in a concrete object or its application as an adverb.¹ In Dayak, reduplication is said to denote rather diminution or weakening of the radical idea, doubling to denote the increase or strengthening² of it. The derivative prefixes are not repeated in the Malay reduplication or doubling ; but there is this difference among them that both in Sumatran and in Dayak, *men-* goes before the second member, the others are prefixed to the whole.² This indicates that the combination of *men-*, with its radical, is closer than that of the other prefixes. It is too much mingled with its radical to change it for that radical, reduplicated, or doubled.

This mode of expressing such modifications of an idea by repeating in whole or in part that which expressed the idea simply, is characterised by want of subordination of a modifying element to the idea as relative to it. What is expressed in this way is in truth the additional attention which an idea gets in a remarkable instance of it, when this is thought not as a particular modification of the general idea, but rather as a special case of it. The sense of a particular modification affecting a general idea produces an element additional to the idea and different from it, but speciality merely repeats the idea with additional expenditure of mental energy. Thus *homunculus* is a thought which involves *homo*, and a particular modification of *homo*, namely, diminution. This latter thought brings out the element *unculus*, relative to *homo*, so that he is no longer a *homo* but a *homunculus*. But if the second mental act were a thought of the diminutive man without defining his peculiarity by comparison with the generality of men, it would be merely a more special thought of him as *homo*, and the expression might be *hohomo* or *homohomo*. In such a thought there is no abstraction of a general element with a particularising addition to it. The radical idea includes sufficiently the speciality of the special case. It is repeated in that case, but it receives no additional element sufficient to prompt expression ; and its inclusion of the speciality shows the concrete fulness with which it is thought. The extent to which such expression is carried evidences concrete particularity of thought, not only in Malay, but also in Polynesian (8), and in Australian of Adelaide (88).

80. The derivative prefixes, though etymologically they are so closely akin to the Tagala prefixes, differ widely from these in respect of variety of meaning. The Malay prefixes vary little in their meaning. There is, therefore, in their case no such common source of various applications, nor any such recurrence of thought to a fundamental signification as is necessary with the Tagala prefixes to connect their various meanings, and cause the same prefix to be suggested as an

¹ Crawford, pp. 44, 57 ; Gabelentz, p. 15.

² Steinthal, p. 159.

expression for such different elements of thought (58). In Malay, the meaning which the prefix is used to express in each application of it may suggest its use much more directly than in Tagala, because it is much the same element of thought which the prefix usually expresses as combined with its radical. That element is thought without the mind leaving the radical, and may suggest the prefix without any intervening mental act. The prefix will then be thought with the radical much more fully present to the mind than in Tagala, and therefore its use gives no evidence of a tendency of thought to concentrate itself on fragmentary objects. Such evidence indeed is absent from the Malay languages. There are no separate verbal particles, nor any separate elements of a fragmentary kind, and the small elements which occur in combinations seem to be thought with the rest of the combination in a great degree present at the same time to the mind.

There is, however, one striking feature in Malay, as in Tagala and Polynesian, which indicates a certain tendency to break the natural unity of ideas; and that is the prevalence of disyllabic roots.¹ For the twofold act of expression must be prompted by a twofold action of thought; the mind thinking the idea only partly in the first act, and completing it in the second. Now the first act, although it does not reach so far as to think the whole of the idea, may fall little short of it. But, by however little the mind may fail to think the whole idea in one act, a second act will be necessary to complete it; and if the first thought be not retained, to make the second relative to it, that second will engage the full mental energy; and if the action of thought be not very fragmentary so as to concentrate on a very fine object, that second thought will go back on the first, including what the first thought omitted, and perhaps omitting something which the first included. This may or may not make the second thought sufficiently different from the first to suggest different expression. And thus disyllabic roots, whether duplications or not, tend to characterise minor degrees of fragmentary thought, where the radical ideas are full and not generalised so as to be thought as particular modifications of a general (Book I., chap. i., 7.) Such concrete particularity of thought belongs to the Malay region, in which Nature supplies what man needs, and he has but to look for it, and take it. And the nature of the Malay, in respect of ready excitability of mental action, seems to be properly classed with those who have this quality in a minor degree. The accounts which are given of the Malays represent them as more subject to excitement than the Chinese, though ready from indolence to lapse into a state of dulness which the active interests of Chinese industry do not admit. They are less excitable than the islanders to the east of them through the Pacific Ocean (p. 75). And to this the structure of their language corresponds, being less fragmentary in proportion as the race is less quickly susceptible of impression.

81. Some examples will show more clearly the nature of the language—

¹ Gabelentz, p. 7; Steinthal, p. 163.

SUMATRAN.

(1.) *Raden Inu bertidor tiga bersudara*, Raden Inu slept, three sleep three brother being brothers; *i.e.*, Raden Inu and his two brothers slept; ¹ the three are thought together as sleeping, but without distinction of individuals, and in the idea of the aggregate of them, the thought of Raden Inu prevails as the principal element, and is expressed for the whole idea; they are afterwards distinguished and counted under a less concrete, more partial idea which belongs to them severally, that they each have the relation of brother; there is no distinction of tense nor of the verb.

The following is similar—

(2.) *Rajah Indra belas ati na lalu bertani'stani'san ka'empat berputra itu*, Rajah Indra (with) pity heart his past weep weeping to four prince that *berputra itu*, Rajah Indra (with) pity (in) his heart wept greatly, all those four being princes; *i.e.*, Rajah Indra, and three other royal personages, pitied and wept; ¹ *lalu* is a verb which means to go, to pass, but here denotes only tense; *tani'san* is abstract noun of *tani's*.

(3.) *Maka rajah mem'beri kurniya di puwan yei kamas'an*, the king gave largess at box which gold the king gave largess at the golden box; ² *maka* is a particle in constant use, like Maori *ka*, to introduce a statement of fact; *kamasan* is an abstract quality (75) used as adjective.

(4.) *Adapun yei di pertuwan men'uruh yei di per'emba daten ini*, he who is in mastery commands who in slave come this *ini*, he who is in mastery commands him who is in slavery to come here; ² *adapun* is another word introductory of a fact, translated by Crawfurd "is too," *ada* being the verb to be; *pertuwan* and *per'emba* are abstract nouns of state; the root of *men'uruh* is *suruh*.

(5.) *Tatkala emba kembali men'adep duli yei di pertuwan raja Malaka apalah sembah yei di per'emba kabawah duli yei di pertuwan*, when the slave returns before the dust (feet) (of him) who is in mastery, the king of Malaka, what the homage (of him) who is in slavery to the dust (of him) who is in mastery; ² *i.e.*, what representation or report shall he make; *tatkala* is a substantive used for when; *men'adep* is a verbal formation for the preposition before; *apalah* is translated by Crawfurd what pray; *kabawah* is a compound preposition, in which *ka* is prefixed to *bawah* as to a noun.

(6.) *Ada suwatu per'mayin'an yei telah aku berulih pada pulau Lenkawi*, there is a certain toy which I found in the island of Lenkawi; ³ *per'mayinan*, noun of instrument; *telah*, past tense.

(7.) *Maka di liat ulih begenda paras'na tuwan putri terlebih*

¹ Crawfurd, Malay Grammar, p. 12.

² Ibid. p. 13.

³ Ibid. p. 14.

more from at before
pula deri'peda daulu, the beauty of the princess was seen by (his) majesty (to be) exceeding more than before; ¹ *di liat* seems to mean in sight (75); *paras* as governor of a genitive is followed by *na* changed after *s* to *na* (70); *putri* qualifies *tuwan*, which is a noun applicable to both sexes; *daulu* is formed apparently from *ulu*, head, or source, and means at first.

(8.) *Maka titah Sri Pand'i kakenda sakalian ber'enti'lah dawulu*
 make lodge cause I wish wait
per'buwat per'sinah'an karana aku endak ber'enti dawulu, maka
 lodge make man
per'sinah'an di per'buwat oran'lah, Sri Pand'i commanded, brothers all, halt pray first, make encampment, because I wish to wait first, an encampment was made by the men; ² *maka* is particle introductory of fact; *titah* may be a noun governing *Sri Pand'i*; *daulu* is translated by Crawfurd "for a while," it seems to mean at the beginning of a while; *per'sinah'an* is verbal noun of action or state (75); *karana* is a substantive used for because; for construction of *di per'buwat* see sect. 75.

(9.) *Maka ari'pun malam'lah, maka bulan'pun trai'lah*, day became night, the moon was bright. Neither Marsden nor Crawfurd give any proper explanation of these suffixes.

DAYAK.

(10.) *Hatalla karē mariksa talo ul'ē be'silim huan' olo*,³ God will judge the secrets of men (Rom. ii. 16).

(11.) *Tampai'a keton akan awen te ul'ē men'au'oi' kalo 'tē*, mark them which walk so.³

(12.) *Yaku aton sakatike ul'ē ba'halap*, I am the good shepherd.⁴

(13.) *Ul'ē sinta kola · e, iē d'ari me'lulus torat*, he who loveth his neighbour, has fulfilled the law.⁴

(14.) *Liāt keton talo keton me'hiniū*, take heed what you hear; ⁴ the relative as object is avoided by *talo*.

(15.) *Keton akan indu me'hiniū iē huan' talo handiai iē karē*
 say to ye
me'sanan akan keton, ye shall hear him in all things which he shall say unto you; ⁴ *akan indu* here express the future strongly, in the next example they are prepositions.

(16.) *Hatalla d'ari men · ena akan olo kapir kea ka'hoba akan*
 to live
indu pam'belom, God hath granted to the heathen also repentance unto life; ⁵ *pam'belom* verbal noun.

¹ Crawfurd, Malay Grammar, p. 19.

³ Gabelentz, Dayak Grammar, p. 24.

² Ibid. p. 42.

⁴ Ibid. p. 25.

⁵ Ibid. p. 35.

prohibitive evil self thy
 (17.) *cla memapa arep · m*, do thyself no harm ;¹ the root of *memapa* is *papa*, evil.

blessed man that who sin his [not at all passive impute God
 (18.) *Salamat olo tē iŕ'e dosa · e ŕ'aton haliei i · ton tuhan*,
 blessed is the man whose sins are not imputed by God.²

command they that prohib. to indef. man he to (fut.)
 (19.) *Jesus me · metē ewen tē cla akan iŕ'e biti iē akan me*
 tell thing pass. see of him
sauan talo i · tē · e, Jesus commanded them that they should
 not tell any man the thing seen by them ;² *iē* and *-e* are used for the
 plural.

if man walk night he strike thing
 (20.) *Amon olo men'auŕ'oi ha'malem iē pa'taran talo*, if a man
 walketh in the night he stumbleth ;³ the transitive verb requires
 an object.

thou place my give
 (21.) *Ikau aka'ku mēve'ia*, thou art my place of giving,⁴ *i.e.*, I
 have given to thee ; the relation to is here thought as a noun. Com-
 pare the Eskimo construction in Sect. II., 9, 1, 2.

AUSTRALIAN.

ADELAIDE.

82. The languages of the aborigines of Australia seem to differ greatly from each other in their structure. The only one for which materials were at hand for such a study of its nature as is needed here is the language spoken by the natives about Adelaide ; of which a short grammar has been published, containing a good supply of examples.

Its consonants are *k, g, t, d, p, b, w, y, r, l, ñ, n, m* ; its vowels are *a, e, i, o, u, o* ; there are diphthongs, *au, ei, oi, ui*, and concurrences both of vowels and consonants ; but every word ends in a vowel.⁵

83. One of the most remarkable features of this language is the absence of subjectivity from the verb. When the agent is distinctly thought as such, it is not thought as subject of the verb, but as a condition, such as we express with the preposition *by* ; and the verb must then be thought either as passive or as stating the existence of an action. Thus we may either say, I gave a book to him, or a book was given to him by me, or a giving a book to him was by me. There is, however, no passive form for the verb, except a form with a suffix *-nanna*, which seems rather to be a past passive participle,⁶ and to be used like a noun or adjective rather than as the verb. And when a verb, signifying an action, is used in its ordinary form, and with the agent in the ablative case, it must be understood as expressing an action going to its object, and yet abstracted from the agent. In that case there is an absence of the verb of subjectivity. And there is in truth no distinction whatever in the language either in noun or pronoun, by affix or preposition, between the subject and the

¹ Gabelentz, p. 26.

² Ibid. p. 31.

³ Ibid. p. 43.

⁴ Steinthal, p. 173.

⁵ Teichelmann and Schürmann's Grammar, p. 1-3.

⁶ Ibid. p. 20.

direct object, the same word which is subject with a neuter verb being object with an active verb.

84. But though there is so little subjectivity in the verb, there is process in it; not, however, appropriated to the root by entering into it, or by various expressions for various roots, but rather as involved in suffixes of derivation and of tense and mood. Inchoative verbs are formed by subjoining to the root *-ne-*, *-rne-*, or *-nde-*; and another variety, whose signification is doubtful, except that it is neuter, is formed with *-re*.¹ The tenses are expressed by terminations, the present continuance by *-ndi*, the past by *-tti*, the perfect by the final vowel of the stem, or by that vowel changed to *-a*, *-o*, or *-i*, the future by *-ita*, *-ota*, or *-iutta*, according to the dialect.² Other endings, instead of these, express moods; *-ma*, a hypothetical or potential; *-ti*, *-rti*, *-tti*, a prohibitive; *-ttoai*, a preventive, equivalent to English *lest* with the subjunctive. An optative or imperative is formed by subjoining to the root the ablative ending of the first or second person singular and the genitive ending *ko* of the third person singular, but neuter verbs use the mere root in second singular, and active verbs take *-ki* instead of *-ko* in third singular; the last syllable of the personal pronoun is taken in dual and plural.³ These are the only personal affixes of the verb.

A verbal noun, equivalent to the present participle, is formed in *-nerla* or *-nterla*; ⁴ and an abstract noun of act or state in *-ti* or *-tti*. ⁵

85. There is little sense of the object as distinct from the subject; but there is more sense of the conditions, and a corresponding development of elements of relation used as postpositions. These are about as numerous as the prepositions in the Melanesian languages; and they are apt to compound with each other and with nouns of relation. Three of them are so abstract that they are almost like case-endings, and are treated as such in the grammar of the language. These are, *-ko*, *-kko*, or *-to* for the genitive; *-ni* for the dative; *-lo*, *-rlo*, *-llo* (*-tto* with first person, *-do* with second) for the ablative, signifying the cause or instrument.⁶ The personal pronouns in the genitive are used as possessive pronouns, and may take the other case-endings or postpositions in addition to their own.⁷

86. Throughout the noun and the verb the radical part goes first, as if the race thought with strong attention the nature of the objects and facts with which they were concerned. There is a considerable development of number, so that all nouns and pronouns have three numbers—the singular, the dual *-la* or *-lla*, and the plural *-nna*. But the first personal pronoun *nai* makes the dual *nalli* and the plural *nadlu*, without distinction of inclusive and exclusive; and the second, *ninna* or *nin*, makes dual *niwa*, plural *na*. The third personal pronoun is *pa*, and there are two demonstratives, *ia*, this, and *iu*, that. The personal pronouns take *-ndi* to signify alone or self, and the demonstratives *-inta* to make them indefinite.⁸

87. There is, as in all the Oceanic languages, a tendency of words

¹ Teichelmann and Schürmann, p. 15.

² Ibid. p. 16.

³ Ibid. p. 17-19.

⁴ Ibid. p. 19.

⁵ Ibid. p. 4.

⁶ Ibid. p. 5.

⁷ Ibid. p. 11.

⁸ Ibid. p. 5-9.

to unite in compounds;¹ and thus any verbal root may subjoin *wappendi*, to cause, incorporating its *w* as *y*, so as to form a causative verb. There is also a considerable facility of forming derivative nouns, adjectives, and verbs, but all these formations differ from those of the island languages in this, that in them all, as well as in the declension of the noun, and in the conjugation of the verb, the radical part goes first. In the arrangement of the members of the sentence there is considerable freedom, but the conditions and object tend to go before the verb, the subject either preceding it or following it.

88. Great use is made of the doubling of the root to express the modifications usually so expressed in the meaning of the verb as well as to form adjectives and concrete substantives.¹

89. The roots are disyllabic, as in Malay and Polynesian; but this language is less fragmentary than the latter, for there is no such separation of fine elements here as in the Polynesian verbal particles. There is a feature in it which perhaps arises from thought being more fragmentary than in Malay. The affixes of this language, whether in derivation, declension, or conjugation, have a remarkable tendency to double the initial consonant of the affix, or to prefix to it a kindred consonant, which mingles with the root by entering into its last syllable. For while every word ends in a vowel, a syllable may end in a consonant;² and the addition to the last syllable of the root of an initial consonant of the affix has the effect of combining the affix in one word with the root. The additional consonant, therefore, at the beginning of the affixes seems to represent a thought of the affix in connection with the root added to the thought of the affix in itself, whereby the conception of it as an affix is completed, and without which it would not combine as such; and the existence of such junction seems to indicate a separateness in the thought of the two. There is, indeed, throughout the language, a tendency to end syllables with a consonant, except the last syllable, which always ends in a vowel; and this produces a prevalence in the middle of words of concurrent consonants, which are either doubles or akin to each other. It seems to indicate an act of junction, as if in the original formation even of the disyllabic roots there were a thought of the second element, as connected with the first, added to the second element, to establish the connection. This act, when applied to an affix beginning with a consonant, has the effect of closing a final *o* of the root to *u*, and a final *e* to *i*. Elements beginning with a vowel have less distinctness as separate acts of expression, and are more ready to combine with what has gone before. But if those which begin with a consonant need a previous consonant to effect a junction for them, they must be thought in themselves as unconnected; and such conception even of the fine verbal elements, and prevailing generally through the language, would indicate a fragmentary resolution of thought greater than in Malay. Such a character in the language would correspond to the degree of ready excitability evinced in the mental action of the race.

¹ Teichelmann and Schürmann, pp. 5, 6, 14, 15.

² Ibid. p. 2.

90. In the following examples the concurrent initial consonants of the affixes are not divided, but given in combination, as by the grammarian of the language:—

1st pers. pl. by to in he stay fut.

(1.) *na · dlu · lita'nga pa wande'ota*, he will stay with us;¹ *na'dlu*

has a double postposition attached to its ablative. (2.) *nai · to*
child by 1st pers. to give perf.

wakawakurlo nai · inni yunik'i, my child gave (it) to me.² (3.) *na ·*
dual man neg. sit pres.

dli meyr'ti tikka'ndi, we are sitting without company;³ *-rti* is pro-
table on garment pl. put

hibitive suffix with verbs. (4.) *Tarralo'anna muterta'anna wonda'*
2d sing. earth full (84)

ndo yerta butto'net'toai, put the clothes on the table lest they
become full of earth;⁴ *nindo* is the ablative, by thee, and from it
-ndo is taken for second singular imperative; *-ne* is inchoative, *-ttoai*

thou me by to in speak incho. pres. part. me by ear
preventive. (5.) *Ninna natta'ita'nga wai'nga · n · inerla, atto yurre'*
send (84) speech

kaita'nma warra, had you spoken to me I should have obeyed your
advice (thou speaking to me);⁵ *atto* is for *natto*, *n* being dropped
after another word. The verbs which are constructed with the agent in
the ablative are all explained in the vocabulary as active, but in general
there is nothing to show whether their radical meaning is not rather
passive. Now *kaitandi*, send, is one of those verbs, and here it appears
that it cannot be taken passively, for the idea would then be, by me your
speech would be ear-sent, which is not equivalent to its being obeyed.

2d per. gen. speech ear send to I come perf.

(6.) *Nin'ko warra yurre'kaita'ita, nai budn · i*, I came in order
to hear you speak;⁶ *t* denotes the verbal noun, so that *-tita* expresses

me by now 1st per. pl. go think past
the infinitive. (7.) *nat'to narta na'dlu palni'ti'na yait'ti*, I
thought we would go now;⁶ *-tina* is explained as a hypothetical or

thou now go fut. 1st per. pl. here
ideal infinitive. (8.) *Ninna narta palne'ota na'dlu yainta*
sleep 1st pl.

wande'adlu, you will now go, we sleep here.⁷ (9.) *Parni manma'*
hither bring

2d per. 3d per. pl. stick pl. 1st per.
ndo parna galla'rna, bring them hither, the sticks.⁸ (10.) *nai*

almost throw 1st per. gen. little by
ninka palta nai · to tokur'lo, my little one has almost thrown

how many day pl. midst in thy pl. how many thy
me.⁸ (11.) *Nauwe tindu'rna warti'nga ninku'rna? nauwe ninko*

day pl.
tindu'rna? how many days have you been on the road? how long
will you stay?⁸ literally, how many days in the midst were thine?

how many are thy days? If an adjective or adjective pronoun be
joined to a substantive, the number and case are frequently expressed
by one while the other remains unchanged, but the predicate must have

¹ Teichelmann and Schürmann, p. 8.

² Ibid. p. 12.

³ Ibid. p. 16.

⁴ Ibid. p. 18.

⁵ Ibid. p. 19.

⁶ Ibid. p. 20.

⁷ Ibid. p. 23.

⁸ Ibid. p. 24.

its number. (12.) *Burro ai tikka'tikka'ndi*, I will still remain; ¹ *ñai* still I remain pres. lime abl. me by house
 is apt to drop *ñ* after another word. (13.) *Parndar'lo ña'tto wodli*
 build fut.
taie · ta, I will build the house with lime; ² here are two ablatives.
 (14.) *Pulyu'mma meyu titta · appe · urti pindi meyu nurru'*
 black man tie make prohib. pit man charm
 preven.
ttoai, do not hang the black man that the European be not
 charmed; ³ *-mma* is an adjectival affix; they thought that the Euro-
 peans were their ancestors come from the grave (*pindi*) to revisit
 their country.

DRAVIDIAN.

TAMIL.

91. The languages grouped together by Bishop Caldwell, under the name Dravidian, are the aboriginal languages of Southern India; and are still spoken through nearly the whole of the peninsular portion of India, from the Vindhya Mountains and the river Nerbudda to Cape Comorin, as well as in scattered districts farther north.⁴ Of these languages the Tamil is the earliest cultivated, the most copious, and the richest in ancient forms,⁵ and to it almost exclusively attention will be here directed. It is spoken throughout the Carnatic from Pulicat to Cape Comorin and from the Ghauts to the Bay of Bengal, in the southern part of the Travancore country from Cape Comorin to the neighbourhood of Trivandrum, in the northern and north-western parts of Ceylon where Tamilian settlements began to be formed prior to the Christian era, and in various other parts whither emigration has carried it. And the people who speak the Tamil language are estimated in number at about fourteen millions and a half, and in character "as the least superstitious and the most enterprising and persevering race of Hindoos."⁶

92. The Dravidian phonesis is remarkable for its softness. It is also characterised as vocalic, with full pressure of breath from the chest. To its softness is due the remarkable development of cerebrals and vibratiles, which require flexibility of the tongue, and therefore indicate its relaxation. This condition of the tongue also favours palatals, as the relaxed tongue lies close to the arch of the palate. The softness is such that it is only in the stress of utterance at the beginning of a word, or in the doubling of the letter, that a mute is uttered as tenuis. In other positions, it is a medial uttered so softly that the breath is apt to pass through. And as it is natural for a consonant to be harder as an initial and when doubled, the Dravidian utterance yields to this influence, to distinguish by a tenuis the initial and the doubled mutes. There is thus only a single mute of each order: post-palatal, palatal, cerebral, dental, labial, which is hard or

¹ Teichelmann and Schürmann, p. 65.² *Ibid.* p. 24.³ *Ibid.* p. 69.⁴ Caldwell's Comparative Dravidian Grammar, Intro., p. 1.⁵ *Ibid.* p. 9.⁶ *Ibid.* p. 10.

soft, as above stated, and each of these orders has also its nasal. Besides these, there are five vibratiles—*r*, *l*, and a hard and a soft *r* as well as a hard, strong *n*. Tamil has neither sibilants nor *h*, its only spirants being *y* and *v*. The hard *r* when doubled is uttered as *ttr*, and when preceded by *n* as *dr*.

The vowels are *a*, *e*, *i*, *o*, *u*, short and long, and the diphthongs *ei* and *au*.

A vocalic character is indicated by the rule that *ĩ* before *t*, *ɳ*, *ʒ*, *r*, *r*, *l*, or *l*, followed by *a*, *e*, or *ei*, acquires something of the sound of *e*; *ẽ* before *t* or *ɳ*, followed by *a*, *e*, or *ei*, is also opened; and *ũ* before any single consonant which is not followed by *i*, *u*, or *e*, becomes *o*. This influence of the vowel through the consonant indicates a pre-dominance of the former. And a vocalic character appears in Telugu, Canarese, and colloquial Tamil, ending every word with a vowel. The development of vibratiles seems to indicate a full pressure of breath from the chest. Hiatus is not tolerated, because the organs have not sufficient versatility of action for the immediate change of their position which it requires.¹

93. The structure of the Dravidian languages is synthetic, but not megasyntetic (II. 4), and both in their verbs and in their nouns the radical part goes first, and the accent is generally on the first syllable. The verb has enough sense of the subject to take regularly a personal element; and this is taken by the Tamil verb even when the subject is independently expressed.² The third person differs in Dravidian according as the subject is or is not a rational being, and in the singular it distinguishes also between the male rational being and the female; in the plural, in Tamil, the subjects represented by the person must be all rational or all irrational.² There is also in the verb a sense of the succession or process, and a distinction of present, past, and future tense.

The distinction of tense, however, is not strongly felt. The present tense is seldom used in Tamil poetry, and in colloquial use its element is generally omitted;³ the future tense often expresses the habitual rather than the future;⁴ and there is no distinction of tense in the negative verb.⁵

There is no verbal expression of a subjunctive or of an ideal mood, nor any element expressing a passive or middle voice. The elements of process, tense, and person are thought with remarkable distinction from each other. The sense of process may indeed be taken up into a root; but in many instances⁶ the Dravidian verb subjoins to the root an element called by Caldwell "formative or euphonic," but which doubtless expresses what is thought along with the root in the idea of the verbal stem, and this can be nothing but the process or succession of doing or being. As thought with different roots it may take different forms; and accordingly is expressed by *vu*, *gu*, *q'u*, *du*, or *bu*, subject to various changes. It is retained in participles and verbal nouns, its presence in the latter conveying a significance as

¹ Caldwell, pp. 4, 12-30.

³ Caldwell, p. 385.

⁵ Ibid. p. 360.

² Rhenius' Tamil Grammar, sect. 43.

⁴ Ibid. p. 403.

⁶ Ibid. p. 338.

of English *-ing*;¹ and it may also be subjoined to the root in forming nouns more strictly substantive, in which use it expresses the succession thought more strictly as the attributive part of a substantive object (Def. 1, 4).

To this element or to the root, if this is not used in forming the verbal stem, is subjoined the element of tense. These elements in Tamil are: *-gir-* or *-ginn-*, for the present; *-d-*, *-nd-*, or *-in-*, for the past; *-v-*, *-b-* or *-pp-*, for the future. Another element, *-āninn-*, is used for the present, but very rarely; it is believed to consist of *ā*, the root of *āgu* to become, and *ninn-* denoting continuance.² The tense elements double and harden their initial consonants, when they are attached immediately to roots consisting of two short syllables, the final vowel of which is regarded as part of the root, and is incapable of being elided.²

The past is sometimes formed in all the Dravidian languages by doubling the final consonant of roots which do not subjoin any element of process and which consist of one syllable with a short vowel.³ In Tamil it is ordinarily formed by *-in-* when the root, consisting of two syllables or of one long syllable, has subjoined an element of process which then drops *-u*,⁴ otherwise by *-d-* or *-nd-*,⁴ subject to euphonic change.

In the future *v* generally follows the softest consonants, and *b*, the nasals *n* and *ṅ*; *pp* is used in other cases.⁵

The initial consonants of the elements of tense in Tamil are all liable to be doubled and hardened to change intransitive verbs to transitive,⁶ but if there is an element of process subjoined to the root it is on the initial consonant of that element that this affection falls to express the transitive.⁷ Some Tamil verbs which have no element of process and whose root ends in *ḍ* or *r*, double and harden this final consonant in becoming transitive; and some subjoin the pronominal element *du* to the root, or *ttu* if the root ends in a vowel which cannot be elided.⁸

The person endings in Tamil are—

singular	plural
(1.) <i>ēn, en, an.</i>	<i>ōm, ēm, em, ām, am.</i>
(2.) <i>āi, ōi, ei, i.</i>	<i>ṽr, ir.</i>
(3.) <i>ān, an, m., āl, al, f., adu, irratl.</i>	<i>ar, ār, argal, ratl., a, irratl.</i>

94. A causal verbal stem is formed in Tamil by subjoining to the root, *-vi-*, *-bi-*, or *-ppi-*;⁹ and a frequentative by doubling the root.¹⁰ A negative verb is formed by subjoining to the verbal stem *a*, equivalent to *al*, which is taken up by the initial vowel of the person,¹¹ so as to lengthen it.

Substantives and adjectives can take the person-endings in Dravidian, and thereby be predicated of the person.¹²

¹ Caldwell, p. 431.

² Ibid. p. 333.

³ Ibid. p. 337.

⁴ Ibid. pp. 392, 394.

⁵ Ibid. p. 404.

⁶ Ibid. p. 345.

⁷ Ibid. p. 343.

⁸ Ibid. pp. 346, 347.

⁹ Ibid. p. 349.

¹⁰ Ibid. p. 355.

¹¹ Ibid. p. 366.

¹² Ibid. p. 369.

95. It is a striking feature of the Dravidian languages that all subordinate facts which are thought as parts of a principal fact, instead of being connected with the latter by a conjunction or relative pronoun, are expressed by prefixing the subordinate verb without person-ending to the principal verb if the former has the same subject as the latter;¹ and by subjoining to the subordinate verb *a*, expressive of relation, instead of the person-endings, if the subordinate fact qualifies a noun as connected with it by a relative pronoun in any case.² The former is called a verbal participle, the latter a relative participle, being relative to the noun with which it is connected. The element of tense may be retained in the participles, the present denoting that the subordinate fact is contemporaneous with the principal fact, the past that it is antecedent to it, the future that it is subsequent to it.³ In Tamil, however, the past participle is used for the present;³ and those verbs which form the preterite with *-in-* drop *n* in the participle.⁴

The verbal stem with *a* subjoined, but without either tense-element or person-ending, is either used as an infinitive, the *a* expressing the transition to it from the verb which governs it, or as an adverb, the *a* expressing the transition to it from the verb which it qualifies, or as an optative, the *a* expressing the transition to it of desire, or as a fact accompanying another fact, the *a* expressing the transition to it of such connection.⁵

The verbal stem may be treated as a noun and take a postposition of case. In this way a conditional is expressed in Tamil with the postposition *il* or *in*,⁶ which Caldwell regards as locative.

The imperative second singular is the root of the verb without any formative suffix. In the second plural *-um* is subjoined to this root in colloquial Tamil, and *-min* or *min̄v̄r* in classical Tamil; *m* in these two latter suffixes has probably a significance akin to the future,⁷ and *um* in this use of it suggests *um*, the stem of the oblique cases of the plural of the second personal pronoun.

But *-um* forms a future when suffixed to the verbal stem in all the Dravidian languages. This future, however, is even less distinctly expressive of future time than the other formation in *-v-*, *-b-*, or *-pp-*.⁸ It takes no person-endings, but may be used in Tamil like an impersonal verb in third singular neuter and also as a relative participle.⁹ This particle *um* and the sense of the habitual belonging to the Dravidian future (93) remind one of Tagala (see 54, 56). In Tagala *um* is used to denote the imperative; but in Tamil it is used not only as a verbal particle, but as a suffix to interrogative pronouns to denote indefinite comprehension, as *evan*, who? *evanum*, every,¹⁰ as a copulative conjunction,¹¹ and as a suffix to a conditional to express even though,¹² *i.e.*, admitting or including the supposition. These are all

¹ Caldwell, p. 379; Rhenius, p. 142.

³ Caldwell, pp. 379, 407.

⁵ Ibid. p. 427; he regards *a* as demonstrative.

⁷ Ibid. p. 419-422.

¹⁰ Ibid. p. 337.

⁸ Ibid. p. 403.

¹¹ Ibid. p. 322.

² Rhenius, p. 138, &c.

⁴ Ibid. p. 394.

⁶ Ibid. p. 417.

⁹ Ibid. p. 405.

¹² Ibid. p. 419.

kindred meanings involving a general element of signification like the Tagala particles (58); and the general element which pervades these meanings is a sense of increase, the same element which is so widely prevalent in Tagala, and which in it belongs to this particle *um* as expressing a sense of production or potential accomplishment.

96. Participial nouns are formed in Dravidian by subjoining to the relative participle *-an* for the male, *-al* for the female, *-du* for the irrational or neuter; the two first require to be preceded by euphonic *v*. The last is in Tamil identical in form with the third singular neuter of the verb; but it may also express the abstract idea of the do pres.

verb thought as a noun, so that *k'eygir'adu* may mean either it does, that which does, or the doing;¹ in the first and last *adu* is the pronominal suffix, in the second *du* seems to be subjoined to the relative participle.

Participial abstract nouns are formed also in Tamil by subjoining
be pres.
mei to the present or preterite relative participle, as *iru'kki'na'mei*, which is, *iru'kki'na'mei*, being.²

Verbal abstract nouns, which, like the participial nouns, may govern an object and be qualified by adverbs, are formed by subjoining *-al* or
walk walk
-dal to the verbal stem, as *nada'kk'al* or *nada'kk'udal*, walking.

97. And abstract nouns which are truly nouns to be qualified by adjectives may be formed from roots by subjoining either *mei*, as *poru'mei*, endurance, or *am* with doubled consonant of root, as *tuk'kam*, sleep, or *g, d, b*, with various vowel terminations, as *k'ey'gei*, an action, or by doubling and hardening the final consonant of the root, as *pattu*, a song, from *pa'd'u*, to sing; or if it be a monosyllable by lengthening its vowel, as *pa'd'u*, suffering, from *pa'd'u*, to suffer.³

Nouns of the agent are formed by adding *-i* sometimes to the root and sometimes to the stem of the verb.⁴

These formations indicate a clear distinction between the idea of the verb and the idea of the noun. There is, moreover, sufficient sense of the individual substance of the noun to produce suffixes expressive of plurality, *ar* or *mar* for rational nouns,⁵ and *gal* or *a* for irrational,⁶ all being subject to euphonic change. But, ordinarily, there is no expression of number in the Tamil noun, especially if irrational, though the plural is generally expressed in the rational pronouns. Even when an irrational noun is pluralised in Tamil, the verb is rarely pluralised to correspond.⁷ In modern Tamil the rational plural element *ar* is usually employed for a honorific singular, and for the rational plural, when expressed a compound, *argal* is used.⁸ When *mar* is used for the plural it is added to the elements of sex, *an* and *al*; when *ar* or *argal* is used it takes the place of these.⁹

{ ¹ Caldwell, p. 429.

² Ibid. p. 430.

³ Ibid. p. 431-434.

⁴ Ibid. p. 440.

⁵ Ibid. p. 136.

⁶ Ibid. pp. 140, 144.

⁷ Ibid. p. 129.

⁸ Ibid. p. 135.

⁹ Ibid. p. 136.

98. The Tamil personal pronouns are—

singular.		plural.		
		nominative.		oblique. ¹
nominative.	oblique.	inclusive.	exclusive.	
(1.) <i>yān, nān</i>	<i>eñ-</i>	(<i>yām, nām</i>)	(<i>nāñga!</i>)	<i>em-, nam-, eñga!</i>
(2.) <i>nī, nīy</i>	<i>nīn-, un-, nun-</i>	<i>nīr, nīyir, nīvir,</i>	<i>nīñga!</i>	<i>nun-, un-, uñga!²</i>

The 3d is a demonstrative.

The reflexive is—

tān tañ tām.³

In the nominative of the personal pronouns the vowel is long, in the oblique cases it is short. The demonstrative bases are: *a* the remote, *i* the proximate, *u* the intermediate; and the interrogative base is *e* or *yā*. To these are subjoined in Tamil *-an* for the male, *-a!* for the female, *-du* for the irrational, *-ar* for the rational plural, and *-ei* for the irrational plural, *v* being inserted for euphony before all these except *du*.⁴ From these bases Tamil forms nouns with *-mei*, the *m* being doubled, and *mei* meaning birth or being.⁵ It also forms from *tañ* self, *tañmei* selfness, nature. Each of the dialects possesses also an interrogative pronoun in *n* or *m* less definite than that in *du*; thus in Tamil *edu* means which? *eñ* what?⁶ Tamil has also demonstrative adjectives, *anda* that, *inda* this,⁷ and interrogative *eñda* which?⁸

The demonstrative bases *a* and *i* may be prefixed to substantives, and then either the initial consonant of the substantive is doubled, or the demonstrative vowel is lengthened. The former plan is adopted invariably in Tamil; and if the substantive begin with a vowel the *v* which is then inserted is doubled as if it were initial. In Tamil the interrogative *e* is occasionally lengthened in the irrational singular *ēdu ēñ*.⁹

99. Comparative thought is not fully carried out in the Dravidian languages in a due production of truly comparative elements. "The majority of adjectives in all the Dravidian dialects are nouns of quality or relation, which become adjectives by position alone without any structural change whatever, and without ceasing to be in themselves nouns of quality."¹⁰ There is, however, often euphonic change and assimilation of the final consonant of the quality and the initial of the following noun, and sometimes the vowel of the former is lengthened to compensate for its final vowel which has been dropped. Many Tamil nouns ending in *g'u*, *ḍu*, *nḍu*, *o*, *ru*, or *bu*, double and harden these consonants when they are used as adjectives or when case signs are suffixed to them.¹¹

Relative participles, and nouns of quality, converted into relative participles by the addition of participial formatives, are largely used as adjectives in all the Dravidian languages;¹² and also nouns of

¹ Caldwell, p. 310.

² Ibid. p. 311.

³ Ibid. p. 291.

⁴ Ibid. pp. 315, 316.

⁵ Ibid. p. 320.

⁶ Ibid. p. 321.

⁷ Ibid. p. 322.

⁸ Ibid. p. 324.

⁹ Ibid. p. 323.

¹⁰ Ibid. p. 204.

¹¹ Ibid. p. 205.

¹² Ibid. p. 207.

quality with the suffixes of the relative participles more or less modified, *-iya*, *-a*, *-um*, *-āna*, *-āgum*, these last two being relative participles of *ā*, to become.¹ There are no forms for degrees of comparison.

Of adverbs, properly speaking, there are none. "Every word that is used as an adverb in the Dravidian languages is either a noun or a verbal theme or the infinitive or gerund of a verb."²

100. There is an imperfectly developed habit of correlation. "All the Dravidian postpositions are or have been nouns, and are generally suffixed in their uninflected form or in the nominative."³ This shows that the element of relation is not thought properly as transitional with a due sense of the correlatives (Def. 8), but that the mind tends to dwell on it and think it as an independent object. And hence it is that the Dravidian languages tend to use for the expression of relations not a mere particle which shall be a sign of the relation, but a word or phrase which has a distinct meaning of its own.⁴ Hence also it is that substantives are not thought habitually as correlatives, and often need to be connected with the postpositions of case, and with words which govern them by pronominal elements which may be thought correlatively. "In a very large number of instances, that form of the Dravidian noun which constitutes the crude base, and which is used as the nominative, constitutes also the inflectional base. And the case-signs are added to the base or nominative without any link of connection beyond the ordinary *v* or *y*, which is inserted to prevent hiatus between concurrent vowels. In a smaller number of instances, a number which constitutes, however, a large minority, the base or nominative receives an augmentation, and it is to this inflectional increment that the case-signs are attached. This inflected form of the noun is frequently used by itself without the addition of any case-termination, and when so used it has sometimes a locative, sometimes a possessive or adjectival force."⁵ Now this inflectional increment is in Tamil either *-in* or *-attu*, or the two together, *-attin*; *-attu*, and *-attin* being used only with irrational abstract nouns in *-am*, or Sanskrit neuters in *-am*,⁶ and *am* being dropped when *att* is taken. There are in Tamil a few naturally plural pronominals which receive in their oblique cases the inflectional increment *-attru*; for example, *avei* those, *siḷa* few, *pala* many, *ella* all.⁷

Tamil nouns ending in *ḍu* and *ru*, instead of taking an inflectional increment, form the basis of their oblique cases by doubling the final *ḍ* and *r* (*u* is regarded as merely enunciative, the habits of utterance requiring that every word shall end either in a vowel, semi-vowel, or nasal).⁸ These final consonants being doubled are hardened, *ḍ* becoming *ḍḍ*, and *r* becoming *ttr*.⁹

The postpositions of case are, most of them, "in reality separate words;" "but several of them have lost the faculty of separate existence, and can only be treated now as case terminations." In the

¹ Caldwell, p. 208-211.

² Ibid. p. 441.

³ Ibid. p. 213.

⁴ Ibid. p. 173.

⁵ Ibid. p. 155.

⁶ Ibid. pp. 151, 157, 160.

⁷ Ibid. p. 161.

⁸ Ibid. p. 79.

⁹ Ibid. p. 163.

plural the particle of pluralisation goes before them.¹ In Tamil they are as follows :—

Accusative, *-ei*; often omitted with irrational nouns.²

Instrumental, *-āl* or *-ān*.

Conjunctive, *-odu*, *-ōdu*, or *-uḍan*; *uḍan* is a noun signifying conjunction; *oṭtu*, verbal noun of *oḍ*, means adhesion.³

Dative, *-ku*, generally preceded by *u*, but in personal pronouns by *a*; *k* doubled after either.⁴

Ablative, *-il* or *-in*.

Genitive, *-a*, probably identical with *a*, the formative of the relative participle;⁵ used only as genitive ending of the personal pronoun.⁶

Locative, *-kan*, means place, but is rarely used; also *-il*, a place; *-iḍam*, a place; *-iḍattil*, in place.⁷

Two or more case-postpositions are occasionally compounded together, as locative subjoined to dative, or dative or ablative subjoined to locative.⁸

101. The inflectional increment consists of the two elements *attu* and *in*, which are quite similar in their use, and therefore probably in their nature. *Attu*, however, can be used only with irrational singular nouns, and is plainly an altered form of the irrational demonstrative pronoun *adu*.⁹ It is probable, therefore, that *in* also is pronominal, and similar to the pronominal connective *n* which is so much used in Tagala, and prevails so widely in the Oceanic languages. But, in order fully to understand the nature of the inflectional increment, it is important to inquire whether the pronominal elements of which it consists represent the noun to which they are subjoined, or that with which they connect that noun. Now, *attu* evidently represents the noun to which it is subjoined, for it agrees with that noun in gender and number; but there is no such agreement in the use of *in*, which is used with all genders and both numbers, and it is therefore more open to question which member of the connection it represents. The use of *in*, however, subjoined to *att*, suggests that *in* probably represents, not the noun to which it is subjoined, but rather the other member; and this is confirmed by considering the significance of those doubled and hardened letters which form so striking a feature in Tamil.

102. This doubling and hardening of the consonants expresses always a complementary thought of the element to which the consonant belongs, whereby the thought of that element in its present application is completed. When the final consonant of a verbal root is doubled and hardened to form the stem of a noun (97), this additional utterance expresses the additional mental action whereby the succession that is in the verb is thought in its totality as an entire object of thought (Def. 4). And when the final consonant of a monosyllabic verbal stem with a short vowel is doubled and hardened

¹ Caldwell, p. 149.

² Ibid. p. 167.

³ Ibid. p. 174.

⁴ Ibid. pp. 165, 175.

⁵ Ibid. p. 192.

⁶ Ibid. p. 193.

⁷ Ibid. p. 198.

⁸ Ibid. p. 202.

⁹ Ibid. p. 162.

to express the past (94), there is also a thought of completion added to the sense of verbal succession which such a root has taken up in its use as a verb.

In all the other cases of doubling and hardening consonants, the complementary element of thought which is added is a sense of connection. When in a verb the initial consonant of the formative element of process, or in the absence of such an element the initial consonant of the element of tense, or the final consonant of the root, is doubled and hardened to express transition to an object (94); the additional utterance expresses the completion of the thought of the verb as affecting the object. And when in a noun the initial consonant is doubled and hardened on having the demonstrative *a* or *i* prefixed (98), or the final consonant of the root is doubled and hardened on the occasion of the noun being used adjectivally, or being affected with postpositions of case (100); the additional utterance expresses the completion of the thought of the noun as connected with the demonstrative or with the other noun or with the relation.

So, too, when a verbal root consists of two short syllables, and its final vowel is radical and cannot be elided, there being no formative element of process, there is nothing transitional to form a connection between the root and the element of tense, and this latter doubles and hardens its initial consonant to complete the thought of it as connected with the root (94).

And it would seem that in general, when the initial of an affix is increased by being doubled, it is due to the root and affix not being ready to coalesce, and to the affix requiring a complementary element to connect it with the root, or to the affix requiring such an element to connect the formation with another object as is the case with the transitive verbs.

103. Now if this be so, the inflectional increment *attu* which connects the noun with a postposition or with another noun is to be regarded as the pronoun *adu*, representing the noun to which it is subjoined, but having its consonant doubled and hardened to express the element of connection which the mind adds to it in completing the thought of it as connected with what follows. And what follows *attu* must pertain to what *attu* connects the noun with. The compound inflectional increment *attin* when it serves for a genitive has always *adu* subjoined to it, and can only be used when followed by an

irrational noun, which evidently *adu* represents, as *mar^{tree}attin^{branch}adu*

koppu, branch of a tree.¹ But it may also connect a noun with post-

positions of case, as *mar^{tree}attin^{tree}al*, by a tree.² And in either case *in* expresses the attention directed to what follows it. From this it may be inferred that when *in* is used alone as an inflectional increment, it represents pronominally not the noun to which it is attached, but the

¹ Caldwell, p. 187.

² Ibid. p. 157.

other member of the connection; and in this it differs from the American arthritic elements, whereas *attu* agrees with these (see II. 33, 35; Def. 7).

104. The analogy is very remarkable between the doubled consonants in Tamil and in the language of Adelaide in Australia (89); and it confirms the view which has been taken of the significance of this feature in both languages.

In both, this feature indicates a tendency to think separately what requires such complementary mental act to connect it; and when this affects a fine element, it shows a degree of readiness to think light fragments as separate objects of thought. In Tamil, indeed, this shows itself somewhat differently from its appearance in the above Australian language; for it is in the separateness of the light elements of process and tense as shown in their independent connection with the object of a transitive verb, that this facility of detachment is perhaps most clearly seen in Tamil. At the same time there is a combination of these elements with the verbal root, which puts a wide difference between the evidence of a fragmentary tendency which may be discerned in Tamil and that which characterises Polynesian. In the former also there is no prevalence of disyllabic roots, for there was not that concrete particularity of thought which prevails where nature supplies what man needs ready to his hand if he will find it. In India, life was more difficult, and required attention to the essential conditions of utility and success in the nature of things and in the modes of action. These therefore were noted separately and generalised, and consequently the radical ideas of the race were too abstract and general to satisfy the conditions of Book I., chap i., 7.

105. As to the position of the parts of a sentence in Tamil, it may be stated generally that the subject precedes the verb, and the verb ends the sentence; the qualifying word precedes what it qualifies; and the second member of a correlation precedes the first, even the genitive of the personal pronouns going before the noun which governs it instead of being a suffix.¹ But the structure of the language will be better seen in a few examples.

love beginning good dispositions sinners; dat. are not

106. (1.) *Anbu · mudal · āna · narḡuṇaṅgaḷ pāvigaḷ · u · lk · illei*, love and the other good dispositions are not with sinners;² *mudal* is a substantive and means a beginning; *mudalāna* is an adjective and means having beginning; and this is defined by *anbu* love, and what is meant is love and the rest; but instead of being expressed with a copulative, they are thought together as a series whose first term is love, the good dispositions having love at the head of them; *narḡuṇaṅgaḷ* is the plural of *narḡuṇam*, which is from *naḷ* good, and *kunam* disposition; *illei* is an aoristic negative of any tense or person.³ This mode of thinking a number of objects as an aggregate defined by one of them has some resemblance to the Malay idiom (81, 1)

¹ Rhenius' Tamil Grammar, sect. 42.

² Ibid. sect. 43.

³ Caldwell, p. 367.

- beginning gods rise past 3d pl. ratl.
 (2.) *Tevendirān mudalānā dēvargaḷ eṟu · mb · in · ārgaḷ*, Tevendiran
 and the rest of the gods rose up; ¹ *mb* is a formative of process,
 God wicked pl. accus. punish
 making verbal stem. (3.) *Parābaraṇ tunmārkk · ar · ei taṇḍi* ·
 pres. 3d sing. male
kkir · ār, God punishes the wicked; ² *parā* means other, excel-
 lent, supreme; *tunmarkk-* is from *tun*, evil, and *markkam*, way; *-ar-*
 charity business acc. concerning speak
 is rational plural. (4.) *Taruma · kāriy · att · ei · kkuṟittu peḡ* ·
 past 3d pl. ratl.
in · argaḷ, they spoke concerning the charity business; ² *taru-*
mam means virtue; *kāriyam*, business; *-att-*, inflectional increment;
kuṟittu is the past participle of *kuṟi · kkiṟ · en*, I describe or define.
 virtue way acc. from leave past he
 (5.) *K'anmārkkatt · ei · viṭṭu vilaḡin · ān*, he forsook the path of
 virtue; ² *-att-* is inflectional increment; *viṭṭu* is root of verb *vittuḡiṟen*,
 I leave; *vilaḡin · ān* is the past of *vilaḡuḡiṟ · en*, I turn from. (6.)
 growing corn place in parrot corn acc. eat pres. 3d sing. irrat.
Payir · in · idaṭṭiṟ kilḷei payiṟei tinḡiṟ · adu, the parrot
 of the cultivated field eats the grain; ³ *-in-* and *-tt-* are inflectional
 increments; *iḍam*, place; the locative becomes *iṟ* before *k*.
 night by there go die past 2d sing.
 (7.) *Irāttiri · yilē aiḡē · bonā · y · ān · āṟ* *k'ettaṟi*, hadst thou travelled
 there by night thou wouldst have died; ⁴ *bonā* is a gerundive formation
 of *bo*, and *āna* of *ā*, to become; *āṟ* is the instrumental postposition
 risen
āl changed by *k'* to *āṟ*; *y* between vowels is euphonic. (8.) *Tōnriya*
 sun acc. describe past he
k'ūriyan · ei kuṟi · tt · āṟ, he described the risen sun; ⁵ *tōnriya* is the
 so
 past relative participle of *tōnriḡiṟen*, I appear (95). (9.) *Ittaneṟi*
 splendour adv. which appears sun God of greatness acc.
pirakāḡam · ai tōnriya · k'ūriyan parābaraṇ uḍeṟiya makimeṟi · y · ei · y
 declare pres. 3d sing. male
arivi · kkiṟ · ān, the sun which appears so splendidly declares
 the glory of God; ⁵ *tōnriya*, the past participle used for the pre-
 sent (95); *arivi* is causative of *ari*, to know; *y* euphonic. (10.)
 world acc. create past rel. God all pl. loc. indef. high be
Ulakatt · ei paṭci · tt · a parābaraṇ ell · āṟ · il · um ujaṟ · ntt · iṟu

¹ Rhenius, sect. 43.² Ibid. sect. 44.³ Ibid. sect. 49.⁴ Ibid. sect. 53.⁵ Ibid. sect. 55.

pres. 3d male

kkir̥ · ār, God who created the world is high above all;¹ *-att-* is inflectional increment of *ulakam*, the world; *paṭeitta*, the past relative participle (95) of *paṭeikkir̥ēn*, I create; *ellār*, the rational plural; *uyarnd* is the past verbal participle of *uyarugir̥ēn*, I am high.

God world acc. create past rel. manner wonder be

(11.) *Parābarān ulak'att'ei paṭci · tt . a vidam āk'k'ariyam · āyirru*
pres. 3d sing. irrat.

kkinn̄r̥ · adu, the manner in which God created the world is wonderful;¹ *-āy* is the adverbial termination added to the noun *āk'k'ariyam*;

the relative of *paṭeitta* is in an oblique relation. (12.) *I'v'ulak'att'ilē*
appear true wisdom acc. teach many manner charity pl. acc. do past

tōnri me'n'n'ān'att'ei pōtittu pala · vit · tarumān'gaḷ'ei k'k'eyduv'and'.
rel. Lord all instr. indef. desire suffer fit he

a karuttar elt'ār · āl · um virumba'ppada'ttakkar'ar, the Lord who appeared in this world, who taught true wisdom and did various charitable actions, ought to be desired (loved) by all;¹ euphonic *v* is doubled after *i* (see 98); *-att-*, inflectional increment; the *ē* added to *il*

is not explained either by Rhenius or Caldwell; *tōnri* and *pōtittu*, past participles, having the meaning of relative participles, but when a number of these occur in succession the last only retains the relative element *-a*; *-du-* is the element of process formative of the verbal stem *k'eydu*; *-ar-* is rational plural of *ella*; *paḍa* is the infinitive of *paḍugir̥ēn*, I suffer, which is one of the verbs used to express a passive, and it is here subjoined for that purpose to the infinitive *virumba*;

I this acc.

takka is the past participle of *tagugir̥ēn*, I am fit. (13.) *Nān id · ei*
do finish go pres. I

k'k'eydumud'ittu pō'gir̥ēn, when I have finished doing this I shall
this

go;² *mudittu* is past participle of *mud'ikkir̥ēn*, I finish. (14.) *Inda*
letter me instr. write suffer be pres. 3d sing. irrat.

kkākitam en̄n · ālē · yeru'da'ppatt'irukkinn̄r̥ · adu, this letter has been written by me;³ initial of noun is doubled after demonstrative (98); *y* is euphonic; *eruda* is infinitive of *erudugir̥ēn*, I write;

paṭt-, past participle of *paḍugir̥ēn*, I suffer. It may perhaps be conjectured, following out the supposition of sect. 102, that the final *r̥* of *gir̥* is increased by a nasal when the verb and the subject are such that the former does not readily combine with the latter in present realisation.

¹ Rhenius, sect. 55.

² Ibid. sect. 56.

³ Ibid. sect. 63.

EGYPTIAN.

107. The Egyptian language, which had remained undisturbed till the Arab conquest of the country, could not withstand the consequences of that event. Already in the tenth century of our era it was unknown to most of the inhabitants of Lower Egypt, the Arabic having taken its place. And although in Upper Egypt the Sahidic dialect of Egyptian still lived in the mouths of the people so late as the beginning of the fifteenth century, it was a dead language in the seventeenth; and the Egyptian of the Bible and of the liturgy had to be interpreted in Arabic.¹ The language of Egyptian literature is sometimes, as by Schwarze, called Coptic, so as to include under that name the three dialects; and sometimes by Coptic is meant the Lower or Memphitic dialect,² the other two dialects being the Bashmuric, which was spoken in the Delta, and the Sahidic or Thebaic, which belonged to Upper Egypt. To avoid ambiguity it may be well to call the whole language Egyptian, and not to speak of Coptic at all. It is known in a copious literature, principally ecclesiastical, beginning with the Egyptian versions of Scripture, which are thought to have been made about the second century.² And it is substantially the same language as that of the monuments,³ which will here be called Old Egyptian.

108. The Egyptian consonants are *k, k', k', g', t, t', p, p', b, b', h, χ, s, s, f, r, n, m*; the vowels are *a, e, i, o, u*.⁴

109. A large proportion of Egyptian substantives and adjectives are the same word as the verbs of the same radical meaning, being distinguished only by their use in the sentence, especially by their taking the articles. But the language is not by any means destitute of nominal formative endings subjoined to the root, *-ti, -tē, -t, -s, -i, -ē, -f*, there being apparently a tendency to distinguish the feminine gender from the masculine by a heavier ending; ⁵ sometimes also by altering the vowel of the penultimate syllable of the masculine.⁶

In Old Egyptian all nouns of the feminine gender have a final *t*.⁷

It is very remarkable in Egyptian that every substantive is either of the masculine or of the feminine gender, as appears from the pronominal elements which refer to them.⁸ There is a remarkable tendency also to particularise substantive objects in their class, or to individualise them in themselves, so that a substantive is accompanied for the most part by a definite article to particularise it, or by an indefinite to individualise it; and pronominal elements are used to an extraordinary extent. In the plural, the individual is apt to be more or less merged in the aggregate.

The definite article is, for the masculine singular *p*, with or without a vowel following, and liable to be changed euphonicallly to *p'*; for the feminine singular, *t* with or without a vowel following, and liable

¹ Schwarze, *Koptische Grammatik*, p. 9-12.

² Tattam's *Egyptian Grammar*, Preface.

⁴ Tattam, p. 1-6. ⁵ Schwarze, p. 391-398.

⁷ Bunsen, *Egypt*, i. p. 289.

³ Schwarze, pp. 6, 7.

⁶ Tattam, p. 15.

⁸ Tattam, p. 14.

to be changed euphonically to θ , and for both genders in the plural *ni* or *nen*.¹

The indefinite article is for both genders, in the singular *u*, and in the plural *han* or *hĕn*.² Both articles precede their noun.

In general, Egyptian substantives have no distinction of form for singular and plural.³ Of those which do distinguish number, far the larger portion form the plural by a plural ending coupled with more or less internal change, the remainder by internal change without any plural ending. The plural endings are various, but they almost all consist of vowels, among which *u* generally predominates, though some plurals are formed in *i* and *ĕ*.⁴ In Old Egyptian *u* was the only plural ending, and there was also a dual in *ti*.⁵

110. Egyptian is, like Malay, deficient in elements of relation properly thought as such. Indeed, in those general relations which are apt to adhere to nouns as the elements of case, Egyptian is more deficient than Malay (70); for it expresses those relations only by pronominal elements prefixed to the governed noun and representing that which governs it. The genitive takes a stronger element than the others, namely, *ent*, but the other cases take, without any distinction of one case from another, *ĕ*, *ĕm*, or *ĕn*, which have as well as *ent* the nature of a relative pronoun referring to an antecedent.⁶ The nominative when it follows the verb is apt to be preceded by *ĕnġ'ĕ* in the Memphitic dialect and *ĕnk'i* in the Sahidic, which are of a relative pronominal nature.⁷ The possessive relation is expressed by the definite article proper to the possession with *a* subjoined to express

the power the God is

transition to the possessor; as *pi'amahi p'a p'ti pĕ*, the power is of God.⁸

Egyptian, like Malay, instead of thinking elements of relation transitionally with a due sense of the correlatives, is apt to dwell on them, so as to think them as nouns, and to compound them; but there are about eight which are thought lightly as true prepositions.⁹ Hence when the object governed is a personal pronoun the relation is apt to be thought as part of it (see Def. 8), and attaches it as a possessive suffix,¹⁰ being often expressed by a noun denoting a part of the body; as *rat* foot, *ro* mouth, *tot* hand, *χĕt* neck, *hĕt* heart, *hra* face, *g'o* head. Such nouns with the relative prefix *ĕ*, *ĕn*, or with the prepositions *sa* to, *ha* to, *χα* towards, preceding them, and the possessive suffixes subjoined to them express under, before, &c., as governing the person which is suffixed to them.¹¹ Sometimes these combinations are used before nouns to express a relation which governs the noun:

and that the judge deliver thee rel. hand his rel. the officer

as *uoh entĕ pi pĕfti'hap tĕi · k · ĕ · tot 'ef em pi praktōr*, and that the judge deliver thee to the officer;¹² *ĕ* represents what has gone

¹ Tattam, p. 10. ² Ibid. p. 12. ³ Ibid. p. 15. ⁴ Schwarze, p. 398-408.

⁵ Bunsen, i. p. 290. ⁶ Schwarze, pp. 459, 471, 478; Bunsen, v. pp. 622-623.

⁷ Schwarze, p. 460.

⁸ Tattam, p. 13.

⁹ Ibid. p. 100; Schwarze, pp. 462, 463.

¹⁰ Schwarze, p. 384.

¹¹ Ibid. p. 346-349; Tattam, p. 34.

¹² Schwarze, p. 483.

before, and *ef* represents *praktor* in connection with *tot*; *etotef* expresses to; *em* represents *tot* in connection with *pi praktor*.

There are no conjunctions, except *uoh* and, *kě* also,¹ *san* if, and some pronominal elements which are used as conjunctions.

111. In Old Egyptian the number of simple adjectives, properly so called, is extremely small; because many adjectives are at the same time substantives, and many others are also verbs.² Adjectives are sometimes formed in Egyptian by the relative particles *č*, *čt*, *čθ* prefixed to verbs. There are no adjectival forms for degrees of comparison.³

I thou masc. thou fem. he she

112. The personal pronouns are: *anok*, *entok*, *entö*, *entof*, *entos*,
 we ye they
anon, *entöten*, *entöu*. The corresponding personal suffixes, sub-
 singular.

1st 2d masc. 2d fem. 3d masc. 3d fem.

jective, possessive, and objective, are: *-i*, *-i*, *-č*, *-f*, *-s*;

plural

1st 2d 3d

-n, *-ten*, *-u*. Sometimes the first singular suffix possessive or objective is *-t*, and the second feminine *-ti* or *-i*.⁴ The cases of the personal pronouns are expressed by the same relative elements as the cases of nouns with the above suffixes subjoined to them.⁵ Possessive pronouns are formed with the definite article, representing the possessed, and the personal suffixes, and are prefixed to the noun which is possessed,⁶ as *pe · k sēri*, thy son; *te · k sōni*, thy sister. The first singular possessive is *pa*.

There is also an element of personality, *emmo* or *emma*, and another, *uaa* or *uaat*, which, having taken the personal suffixes, are used for the personal pronouns with strengthened personality, the former as object, the latter either as subject or object.⁷

113. In the Egyptian verb the root takes up little or none of the subjectivity; and the realisation in the subject is expressed by detached verbal elements with which the persons are combined as suffixes, and which are then followed by the verbal root. In Old Egyptian the verbal root could take its subject after it immediately whether noun or pronoun, in the present and the past, but it also used auxiliary verbal elements detached from the root; and in the past this was the usual formation.⁸ In the later language it was only the verbs *pege'e*, to say; *tre*, to do; and *mare*, an imperative or optative verb, which thus immediately took their subject when it was a personal pronoun as a personal suffix;⁹ a few other verbs in the imperative were thrown into this immediate connection with their pronominal subject by the urgency of command.¹⁰

The Egyptian language is marked by a strong sense of the subject and of the fact which is realised, and by a weak sense of the realisation in the subject. The interest of fact lies rather in its outward

¹ Tattam, p. 103.

² Bunsen, i. p. 290.

³ Tattam, p. 24-26.

⁴ Schwarze, p. 358.

⁵ Ibid. p. 342-344.

⁶ Tattam, p. 37; Bunsen, i. p. 283.

⁷ Schwarze, pp. 345, 346.

⁸ Bunsen, v. pp. 656, 658.

⁹ Schwarze, p. 421.

¹⁰ Ibid. p. 422.

accomplishment than in the affection of the subject. And the element of succession of being or doing which is associated with the subject as realised in it, expresses process of accomplishment rather than of subjective affection.

114. From this want of subjectivity arises the strangely objective nature of the verb to be, in Egyptian. It is expressed by the demonstrative element *pě* when the subject is masculine singular, *tě* when it is feminine singular, and *ně* when it is plural, as *anok pě pi kug'i*, I am the small (one).¹ The realisation in the subject is here expressed by a demonstrative direction of attention to the subject (Def. 7). The subject is thought strongly, and precedes *pě*.

The verb substantive is also expressed by an individualising direction of attention to the subject, the indefinite pronoun, *uon*, being used as the verb to be, with its subject after it.² In the Old Egyptian there are, besides these, two elements of a verbal nature which are used as verb substantive; *er*, *ar*, which in later Egyptian means to do, and *au*, which appears also in later Egyptian as *ō*, *oi*.³ These Old Egyptian elements, *ar* and *au*, remind one of the Vei elements *ra* and *wa*; and their significations, too, seem to be not dissimilar (I. 37.)

115. From the weak sense of the realisation in the subject, it also follows that when that realisation is further weakened by being thought in the past, it is apt to be supplemented by an additional element of affirmation. And thus the past is expressed by *n* prefixed to the verbal personal element, and by subjoining to the verb *pě*, which does not change with the gender and number of the subject,⁴ as

I destroy
n'ari tako pě, I destroyed, I was destroying, I had destroyed; *a* is an element of verbal process.⁴

116. The strong sense of accomplishment appears in the distinctions of the verb with reference to accomplishment to which expression is given. Thus there are three tenses, each of which is called perfect, aorist, and present, and which therefore must all express accomplishment present or past, differing only in the strength

I destroy I destroy I destroy
of their verbal element; as *ari tako*, *sari tako*, *ěri tako*. The first is called by Schwarze emphatic, the second intensive, the third weakened emphatic. A still weaker tense is that in which the verbal element is given up, and the personal suffix stands alone. The weakness of this tense consists in the want of accomplishment, the tense being applied only to the present. On the other hand, a stronger sense of accomplishment than in any of the above is expressed by putting the subject, when it is a noun, after the verbal element *a* in place of the personal suffix. This expresses a less engagement of the personal life of the subject, and is applied only to what is finished and past; and sometimes this more complete accomplishment is expressed, at least in the Bashmuric dialect, by *aa* instead of *a*, followed by third person or noun, and sometimes in all the dialects by

¹ Schwarze, p. 418.² Ibid. p. 420.³ Bunsen, i. p. 292; Schwarze, pp. 423, 425.⁴ Schwarze, p. 440.

repeating *a* as a prefix to the verbal root after the subject noun. This second *a* may or may not have a personal element.¹

The future is expressed by the verb *na*, to go, preceded by the usual verbal personal elements, and followed by the verbal root (see Vei, I. 42); also by the element *ě* instead of *na*; and also, though much less frequently, by *tar* or *ta* as verbal element, with the personal suffix subjoined and the verbal root following.² A past future also is formed by prefixing to the future, *n* the element of the past, and often by also subjoining *pě* after the verbal root.³

117. Owing to the strong sense of the subject, and of the accomplishment, and the detachment of the latter from the former, the conception of fact wants unity, and negation generally gets a double expression; *en* or *n* preceding the verbal personal element negatives the realisation in the subject, and *an* or *ěn* following the root negatives that which is realised (see 37).⁴ In the Memphitic dialect, however, the first of these is often omitted. There is a stronger negative particle, *em* or *emp*, which seems to be *en* strengthened with *pě*, as if it was the assertion of a negative, and this when used instead of *en* does not require the second particle.⁵

With the verb substantive *pě*, the subject, as has been said above, takes the lead, and is followed by *pě*, and *pě* is followed by the predicate. But in negating such a proposition the order is somewhat changed. The subject, indeed, still comes first, being followed by the first negative *en*; but then comes the predicate, followed by the second negative *an*; and this is followed by *pě*.⁶ In this arrangement *en* seems to negative the subject as such, and *an* the predicate; and then unity is given to this twofold negative by *pě*, which asserts the negation.

In negating the past, *en* precedes the *ne* which expresses the past, but is often omitted, and *an* comes between the root and *pě*,⁷ as *n'ai* destroy
tako *pě*, I destroyed; *en nai tako an* *pě*, I did not destroy; *pě* supplements the assertion in both, the assertion in the latter being that of a negative.

In the negation of the future, the second negative *an* is often omitted; for the future has not yet come forth from the subject, and its negation in the subject is felt to be sufficient.⁸ On the other hand, in the Memphitic dialect, the first negative before the element *na*, when this is preceded by the person without any verbal element, is often omitted;⁹ for *na* is then thought with least subjectivity, and the future is negated in its accomplishment.

118. Egyptian has a very strong sense of the dependence of facts as relative to other facts, and expresses it by prefixing the relative particles *et ent*.¹⁰ The conditional particle *san*, if, goes between the verbal personal element and the verbal root.¹¹

¹ Schwarze, p. 423-433.

⁴ Ibid. p. 435.

⁷ Ibid. p. 443.

¹⁰ Ibid. pp. 434, 452.

² Ibid. p. 444-449.

⁵ Ibid. p. 436.

⁸ Ibid. p. 450.

¹¹ Ibid. p. 453.

³ Ibid. p. 451.

⁶ Ibid. p. 419.

⁹ Ibid. p. 449

The optative mood takes for its verbal element, to which the personal suffixes are attached, *marĕ*, which consists of *ma* give, and *rĕ* do; and in the same way the imperative also is expressed. But sometimes the imperative takes only *ma* without personal affix, followed by the root, and a certain number of verbs form their imperative by prefixing *a* to the root.¹

119. A passive could be expressed in Egyptian by changing the vowel of the verbal root to *ĕ*, and a passive participle formed by prefixing the relative *et* to the root so changed, or by adding to the unchanged root the termination *ĕut*, or less frequently *ĕut*, *Āut*, or even *acit*.²

120. In Old Egyptian the verb had more subjectivity than in the later language, the realisation in the subject entered more into the thought of the verbal root, and, as has been said above (113), was less detached from it. This gave more unity to the verbal idea, and the single particle *en* or *ne* prefixed was sufficient to negative it.³ The subjective realisation also could be thought in the past without being thereby so weakened as to need a supplementary assertive element, and the past was expressed by *en* between the verbal root and the personal suffix.⁴ The closer connection between the root and the subjective realisation is also seen in the optative, in which the optative element *mai*, instead of taking to itself the personal suffix, and being followed by the root, is followed by the root with the person suffixed.⁵

121. One of the most striking features of the Egyptian language is that, while it shows an inaptitude to define the thought of a relation, and at the same time think it lightly and transitionally, with due sense of the correlatives, it shows a constant tendency to connect objects by means of relative pronominal prefixes without thinking the relation; and it is not only substantives and adjectives which are thus treated with relative prefixes, but also verbs. Now such connections have little unity, and such habit of thought naturally produces also loosely-formed compounds, whose parts are imperfectly united⁶ (78).

122. These African races which were subject to Asiatic influence, though having a minor degree of ready excitability, did not develop disyllabic roots like the Polynesian and Malay, for this tendency was not either in the African or the Asiatic factor of their character.

123. That the Egyptian language has a fragmentary nature appears from the fine abstract elements which it can detach from the verbal root; and that these exhibit that nature as existing only in a minor degree is seen in their being almost always combined with personal suffixes.

124. In Old Egyptian the subject generally followed the verb, sometimes with the object between.⁷ In the later language it seems to have had a greater liberty to precede the verb. In both periods

¹ Schwarze, pp. 453, 454.

² Ibid. p. 457.

³ Bunsen, i. p. 293.

⁴ Ibid. p. 295

⁵ Ibid. p. 296.

⁶ Tattam, p. 104.

⁷ Bunsen, v. p. 715.

of the language the governor generally preceded the governed, and the attribute followed that to which it belonged.¹

125. The following are examples of Old Egyptian : (1.) *an n' a' f* ^{be perf. he}
 in pool rel.
em se en Pān'tt, he has been in the pool of Pan ;² the verbal personal
 element *naf* is detached from the verb. Bunsen calls it the perfect,
n is the sign of the past, *a* the emphatic present perfect (see 116) ;

tt is probably the feminine-ending (see 109). (2.) *Hapi ma' su er* ^{imper. go to}
 north turn say rel. god pl. northern

meh ak'i gu en neterru meni, Hapi go to the north, say to the gods
 of the north ;³ thus Bunsen translates *ak'i*, and says that it is used

as an imperative particle. (3.) *En ma' k neb neterru*, that thou ^{rel. see thou lord god pl.}
 give pass. by order pl.

(mayest) see the lord of the gods⁴ (see 118). (4.) *Ma' u em hes' u*
 rel. king majesty to god house rel. in

ent suten k'er er neter ha en Amen em Apt, given by the orders
 of his majesty the king to the temple of Ammon in Thebes.⁵ (5.)

Anχ Har set suten χba χufu ta anχ km na' f pr Hest hn' t
 living conductor king living find perf. he house Isis rule part.
 pyramid near house Sphinx above north west rel. house Osiris lord Rusta build
aa rma pr hu nher nh't ment n pr Uasar nb Rusut kat
 perf. he pyramid his near god house rel. god that

na' f aa' f rma ntr ha nt ntr tu,⁶ the living Har the con-
 ductor, the King Khufu (Cheops) the living, he designed the house of
 Isis, the ruler of the pyramid near the house of the Sphinx, above
 the north-west of the house of Osiris, lord of Rusta, he built his
 pyramid near the temple of that goddess. This is part of an inscrip-
 tion of the time of Cheops, fourth dynasty ; *χba* is a royal title, mean-
 ing king of Lower Egypt, *suten* of Upper Egypt ;⁷ *ta* is probably
 pronominal, perhaps akin to the *t* in *ent* ; *meh*, the north, has here a
 final *t*, perhaps feminine ; the *t* of *tn* seems to be feminine.

The following is an inscription at Dendera : (6.) *Pa senti ur* ^{the foundation great}
 in Dendera repair monument make rel. king lord world Sun firm create Sun
m an't suma men ar n su χb neb ta Ra men χr Ra
 son lord diadem pl. as find pass. part. in writing old pl. in day pl.
su neb sa' u Tetmes emχt kam' ut m χa as' u m ha' u
 rel. king Khuf

n suten χuf, the great foundation of Dendera. The repair of monu-
 ment was made by the king, the lord of the world, the Sun firm of
 existence, the son of the Sun, lord of diadems Thothmes (III.), as it
 was found in ancient writings of the days of King Cheops ;⁸ *ar* is a
 verbal root which seems to be used as a noun, work of ; *χb* title of
 royalty ; the adjective *as* apparently takes the plural *u*, which is not
 taken by its substantive *χa*.

The following are examples of the later Egyptian : (7.) *Et'a* ^{rel.}

¹ Bunsen, v. p. 715 ; Schwarze, p. 487.

³ Ibid. p. 663.

⁵ Ibid. p. 670.

⁷ Smith's Dictionary of the Bible, art. Egypt.

² Bunsen, v. p. 651.

⁴ Ibid. p. 665.

⁶ Ibid. p. 719.

⁸ Bunsen, v. p. 721.

the word rel. the Lord go forth from pron. you
p · saʿi em p · k'es sōr ebol hi · ten θēnu, for from you sounded forth
 the word of the Lord; ¹ *a* is the verbal element of what Schwarze
 calls the emphatic present or perfect, and both he and Tattam take
et a as another tense formation, but surely *et* is always relative.
 Tattam remarks that it is often found after the conjunctions that,
 if, and but; ² and the most natural interpretation of it is as a
 general relative element which before a verb supplies the place
 of a conjunction and before a noun of a preposition. Here it
 connects the sentence with what has gone before, supplying the
 place of *for* which is in the original, 1 Thess. i. 8; *ebol* is a pre-
 position or adverb formed from the root *bol* to loose, ³ with the
 relative *e*; *hiten* consists of the preposition *hi* and the pronominal
 element *ten*, which represents what the preposition governs. ³

your faith rel. to God verb. pers. go forth

(8.) *Apetennahti et ha p'ti a · f sōr ebol*, your faith towards God
 has gone forth; ⁴ this is the verbal formation with *a* repeated, which
 is described in 116; *peten* is the possessive pronoun, *ten* being suffix
 of second plural, *pe* being masculine article agreeing with *nahti*.

and he find in the temple rel. pl. dem. rel. give ox forth with sheep

(9.) *Uoh aʿf g'imī χεν πὶ ἐρφεὶ ἐν νῆ ἐτ τὶ ἐθε ἐβολ νῆμ ἐσῶυ*
 with dove with pl. art. change money 3d pl. sit

nēm k'rompi nēm ni fai · kerma e · u hemsī, and he found in the
 temple those who sold oxen and sheep and doves, and the changers of
 money sitting; ⁵ *aʿf* is verbal personal element of emphatic perfect
 present, third singular masculine; *ehe*, *esōu*, and *rompi* are all singular,
 and have no article; *eu hemsī* is a weak perfect or present (116) used

but not art. Herod

participially. (10.) *Alla empe p'ke'herodes*, but also not Herod; ⁶ *ke*,
 which is used for also, is pronominal, and may intervene between the
 article and the noun; the adoption of *alla gar*, &c., shows the
 and one every rel. in fem. art.

Egyptian poverty of conjunctions. (11.) *Uoh uon niben et χεν τὶ*

past verb. pl. art. 3d pl. eye

synagōgē n · are n · u · bal, and the eyes of every one in the syna-
 gogue were (fastened) on him; ⁶ *are* is the old verb to be, which is used
 in the third person both singular and plural; *nu* is possessive pronoun of
 third person plural with plural noun. The construction with nomina-
 tive absolute is very usual when that which should follow is by emphasis

caused to precede, so also in the next example. (12.) *ēnē enθōten*
 pl. art. son rel. be pl. art. work pl. rel. past you fut.

nen sēri en Abraam pe ni hbe'ui ēntē Abraam n · are'ten'na'
 do them

ait · u, if ye were the sons of Abraham ye would do the works of

my time I not perf. come art. your time but you
 Abraham. ⁶ (13.) *Pa·sēu anok mp · a · teʿi pe · ten · sēu dē nθōten*
 3d masc. ready rel. time every

f · sebtōt en sēu niben, my time is not come, but your time is alway

¹ Schwarze, p. 429.

² Tattam, p. 71.

³ Schwarze, p. 463.

⁴ Ibid. p. 429.

⁵ Ibid. p. 464.

⁶ Ibid. p. 465.

ready; ¹ the personal pronouns used as genitives along with the possessives for emphasis. (14.) *A · u · er uō dē eng'e han*
 perf. 3d pl. make answer but pronom. pl. indef. art.
 indef. pron. from among pl. art. def. scribe

uon ebol xen ni saχ, but some of the scribes made answer; ²
eng'e is a pronominal element which introduces the subject (110).

these words neg. a man neg. be rel. indef. pron. a devil with him
 (15.) *Nai sag'i na u rōmi an pe e uon u demon nem · af*, these
 words are not of a man that hath a devil; ³ *nai* is plural of *pai, tai*,
 but the verb substantive *pē* is in its singular form though its subject
 is plural; for the negative construction (see 117) the first negative

indef. rel. him rel. this rel. fut. give
 here being *na* instead of *en*. (16.) *Uon · ta · f em p'ē eθ na · ti*
 judgment rel. mouth his

hap e ro · f, he hath one (viz., this) who will judge him; ⁴
uon asserts as verb substantive; *enta* is relative, serving for dative

relation to *f*. (17.) *Ne af honhen gar pē ē tot · ef em pi pneuma*,
 past command for rel. hand his rel. the Spirit
 for he commanded the Spirit; ⁵ *af* is the verbal personal element of
 the emphatic perfect present, third person singular masculine; for the
 construction of the past with *ne* and *pe* see 115; and for *ē totēf*
 see 110.

NUBIAN.

126. The Nubian consonants are *k, g, g', t, d, p, b, s, w, f, r, l, n, n, m*; the vowels *a, e, i, o, u*; and diphthongs *ai, au*. From the absence of *h* and the aspirates, Lepsius infers the want of pressure of breath from the chest. ⁶ No more than two consonants concur, and generally one of them is a liquid. The great number of euphonic changes of the consonants ⁷ indicates a want of versatility of utterance.

127. The Nubian language is quite different in structure from the Egyptian. The substantive has no grammatical gender; ⁸ nor is it accompanied by either a definite article to particularise it, or an indefinite article to individualise it (109). It is thought, however, with an added element which seems to be partly pronominal, and therefore partly subsequent to the idea as directing additional attention to the object. The substantive tends to take a final *i* which seems to have no significance except that of a general nominal ending. But substantives also take *-r, -ir*, which seem to give emphasis, as if *r* were a demonstrative element of the nature of an article. ⁹ There are, moreover, substantive endings of special meaning, *-d* for abstract substantives of verbal stems, *-kennē* for abstract substantives of adjectives, and *-atti* for frequent doers, generally with a bad sense; *-itti* forms ordinal numbers from the cardinals. ¹⁰

The plural is formed most usually by *-gū*, but sometimes by *-ī*, and not unfrequently by *-gū*. ¹¹ When several plural nouns are connected

¹ Schwarze, p. 466.

² Ibid. p. 471.

³ Ibid. p. 472.

⁴ Ibid. p. 482.

⁵ Ibid. p. 483.

⁶ Lepsius' Nubische Grammatik, pp. 4-6, 30.

⁷ Ibid. p. 16.

⁸ Ibid. p. 30.

⁹ Ibid. pp. 26, 27.

¹⁰ Ibid. pp. 28, 29.

¹¹ Ibid. p. 30-33.

together, the plural ending is attached only to the last;¹ for being thought pronominally rather than as part of the substantive idea, the plural elements of the different substantives have more affinity for each other than for their respective nouns, and so coalesce at the end. The substantive precedes the adjective, and the plural ending being loosely connected, follows the adjective, because the adjective affects the individual.¹ Before possessive pronouns, however, the substantive takes the plural ending, though the pronoun or adjective takes it also, for these refer to the aggregate rather than to the individual.¹ The analogy between the above features of the Nubian noun and those of the Mandingo is most striking (see I. 32).

128. The substantive in Nubian has two cases, a genitive and an objective. The genitive, when it precedes its governor, is formed by *-n* or *-in*; when it follows, which is less usual, it takes *-ni*, or with greater strength of meaning, *-na*, or even *-nan*, *-nani*, *-nane*. All these seem to be demonstrative elements representing the governor in connection with the genitive; they follow the plural ending, and if several genitives are connected together, the genitive ending is taken only by the last; and if the enclitic copulative *-gōn*, which corresponds to Latin *-que*, be attached to a genitive, it comes between the stem and the genitive ending.² This enclitic *-gōn* does not come between the stem and the plural ending, but follows the latter.

The objective case, both direct and indirect, is formed by *-gā*. When several substantives, or substantive and adjective, are joined in the object, *-gā* is taken by the last substantive or adjective; it also follows the plural ending, and the copulative *-gōn*; and may be subjoined to a genitive ending when the genitive is the last member of a construction which denotes the object.³

As a general rule the governed word precedes the governing.⁴ The sense of relation, though more distinct than in Egyptian, has not close connection with its object, as may be observed in the poor development of case, and the ready detachment of its element from the stem of the noun. Accordingly, there are only three or four postpositions which combine immediately with the noun. The others require the genitive ending to mediate and form a connection with the noun, being in fact thought as nouns governing a genitive (Def. 8).⁵

There is no adjectival expression of degrees of comparison.⁶

singular.			plural.		
1	2	3	1	2	3

129. The personal pronouns are *ai*, *ir*, *tar*; *ū*, *ur*, *ter*,⁷ and are strengthened by the addition of *-ī*, as by a demonstrative element.⁸ They form their genitive by adding *-in* or *-in* to the simple form, and the shorter genitive is contracted to *an*, *in*, *tan*, *ūn*, *un*, *ten*.⁹ When the genitive follows its governor it is formed with *-ni*.¹⁰ It, however, always precedes nouns of kindred.¹¹

¹ Lepsius, p. 34.

² Ibid. p. 35-37.

³ Ibid. p. 37-40.

⁴ Ibid. p. 38.

⁵ Ibid. p. 44.

⁶ Ibid. p. 54.

⁷ Ibid. p. 55.

⁸ Ibid. p. 56.

⁹ Ibid. pp. 56, 57.

¹⁰ Ibid. p. 58.

¹¹ Ibid. p. 61.

The demonstrative pronouns are *in* and *tar* this, and *man* that; the two latter are generally used with persons; *ta* seems to be a relative pronoun, and *nai* an interrogative.¹

130. The formations of the Nubian verb indicate as strong a sense of the subject, and a stronger sense of the subjective realisation, than those of the Egyptian verb. The subject, even when it immediately precedes the verb, is always represented by a person ending attached to the verb; and the elements which intervene between the person and the root in the various tenses seem to have a more subjective significance than those which are combined with the persons in Egyptian. That significance has less reference to accomplishment, and more to the affection of the subject, than in the Egyptian verb; so that, unlike the latter (116) it has a proper expression for the present affection of the subject. At the same time there is more reference to the object in the Nubian verb.

The element of the present is *r*, that of the aorist past is *s* and *o*. These combine with the persons as follows, and are attached to the verbal stem with an intervening *i* when euphony requires it, [or combine with the stem subject to euphonic change.²

Present.	Aor. Past.	Present.	Aor. Past.
1st sing. - <i>r</i>	- <i>s</i>	1st pl. - <i>r'ũ</i>	- <i>s'ũ</i>
2d „ - <i>nam</i>	- <i>o'nam</i>	2d „ - <i>r'okom</i>	- <i>s'okom</i>
3d „ - <i>n</i>	- <i>o'n</i>	3d „ - <i>n'nan</i>	-(<i>s</i>)- <i>san</i>

The perfect inserts before the aorist endings *ken* or *kon*, which Lepsius identifies with *kune*, to have;³ and the pluperfect doubles *ken*. In both tenses the stem, instead of taking a euphonic -*i*, may take a participial ending -*a* (132), like a separate word.⁴

The future inserts before the present endings *al* if the root ends in a consonant, and *dil* if it ends in a vowel, or in *r* or *l*; and with all these there are euphonic changes, of which the language is in general very susceptible. These future elements Lepsius reduces to *dar*, to be at hand.⁵

Another future is formed by prefixing *fa-* to the present. This prefix, which may be separated from the stem by other words intervening, is by Lepsius deduced from *fale*, to go forth; and he takes the formation to mean, be about to do, or be.⁶ The element *fa-* prefixed to the aorist forms a future past, which seems to be little used.⁷

131. A passive is formed by inserting between the stem and the element of tense *takk* or *dan*, the latter less frequently used than the former; both of them inflected like independent verbs, though they do not occur as such, and not making any euphonic change in the final letter of the stem to which they are attached.⁸

There are interrogative particles which generally go before the subject, but interrogation also affects the form of the verb, and its

¹ Lepsius, p. 66-68.

² Ibid. p. 70.

³ Ibid. p. 89.

⁴ Ibid. pp. 89, 91.

⁵ Ibid. p. 96.

⁶ Ibid. p. 98.

⁷ Ibid. p. 99.

⁸ Ibid. pp. 99, 100.

interrogative form can express the question without the help of interrogative particles. The interrogative form of the verb ends always in a long vowel, which is either added to the person-ending, or is a lengthening of its vowel, the following part of the person-ending being dropped if this vowel be not final. The vowel which is added in the first case is generally *-ā*, and this may be added to the last word in a question even though it be not a verb. For the most part, the eagerness of interrogation by means of this long vowel still further reduces the person or suppresses it altogether.¹

A conditional form is also given to the verb, though at the same time the subject may have the enclitic conjunction *-lōn* or *-ōn*, meaning *if*. This conditional form consists of the insertion of *-ka-* or *-kaw-* after the verbal stem, accompanied often by the addition of a long vowel *ī* or *ē* at the end, with reduction of the person-ending.² The conditional element in Woloff is *kon*, in Tamachek *ku*.

A potential form, which may be translated *might*, is given to the verb by inserting *ēn* after the verbal stem.³ In Mandingo *nan* expresses *should* or *ought*; *no* expresses *may* or *can*.⁴

The negative verb is the only negative expression in Nubian,⁵ and it is formed by *mun* inserted before the present endings, *r* being dropped in these; *mun* is changed to *min* in second singular and third plural, and its *n* absorbed by the *n* of second and third singular.⁵ There are also traces of an aorist negative *men*, whose *n* is changed to *s* by the *s* of the aorist endings.⁶ They both exercise euphonic influence on the verbal stem to which they are subjoined.

This negative verbal element subjoins to itself the interrogative and conditional forms, but it follows the elements of the perfect, pluperfect, and future.⁷

In Mandingo also the negative is verbal, though detached from the verbal stem, and its most usual expression is *man* or *me*.⁸

The Nubian verb inserts *-g'* between the verbal stem and the element of tense to represent the direct object when this is plural, even when it is reflexive, that is, the same as the subject.⁹

It also incorporates the relation to the indirect object by giving to the verbal stem the ending *-a* (132), expressive of transitional connection or reference to, and inserting between it and the element of tense *-dēn-* when the indirect object is first person singular, *-dēng'* when it is first person plural, *-tir-* when it is second or third person singular, and *-tij'g'* (from *-tirg'*) when it is second or third person plural, all subject to euphonic change. These dative elements are also used separately for the verb to give, each being restricted to the proper person which it implies as indirect object.¹⁰

The imperative second person singular is the verbal stem with or without *-e* or *-ē* added to it; the second person plural takes *-anā* or *-an*. The negative imperative subjoins to the verbal stem, or to the verbal stem with *-a* added to it (132), *-tam* or *-tame* in the second

¹ Lepsius, pp. 103, 104.² Ibid. p. 111.³ Ibid. p. 114.⁴ Macbrair's Mandingo Grammar, p. 20.⁵ Lepsius, p. 115.⁶ Ibid. p. 120.⁷ Ibid. p. 118-126.⁸ Macbrair, p. 22.⁹ Lepsius, p. 127-132.¹⁰ Ibid. p. 132-138.

person singular, and *-taman* or *-tamanā* in the second person plural.¹ Mandingo has a prohibitive particle *kana*, and a negative of the future *te*.²

The infinitive adds *-e* or *-en* to the verbal stem ; or a stronger form, *-nan* or *-innan*, when the infinitive belongs to a different subject from that of the verb which governs it, or when it has the postposition of the object *gā*.³ These endings seem all to be of a pronominal nature, the stronger demonstrative being needed when the transition to the infinitive from the principal verb is less immediate. The ending of the aorist infinitive is *sān*.⁴

132. The ending *-a* joined to the verbal stem can give it a participial meaning.⁵ It seems to be an element of relation or transitional connection between the substantive and the participle which belongs to it. It is also used subjoined to a predicate, whether adjective or substantive, to connect with it the subject, even though the copula is expressed.⁶ The verbal stem, however, is sometimes used participially without any addition ; and with or without *-a*, serves for both singular and plural.⁵ The readiness with which a verb assumes the participial form in Nubian shows how slightly the subjective process enters into the thought of the verbal stem. For just as when two or more substantives occur in succession in the same number or case, all but the last drop the element of case or plurality ; so also when two or more verbs in succession are in the same tense and person, all but the last drop these elements and take *-a* instead, without being thereby at all subordinated to the final verb⁷ (95).

Any tense may take *-ī* instead of its person-ending, to express the relative pronoun as its subject in the singular number ; for the same in the plural it takes *-kū*, and as object *-kū* (to express, e.g., him who). Now the plural element is *gū*, and the object relation is *gā*, and the change of *g* to *k* indicates an *n* which has been assimilated by *g*.⁸ This *n* is doubtless pronominal, and is the demonstrative element which serves for the relative pronoun as subject of the verb, whether in the plural number or standing in the sentence in the object relation.

133. The copulative enclitic *-gōn*, the interrogative *-lē*, and the shortened negative *-m*, when they affect a verb, detach the verbal stem from the elements of tense and person. The copulative by referring to the connected facts, and the other two by lowering the sense of realisation, diminish the subjectivity of the verbal idea, and turn the verbal stem into a participial predicatē with the ending *-a*. To this those particles are subjoined ; and they are followed by the verb *-gene*, to be, in the proper tense and person.⁹

The verb *-ile*, to name, is another inflected enclitic verb which is subjoined to the name ; and *-lin* is an uninflected enclitic copula subjoined to the predicatē.¹⁰

Causative verbs are formed by *-ire* or *-hire* subjoined to a verbal

¹ Lepsius, p. 139-141.

² Macbrair, pp. 22, 23.

³ Lepsius, p. 143.

⁴ Ibid. p. 144.

⁵ Ibid. p. 145.

⁶ Ibid. p. 29.

⁷ Ibid. p. 191.

⁸ Ibid. pp. 146, 147.

⁹ Ibid. pp. 149, 150.

¹⁰ Ibid. p. 151.

root; also by *-hire* subjoined to a substantive or adjective to which *-a* has been added.¹

Verbs are also formed by subjoining *-aie* to substantives or adjectives, meaning to become that which the substantive or adjective signifies.²

Verbal stems also are increased by adding *-ōse*, *-ede*, or *-ale*, of unknown signification (see 137). Perhaps *-ōse* expresses a sense of outgo or accomplishment, and so has affinity for the past; ³ *g'āne* or *g'ānele* means to buy, and *g'ānōse* to sell.

134. The conjunctions are subjoined to the verb as the postpositions to the noun. The element *-ā* subjoined to a verb, with *i* or *e* intervening, makes it the object of a relation.⁴ And more definite elements expressive of special relations may be subjoined to verbs as referring to them, and these elements may have the endings *-u* or *-ni* to represent pronominally the governing member of the relation.⁵

There are two particles, *tā* and *ken*, which are used in the conjunctive sense of that, or in order that, and precede the dependent clause. Now *tā* is used also as a relative pronoun, referring therefore to what has gone before; and *ken* may be of a similar nature. So that both of them in their conjunctive use may refer to the antecedent clause to bring it into relation with the consequent clause, to which the truly conjunctive elements of relation are subjoined.⁶

135. The facility with which such elements as plurality, and the mere abstract relation of direct object, can be detached and thought separately from the stem of the substantive (127, 128), and the present and aorist persons from the stem of the verb (132) give the language a certain fragmentary character, for these elements seem to be thought as fine fragments. Connected elements also, as in some of the negro languages (II. 2) readily coalesce, and especially the remarkable predominance of the verb causes it to gather to itself the various modifications of fact.

The structure of Nubian expression may be illustrated by the following examples:—(1.) ^{give 2d pl.} *Tir·ana Gaisarkā Gaisar·ni·gā*, ^{God} *nōr·kā nōr·ni·gā*, give to Cæsar the things which are Cæsar's, and to God the things which are God's; ⁷ *tir* is the dative element to the second or third person; *kā* is the objective postposition *gā* hardened by *r*; *ni* is a strong genitive element (128). (2.) ^{disciples} *Talāmūdī* ^{around} *hawwalēn* him by him obj. surround verb. part. ^{sit pl. obj.} *tan·na*, ^{look obj. part.} *tak·kā halleg·ad·a* ^{again say} *agi·ku·gā* ^{aor. 3d sing.} *nag·g'·a wīd i·g'*

on, looking round on the disciples sitting about him he said again; ⁸ *talāmūdī* is followed by four appositions, the last of them, *agiku·ga*, having the plural element and the objective postposition; *tanna* = *tar·la*, *la* being postposition of place; *takkā* = *targā*; *-ad-* is verbal (133); *-a* participial (132); *nag·g'·a* = *nal·g'·a*, participle of *nale*, with plural object *g* (131). (3.)

¹ Lepsius, pp. 152, 153.² Ibid. p. 154.³ Ibid. p. 157.⁴ Ibid. pp. 140, 144, 163.⁵ Ibid. p. 159-164.⁶ Ibid. pp. 159, 192, 193.⁷ Ibid. p. 36.⁸ Ibid. p. 38.

know perf. neg. verb. 3d pl. what obj. him return caus. dat. 3d pers. 1st pl. obj.
Irbi:kum · min · nan min·gā tak·kā wīd·kir · tēr · u · gā,
 they knew not what we answer to him;¹ the verb *wīdkirtēru*

qualifies *min* and takes the objective postposition. (4.) *īg'a · tig'g' · say dat. 3d pl.*
 aor. 3d sing. good ness how much obj. him gen. for do dat. 3d sing.
on mas·kennē min · kelli · g Jesu ta · n · dorro āw'a · tik ·
 perf. 3d sing.

ken · ō, he told how much good Jesus had done for him; ² the verb subjoins *-a* to the stem before the incorporation of dative object (131); *tig'g'* is euphonic for *tirg'*, plural of *tir*; *tik* is euphonic for ^I

tir before *ken*; *ō* is the interrogative third singular aorist. (5.) *Āi*
 come aor. 1st sing. call dat. 3d pl. fut. infin. to repent 3d pl. to

ki · s tag'a · tig'g' · all · e · iā tub · ana · iā, I came for
 after (adv.) me gen.

the purpose of calling them that they repent.³ (6.) *Abag a'n ·*
 by come obj. 2d pl. imper. I will you man pl. gen. fisher caus. pl. obj.
na kaḡ' · g' · an ai fa uk·kā adem·ir' · n saiād'a · kaḡ' · g' ·
 1st pers. that

ir · ēnī, follow me, and I shall make you fishers of men; ⁴ *na* is euphonic for *la*, *kaḡ'g'* for *karḡ'*; *g'* is the plural object taken by intransitive verbs thought as reflexive; *fa* (see 130); *ukkā* for *urgā*; *gā* the objective postposition; *ēnī* conjunction subjoined. (7.)

wilderness in baptize pl. obj. part. be aor. 3d sing. preach
Juhanna falē · lā gatis · ō · g' · a · men · on ā · ders
 aor. 3d sing. baptism from repent pl. obj. they that sin pl. forgive pass.
on getas'i · Hon tub · ō · g' · ana · iā semb · i gaḡri · takk
 3d pl. that

ana · iā, John was baptizing in the wilderness, preaching that they should repent from baptism (as from a starting-point) that sins be forgiven; *ō* is the strengthening element *osē* (133) which drops *s* before *g'*; *ā-* expresses duration; *tube* is an intransitive or reflexive verb which requires the plural object *g'*: *ana* is given by Lepsius for second plural imperative, but translated by him as third plural.⁵

BAREA.

136. The Barea language is spoken in a part of the northern highland of Abyssinia. Its consonants are *k, g, ḡ, t, d, b, h, y, s, s, θ, w, f, l, r, n, n, m*; its vowels, *a, e, e, i, o, g, u, u*. Letters are interchanged without apparent euphonic occasion, as if the utterance were careless.⁶

137. The language shows in its so-called auxiliary verbs a degree of fragmentariness or comminution of expression which may be compared to that of Egyptian and Nubian. For these are used as formatives of tense, or of participle, or as mere increments of the verbal stem; and also they occur as independent verbs meaning to be or to have. In both uses they express similar thoughts of realisation, and in each use the associations of the other use must cling to them, making them both fine and detached (58). They are—*de, ne, ge, si*; ⁷

¹ Lepsius, p. 38.

² Ibid. p. 110.

³ Ibid. p. 140.

⁴ Ibid. p. 160.

⁵ Ibid. p. 201.

⁶ Reinisch, Barea Sprache, p. 19–26.

⁷ Ibid. pp. 53, 54.

de when separate means to have, but it is also, as *te*, the formative of the perfect, and is used too as a mere increment of verbal stems; e.g.,

wo, to be; *wode*, to be (see 133); so also *ne*, *ag ne mede 'go*, I am cursing; ^{I am curse part.} *yi n · u*, this is it; ^{this 3d pers.} *le n · u*, it is good; ^{good 3d pers.} there seems to be here a pronominal element in *ne*, and accordingly it seems to take the

consonant of the plural in *yi'gu ge*, these are it, or it is these; but, on the other hand, it only increases a verbal stem in *wone*, to come, from *wo*, to come;² as *ge* also does in *allege*, to go, from *alle*, to go; *si* is the formative of the passive participle, and might be taken as such in

tyb mete si, he is cursed; ^{he curse} but in *o'gi le is*, he is better than I, it is a separate verb. ^{me by good}

The meanings which these particles have when used separately indicate that when used as increments of verbal stems they are probably expressive of the process of being or doing; *de* expressing the completion of that process as thought in the subject, *si* expressing it rather as thought in the object (see 133).

From these particles, and from the pronominal elements which form the bases of *yi*, this; *te*, that; *na*, who? *emle'ha*, what? and *k*, *g*, the base of the relative pronoun, spring a large number of suffixes used in the formation of verbs and nouns from the roots of the language. The noun has no distinction of gender, and even that of sex is often omitted.

138. Substantives make their plural in *-ta*, *-ka*, or *-a*.³ They have no case-ending for either genitive or accusative, putting both before what governs them; sometimes the genitive is represented in connection with its governor by a possessive pronoun.⁴ The other relations are expressed by postpositions, of which many partake of the nature of nouns; and which, when the object is a personal pronoun, are often thought, as in Egyptian, as a part of a person's body.⁵

The adjective follows its substantive, is often formed by a relative suffix *ko*, *go*, &c., or a verbal suffix *si*, and inserts its plural element *ta* or *te* before the suffix.⁶ There is no adjectival expression of degrees of comparison.⁷

139. The personal pronouns are—in the nominative, *aj*, *ena*, *tobb*; ^{singular} _{1 2 3} *heiga*, *enane*, *toba*; in the genitive and objective, *o*, *ena*, *te*; ^{singular} _{1 2 3} ^{plural} _{1 2 3} *he*, *eno*, *teba*.⁸

¹ Reinisch, p. 57.

² Ibid. pp. 37, 38.

³ Ibid. p. 40.

⁴ Ibid. p. 58.

⁵ Ibid. p. 47.

⁶ Ibid. p. 46.

⁷ Ibid. p. 32-36.

⁸ Ibid. p. 39.

The plural-ending of the demonstrative pronouns is *-gu*.¹

140. There is no distinction in Barea between nominal and simple verbal stems.² But the latter may take *-ei* to express a passive,³ or *-gis* for a causative;⁴ which last may be applied also as causative to nominal stems. To these or to the simple stem may be attached, *-ter*, *-der*, to express a durative tense; *-de*, *-te*, for a past; *-arte*, for a conditional.

The person-endings for the different tenses are as follows:—

	SINGULAR.				PLURAL.				
	Aor. pres.	Dura. Past and condi.	Future.		Aor. pres.	Dura. Past and condi.	Future.		
(1.)	<i>e</i>	<i>i</i>	<i>e</i>	<i>ge, ga</i>	(1.)	<i>k.</i>	<i>k</i>	<i>go</i>	<i>ga</i>
(2.)	<i>e</i>	<i>a</i>	<i>a</i>	<i>ña</i>	(2.)	<i>ge</i>	<i>ko</i>	<i>go</i>	<i>ña</i>
(3.)	<i>o</i>	<i>u</i>	<i>o</i>	<i>ña</i>	(3.)	<i>i</i>	<i>i</i>	<i>ko, go</i>	<i>ña</i>

The second person singular imperative passive is *-h*.

The aorist expresses the momentary occurrence without reference to its position in time.⁵

There are also verbal formations having postpositional elements subjoined to express facts as in relation with or governed by other facts. The principal of these elements is *g*, which in the postpositions *go* and *gi* expresses juxtaposition, and which when subjoined to a verb may express a co-existing condition, or in the form *ga* may express a contemporaneous fact with sense of relation or transition of thought to it as such, being sometimes strengthened with *-s*, which is probably akin to *si*, in. Before all these the first person singular and plural is *e*, and the second and third singular and plural are *en*, the subjectivity being less distinct. There is a future postposition *guto* or *geto* akin to the above future persons, but which is not attached to an element of person but generally to a nominal ending *n*, which is joined to the verbal stem.

The suffix *-ma*, *-am*, or *-em* is cohortative or imperative. The present and future are negated by *ka*, the other parts by *ma*, both preceding the verb.⁶ An active participle is formed by *-ko*, *-no*, *-mo*, *-kono*; a passive by *-si*, *-ei'no*, *ei'go*; and an abstract verbal noun by *-do*.⁷

I curse 1st pers. subj. after fly past 3d sing.
 141. For examples: (1.) *ag med · e · li dawiti for · t · o,*
 mock 3d pers. subj. after robe him off take
 after I cursed he fled.⁸ (2.) *Bes · in · g dawiti kute te go hin'*
 past 3d pl. self his clothes make 3d pl. past bind fut. suff. lead past 3d pl.
di · go konin te kute ai · ko hadi · n · guto dal · li · go, after
 they mocked him they took the robe off him, put his own clothes on
 I to-day night marry pass. past 1st pers.
 him, led him to crucify him.⁹ (3.) *Ag enton kisne leb · ei · t · e ·*
 subj. I son pl. bear past 1st sing. subj. great abstr. till wait 2d pl.
gas ag dawde tel · l · e · gas deb · an sigi't denge · ga, if I should
 be married to-night, and should bear sons, would ye wait till they
 were grown;¹⁰ *deban* is abstract noun, full growth; *sigi* is a sub-

¹ Reinisch, p. 48.

² Ibid. p. 51.

³ Ibid. p. 55.

⁴ Ibid. p. 56.

⁵ Ibid. p. 57-69.

⁶ Ibid. p. 52.

⁷ Ibid. pp. 69, 70.

⁸ Ibid. p. 65.

⁹ Ibid. pp. 65, 83.

¹⁰ Ibid. p. 66.

stantive which means worth or quantity, *ti* or *t* means^{so} into. (4.) *Menni* be past 3d pers. subju. her son pl. wife with arise past 3d sing. her home return to
ei · t · in · gas te da · de ula alke nes · s · o te loy fin · un ·
geto, when it was so she arose with her sons' wives to return home¹
maiden handsome adj. suff. loc. come past adj. suff.
 (see 140). (5.) *Dongode haki · ko Keren gi o · to · gu*
who is it
name · n, the handsome maiden who came from Keren, who is she?²
maiden handsome adj. suff. see past 2d sing. adj. suff. who is it
 (6.) *Dongode haki · ko ti · t · u · ko nanen*, who is the
 handsome maiden whom thou hast seen?³

DINKA.

142. The Dinka inhabit both banks of the Bahr-el-Abiad, or White Nile, and those of its numerous tributaries. From the twelfth degree of north latitude to the ninth they dwell on the eastern bank; from thence to the fifth almost exclusively on the western bank of the river. In the north they reach the thirty-third degree of east longitude; in the middle, about 9° north latitude, they reach the twenty-sixth degree of east longitude. They are an intelligent people, apt to learn, who practise agriculture, but whose principal wealth consists in herds of cattle.⁴

143. The Dinka consonants are *k, g, t, t', d, p, p', b, h, ç, y, v, l, r, ñ, z, n, m*; the vowels are *a, o, e, i, o, o, u*.⁵

In the Dinka language a root may often be used without change as verb, substantive, adjective, or preposition.⁶

144. The noun may take a demonstrative suffix, *-e* singular, *-ke* plural, for a definite article, but this is little used, and for the most part only north of Sobat; and there is an indefinite article *tok*, one, also suffixed to the noun.⁷

The substantive has no grammatical gender;⁸ it forms its plural by internal change, for which no general rule can be given, and not a few substantives are the same in singular and in plural.⁹

The relations of case are generally expressed by prepositions, except the accusative, which takes no element of relation, and the genitive, which, instead of a preposition, may take before it the pronominal elements *e, de, ke, kede, ken, kene* to represent the substantive which governs it, or may follow that substantive immediately. The genitive always follows its governing noun, but generally requires a pronominal element to intervene. The accusative follows the governing verb when this is in the present or imperative, but precedes it in the future and the perfect as well as in negation. The nominative generally begins the sentence, the dative follows the verb.¹⁰

145. The adjective follows its substantive, and when the sub-

¹ Reinisch, pp. 66, 85.² Ibid. p. 72.³ Ibid. p. 69.⁴ Mitterrutzner, Dinka Sprache, p. vii.-ix.⁵ Ibid. p. 3-9.⁶ Mitterrutzner, Bari Sprache, p. 16.⁷ Mitterrutzner, Dinka Sprache, p. 13.⁸ Ibid. p. 14.⁹ Ibid. p. 15.¹⁰ Ibid. pp. 16, 17.

stantive ends in *d* or *t*, and the adjective begins with *d* or *t*, *a* is sometimes prefixed for euphony to the adjective.¹

There is no adjectival expression of degrees of comparison.

Abstract nouns of quality are formed from adjectives by prefixing to them the pronominal element *ke*.²

If the final letter of a substantive be a mute consonant, it is changed into the corresponding nasal when it occurs in the singular number before the pronominal element *e*, before any pronominal suffix, or before an adjective or the indefinite article *tok*. To this rule, however, there are a few exceptions; and there are several substantives ending in a vowel which take a nasal on the same occasions.³ The nasal seems to be a phonetic element wherein utterance may pass with continuity to what follows.

singular.			plural.		
1	2	3	1	2	3

146. The personal pronouns are $\check{x}\bar{e}n$, *yin*, *yen*, $\check{x}\bar{o}g$, *uék*, *kék*; or shortened $\check{x}a$, *yi*, *ye*, $\check{x}o$, *ue*, *ke*. The reflexive element is *rot*. When possessive the personal pronouns are suffixed, with *d* before them to represent a singular noun, and *k* for a plural, *-d'ia*, *-d'u*, *-d'e*, *-d'a*, *-d'ün*, *-d'en*, *-t'ia* (*k'ia*), *-k'u*, *-k'e* *-k'ua* *-k'ün*, *-k'en*. To substantives denoting parts of the body, the short forms of the personal pronouns are generally prefixed as possessives. Separate possessive pronouns are formed by prefixing the demonstrative element *ke* to the *d*- suffixes to agree with a singular substantive, and *ka* to the *-k* suffixes for a plural.

The substantives denoting father, mother, sister, brother, and friend, unite in the singular number with the suffixes of the singular pronouns without *d*.

The demonstrative pronouns are *kan* this, *kak* these, or when suffixed to a substantive *-e* or *-de* this, *-ke* these; also *kene* or *ken* that, *kaka* or *kak* those, and the compounds, *yenkan* this, *kekak* these, *ketúy* that, *kakúy* those.

The relative pronoun is supplied by *e*, *ye*, *ke*, sometimes but seldom in the plural *ka* and *ai*.

The interrogative pronoun is *ia*, *iu*, or *-o*; the indefinite *eben*, *tok*, *neh*.⁴

147. The verbal element *a* asserts, and is used as copula before a predicative adjective, being sometimes changed to *e*,⁵ it is, however, also used for present participle without assertion.⁶

There are only three tenses, the present, the past, and the future. The element of the past is *ti*, that of the future *bi*, they both have *a* prefixed, and precede the verbal stem; and with both the verbal stem is apt to suffer the same change, which is either a change of quantity, a change of the vowel, or a contraction. The present is the verbal root preceded by *a*, which, however, is often omitted, as it is also often with the past.⁷

¹ Mitterrutzner, p. 18.

² Ibid. p. 19.

³ Ibid. pp. 10, 11.

⁴ Ibid. p. 21-29.

⁵ Ibid. p. 18.

⁶ Ibid. p. 37.

⁷ Ibid. p. 30.

what past 2d pl. do we past fear our all for it sickness bring and death
ni t̄ · ak loy? χ̄ōg aṭi ryot χ̄ōwḍia ké yen d̄'uaḡ behi ko t̄ou,
 but chief great pl. our past them assemble with priest pl. our and past cattle killed
lone bayn'did · k'ua aṭi k̄e it̄ kuot keke tit̄ · k'ua ko t̄i χok nok e
 devil and devil past pass. appease
d̄'ok, ko d̄'ok aṭi d̄or, the day that you saw the star that had a
 long tail, what did you say, and what did you do? we feared all of
 us, for it brings sickness and death, but our chiefs assembled them-
 selves with our priests and killed cattle for the devil, and the devil
 was appeased;¹ *t̄i* after *akol* is the element of the past without the
 verbal prefix *a*, it connects the past fact with *akol* as a participle agree-
 ing with it, that fact, viz., *w̄k tin̄*, having no other verbal element; *a*
noñ is participial; *tin̄* is the form which the verb *tyeñ*, to see, takes in
 the past and in the future; *ké* seems to reduce the following verb to a
 noun, for it has no verbal element; in *-kua*, *k* is a plural demonstrative
 element; *kuot it̄* is given in the dictionary as meaning to put together,
kuot means much, and *it̄* within; *aṭi k̄e it̄ kuot* is translated *versam-*
melten sich; *χok* is the plural of *χuen*; *nok* is the past and future
 stem altered from *nak*; *e* is a demonstrative element serving for a
 preposition as in Egyptian (110); *d̄or* is the altered stem from *dor*.

B A R I.

151. South of the Dinka, on each side of the Bahr-el-Abiad, from 6° 5' to 3° 35' N. lat., and from 31° 10' to 32° 37' E. long., dwell the Bari, a vigorous and handsome race. They live a patriarchal life, not as nomads, but in fixed habitations in villages, without hereditary or elected governors, the man of largest possessions, especially in cattle, being their chief. What strikes a stranger most is their populousness, for they have none of that shyness and timidity which cause the Dinka to withdraw hastily from strangers, but, on the contrary, the Bari flock all together to see them.²

Their language has the following consonants—*k, g, t̄, d̄, t, d, p, b, y, w, f, r, l, ñ, n, m*; the vowels are *a, o, e, i, o, u*.³

152. It is remarkable as being one of those languages which distinguish gender in nouns. Every substantive in the language is thought as masculine or as feminine, and is referred to accordingly by distinct pronominal elements; though some nouns, like personal nouns which are applicable to both sexes, may sometimes be thought as masculine and sometimes as feminine.⁴ Abstract verbal nouns are formed by *-et*, and nouns of agent by *-nit* with the prefix *ka-* which seems to express junction; *-nit* is pronominal, and probably also *-et*.⁵

Many substantives have no distinction of number. Some form a plural by subjoining a vowel, others by subjoining a vowel followed by *n*, others by subjoining a vowel preceded by *l*, others by subjoining a vowel followed by *n* and preceded by *l*, others by subjoining

¹ Mitterrutzner, p. 56.

² Mitterrutzner, Bari Sprache, pp. ix. xii. xiii. xvi.

³ Ibid. p. 1-6.

⁴ Ibid. p. 62, 63.

⁵ Ibid. p. 19, 21.

one of the following syllables, *at*, *et*, *ot*, *d'i*, *d'in*, *ki*, *kin*. Others have a final syllable in the singular, apparently pronominal, which they drop in the plural. Others form a plural by internal change, or use that of another stem.¹

The genitive, which always follows its governing noun, takes before it a demonstrative element to represent that noun, *lo* if it be masculine, *na* for feminine, *ti* for plural of either gender. The accusative and dative have no expression of their relations, but are the same as the nominative.²

153. There are not many primitive adjectives; the greater number are formed by prefixing to a root the pronoun *lo*, masculine; *na*, feminine; or prefixing to a substantive the preposition *ko*, with; verbal stems also are used as adjectives.

Some primitive adjectives, and some even of those which are formed with *lo* and *na*, have plurals. There is no adjectival expression of degrees of comparison.³

singular.			plural.		
1	2	3	1	2	3

154. The personal pronouns are *nan*, *do*, *ne*, *yi*, *ta*, *t'e*; and these may be either subject or object direct or indirect.⁴ It is remarkable that there is no distinction of gender in the personal pronouns.

The possessive suffixes are, to a singular noun, according to its gender—

singular.		
1	2	3
-lio masc.,	-nio fem.;	-ilot m.,
	-inot f.;	-lonet m.,
		-nanet f.
plural.		
1	2	3
-likañ m.,	-nikañ f.;	-lot'u m.,
	-nat'u f.;	-lot'e m.,
		-nat'e f.

To a plural noun they are—

singular.		
1	2	3
-kwe m. f.;	-kulok m.,	-kunok f.;
		-kanet m. f.
plural.		
1	2	3
-kañ m. f.;	-kat'u m. f.;	-kat'e m. f. ⁵

The possessive elements, subject to euphonic change, are used also with some prepositions.⁶

The simple demonstrative pronouns are *lo* m., *na* f., this; *t'ilo* m., *t'ine* f., these; *lu* m., *nu* f., that; *t'ilu* m., *t'inu* f., those. These are strengthened by *nie*- here, prefixed to the singular *lo na*, or *ni* here, suffixed to the plural *t'ilo*, *t'ine*; or by *-yu* there, suffixed to *lu nu*, *t'ilu*, *t'inu*; or by *ni* same, prefixed to *lu nu*.⁷

The relative pronoun is supplied by the demonstrative.⁸

¹ Mitterrutzner, p. 64-70.

² Ibid. pp. 71, 72.

³ Ibid. p. 73-77.

⁴ Ibid. p. 23.

⁵ Ibid. p. 26.

⁶ Ibid. p. 24.

⁷ Ibid. pp. 28, 29.

⁸ Ibid. p. 30.

The interrogative pronouns are *ña* singular, *koña* plural, without distinction of gender, meaning who? *ñalo* m., *ñana* f., singular, *koñalo* m., *koñana* f., plural, meaning which? *ñyo* what? and *lon* m., *nan* f., singular, *kulon* m., *kunon* f., plural, meaning what kind? the last *n* being an abbreviation of *ña*.¹ The indefinite pronoun is *io*, and *an* prefixed to pronominal elements makes them negative.²

155. In the Bari language, verbal stems are often formed from roots by reduplication; but there is also in it a great tendency to form verbal stems by subjoining either to the root either a simple vowel, or a vowel followed by *n*, or a vowel preceded by *d*, *d'*, or *y*, or the syllables *ri*, *ro*, *ba*, *bu*, *du*.³ These elements seem to express the process of being or doing which is proper to the root, for when the root may be used as a verbal stem by itself as well as with one of these increments, its durative tense, which expresses the thought of it as going on, may be expressed by the lengthened form.⁴ Some verbal stems are formed with two of these increments subjoined to a root.⁵ Transitive stems are formed from intransitive, or causative from transitive by prefixing *to-*, sometimes *tu-*, and a verbal stem may subjoin *-kin* to represent an indirect object.⁶

The only tenses possessed by the Bari verb are a durative or non-completed tense, which may be either present or future, and a completed tense, which may be present or past. The durative tense is formed usually by reduplication. The future may be more distinctly expressed by putting *de*, which means later, before the durative tense, or *molu*, of similar meaning, after it. The completed tense is formed always by the verbal stem with *a* prefixed,⁷ which is not properly an element of tense, but a simple verbal element of realised fact used also as copula before a predicate⁸ (147). The verb has no element of person.

There is a durative negative *ti* and a negative of the completed *ko*, both which precede the verb, the reduplication of the durative being dropped after *ti*, and the *a-* of the completed being taken by *ko*.⁹

The imperative second singular ends in an accented *e*, *i*, *ne*, or *ni*, and to this *-ta* is added in the second plural. The expression is sometimes strengthened by subjoining to the imperative the verbal stem, sometimes by reduplication.¹⁰ The *e* or *i* is sometimes added to the verbal stem, a final medial of monosyllabic stem being changed to tenuis before *e*, final *g* doubled before *i*.¹¹ Sometimes the final vowel of the stem is changed into the imperative vowel; sometimes a final *n* is dropped, and the preceding vowel accented or changed to *e*. The formation seems to depend partly on euphony, but probably more on an expressiveness suited to that of the verbal stem.

The negative imperative is expressed by *ko* or *ku* prefixed to the verbal stem, with addition of *ta* suffixed to the stem in the plural.¹²

The same that has been said of the variety of imperative formations

¹ Miterrutzner, p. 31-33.

⁴ Ibid. p. 36.

⁷ Ibid. pp. 36, 37.

¹⁰ Ibid. p. 40.

² Ibid. p. 34.

⁴ Ibid. p. 21.

⁸ Ibid. p. 21.

¹¹ Ibid. p. 39-48.

³ Ibid. p. 18-20.

⁶ Ibid. pp. 20, 22.]

⁹ Ibid. p. 38.

¹² Ibid. p. 48.

as euphonic or expressive may be said of the passive form which all transitive verbs may assume to express the ordinary passive meaning, and which most reflexive verbs have also. This form always ends in a vowel, oftener in *a* than in any other, and has a tendency to soften the termination of the verbal stem. Sometimes, if the stem has an increment subjoined to a root, the increment is dropped, and the passive is formed on the root.¹

The verbal stem tends to be reduplicated in the infinitive active.²

156. Prepositions properly so called are very few,³ and the same may be said of conjunctions, so that the language takes little note of relations. At the same time a tendency may be observed to combine the elements of fact as if the interest lay in the combination so as to a certain degree to merge the parts in the whole. This appears in the imperfect distinction of the words in utterance; for, though every syllable is clearly spoken, many words of one, two, or more syllables have no accent. And when a final syllable is accented, it is not felt as distinguishing the word, but rather has the effect of taking up into the word as an enclitic a following monosyllable or disyllable, if the first syllable of the latter is not long and the second not accented. Moreover, the article *lo, na, ti*, and some other monosyllables, as the prepositions *ko, i*, as well as many words of two or more syllables, which properly have no accent, take an accent in order to annex a following monosyllable or disyllable such as has been mentioned.⁴

157. The usual arrangement of the sentence is subject, verb, indirect object, direct object.⁵ The genitive follows its governing noun,⁶ the adjective and adverb generally follow what they qualify, and the prepositions precede what they govern. A demonstrative pronoun in connection with a substantive generally precedes it if it be subject of a proposition, but if it be not subject, or if it be subject of a dependent clause, the substantive may be followed by the demonstrative pronoun.⁷

158. In respect of the fragmentary character, Bari is similar to the other Nilotic languages, as appears from the separateness with which the verbal element *a* may be used; for, as in those other languages, this element is a pure abstract verbal element (155) which may belong to any kind of verb as an untranslatable constituent of it; and yet, though it be so fine, it can be thought independently, so as to be uttered separately.⁸

But there is no prevalence of disyllabic roots (see 122).

159. The following is the beginning of a Bari fable:— maiden with
det kú
 mother with father art. 3d poss. live in house same mother go away
note kú mone · ló · net améd · da i mede nánu note a'í'óló,
 3d per. pr. sing. say to child woman look well to thy father but
ne a'í'ambú ko iuro'nakwan met'é bura kó muñi. Amá
 maiden not look well father be with hunger when mother return father
det a'kó met burá, mone gwón ko magor. Na note a' yítue mone

¹ Mitterrutzner, p. 51-58.

² Ibid. p. 59.

³ Ibid. p. 89.

⁴ Ibid. p. 7-9.

⁵ Ibid. pp. 24, 71, 72.

⁶ Ibid. p. 62.

⁷ Ibid. p. 29.

⁸ Ibid. p. 21.

become thin now mother hunt maiden in forest with basket large
a·gwé a·lól'ok, f'unána ñote a·ríkgrq det i yobu kó kupo duma
 to seek tamarinds 3d pers. pr. come to tree large this tree
anan doya kiténi. ñe a·pó i kqdiní duma. Níe'lo kqdiní
 beasts but beasts walk maiden fill basket with fruits
lo·kúl'akua ama kúl'akua a·walúl'i. det atod'óre kupq ko konén
 tree afterwards return beasts evening they find maiden there in
ti·kqdiní. Ede a·yítue kúl'akua kótan, t'e a·ríe det ñyú i
 tree above they rejoice much with be they hope flesh get
kqdiní ki. t'e a·lìqñon parlk ko·gwón t'e a·yen lókore wuwúl'u
 with they eat maiden this
kó t'e ko·kó det níena. A maiden lived with her mother and her
 father in the same house. The mother went away, and said to her
 daughter, Look well to thy father. But the maiden did not look well
 to him; the father suffered hunger. When the mother returned the
 father had become thin. Then the mother and the maiden hunted in
 the forest with a large basket to seek tamarinds. She came to a
 large tree. This tree belonged to the beasts; but the beasts had
 gone. The maiden filled the basket with the fruits of the tree.
 Afterwards the beasts came back in the evening; they found the
 maiden still up in the tree. They rejoiced much, because they hoped
 to get flesh when they would eat this maiden.¹ *Monélonet* (see 154);
amed'la, a is the expression of the completed (155); *da* is the incre-
 ment added to the root *med* to form the verbal stem (155); *nunu, nu*
 is the feminine demonstrative agreeing with *mede, nie* meaning here
 strengthens it; *meté* is imperative of *met* (155); *nuni* is a special
 form of *mone* which has taken up the second possessive; *lól'ok* is an
 adjective agreeing with a masculine noun; if feminine, it would be
natok (153); *a* probably participial completion; *kiténi* is plural of
kité; *lokid'akua* genitive (152); *kúl'akua* is plural of *kid'akútat*;
konen is plural of *koie*; *wuwúl'u* is infinitive of *wuúl'u* (155).

G A L L A.

160. The great race of the Gallas has overrun some of the finest parts of Abyssinia, and they dwell also to the south of it, so as to extend from the eighth degree of north latitude to the third degree of south latitude, numbering from six to eight millions.² "They occupy vast and noble plains, which are verdant almost all the year round, and afford nourishment to immense herds of cattle."³ "In the neighbourhood of Abyssinia they are tillers of the soil as well as breeders of cattle; while their brethren under the equator are merely pastoral, and lead a nomadic life."³ "They are great talkers, and for hours together they can make speeches with an expression and play of gesture which are very amusing to a European."⁴ And "they are distinguished from all other East Africans by intellectual capacity and teachableness, so that they are much sought after by the slave-dealers."⁵

¹ *Miterrutzner*, p. 10.² *Krapf's Travels*, p. 72.³ *Ibid.* p. 75.⁴ *Ibid.* p. 76.⁵ *Ibid.* p. 74.

161. The consonants of the Galla language, as well as they can be made out, are : *k, g, k', g', t, t', d, d', t, d, b, h, y, s, z, s, z, w, f, r, l, n, n, m*. The vowels are *a, e, i, o, u*, long and short. "The decided propensity of the Galla language to vowels is so great that not a single word ends in a consonant, that no word begins with two consonants, and that a concurrence of three consonants is avoided." Tenues also are rare, and medials frequent, so that the language is very soft; *h* can only begin a word. Tutschek speaks also of an entirely breathless *t*, and suggests an analogy to the Amharic *t*-consonants (see V. 141).¹

162. The Galla language has no article. The stem of the verb may generally be used as a substantive; but sometimes in becoming a substantive it changes final *a* to *o*. Substantives denoting the agent change the final *a* of the verbal stem to *tu*, with euphonic change.²

Substantives form a plural in *-oda*, sometimes in *-ni*, but the plural number is very seldom used, plurality being thought rather as a collective substantive and expressed by a singular noun. Such nouns may take *-t'a* to limit them to a single individual. Gender is distinguished as masculine or feminine. Collective nouns are thought as feminine; and even plural nouns are nearly always considered as feminine, and take the verb in the feminine singular.³ If the stem of the noun ends in *e, i, o, u*, it takes *-n* in the nominative; if it ends in *a* it takes *-n*, or changes *a* to *i* or *ni*, the latter causing or suffering euphonic change.⁴ The instrumental also takes *-ni* or *n*;⁵ and *-n* stands, too, for concerning, and for along with.⁶ This affix is probably in all these cases pronominal, representing the act or state in connection with the subject or the instrument, &c. There is no expression for the relation to the direct object, or to the genitive; and the other relations are expressed by postpositions, of which and of conjunctions there are very few. Sometimes a pronominal connective *n* is subjoined to a postposition to represent the act or state

expressed by the governing verb as involved in the relation, as *ini* ^{he} mother his to ^{said} *ni* I alone my by ^{be} *hag'a · za · ti · n d'eg'e*, he said to his mother,⁷ *ani koba'koti'n taa* I am alone (by my 'lone.)⁸ Sometimes it is subjoined to a conjunction or a direct object to represent the fact in correlation with these, ^{if} ^I ^{thee} ^{spare} *as hon'ani zi · n g'izu*, if I spare thee.⁹

163. The adjectives are either verbal or nominal stems used adjectively;⁹ and when predicates, they take *-g'a* for copula;¹⁰ they may also be used as adverbs.¹¹

The adjective follows its substantive, and agrees with it in gender and number, taking *-tu* or *-ti*, or changing *-a* to *-o*, for feminine; and taking *-oda* or *-i* with euphonic change, or reduplicating or altering the root, for plural. Many adjectives have but one form for both

¹ Tutschek's Grammar, p. 1-9.² Ibid. sects. 177, 178.³ Ibid. sects. 179-182.⁴ Ibid. sect. 184.⁵ Ibid. sect. 189.⁶ Tutschek's Dictionary, p. 176.⁷ Tutschek's Grammar, sect. 191.⁸ Tutschek's Dictionary, p. 175, takes *n* for part of first personal pronoun.⁹ Tutschek's Grammar, sect. 192.¹⁰ Ibid. sect. 195.¹¹ Ibid. sect. 194.

genders. The postposition follows the adjective or the possessive pronoun (see above). There is no adjectival expression of degrees of comparison.¹

164. The personal pronouns are : *ani, na, ati, zi, ini, iza, izin, izi* ;
 I 2 3
 plural both subject and object, *nu, izin, izan*.²

The formative of the agent, *-tu* (162), may be subjoined to the objective forms of the personal pronouns, and form a noun which expresses the person emphatically though regarded itself as of the third person.³

The possessive suffixes are : *-ko, -ke, -za, -zi, -kena, -kezani, -zani*. Sometimes the postposition *ti*, meaning to or belonging to, is added to the suffixes to express possession. They are affixed to some nouns which are used as elements of relation governing them, as *gara*, part ; part my
gara'ko, to me.⁴

The demonstrative pronouns are *kana, -ana*, this, in the nominative *kuni* ; *zana*, that, in the nominative *zuni* ; they are the same for both genders and numbers.⁵ An emphatic demonstrative is expressed by *kan* following the third personal pronoun.⁶

165. The Galla verb is remarkable for its prolific production of causative and middle verbal stems. It is as if the principal interest of fact lay in effects, whether thought as external to the subject or as referring to it. And the verb being thought in its effect, as soon as it became by use a single idea, was ready for a new formation to express a doing or being which should realise that effect. Thus the causative affix *-za*, and the middle *-g'a*, may occur accumulated several times on a root ;⁷ but such accumulation requires that the previous part shall have been reduced by use to a simple thought ; so that these formations cannot be put together at will, but grow naturally out of previous habitual applications. They do not express a large synthesis of thought, but are of the same nature as African derivatives in general, according to the account given of these in Sect. II. 3.

Intensives are formed by reduplication.⁸

A passive may be formed from all transitive verbs by subjoining *-ama*, which, like other affixes, produces euphonic changes. The Gallas, however, prefer speaking in the active.⁹

A formation similar to the passive is that of denominative verbs derived from adjectives. These are formed by adding *-oma* and dropping the final vowel of the adjective or its whole termination, if this be *eza*, as *hieza*, poor ; *hioma*, to become poor.¹⁰

166. The verb has two simple tenses, a present and a not-present, which may be either past or future, and two compound tenses, a perfect and a future, and it has also a subjunctive mood. The endings,

¹ Tutschek's Grammar, sects. 196-200.

³ Ibid. sect. 219.

⁴ Ibid. sects. 225-228.

⁶ Ibid. sect. 246.

⁷ Ibid. sect. 44.

⁹ Ibid. sect. 105.

¹⁰ Ibid. sect. 108.

² Ibid. sect. 218.

⁵ Ibid. sects. 241, 242.

⁸ Ibid. sect. 102.

according to tense, mood, and person, are as follows; ¹ they combine with euphonic change:—

	Present.	Not-pres.	Perfect.	Future.	Subjunc.	Imper.
1st sing.,	-a	-e	-era	-uf'an'dira	-u	...
2d ,,	-ta	-te	-terta	-uf'dirta	-tu	-i, -u
3d ,,	-a	-e	-era	-uf'dira	-u	...
3d ,, fem.,	-ti	-te	-terti	-uf'dirti	-tu	...
1st plural,	-na	-ne	-nerra	-uf'dirra	-nu	...
2d ,,	-tu	-tani	-tani'rtu	-uf'dirtu	-tani	-a
3d ,,	-u	-ani	-ani'ru	-uf'diru	-ani ²	...

The *a* of the first and third singular present involves no element of person, for it is still retained when the verbal stem is used as a noun.³ It expresses a sense of the succession of being or doing, and is reduced to *e* in the not-present, and to *u* in the subjunctive and in the infinitive. In the second and third plural of the not-present and of the subjunctive there seems to be more sense of the individual than in the present, for the plural element is a distinct suffix, *-ni*. This is probably because in the present there is a stronger sense of the common being or doing in which the individual is merged. The future is compounded of the present tense of the verb *dira*, to be, and the particle *uf*, which is akin to *g'ufa*, to come, subjoined to the verbal stem. In the first singular the person *an* is interposed.

The perfect combines with the not-present of the verb, the present of *dira*, its first syllable being dropped. In some dialects this syllable is not dropped, so that the two parts are complete.⁴ There is a remarkable want of unity in this formation which calls to mind the Kafir verb. In Galla the verb is thought so much in the effect, that in the perfect the completion separates from the present affection of the subject.

The subjunctive is used "in nearly all the cases in which this mood is employed in Latin," as well as with the negative *hin*.⁵

The imperative second singular ending is *-i*, which is changed to *-u* in middle verbs.⁶

If the verb end in *-g'a*, this becomes *-ta* in third singular; probably owing to an original *n* of third person, for the same change takes place in nouns before the *n* of the nominative.⁷ In the infinitive *-g'a* becomes *-l'u* instead of *-g'u* before verbs of motion, wish, or fear, and when followed by the negative verbs *dida*, to deny; *g'aba*, to fail; *bag'a*, to omit.⁸ This relaxation of utterance is perhaps due to the closeness of the connection with these verbs.

167. The postposition *ti*, which is used to express a dative relation and sometimes a genitive relation in the sense of belonging to,⁹ is subjoined to the not-present tense to connect it as a participle with that to which it belongs as such;¹⁰ as we might say in English, we

¹ Tutschek's Grammar, sects. 121–124, 135.

³ Ibid. sect. 177.

⁴ Ibid. sect. 140.

⁶ Ibid. sect. 145.

⁷ Ibid. sect. 137.

⁹ Ibid. sect. 186.

¹⁰ Ibid. sect. 154.

² Ibid. sects. 112, 145.

⁵ Ibid. sect. 112.

⁸ Ibid. sect. 150.

on not knowing; for we not knowing. In the first person *ani* is subjoined to *ti*, so that the ending is *-tani*.¹

When the verb is preceded by *hama* until, or *aka* in order that, it becomes subjunctive, and also takes the postposition *-ti*, meaning to.²

When preceded by *oto*, whilst, it is also subjunctive, and takes postposition *-yi* if affirmative; ³ but if the sentence be negative, the verb, when preceded by *oto*, is reduced to its stem and takes *-ni*.⁴

Interrogative verbs in any tense, when affirmative, subjoin *-re*, and when negative, *-mi*.⁵

A perfect participle is formed by subjoining *-nani* to the verbal stem; ⁶ of which, perhaps, *na* expresses completion, and *ni* is pronominal, representing in connection with the participle that to which it belongs.

The verb is sometimes strengthened by prefixing *in-*,⁷ which seems to be a pronominal element to demonstrate the subject. If the subject be first person singular, *ani* is subjoined to *in*.

168. The adverb is usually expressed in Galla by a verb in the not-present, which, with its proper person-ending, precedes the principal verb,⁸ and if the sentence be negative, the principal verb takes the negative. This is a striking instance of want of unity in the verbal expression of fact. Other verbs also are used, with the verbs dependent on them, in their own tense and person following them; ⁹ these are *danda*, to be able; *rawada*, to finish; *beka*, to know; *dağ'aba*, to be weary.

Verbs are negated by prefixing *hin-* with euphonic change; or by connecting the verb in the infinitive with one of the verbs of negative meaning.

The imperative not only prefixes *hin-*, but, at the same time, subjoins *-in*; the not-present prefixes *hin-*, and subjoins *-ne*.

Other parts of speech subjoin the negative *-miti*.¹⁰

169. The general order of the elements of fact is, that the subject precedes what it realises, and the governed word goes before the governing. The genitive, however, follows its governing noun,¹¹ and the adjective follows the noun with which it agrees.¹²

170. There does not appear to be any distinct evidence of a fragmentary character; and there are traces of resemblance to the Syro-Arabian languages, which seem to indicate a Syro-Arabian origin. Yet the structure of the language in other respects is such that it cannot be classed as a Syro-Arabian language, even though the points of difference are for the most part to be found also in Amharic in a less degree.

The plural-ending *-oda* corresponds to Amharic *-ot'*, Ethiopic feminine *-ät*, and Hebrew feminine *-öθ*; and the rarer plural ending *-ni-n*, which is found also in the second and third plural of what corresponds to the Syro-Arabian imperfect, is similar to Arabic *-na*

¹ Tutschek's Grammar, sect. 135.

² Ibid. sect. 116.

³ Ibid. sect. 118.

⁴ Ibid. sect. 119.

⁵ Ibid. sects. 114, 115

⁶ Ibid. sect. 156.

⁷ Ibid. sect. 138.

⁸ Ibid. sects. 171, 172, 193.

⁹ Ibid. sect. 170.

¹⁰ Ibid. sects. 174-176.

¹¹ Ibid. sect. 186.

¹² Ibid. sect. 196.

which is found in the same persons. The conception of the plural as collective and feminine; the element *t* for the feminine adjective; and in the personal pronouns and person-endings *n* of the first person, *t* of the second, *u* for the plural, and *i* for the feminine, are all Syro-Arabian; the strengthening pronominal *-tu* is Ethiopic (V. 132); and the *o* of the possessive suffix first singular may be compared with the *u* of the person-ending first singular of the perfect in Arabic, Ethiopic, and Amharic.

171. Examples: (1.) *Rufa kan durati iza waḥ'in dubaḥ'u* · dem. before in him with speak infin. refuse 3d fem. be afraid part. him behind go away infin. refuse 3d fem.

did · te zoda · nan iza duba mak'ah'u · did · te, Rufa, who would not speak to him before, being afraid, would not now go away from behind him; ¹ *kan* is the demonstrative used as relative; *dubaḥ'u* and *mak'ah'u* are the infinitives of *dubay'a* and *makaj'a* (166), used before the negative verb *didte*, which is the not-present third feminine of *dida* (168); *zodanan*, euphonic for *zodanani*, is perfect participle

do dem. ye like 2d pl. of *zoda* (167). (2.) *Goda kan izin feḡ'tani*, do what you like; ¹ the verb has its person, though the personal pronoun as subject immediately precedes; it is subjunctive, being thought as con-

cattle his dem. remain 3d pl. took went tingent. (3.) *Zufe lon · za kan haf · ani fujaj'e ademe*, Zufe took his cattle, which remained and went; ¹ the verbs are all not-present, unless *hafani* is subjunctive after the relative (166).

youth nom. dem. home be subj. all fem. came (4.) *Daryago · n kan mana dir · u k'ik'um · tu g'uḡe*, the young men who might be at home all came; ¹ *daryago* is a collective noun with the nominative ending *n* (162); *diru* is third person masculine,

but *diru*, feminine, would be equally correct ¹ (162). (5.) *Ini kan* eat subj. not have subj.

naḥ' · u n kub · u, ille quod edat non habet; ¹ *n* is the negative *hin* with *hi* elided euphonically; *hin* is followed by the subjunctive

(166). (6.) *Ibūla ḡ'aka guba fuḡ'e fuḡo hiḡ' · ani · n ira kae* fire pipe up took cord bind 3d pl. pronl. on put cord set on fire broke

fuḡo gubaj'e lite, he took the fire up (out of) the tobacco pipe, put it on the cord with which they had bound him, set on fire the cord, and broke it; ¹ the verbs are all not-present; *n* subjoined to *hiḡ'ani* represents *fuḡo* pronominally, and makes the verb a personal

participle agreeing with *fuḡo*; compare *-nani* (167). (7.) *Dubi ati* speak 2d sing. I not know subj.

dubag' · ta ani m beku, the word thou speakest I do not understand; ¹ here the verb with its person and subject qualifies the noun *dubi* without taking *-n* to represent it; *m* is *hin* with *hi* elided and *n* changed to *m* by *b* the initial of the following word; *hin* is followed by

what for thou kill neg. verb 2d sing. child the subjunctive. (8.) *Mali · f ati aḥ'ezu · did · ta zolia ilma*

¹ Tuttschek's Grammar, sect. 249.

pl. on *sit* subj. dem.

nz'ira tez · u kana, why killest thou not the zolia which sits upon its young; ¹ here the verb which with its object qualifies the noun *zolia* is followed by *kana* to represent that noun; *ad'ezu* is the infinitive of *ad'eza* followed by the present of *dida* to refuse, used as a negative verb; in *ilmanzira z* is inserted euphonicly in the plural

child nom. 3d. pers. sing. fem. forest into enter
 element *ni* (162). (9.) *Hid'ole · n* *izin* *bozonati nak'am'*
 3d. sing. fem. that nom. there in stray 3d. pl. perf.

te zuni ati · ti bag'ani · ru, the children who had entered the forest lost their way in it; ¹ the noun *hid'ole* taken as a collective is thought as feminine, in *izin* she, and in *nak'amte*, yet the principal verb *bag'aniru* is plural; *bag'a* is middle form of *ba* to go, meaning to go without an object; *nak'ama* is from *nak'a* to put in, *-ama* when they mountain red fem. pronl. head

inactive element (165). (10.) *Yomu izan tulu dimtu · n mata'*
 their raise 3d pl. infantry nom. flee 3d fem.

zani bafag'ani lafo · n genzi · te, when they showed themselves upon the red mountain the infantry fled; ² for *-n* supplying the place of a postposition see 162; *bafag'a* is a double derivative from *ba* to go, being the middle formation of *baza* to cause to go (165), in which *z* becomes *f* by the euphonic laws of the language; *lafon*, feminine

collective. (11.) *Mana ini d'eg'eti g'uf · ne*, we came to
 house he spoke to come 1st pl. not-pres.

the house (which) he spoke of. ¹ (12.) *Irge dargago · n kuni*
 man this see 3d sing. fem. to me lead imper.

namit'a kana argi · te · ti na gez · i, lead me to the man whom these young men saw; ¹ so Tutschek translates it, though it seems to mean, lead me to the place where these young men saw this man; the general noun *nama* is limited to an individual by *-t'a* (162); the collective *dargagon* puts verb in the feminine person singular.

KANURI.

172. In Bornou, west of the Lake Tchad, half-way across Africa, south of the Sahara, is spoken the language called the Kanuri. The Kanuri consonants are: *k, g, t', t, d, d', p, b, h, y, s, s, z, w, f, r, l, n, m*; the vowels: *a, á, e, é, e, i, o, o, u*. The vowels affect each other through an intervening consonant as if they were predominant; and there are the diphthongs—*ui, ei, oi, ui, au, ou*. The consonants in concurrence suffer euphonic change to such an extent as to indicate a want of versatility of utterance.³

173. In Kanuri there is no article; but its place is sometimes supplied by the demonstrative suffix *-tè*. The noun is distinguished from the verb, so that the verbal stem is not used as a noun, but requires a prefix to make it such. This prefix for verbal stems which are thought subjectively is *nèm*, and for those which are thought

Tutschek's Grammar, sect. 249.

² Tutschek's Dictionary, p. 127.

³ Külle, Grammar, p. 9-13.

more objectively is *kèn*; the former prefix is used also with nouns and adjectives to form substantives denoting the corresponding abstract attribute; as *nəm'aba*, fatherhood; *nəm'dibī*, badness; it is sometimes reduced to *n-*; *kèn-* is used with the cardinal numbers to form the ordinals. Both prefixes in combining with the stem are attended by euphonic change. They may be used to form abstract substantives from any verbal or nominal stems.¹

The personal element *-ma* may be subjoined to nouns or verbal stems to express the possessor or the agent; or to names of countries to express the native; and this element in the plural becomes *-bū*, as Kafir *um-* becomes *aba-*. The suffix *-mi* seems to be diminutive, it is subjoined to proper names, and means son of. The suffixes *-ri* and *-ram* seem to be akin to the dative *-rō*, and to mean belonging to.²

The plural is generally formed by *-wa*, but is often unexpressed. And there seems to be a trace of the individualising of a collective (162) in *kām* person, compared with *ām* people; *kāmū* woman, *āmūa* or *kāmūa* women; *kēmēndē*, is this year; *mēndē*, a year ago.³

The noun has a nominative ending *-yē*; and postpositions of case, *-be* genitive, *-rō* dative, *-gū* accusative (see Nubian, 128), *-nin* or *-n* locative,⁴ which, however, leave the noun and are subjoined to the adjective or to the suffixed possessive pronoun when the noun is accompanied by these; *yē* is probably pronominal, strengthening the noun, for it is sometimes followed by the postpositions, or attached without these to the direct object.⁵ Four other postpositions are mentioned, *lan* on, which is thought to be the locative of a lost noun *la*; *derī* round, which is the stem of a verb; *naŋga* because of, and *gadi* or *gei* like.⁶

But there is also a particle *wa* which is used as copulative conjunction,⁷ and which as a postposition may be subjoined to a noun, or to the last term of a correlation to connect it with another noun; as

kašāgar musko n'wa, having a sword in the hand. It may also be subjoined to an inflected verb; as *nī yīrē min wa lēnē mi*, thou hast gone weeping, *i.e.*, with weeping.⁸

The supply of conjunctions is scanty, like that of postpositions.

The plural element remains attached to the noun, when this is followed by an adjective; ⁹ the adjective taking no plural; ¹⁰ and when there is no adjective, *-yē* and the postpositions of case follow the plural element.¹¹

The noun has no distinction of gender,¹² nor the adjective of degree of comparison.¹³

singular.			plural.		
1	2	3	1	2	3

174. The personal pronouns are: *wu*, *nī*, *sī*, *andi*, *nandi*, *sandi*. The plurals may be contracted into *ei*, *nei*, *sei*.

¹ Kölle, Grammar, p. 19-22.

⁴ Ibid. p. 24.

⁷ Ibid. p. 146.

¹¹ Ibid. p. 24.

² Ibid. p. 33-36.

⁵ Ibid. pp. 30, 37, 162.

⁹ Ibid. p. 37.

¹³ Ibid. p. 205.

³ Ibid. p. 23.

⁶ Ibid. p. 145.

¹⁰ Ibid. p. 204.

singular.			plural.		
1	2	3	1	2	3

The personal possessive suffixes are : *-ni*, *-nem*, *-nt'é*, *-ndē*, *-ndō*, *-nt'a*. Sometimes, when the noun ends in a consonant, a vowel is inserted for euphony before the possessive suffix ; sometimes there is other euphonic change. The *n* is probably a pronominal connective element representing the substantive in connection with the possessive. Suffixed to *kāgē*, which is only thus used, the possessive suffixes form possessives used substantively ; that of the first singular is *kāgē* instead of *kāgēni*.

The demonstratives are : *tū* that, *tōni* those, *atē* or *-tē* this, *ani* these. This plural element *ni*, which in the personal pronouns is *ndi*, is also in Galla (162).¹

The indefinite elements are : *ndū*, *ndā*, *yā*, *āfi* ; they readily enter into composition, and all but *yā* are used interrogatively.

175. The Kanuri verb has marks of affinity to the Nubian verb which suggest a comparison between them ; and the remarkable peculiarities of the former may perhaps best be viewed in the light of such comparison.

In both languages the verb has generally an element of person, even when the subject immediately precedes. But the sense of the affection of the subject which appears in the Nubian verb (130), is to be found only in a portion of the Kanuri verbs ; so that these must be divided into two classes, the more subjective verbs and the less subjective.² Not only do the former in their simpler formations in the first and second person possess an element expressive of the affection of the subject which is absent from the latter ; but the verbal stem itself is differently affected in the two classes by the elements of person, tense, and object. For in Kanuri the attention given to the nature of substantive objects and of beings and doings as thought in its general associations, is not such as to secure for the radical part the first place in the formation ; and when the radical part becomes more particular it follows the element which limits it.

In the third person, which involves less sense of inner personality than the first or second, the less subjective verbs are thought not in their pure subjective associations, which are the same for every subject, but with a sense of outer manifestation which is determined by the subject. And in these verbs, consequently, the element of the third person precedes instead of following the verbal stem. In the past and future, in which the sense of subjectivity is reduced by remoteness, the less subjective verbs have not sufficient subjectivity to retain the element of third person, and this is dropped.

In the past and future also in all the persons, the less subjective verbs being thought with more sense than the other verbs of their outer manifestation in the succession of facts, and with less sense of their subjective associations, which are the same in every position in time, are more deeply affected by that position ; so that the idea of the

¹ Külle, Grammar, pp. 26-31.

² Ibid. p. 54.

verbal stem is determined by it, and the stem is preceded by the elements of past and future.

The two classes of verbs are differently affected by the reflexive object. In the more subjective verbs the reflexive object naturally takes the place proper to the element which expresses the affection of the subject, immediately preceding the person-ending. But in the less subjective verbs the reflexive object immediately precedes the verbal stem, the element of third person being dropped, and those of past and future going first; because the sense of the third person as subject, already weak, is weakened by that of the subject as object, and it is therefore dropped, while the verbal stem, thought in its outer manifestation in the subject, is so affected by having this for its object that it needs the reflexive element prefixed to it to give it an inward direction.

176. The element which represents the affection of the subject is *n*; it does not enter into the past or future.

singular.			plural.		
1	2	3	1	2	3

The essential elements of person are *g* or *sk*, *m*, *t*, *ye*, (*w*)*u*, *t'a*.¹

There are five tenses, which tend to have the following endings: durative *-in*; non-durative or abstract *-ē*, or in first singular *ō*; ² perfect *-ī*; past and future *-ō*; the past also subjoins *go* to the stem of the more subjective verbs, and prefixes *ki* to the less subjective verbs; and the future subjoins *to* to the stem of the more subjective verbs, and prefixes *t'i* to the less subjective verbs.

Thus the formation of tense and person is as follows:

More subjective.	Durative.	Non-durative.	Perfect.	Past.	Future.	Imperative.																															
1st sing.	<i>-ñ'g'in</i>	<i>-ñ'g'ē</i>	<i>-ñ'g'ī</i>	<i>-go'sk'ō</i>	<i>-t'o'sk'ō</i>	...																															
intens.	<i>-n'esk'in</i>	<i>-n'esk'ē</i> ³					2d sing.	<i>-n'ém'in</i>	<i>-n'ém</i>	<i>-n'ém'ī</i>	<i>-g'am</i>	<i>-t'am</i>	<i>-nē</i>	3d „	<i>-t'in</i>	<i>-t'ē</i>	<i>-t'ī</i>	<i>-go'n'ō</i>	<i>-t'o'n'ō</i>	...	1st pl.	<i>-n'yē'n</i>	<i>-n'yē</i>	<i>-n'yē</i>	<i>-gei'yē</i>	<i>-t'ei'yē</i>	<i>-n'yo'gō</i>	2d „	<i>-n'w'wī</i>	<i>-n'ū</i>	<i>-n'w'wī</i>	<i>-g'ō'u</i>	<i>-t'ō'u</i>	<i>-no'gō</i>	3d „	<i>-t'e'i</i>	<i>-t'a</i>
2d sing.	<i>-n'ém'in</i>	<i>-n'ém</i>	<i>-n'ém'ī</i>	<i>-g'am</i>	<i>-t'am</i>	<i>-nē</i>																															
3d „	<i>-t'in</i>	<i>-t'ē</i>	<i>-t'ī</i>	<i>-go'n'ō</i>	<i>-t'o'n'ō</i>	...																															
1st pl.	<i>-n'yē'n</i>	<i>-n'yē</i>	<i>-n'yē</i>	<i>-gei'yē</i>	<i>-t'ei'yē</i>	<i>-n'yo'gō</i>																															
2d „	<i>-n'w'wī</i>	<i>-n'ū</i>	<i>-n'w'wī</i>	<i>-g'ō'u</i>	<i>-t'ō'u</i>	<i>-no'gō</i>																															
3d „	<i>-t'e'i</i>	<i>-t'a</i>	<i>-t'e'i</i>	<i>-g'ē'da</i>	<i>-t'ē'da</i>	...																															

Less Subjective.

1st sing.	<i>-sk'in</i>	<i>-sk'ē</i>	<i>-sk'ī</i>	<i>ki -sk'ō</i>	<i>t'i -sk'ō</i>	...
2d „	<i>-m'in</i>	<i>-m</i>	<i>-m'ī</i>	<i>ki -ém</i>	<i>t'i -ém</i>	<i>-ē</i>
3d „	<i>t'ē-i(n)</i>	<i>{ t'ē-ē- or t'ē-ō² }</i>	<i>t'ē-ī</i>	<i>ki -ō</i>	<i>t'i -ō</i>	...
1st pl.	<i>-(y)ē'n</i>		<i>-(y)ē</i>	<i>-(y)ē</i>	<i>ki -(y)ē</i>	<i>t'i -(y)ē</i>	-yo'go
2d „	<i>-w'i</i>	<i>-ū</i>	<i>-w'ī</i>	<i>ki -ū</i>	<i>t'i -ū</i>	<i>-o'go</i> ⁴
3d „	<i>t'a-i(n)</i>	<i>{ t'a'- or t'a'-ō² }</i>	<i>t'a-ī</i>	<i>kē -ō</i>	<i>t'ē -ō</i>	...

The letters in parenthesis are sometimes omitted.

The use of *i* and *o* in the above to express the proximate and the non-proximate in time corresponds to the use of the vowels of position

¹ Kölle, Grammar, p. 54.

² Ibid. p. 53.

³ Ibid. p. 46.

⁴ Ibid. p. 56-84.

in Woloff; and in it *e* is the characteristic expression of fact in the abstract (see I. 26–28). The element of the past in Kanuri corresponds to *gei* in Susu (I. 50); and that of the future to *ɔ'o*, the future of the verb substantive in Gã. The element of the third person in the more subjective verbs loses life by reason of remoteness in the past and future, and consequently drops the aspiration. The ending *go*, in the imperative plural, corresponds to *gū* the plural element in Nubian, with which language the verbal formations have striking points of similarity. It is to be observed that those formations are subject to much euphonic change, as are also those which follow.

177. The more subjective verbs take or increase a transitive significance¹ by inserting *ge* before the element of the first or second person, and after that of the third in the first three tenses; for the third person clings close to the stem, having no intervening element of subjective affection; whereas the first and second persons exchange that element for *ge*, which gives an outward direction to the verb, corresponding as it does to *ga*, the postposition of the direct object; and *n* being dropped the element of the first singular becomes *sk*. The past and future elements subjoin *ge*, and become *gi* and *t'i* before it; and *ge* also changes its vowel euphonicallly, and absorbs that of the person in the plural.² Only a few of the less subjective verbs make this transitive formation.

The more subjective verbs become reflexive by taking *té*, just as they take *ge*, except that *té* absorbs the third person, and that the past and future elements become *ga* and *ta*.²

The less subjective verbs prefix *té*, as has been said, to the verbal stem, so that it follows the past and future elements *ka-* and *ta-*.³

The more subjective verbs form a causative by prefixing *yité* or *yige* to the transitive or *ge* formation; the less subjective by prefixing it to their simple form.⁴

Most of the former verbs are used in all these derived forms. But only a limited number of the less subjective verbs have developed a transitive or causative form, while they invariably form a reflexive.⁵ The causative form of transitive verbs generally expresses only increase of transitivity.⁶

Some few verbs form a transitive on a reflexive, as *kér-té'gè'skin*, I tie myself to.⁷

The tense and person-endings given above for the more subjective verbs are all, except the perfect, used separately as the parts of a verb *nigin*, I say or I think.⁸

178. The negative *nè* is subjoined to the abstract and future, subject to euphonic change.⁹

The perfect and the past subjoin *-yā* to express the subsequence to them of a principal verb; and the abstract, the past, and the future

¹ Kölle, Grammar, p. 46.

⁴ Ibid. pp. 51, 56.

⁷ Ibid. p. 52.

² Ibid. p. 56.

⁵ Ibid. p. 46.

⁸ Ibid. p. 55, and Dictionary.

³ Ibid. p. 69.

⁶ Ibid. p. 48.

⁹ Ibid. p. 84.

subjoin *-na* to express contemporaneousness ; both subject to euphonic change.¹

The infinitive of the more subjective verbs is formed by subjoining to the verbal stem *-tê* or *-ta*, which are probably pronominal ; and to this *gê* or *ga* is suffixed for the infinitive of the transitive form.²

The infinitive of the less subjective verbs is formed by nasalising the initial consonant of stem and changing the final vowel to *ô*, *eî*, or *â*.²

The present active participle subjoins *-ma* to the infinitive (173).³

A passive participle is formed only by the more subjective verbs, *gata* being subjoined to the verbal stem ; *ga* is probably the past,⁴ and *ta* pronominal.

There is an interrogative suffix *-ba*, a predicative suffix *-gô*, and an emphatic suffix *-ma*.⁵

179. The Kanuri verb, though it has no passive, is thought strongly as affecting a direct object, when the sense of this is most vivid, that is, when it is the first or second person. This reference, however, is not thought as influencing the subject to do or to be, but rather as affecting the idea of what the subject does, or of the state in which he is ; and it has closer connection, therefore, with the stem than with the person. In the less subjective verbs, which are thought more objectively than the others, in their outer manifestation, the first or second personal pronoun as object determines the whole thought of the verb, and is prefixed to the entire formation. In the more subjective verbs the verbal stem is thought in its own general associations, but subjoins to itself the first or second personal object, so that this is separated by the elements of the past and of the future from the person of the verb ; in the other tenses it takes the place of the affection of the subject (176). When subject and object are of the same person in the same or in different numbers, this formation is not used. In the more subjective verbs in the first person singular, when this is expressed by *îg*, the idea of the verb is too subjective to take up an object.

The object elements are for the first person *s*, and for the second *n*, their plural element being *a*, which, however, sometimes mingles with the elements which follow.⁶

180. There does not seem to be any distinct evidence of a fragmentary character.

181. In the syntactical construction of Kanuri the subject generally precedes the predicate ;⁷ the adjective follows its noun ;⁸ the personal possessives are suffixed to their noun, even when this is followed by an adjective or genitive.⁹ The genitive may either precede or follow the governing noun, but it oftener follows ;¹⁰ the adverb may either precede or follow what it affects ;¹¹ the objects and conditions may occupy any position.¹² A subordinate clause may be inserted anywhere in a sentence without any particle to express the

¹ Külle, Grammar, p. 87-92.

² Ibid. p. 93.

³ Ibid. p. 97.

⁴ Ibid. p. 98.

⁵ Ibid. p. 273-281.

⁶ Ibid. pp. 102, 121.

⁷ Ibid. p. 148.

⁸ Ibid. p. 203.

⁹ Ibid. pp. 150, 167.

¹⁰ Ibid. p. 163.

¹¹ Ibid. p. 153.

¹² Ibid. p. 152.

relation in which it stands as a condition of the fact, or with a demonstrative instead of such particle;¹ it may also be connected by the suffixed particles *-ya* and *-na*,² but there is scanty expression of the relations of facts to each other.³ The case postposition is often added to an inflected verb, or even to a longer proposition.⁴ A postposition is often added to a genitive to govern the combination of the governing noun and genitive;⁵ the accusative postposition is often omitted.⁶ When nouns are qualified, or in apposition, or otherwise in the same relation, the postposition is attached only to the last word.⁷ Relative propositions are treated like adjectives.⁸ The last only of a series of connected facts is expressed with the element of the past, or perfect, or future, the others being in the non-durative.⁹ There is no copula.¹⁰

thief man two shirt my steal past 3d pl. contempor.
182. Examples: (1.) *Barbū kām 'di kalgū'ni ndal'ge · da · na*
 word one emph. speak 3d pl. neg.
mana tilō · ma mana · t'a · ni, the two thieves, while they were steal-
 ing my shirt, did not speak one word.¹¹ (2.) *Wu kū lifū korō'bē, le ·*
 I to-day corpse ass of walk
 1st sing. dur. previously God nom. show me trans. eat 1st sing. perf.
ng · in dugo Allāyē pēlē · sē · gē, bu · sk · ē, I have eaten
 to-day the body of an ass, which God previously showed me as I was
 walking;¹² *lifū korobe* is qualified by the following clause, of which
leŋgin is a subordinate member, without any expression of relation;
pēlē · sē · gē is the third singular of the abstract or non-durative tense of
 the transitive or *gē* formation of the verb *pēlēŋgin*, I show, with the
 thou father my accus. see 2d sing. succes. he news the
 first person as object. (3.) *Ni abā · ni · gū ru · m · ūa sī labar'tē*
 tell thee fut. 3d sing.
gule · n · t'o · no, when thou hast seen my father, he will tell thee the
 news;¹³ *rumī* is the second singular perfect, and to this *ya* is subjoined
 I fire for
 to express the succession to it of the principal fact. (4.) *Wu kanurō*
 me send 2d sing. go past 1st sing. succes. fire see 1st sg. neg.
su · not · em lē · ga · sga · nya kanu ru · sga · ni, I, when thou sentest
 me for fire, and I had gone, did not see fire;¹⁴ *sunotem* is the second singu-
 lar of the abstract or non-durative tense, its position in time being ex-
 pressed by the following verb, with which it is connected. (5.) *Andi nū*
 we place
 daughter thy of to wife for like 1st pl. think 1st pl. come 1st pl.
pērō · nēm · bē'rō, kāmurō rāg · ē n · yē, kas · yē, we have come
 to the place of thy daughter, as we thought we liked her for a wife.¹⁵
 The verbs are in the perfect, or *kasye* may be perfect, and the other
 3d pl. non-dur. king pers. to soldier pl. his nom.
 two abstract. (6.) *T'a mei Bornumārō kogana wa'nt'i · yē*
 say past 3d pl.
gul'ge · da, said his soldiers to the king of Bornu;¹⁶ *t'a* is equivalent to

¹ Kolle's Grammar, pp. 154, 190.² Ibid. p. 246, 252.³ Ibid. p. 246.⁴ Ibid. pp. 166, 178.⁵ Ibid. p. 167.⁶ Ibid. p. 173.⁷ Ibid. p. 176-178.⁸ Ibid. p. 188.⁹ Ibid. pp. 225, 234, 236, 259.¹⁰ Ibid. p. 268.¹¹ Ibid. p. 151.¹² Ibid. p. 152.¹³ Ibid. p. 153.¹⁴ Ibid. p. 154.¹⁵ Ibid. p. 155.¹⁶ Ibid. p. 162.

father girl of boy of salutation his 3d sing. accept
 said they (177). (7.) *Aba pērō·bē tatar·bē lafea · nt'e t'ē · māgē*, the
 girl's father accepts the boy's salutation; ¹ *t'ēmāgē* is third singular non-
 boy leprosy pers. friend his of word hear past succes.
 durative. (8.) *Tata dulī · ma sobar·nt'·i·bē mana pāi'ga · nyā*, the leprous
 woman fish boy 3d sing. poss.
 boy having heard his friend's word.² (9.) *Kamū buwā tata · nt'e*
 little to gave place stone
gana·ro t'ī, the woman gave the fish to her little boy.³ (10.) *Nā kou·*
 acc. lay 3d sing. dur. acc. wife his to show 3d sing. trans.
ga ganā · t' · in · ga kamū·nt'·uro pelē · t'e · ge, he shows his wife the
 place where he used to lay the stone; ³ *pēt'ēgē* is third singular non-
 horse he to king nom. send 3d sing.
 durative of the *gē* formation. (11.) *Pēr sī·ro mei·yē t'ebā · t'ē ·*
 contemp. to 3d sing. mount
na · ro t'ē · bā, he mounts the horse which the king now
 voice hyena hear 3d sing. arise 3d sing. side his loc.
 sent him.⁴ (12.) *Mana bultu·bē pan · t'ē t'i · t'ē rū · nt'ē · n*
 hide 3d sing.
gēra · t'ī, he heard the voice of the hyena, arose, and hid himself
 alone (by himself);⁵ the tense is defined only in the last verb as
 father my he king
 perfect, the others are abstract, non-durative. (13.) *Abā · ni sī mei*,
 my father is king; ⁶ *sī* represents *abani* as subject, and thereby
 I wife my Lord our gen. 3d sing. pay perf.
 implies the copula. (14.) *Wu kāmū·ni kom·andē·bē t'ē · ramb · ī*,
 my wife has paid our Lord (died);⁷ *wu* is genitive without *-bē*, the
 I middle forest
 possession being expressed in the suffix *-ni*. (15.) *Wu t'urō karagā·*
 of in one my house my build 1st sing. non-dur.
be · n tilō · ni nēm · ni tēm · g · ē, I build my house alone in
 I horse king to
 the midst of the forest; ⁸ *tiloni*, my 'lone. (16.) *Wu pēr mei·rō*
 bring 1st sing.
ku · sk · ō, or *wu meirō pēr kuskō*, or *meirō wu pēr kuskō*, or *pēr*
wu meirō kuskō, or *wu pēr kuskō meirō*, or *pēr meirō wu kuskō*, I
 brought a horse to the king.⁹

P U L.

183. The Pul language, spoken by the Fulah race, which is spread
 at present through the countries west of Bornu, identifies that race as
 African, though they have neither the features nor the hair nor the
 colour of the negro. The language is remarkable indeed for having,
 like the Oceanic languages and unlike the African, with the exception
 of the Hottentot, an inclusive and an exclusive form of the pronoun
 of the first person plural; but it has, on the other hand, unmistakable
 traces of the Kafir system of nominal prefixes; and though these
 have tended to become suffixes, they retain their affinity to the Kafir

¹ Kölle, Grammar, p. 169.² Ibid. p. 163.³ Ibid. p. 178.⁴ Ibid. p. 179.⁵ Ibid. p. 259.⁶ Ibid. p. 182.⁷ Ibid. p. 181.⁸ Ibid. p. 213.⁹ Ibid. p. 152.

prefixes, and not only by them thus transposed, but also by prefixes, the concord of the noun and adjective is expressed.

All personal nouns end in *-o* in the singular, and in *-be* in the plural;¹ nouns in *-o* which are not personal are very rare exceptions, and do not form plural in *-be*. These suffixes evidently correspond to the Kafir prefixes *um-* and *aba-*. The suffix *-am* belongs to nouns denoting liquids or what has come from liquids;² and in all the languages of the Kafir family the prefix *ama-* or *ma-* is taken by such nouns.³ This element is found also in Bullom;⁴ but *m* with this significance may be traced also through the Oceanic⁴ and Syro-Arabian languages. In Kafir *ama-* is generally thought as a plural or collective prefix, and has no other prefix to make a plural for itself; but in Pul the nouns which have *-am* in the singular have *-e* in the plural.

Nouns denoting things of a vegetable nature tend to have *-i* in the singular, and *-e* or *-i* in the plural.⁵

Other suffixes are *-ndu* singular, *-li* plural, *-ru* singular, *-hi* plural, *-uru* singular, *-bi* or *-pi* plural, *-nu* singular, *-di* plural, *-nde* singular, *-le* plural, *-ere* singular, *-e* plural, *-al* singular (sometimes augmentative), *-e*, *-le*, or *-de* plural, *-gal* singular (nouns of instrument), *-e*, *-le*, or *-de* plural, *-ol* singular, *-li*, *-bi*, or *-di* plural, *-el* singular (diminutive), *-one* or *-kone* plural, *-a* singular, *-e*, *-i*, or *-l'i* plural.⁶

But nouns not only change their suffix in the plural, but also sometimes their initial letters.

I.	II.	I.	II.
<i>p</i>	<i>f</i>	<i>d, nd</i>	<i>r</i>
<i>b</i>	<i>w, v</i>	<i>d', nd'</i>	<i>i</i>
<i>θ, t</i>	<i>s</i>	<i>z, g, k</i>	<i>h, w</i>

Personal nouns, with initials of column I. in the singular, change them in the plural to the corresponding letters of column II.; and all other nouns, if they have initials of column II. in the singular, change them in the plural to the corresponding letters in column I.⁷ The former tend to soften their initials in the plural, and other nouns to harden them. And this seems to indicate the phonetic influence of prefixes still remaining though the prefixes have disappeared. In this way it is probable that soft initials have been hardened in Mpongwe by the nasals or even by short vowels of prefixes which have themselves been suppressed (I. 17), while the original soft initial remains where there was no prefix, or where it ended in an open *a*.⁸ And it would be in accordance with this phenomenon to suppose in Pul that in the plural of personal nouns the prefix *aba-*, in being slurred as a prefix to be uttered rather at the end of the stem, rendered the utterance of an initial consonant less close so as to soften it, while a nasal or the close vowel *i* in the other plural prefixes, in

¹ Faidherbe, Grammar, pp. 23, 27.

³ Bleek, Comparative Grammar, p. 141.

⁵ Faidherbe, Grammar, p. 29.

⁸ Bleek, Comparative Grammar, pp. 76-79.

² Ibid. p. 30.

⁴ Ibid. p. 142.

⁶ Ibid. pp. 28, 29.

⁷ Ibid. pp. 30, 31.

being similarly slurred, closed and hardened the utterance of a soft consonant.

Nouns which form the plural by adding *-d'i* to the singular, do not generally suffer any change in their initials.¹

184. The adjective agrees with its noun not only in the ending but also often in having an initial part determined by the noun, and, as often happens in the Kafir languages, preserves prefixes or parts of prefixes which have been lost by the nouns. Thus the adjective *hod*, red, changes as follows with its noun:—

person	red	persons	red
<i>neddo</i>	<i>godudo</i>	<i>imbe</i>	<i>hodebe</i>
horse	red	horses	red
<i>putu</i>	<i>ngodungu</i>	<i>put'i</i>	<i>godjudi</i>
mare	red	mares	red
<i>ndarlo</i>	<i>mbodeho</i>	<i>darli</i>	<i>bodehi</i>
book	red	books	red
<i>deftere</i>	<i>hodere</i>	<i>deſte</i>	<i>bodeſ'e</i>
apron	red	aprons	red
<i>udere</i>	<i>hodjude</i>	<i>gude</i>	<i>godjude</i>
goat	red	goats	red
<i>bewa</i>	<i>goduba</i>	<i>bei</i>	<i>godudi</i>
little beast	red	little beasts	red
<i>barogel</i>	<i>ngodungel</i>	<i>barekone</i>	<i>godjukone</i>
lion	red	...	...
<i>barodi</i>	<i>boderi</i>	water	red
belt	red	<i>ndiyam</i>	<i>mbodeham</i> ²
<i>dadungal</i>	<i>bodewal</i>		

There is no adjectival expression of degrees of comparison.³

185. The demonstrative pronouns are supplied by the endings used separately with the noun; thus *o gorko, be worbe; ngu putu, nye* this man these men this horse this ox these oxen this tree these trees this blood this goat this *nagge, i nahi; ki lekki, de ledde; ndam d'ndam, ba mbewa ndu* bird these birds this bone *sundu, di tolli; ngal d'al*. There is also a demonstrative element *k* (see 189, Example 6).

So also the relative pronoun: *putu ngu dogi; put'i di dogi;* horse which runs horses which run
nagge nge dogi; mbewa ba dogi; ravandu ndu dogi; wofere ox which runs goat which runs dog which runs hare
*nde dogi; barodi ndi dogi; gertogal ngal dogi.*⁴ which runs lion which runs hen which runs

The personal pronouns as subjects of verbs are for first and second

	sing.		plural		
	1	2	excl. 1	incl. 2	
persons	<i>mi, a,</i>	<i>min, en, on;</i>	those of the third person correspond to		
					singular
					1 2
the above demonstratives. ⁵	As used separately they are <i>min</i> or <i>mi, an,</i>				

¹ Faidherbe, Grammar, p. 31.

² Ibid. pp. 32, 33.

³ Ibid. p. 63.

⁴ Ibid. p. 34.

⁵ Ibid. p. 37.

plural

excl. 1 incl. 2
em̄in, enen, onon; and for third, if referring to persons, *ko* or *kanko* singular, *kambe* plural.¹

singular plural

1 2 excl. 1 incl. 2

The personal pronouns as objects are: *am, ma, min en, on*; and for third, if referring to persons, *bo* singular, *be* plural;² *amen* occurs in the examples as objective first plural (189, Example 5).

singular

1 2

The personal pronouns as possessive suffixes are: *am, ma,*
 plural
 excl. 1 incl. 2
men en, mon, and for third, if referring to persons, *mako* singular, *mabe* plural.²

The pronouns which do not refer to persons are the same as the corresponding demonstratives.²

186. There are verbal particles *de* and *ma*, which, however, are not detached, but are closely combined with the pronoun which stands as subject; *de* is also subjoined to the verbal stem to form the infinitive mood, and the constant use of it when the verb is governed as a noun shows how the verb is distinguished in thought from the noun.³

The initial consonant of a verbal stem, if soft, is hardened when the subject is plural; just as in the plural of nouns which are not personal,⁴ and probably for a similar reason.

There is a tense which states fact abstractly as realised, without reference to time, in which the verbal stem subjoins *-i*; an actual present in which it subjoins *-a*, the personal pronouns also being affected; and a perfect in which it subjoins *-inon* (compare Woloff *-on*, I. 28); also a future, in which *ma-* is prefixed to the personal pronouns. Thus, for the verb *hal*, to speak—

Abstract.	Perfect.	Actual present.	Future.	Imper.	
1. <i>mi</i> 2. <i>a</i> 3. { <i>o</i> persl. <i>ngu</i> , &c. }	<i>halinon</i>	1. <i>mbede</i> 2. <i>ada</i> 3. { <i>ombo</i> <i>ngu</i> , &c. }	1. <i>mami</i> 2. <i>ma</i> 3. { <i>mo</i> <i>mangu</i> , &c. }	2. <i>hal</i> sing.	
1. { <i>min</i> excl. <i>en</i> incl. }		1. { <i>mbedemin</i> <i>eden</i> <i>odon</i> <i>ebe</i> <i>edi</i> , &c. }			1. { <i>mamin</i> <i>maen</i> <i>maon</i> <i>mabe</i> <i>madi</i> , &c. }
2. <i>on</i> 3. { <i>be</i> persl. <i>di</i> , &c. }		2. <i>kalinon</i>				2. kal plur.	2. kalen plur.
	3. { <i>be</i> persl. <i>di</i> , &c. }	3. { <i>ebe</i> <i>edi</i> , &c. }	3. { <i>mabe</i> <i>madi</i> , &c. }	3. <i>kale</i> plur.	

There seems to be also a present, with a reference to the future, in

¹ Faidherbe, Grammar, p. 48.

³ Ibid. pp. 38, 73.

² Ibid. p. 49.

⁴ Ibid. p. 42.

which the simple personal pronouns precede the simple stem (see 189, Examples 2, 5), or the stem with the ending *-a* (see Example 4).

In the actual present, the first and second persons are combined with the verbal element *de*, the third person in singular and plural is strengthened rather by a kind of reduplication; all the persons in this tense may take in addition the particle *-ni*, as *mbede hala*, or *mbedeni hala*, I am speaking (see Woloff, *ig, ie*, I. 29). In the future *ma* is evidently a verbal element, which determines the subject to a future fact. The ideal, whether conditional, interrogative, or doubtful, is expressed by subjoining *e*, *ne*, or *te* to the verbal stem.¹

A root is made transitive by *-u*, causative by *-nu*, reflexive by *-a*, reversed in meaning by substituting *-i* for *-u*, reciprocal by *-ndir*. The transitive verbs in *u* may change *u* to *a* in the future. The reflexive verbs in *-a*, change *a* to *o* in the future and imperative.²

A passive participle is formed by *-ado*, and from the root of verbs in *-ade* a noun of the agent is formed by *-otodo*.³

From verbal stems ending with *-in*, this suffix *-do* forms verbal nouns in *-nido*, *-inido*, *-nitido*.

There is also an active personal suffix *-owo*, which forms nouns of the agent; and another *-ma*, which forms present participle active⁴ (compare Kanuri, 178).

When the subject is a substantive, the particle *inani* or *ina* may be used before the verb in the sense of French *voilà*⁵ (I. 29).

The stem of the verb substantive is *won*, but the mere copula is omitted.⁶

Negation is expressed by subjoining *-a* to the verbal stem, *-anon* perfect, *-ali* abstract; the future adds *-ta*, thus *hal'ata*; and a prohibitive is expressed by *wata* before the imperative; *wa* is the root of *wavi*, may or can. The termination of verbal noun *-otodo* is made negative in its meaning by changing it to *-otako*.⁷

187. There are few prepositions or conjunctions.⁸ The preposition *to*, which means towards, is prefixed to words of locality, and forms adverbs of locality. The genitive and the direct object follow their governor without any element of relation.⁹ There is no conjunction to express that, in order that.¹⁰

188. In respect of the comminution of speech into small fragments, the Pul language seems to have that tendency in a degree distinctly less than the African languages considered in Sect. I. The suffixes of the nouns are less distinct and separable than the Kafir prefixes, and as taken by the adjectives they seem often to be mixed with radical elements. The verbal elements, too, combine with the persons or with the verbal stem as in languages of this section, instead of being detached or separable as in the pure African languages. It was probably subject to Asiatic influence (122).

¹ Faidherbe, p. 38-41.

⁴ Ibid. p. 42.

⁷ Ibid. p. 46-48.

² Ibid. p. 44.

⁵ Ibid. p. 45.

⁸ Ibid. p. 60.

¹⁰ Ibid. p. 62.

³ Ibid. p. 42.

⁶ Ibid. p. 46.

⁹ Ibid. p. 61.

- moor pl. enter abs. into 3d pl. break abs.
 189. Examples : (1.) *Sapat'be nat' i e Gadaga be kel' i*
 wall 3d pl. kill abs. persons pl. all
tata Mak'ana be mbar' i im' be fop, the Moors entered with
 Gadaga, they demolished the wall of Mak'ana and killed all the
 mare thy handsome if 2d sing. wish abs. sell inf. 1st sing.
 people.¹ (2.) *ndarlu' ma mol' u s' ada hid' i yae' de mi*
 give thee guineas ten pl. five and gun barrel pl. two
rokku ma sollegi tapande doi, e fetel kundurde didi, your mare is hand-
 some ; if you wish to sell I will give you fifty guineas and a double-
 barrelled gun ;¹ *mol' u* has the suffix *u* to agree with *ndarlu*, which in
 184 ends in *o* ; *ada* occurs here before the abstract tense, whereas in the
 grammar it is given only in the actual present ; and *mi* occurs
 before the simple stem *rokku*, a construction not given in the grammar.
 prohib. deceive me fut. 1st pl. do dem. 2d sing. wish
 (3.) *Wata funt am ma' min wad ku a ngidda*, do not deceive
 me, we will do what you wish ;² Faidherbe explains *ngidda* as future
 plural of the verb *hid' de*, to wish, which is quite unintelligible.
 sheikh say chief give me milk and honey or
 (4.) *Ahmadu seku wi kalifa Dagana, tott am kosam e gauri ualla*
 I burn village thy
mi suma uro ma, the sheikh Ahmadu said to the chief of Dagana,
 give me milk and honey or I will destroy your village.³ (5.) *So be*
 receive neg. abs. us into village king punish 3d pl. (5.) *So be*
teddin' ali amen e sare lamdo kaarta fi be, if they do not
 receive us into the village the king of Kaarta will punish them.⁴
 3d pl. shoot abs. dem. me in stomach and lance in eye
 (6.) *Be pid' i k' am e redu e mbangu e itere*, they shot me
 in the stomach and a lance in the eye ;⁵ *e* has many meanings, so im-
 tell him 3d sing. come 3d sing.
 perfect is the expression of relations. (7.) *Wi bo o har o*
 visit me to-morrow
leo mi daigo, tell him that he come and see me to-morrow.⁶
 child his female speak abs. Woloff as
 (8.) *Bu' ko debbo nani tear ono Ndaranke*, his daughter speaks
 Woloff like an inhabitant of Ndar ;⁶ *nani* is the abstract tense of
 2d sing. refuse
nan, it has no person after the noun as subject. (9.) *A ad*
 abs. us take inf. water at well thy God punish opt.
i min dog' de ndiyam e bondu' ma yalla fie, you refuse us to take
 water at your well, God punish (you) ;⁷ *fie* is the ideal form of
ji (186).

190. Of the languages whose structure has been sketched in this section, the Galla shows strong affinities to the Syro-Arabian languages (170), and the Kanuri is spoken by a people who have been noted as having less quickness of excitability than their neighbours (p. 51), so that both these languages may be regarded as exceptional. The others

¹ Faidherbe, p. 81.² Ibid. p. 82.³ Ibid. p. 83.⁴ Ibid. p. 84.⁵ Ibid. p. 85.⁶ Ibid. p. 87.⁷ Ibid. p. 88.

are spoken by races differing widely from each other in descent, in physical circumstance, and in mode of life, and accordingly they show great diversity both in respect of their etymology and of their construction. But through all those differences one feature may be observed, with regard to which they may be classed together; they exhibit a fragmentary tendency, though in a less degree than those African languages which are most remote from Asiatic influence. In them, as in the latter, that tendency shows itself under different forms according as one race takes more or less interest than another in the whole combination of fact compared with their interest in the parts of which such combination consists. And a similar difference has been observed in Sect. II. 144 as causing great diversity among the American languages in the form in which they exhibit their massive character of thought. For whether thought be massive or fragmentary, a prevailing interest in the whole combination of fact produces a polysynthetic tendency, to which both these qualities of thought readily yield. This readiness for polysynthetic formation on the part both of massive and of fragmentary thought according to the degree in which these qualities exist, agrees with the theoretical inferences of Book I., chap i., 6, 8. And the difference between the two kinds of polysynthetic speech is to be found by observing whether on the one hand thought passes from one light element to another with partial mingling of the two, or, on the other hand, the first element is retained and the others added to it, so that all together are thought in one massive synthesis simultaneously present to the mind. Polysynthetic formations of the former kind are to be seen in Tagala and in the Dravidian languages, while in Polynesian and in other languages of this section there is a resolution of speech into fragments which stand apart from each other. Such languages as these are in appearance quite different from the others in respect of their fragmentary nature; yet if this feature of language consists essentially of the lightness of the thoughts which can in succession occupy the mind, such languages as Tagala and Dravidian may be quite as fragmentary as Polynesian, the difference being in the degree in which the elements mingle each with the following one, while there may be no difference in the lightness of what is present at each moment to the mind.

Those successive elements of thought are not, in the languages of this section, so fine as in the African languages of the first section, though some of the former, as the Polynesian, approach very near to some of the latter, as the Hottentot. Nor do the languages of this section agree with each other in this respect so closely as those African languages do; but those which are less fragmentary, as the Malay, are spoken by races of less ready excitability, and those which are more fragmentary, as the Polynesian, are spoken by races of more ready excitability, while none of these races have such quick excitability as the Kafir or the native of Guinea (pp. 72-75). And this confirms the proof that this quality of mental action is connected by causation with this feature in the structure of language, according to the principles of Book I., chap. i., 5. 6.

191. Throughout a large proportion of the Oceanic languages, in

the Polynesian, the Tagala, the Malay, and the Australian of Adelaide, there prevails a remarkable tendency to disyllabic roots, which does not exist in the other languages of this section. And while those languages agree with the others in having a tendency to break the integers of thought, they differ from them in having more concrete particularity of thought (8, 45, 67, 73, 79, 80). With this habit of thought, therefore, it would appear that the disyllabic development of roots is connected, while the absence of the prevalence of disyllabic roots from the languages of the other sections indicates that this feature is to be attributed to a minor degree of ready excitability as well as to a concrete particularity of thought, according to the principle of Book I., chap. i., 7.

IV.—*Languages of Central and Northern Asia and
; Northern Europe.*

1. The races of Central and Northern Asia and Northern Europe may be classed together as having a quickness of excitability below the mean, yet greater than the American races; such at least is the view to which the evidence leads that is to be had on the subject (see pp. 76, 77). And their languages accordingly all have a massive character, but not so massive as the American languages.

The physical circumstances and mode of life in which the character of the races of Central and North-Eastern Asia was formed were remarkably uniform; for their life was for the most part nomadic, as it still is. And their languages show a corresponding similarity of structure. And though the languages of North-Western Asia and Northern Europe differ from these in some particulars of their structure, a great similarity pervades all the languages of this section. The striking feature which in each family of these languages shows the tendency to think the elements of fact together in massive combinations, is that which is called the vowel harmony; though this is also partly due to another cause.

“In the Turkish-Tartar languages, as well as in Mongolian, Manju, Finnish, and Magyar, we find quite similar laws of vowel harmony, but almost everywhere they are less strict than in Yakut.”¹ In Yakut, therefore, a Tartar language which is spoken in the northern part of the basin of the Lena, these laws may best be studied; and in it they not only are very distinctly developed, but have been fully explained by Böhlingk in his admirable grammar of that language. The vowel harmony is connected in principle with the euphonic laws of these languages; and its nature will be better understood if these laws be first noticed in their leading outlines as they are found to prevail in the Yakut language. The general structure of that language will then be studied, according to the plan hitherto followed, that this particular feature may be seen as it co-exists with the other characteristics. And the remaining languages of this section will be treated in succession in the same way.

¹ Böhlingk's Yakut Grammar, sect. 32.

YAKUT.

2. Yakut utterance shows a tendency in a moiety of its words to give imperfectly the fine differences which distinguish the elements of articulation. The vowels called soft are vowels uttered with imperfect discrimination, the organs not being put decisively into the position necessary to give the vowel its proper sound. The indolent Hottentot has a complete set of such vowels, which Wallmann calls indefinite (*unbestimmten*),¹ and distinguishes them from the other vowels by a diaeritic mark. Here they will be distinguished, according to Def. 30, by two dots placed over them. This is the only phonetic feature which the Yakut and the Hottentot languages have in common; for the great difference between the races in other features of their mental character hinders further agreement.

A different cause leads the language to favour vowel sound, and to neglect the distinctions of consonant utterance. Hence there is an imperfect discrimination of tenuis, medial, and aspirate; for the gutturals are only aspirates, that is, tenuis aspirate and medial aspirate; and the ante-palatals are tenuis aspirate, medial aspirate, and nasal; while the post-palatals, dentals, and labials have no aspirate. Böhlingk, indeed, takes the guttural aspirates for *k'* and *g'*, but their exclusive affinity for the broad vowels *a* and *o*, which open the throat, shows that they are *q'* and *g'*.² Owing to this vocalic tendency there is a considerable development of diphthongs.

And owing to a want of versatility of utterance, or deficient promptitude in changing the action of the organs, the formation of these diphthongs indicates a disposition to make the transition gradual in passing from one element to another. The diphthongs are: *ea*, *iä*, *uo*, *üö*, in which the closer vowel precedes the more open one; and each of the three last is apt in speaking to sound like a long vowel,³ to which the close vowel is a mere introduction. This is as if there was deficient promptitude in passing to the full vowel utterance, causing it to begin with a restricted opening of the organs. On the other hand, *e*, though the closer vowel, predominates in the impression made by *ea*,³ perhaps on account of the strong action of the tongue in sounding it with the anterior part retracted behind the lower gum,⁴ and the deficient readiness of the organs to pass from this strong action.

The tendency also to close these diphthongs, and also single vowels with *i*, so as to produce what are called *i*-diphthongs and *i*-triphthongs,⁵ seems to be in order to ease the abruptness of change from a strong vowel utterance to another state of the organs; for this final *i* is only half a vowel, and partakes of a consonantal nature. These diphthongs and triphthongs never occur in Yakut in a syllable closed with a consonant,⁶ but are in truth closed by *i*; and when a suffix

¹ Wallmann, Namaqua Sprache, sect. 1.

² Böhlingk, Yakut Grammatik, sect. 132.

³ Ibid. sect. 34.

⁴ Castren, Samoied Grammatik, sect. 9; Steinthal, Charakteristik, p. 178.

⁵ Böhlingk, sects. 35, 36.

⁶ Ibid. sects. 67, 140.

beginning with a consonant is subjoined to them, the *i* is treated as a consonant, and a connective vowel is inserted after *i*, when it would be inserted after a consonant.¹ This half-consonantal nature of the closing *i* accounts for the strange diphthong *ii* which exists in actual use, and in which, therefore, the final *i* is distinguished in utterance from the initial *i*.²

This tendency to ease the transitions of utterance shows a want of versatility in the organs of speech, an inaptitude for passing quickly from one element to another quite unlike it.

Thus a medial generally requires to be followed by a vowel, and to be preceded by a vowel, a nasal, or a vibratile. No medial can end a word,³ nor does any medial except *b*, and rarely *d* or *d'*, begin one; ⁴ *k* and *q* seldom occur between vowels, but *g* and *q'* instead,⁵ the sonancy of the vowels affecting the consonant; *t* becomes *d* between an *i*-diphthong or *i*-triphthong and a vowel,⁶ and also when, as the initial of an affix, it comes between *r* and a vowel;⁷ final *p* becomes *b* before a suffix beginning with a vowel;⁸ nor is there any place in the concurrences of two consonants open to tenuis and medials alike, except that of following immediately a nasal or a vibratile;⁹—so largely is the use of tenuis or medial determined by the influence of their position, making one or the other more conformable to the adjacent utterance.

There is also an indication of a want of alertness of new action in the fact that the vibratiles very rarely begin a word, *r* never;¹⁰ *p* also scarcely ever begins a word,¹¹ and the utterance is not sufficiently versatile to pronounce a hiatus.¹²

A tenuis, tenuis aspirate, or *s*, can each be immediately followed only by a tenuis, tenuis aspirate, or *s*;¹³ because a medial, or nasal, or vibratile, would require an immediate change of action with less tension and involving the larynx, the nose, or the tongue and breath.

It is a law of utterance, not by any means peculiar to these languages, that a medial cannot immediately precede a tenuis, tenuis aspirate, or *s*; but that a nasal or a vibratile can do so, because these utterances have a duration which facilitates the change of action by putting an interval between the act of setting the organs for the first utterance, and the act of setting them for the second. There is less change of action in passing from a medial to a nasal or vibratile than from a medial to a tenuis, tenuis aspirate, or *s*, for in the former transition there is little change of tension of the organs, and the sonancy of the medial may be carried into the nasal or vibratile; but the only combinations of this kind which occur in Yakut are *gn*, *gr*, *gl*, *gl'*, *br*,¹³ which are simpler than others, because they each engage two different parts of the organs, and pass to that part which is most ready to act, namely, the point of the tongue.

Medial and medial do not concur except in three combinations,

¹ Böhlingk, sect. 69.

² Ibid. sect. 35.

³ Ibid. sect. 153.

⁴ Ibid. sect. 151.

⁵ Ibid. sects. 130, 131.

⁶ Ibid. sect. 141.

⁷ Ibid. sect. 158.

⁸ Ibid. sect. 163.

⁹ Ibid. sect. 146.

¹⁰ Ibid. sects. 148, 151.

¹¹ Ibid. sect. 148.

¹² Ibid. sect. 37.

¹³ Ibid. sect. 146.

each of which occurs only once,¹ because the utterance is not sufficiently versatile to combine readily the double sonancy with the double stoppage of the breath.

Nor in general can two consonants either begin or end a word, the only combinations which are not too complex for the end of a word being *rt*, *lt*, *lt*, *nik*, *mp*.² Moreover, *t* is assimilated by *k*, *č*, or *p* immediately following it,³ probably because the utterance of *t* is weaker than these on account of the habits of utterance relaxing the action of the point of the tongue; and perhaps the reason why the combinations *tč* and *ts* do not occur is that *t* is not strong enough to maintain itself in these combinations.

Thus, generally, Yakut utterance seems to be marked by a want of versatility, as well as by a vocalic tendency, and an indolence which affects a large proportion of its words.

3. The most remarkable phonetic laws of the Yakut language due to these characteristic tendencies are those which are connected with the nature of the vowels.

The vowels *a* and *o*, whether definitely or indefinitely uttered, are called by the grammarians of these languages heavy, and *e* and *u*, whether definite or indefinite, are called light, the former involving a heavier ejection of breath than the latter. The indefinite vowels also are called soft, the definite ones hard, on account of the indecisive state of the organs in uttering the former compared with the latter. An indecisive *e* sounds as *i*, and in *ä*, *ö*, *ü*, the more relaxed state of the tongue causes its position to approach that of sounding *e*, which is approximately its position of rest, and this gives to the vowels an infusion of *e*. The closing *i* of a diphthong or triphthong is neither hard nor soft.⁴

Now there are two *l*'s, a stronger and a weaker, and the strong *l* can be connected only with the hard vowels, the weak *l* only with the soft, unless when it is strengthened by being followed immediately by *č* or *č*. The hard *l* is almost pronounced by uttering *u*, and it seems therefore to involve more action of the back part of the tongue, and to be guttural.⁵

The heavy vowels are sounded with a larger guttural opening than the light, and the former have consequently an affinity for the gutturals, while the latter are more akin to the post-palatals. Accordingly, an initial *k* can never have a hard, heavy vowel *a* or *o* after it; an initial *q* can never have any other vowel.⁶ A final *k* must always have before it a light vowel, a final *q* always a heavy; inside a word also *q* and *č* require each a heavy vowel before them; inside a word *q* as well as *k* sometimes has a heavy vowel before it, but generally *q* is preceded by a light one.⁷

The laws of vowel harmony in Yakut are two: ⁸

I. If the first vowel in a word be hard, the remaining vowels of the word must be all hard; if it be soft, they must be all soft.

II. The vowel *a*, as the vowel of a syllable, can be followed only by

¹ Bächtlingk, p. 56, note 61.

³ Ibid. sect. 189.

⁶ Ibid. sect. 128.

² Ibid. sects. 152, 154.

⁵ Ibid. sects. 24, 127.

⁴ Ibid. sect. 35.

⁷ Ibid. sect. 129.

⁸ Ibid. sect. 31.

a or *e*, as the vowel of the next syllable, *e* only by *e* or *a*, *o* only by *o* or *u*, *u* only by *u* or *a*, and so also for the corresponding soft vowels.

In consequence of these two laws the same suffix has different vowels, according to the word to which it is subjoined. By the first law, if that word have hard vowels, the vowels of the suffix will be hard; if soft, the vowels of the suffix will be soft. And by the second law, if the vowel of the last syllable of the word be *a* or *e*, the first vowel of the suffix must be *a* or *e*; if the vowel of the last syllable be *o*, the first of the suffix must be *o* or *u*; and if it be *u*, the first of the suffix must be *u* or *a*. Every suffix therefore must be capable of having four different vowels or sets of vowels without altering its general meaning, two to satisfy the second law, and each of these hard or soft to satisfy the first. In the roots, a diversity of vowels generally brings with it difference of meaning, though there are examples of stem-vowels being changed, hard to other hard, soft to other soft, without change of meaning;¹ but in the suffix the change of vowels is an influence of the root which does not affect the meaning. And no matter how many suffixes be attached one after another to a root, these laws prevail from the beginning to the end of the word.

4. Now the second of these laws is merely phonetic, and seems to be due to that want of versatility of the organs of speech which makes them indisposed to change of action, coupled with the vocalic tendency, which has been mentioned as another phonetic feature of the language (2). The tendency to favour the vowel as an element of utterance causes it to dominate the utterance of the following consonants and to assimilate the next vowel, making it either labial or non-labial. But the first law of vowel harmony is not merely phonetic, but arises from the expression of thought. For the softness or the hardness of the vowel utterance which characterises the root and determines its meaning is significant, and must express a mental element associated inseparably with the whole idea which the root expresses. And this element of thought must pervade the whole of the subsidiary thoughts expressed by all the suffixes attached to the root. What it is cannot be ascertained from the meaning of the root. It is some fine element associated with that meaning in the mind of the race; and is such that the nature of every thing, and of every doing or being, has its own association suggesting for it either hard or soft expression. Now the utterance of the soft vowels is indolent compared with that of the hard ones; and there would seem to be therefore an association of inactivity indicated by the former, and of the contrary by the latter. An indolent utterance of the vowels, with imperfect adjustment of the organs of the mouth, alters their quality without impairing the loudness of their sound, and can therefore convey its meaning without rendering indistinct the expression of the idea. And on the vowels, therefore, it falls to convey this associated element, whatever it be, as the relaxation of the consonants would impair too much their expressive power.

Such a distribution of the objects of thought into active and inactive

¹ Böhlingk, sects. 74, 76.

seems to imply a twofold experience of life now active and now inactive, and otherwise so far different that each experience is a source of ideas with a corresponding association, the one of activity and the other of indolence, though afterwards so transferred that their present applications cannot be identified with either experience.

Certainly the life of the great nomadic races involves a twofold experience of this kind, as they must during their abundant summer provide for their rigorous winter when little can be done. Their character, too, involves a striking combination of intermittent indolence and energy. And it is very remarkable that this distinction of roots is peculiar to the languages spoken originally where this great distinction of seasons exists (67). Whatever be its significance there is no doubt that it is significant, for it distinguishes from each other expressions of different ideas.

And the fact that the distinction is imparted to all the suffixes of a root proves that the radical characteristic which it expresses is thought with these; and consequently, that the radical idea is retained in the consciousness while these are added to it.

It proves also that these, instead of being abstract elements which might coalesce with roots indifferently whether hard or soft, are thought with a fulness which admits the element of thought expressed by hardness or softness along with their own meaning. And the presence of such suffixed elements to the mind along with the radical idea, shows the tendency of thought to embrace a large object.

Thus the first law of vowel harmony marks the language as massive, while the subsidiary nature of the elements which are combined with the root, compared with those which may be simultaneously before the mind in the American languages, characterises the language as less massive than these.

5. This conception of the suffix, with the idea of the root present at the same time to the mind, tends to give the suffix a fuller sense of the root, making its meaning less general, and limiting the number of roots to which it is applied.¹ This renders necessary a larger number of suffixes to express derivative ideas (see II. 5, 18); and accordingly in Yakut ninety-three suffixes are given as forming nominal stems from verbal stems treated as roots, each suffix being used only with a few roots, and all forming nominal stems in the conception of which the idea of the root is not lost or obliterated, but is distinctly present.² So also from nominal or verbal stems as roots, verbal stems are formed not only by suffixes which are generally applicable to express modifications of the verbal idea, but by suffixes whose meaning is more immersed in their root, and whose application is proportionally limited; of these last a larger number is required than of the others.

6. The suffixes which are of general applicability to form nouns from verbal stems are the following;³ in which, as in all the other suffixes of this language, it is to be understood that the *a* may be replaced by *ä*, *o*, or *ö*, and the *ç* by *i*, *u*, or *ü*, according to the word to which as its root it is applied; *ē* forms the verbal noun of action, sometimes used for the instrument or agent; *at'ī'e at'ī'çk* (after con-

¹ Böhlingk, sect. 257.

² Ibid. sects. 258-372.

³ Ibid. sects. 372-381.

sonants *i*-diphthongs and *i*-triphthongs), *l't'e* (after vowels) forms the noun of agent; *ar* forms the noun of the present; *bat* the noun of present negative, *ba* being the negative; *bət* the noun of the past; (*bat* and *bət* are joined by a light vowel to the final consonant of a verbal stem which has dropped a light vowel out of its last syllable); *taq'* the noun of past indefinite; *caq'* the noun of future; *mcaq'* *emcaq'* the noun of negative future.

With nouns as roots, the following suffixes are used to form nouns and adjectives;¹ *ka eka* forms diminutives or terms of endearment; *je* forms adjectives of place or time, used also adverbially, from nouns or the locatives of nouns; *taje* forms adjectives of place and time from nouns; *l'iq'* forms from every noun an adjective signifying provided with that which the noun denotes; *msaq'* *emsaq'* forms from nouns, adjectives signifying fond of what the noun denotes; *set* forms adjectives signifying occupied with what the noun denotes.

7. Between nominal and verbal stems there are the following differences. Light vowels, whether short or long, and heavy short vowels, which are so frequent at the end of nominal stems, are quite excluded from the end of verbal stems; *a* is rare at the end of nominal stems, but a very favourite final letter to verbal stems of more than one syllable; *ea* ends a verbal stem less frequently than *a*; but *iü*, *uo*, *iö*, more frequently than *a*, *ö*, *ö*, which, however, are not rare; *a* and *ö*, never end a noun, and *ö* only in one instance; *k*, *q'*, and *i* are exceedingly frequent in the end of nominal stems of more than one syllable; but in the end of verbal stems of more than one syllable *q'* is exceedingly rare, *k* and *i* unknown; *m* is not very usual in the end of nominal stems, it occurs at the end of verbal stems only when monosyllabic; in *l* and *l* more nominal stems end than verbal ones.²

Verbal stems seem for the most part to love a prolonged utterance at the end which gives a sense of movement, as if the idea of the verb involved a strong element of process, or succession of being or doing; and this is confirmed by the development of derivative verbs. For though some of these, as, for example, the causatives, might express varieties of action thought quite in the accomplishment, most of them express varieties of the verb which refer rather to the succession of being or doing; such are the inchoatives, properatives, intensives. And that the causative verbs, too, express causation of the succession of being or doing seems to be suggested by the fact that when this is strong in the verbal stem, as when the verbal stem ends in a long vowel or diphthong, the causative element is simpler than when the stem ends in a consonant; in which latter case it has to express in itself a thought of the being or doing which it causes, while in the former case this is expressed for it in the stem; if, however, the stem which ends in a consonant be monosyllabic the verbal idea which it expresses is simpler, and may take up from use more sense of verbal succession, so as to be made causative by a simpler element than that

¹ Böhlingk, sects. 382-387.

² Ibid. sect. 441.

which is required by other stems which end in a consonant. As the causation refers to the doing or being rather than to the subject of the doing or being, the causative governs the object of the root in the accusative, and its subject or agent in the dative.¹

So also the suffix *n*, or when subjoined to a consonant, or *i*-diphthong or *i*-triphthong, *en*, which expresses the reflexive, is sufficient also to express the passive if the stem end in a vowel,² perhaps because the verbal succession that is in the vowel combines with *n* so as to express with sufficient strength the succession of the passive abiding in its subject. But if the stem end in a consonant, though *en* expresses the reflexive, the passive requires an additional element and is formed by *eġen*.³ Causatives of stems ending in a vowel and of some stems ending in *r* are formed by subjoining *t*. Causatives of some monosyllabic stems ending in a consonant are formed by *ar*, *ear*; other monosyllabic stems ending in a consonant or in an *i*-diphthong form the causative with *et*. Causatives of stems ending in a consonant are generally formed by *tar* and its euphonic varieties.⁴

Co-operatives and reciprocals are formed by *s* or *es*.⁵

Intensives signifying also extension or multiplicity in time, in objects, or in subjects, are formed by *et*, *tā*, *lā*, *talā*, *attā*, *etalā*, *elā*, *alā*, *ealā*; ⁶ properatives by *baġtā*.⁷ Sometimes verbal stems take two or

three of these derivatives suffixes, as ^{lift pass. caus.} *kötöf'ülün'när*, cause to be lifted; ^{die caus. caus.} *öl · ör · tör*, let kill; ^{know co-op. refl. caus.} *bil · is · in · nār*, let make acquaintance with.⁸

From nominal stems verbal stems are formed by *lā*, expressing to provide one with, to apply to, to furnish what the stem denotes;⁹ and inchoatives or verbs of becoming are formed by *r* and *er*, by *i* subjoined to a vowel, or by *ei* subjoined to a consonant.¹⁰ Verbs of becoming are formed from substantives by *tei*,¹¹ and verbs are also formed from nominal stems by *ā*, *ea*, *ār*, *rgā*, *sei*, *gei*, *rei*, *lei*, *l'ei*, *t*, *tā*, *ai*, *es*, *l'öi*.¹² All formatives are suffixed.

8. The noun, although it involves less of process than the verb, is imperfectly distinguished from the verb and from other parts of speech. Its stem or nominative case may be used as an adjective, or having taken personal suffixes, may assert as with a copula; and an adjective may generally be used as a substantive.

The noun has no article nor grammatical gender. It makes a plural in *lar*, with euphonic change of *l* to *t*, *d*, and *n*; but this is not used when the plurality is thought indefinitely like a general or collective noun, or when it is implied in an accompanying attributive or predicate.¹³

There are nine case-endings or postpositions of case, all subject to euphonic change in their initial; accusative has *-e* after consonant or *i-*

¹ Böhlingk, sect. 701.

² Ibid. sect. 482.

³ Ibid. sect. 483.

⁴ Ibid. sect. 484.

⁵ Ibid. sect. 485.

⁶ Ibid. sects. 488, 708.

⁷ Ibid. sect. 489.

⁸ Ibid. sect. 487.

⁹ Ibid. sect. 490.

¹⁰ Ibid. sects. 492, 493.

¹¹ Ibid. sect. 494.

¹² Ibid. sects. 495, 508.

¹³ Ibid. sects. 619-624, 640.

diphthong or *i*-triphthong, *-ne* after vowel; it expresses the object of immediate reference, and is used always when the stem is a pronoun, and with nominal stem when the noun is thought with emphasis or particularity, or as when it has plurality or a defining or qualifying element, or denotes a living being, otherwise the bare stem is used for the direct object;¹ accusative governed by an imperative has *-ta*, which perhaps is a demonstrative element like third singular possessive suffix, but with stronger consonant, so that *t* is not dropped after consonants; it possibly refers strongly to the object of command as such; dative (to, at) *-j'a*;² ablative (from) *-ttan* after vowel, *-tan* after consonant, or *i*-diphthong or *i*-triphthong; locative (position in place or time),³ *-na*; instrumental (along of, by means of),⁴ *-nan*; adverbial (like), *-ĭe*; comitative (with) *-ĭen*; comparative (rather than, beyond, besides)⁵ *-taj'ar*; there is no genitive, the genitive relation being expressed by the governed noun in its stem form, preceding the governing, and the latter having a possessive suffix to represent the former, so closely does possession combine with the thought of what is possessed. The postpositions of case are in the plural subjoined to *ĭar*. The bare stem sometimes takes the place of the accusative, dative, instrumental, and adverbial.⁶ It is always used as adjective or possessor before a noun; but if an attributive or adjective follows the noun to which it belongs, it takes the same case-ending as the noun, because the noun is not then thought in such close connection with the attributive so as to affect the latter with its own case-relation, and this has to be repeated. The element of plurality has also then to be repeated for the same reason, so that there is agreement in number as well as in case.⁷

singular			plural	
1	2	3	1	2

9. The personal pronouns are: *min*, *än*, *kini*; *bisigi*, *äsigi*.⁸ There are also compounds with *ikki*, two; *bisikki*, we both; *äsikki*, ye both; *än bisikki* means I and thou, *kini bisikki* I and he.⁹ The

singular		plural	
1	2	1	2

subjective suffixes or persons of present tense are: *-ben*, *-j'en*; *-bet*, *-j'et*, with euphonic change of initial. There is no subjective suffix of third person singular, but that of third person plural is *ĭar*. In the imperative, however, the suffix of second plural is *-ü*, *-en*, or, when strongly expressed, *-enet*, of third singular *-ten*, of third plural *-temmar*.¹⁰

1		2	
1	2	1	2

The possessive suffixes are, in the singular: *-m* or *-em*, *-ü* or *-en*,

3		
1	2	3

-ta or *-ten*, *-a* or *-en*, *t* being used after vowels and not used after consonants or *i*-diphthongs or *i*-triphthongs. In the plural the possessive

¹ Böhntlingk, sects. 536-538, 549, 550.

³ Ibid. sects. 578-580.

⁶ Ibid. sects. 606-617.

⁹ Ibid. sect. 639.

⁴ Ibid. sects. 583-588.

⁷ Ibid. sect. 609.

¹⁰ Ibid. sect. 421.

² Ibid. sect. 551.

⁵ Ibid. sects. 595-604.

⁸ Ibid. sects. 418-420.

1 2 3

suffixes are *-bet*, *-g'et*, *-lara*, or *-laren*. The possessive suffixes, when attached to a plural noun, follow the plural element; but the third plural suffix absorbs the plural ending of a plural noun, so that it is subjoined to the simple stem. Stems of more than one syllable ending in a consonant, with a light vowel after a single consonant in the last syllable, are wont to drop this vowel when they take a suffix, and to insert a light vowel before initial consonant of suffix.¹

The demonstrative pronouns are *bu*, in the oblique cases *ba* or *ma*, demonstrative of the near, *iti* of the more remote, *öl* of the most remote. There are also demonstrative stems *an*, *in*, preserved in *ane*, presently, just now, and *innä*, there; and strengthened forms of the three first, *subu*, *siti*, *söl*, as well as *sin* the same.²

The interrogative and relative pronoun is *kim*, who; *tuoq'*, what; also *q'a*, *q'an*, *q'ai*. There are also the following pronominal formations, *tö'sö*, how much; *q'as*, how many; *ba't't'a*, so much as this; *ot't'o*, so much as that; *q'a't't'a*, how much; *si't't'äq'*, *se't't'äq'*, just so much; *q'ai'taq'* as; *man'nek*, such as this; *it'inv'nik*, *on'nuk*, such as that; *-lara* seems to be an element of proximity or position, *bä'tärä*, this side; *annara*, that side;³ it is probably akin to the Mongolian dative *-dur*.

There is a pronominal element *iänä*, which, subjoined to the roots of the personal pronouns and to *kim*, forms substantives of possession, denoting what is mine, thine, &c. This element in the plural is *iän'när'ä*, which shows that it consists of the stem *iän* and *ä* the possessive suffix of third singular;⁴ *iän* is doubtless of a demonstrative nature, the abstract possessive *ä* gives it the sense of a possession, and this is particularised by the pronoun to which it is subjoined;

he
kin'iän'när'ä may mean either theirs or the plural of his; in the former the possession is thought as attaching to each individual so as to be pluralised with them; *iän* suffixed to the cardinal numbers expresses the number as thought collectively in its totality,⁵ because in the act of referring to it with a demonstrative element it is regarded as a single object.

The pronouns take the postpositions of case like the nouns.⁶ The first and second personal pronouns take in the oblique cases of the singular the element *igi* which they also have in the plural; this is an objective element which these pronouns need when used separately as objects (see 38). As substance also it is brought out by the plurality (Def. 4, 14), and added to the person. To this, *n* only is added to form the accusative, perhaps because the objectivity which *igi*, with demonstrative *n* added to it, gives to the first and second person singular of itself expresses it as object. With the exception of *tuoq'*, all the pronouns, and *kisi*, man, which is used as an indefinite pronoun,⁷ express the dative relation by *eq'a* instead of by *g'a*, which probably arises from their being thought with strong sense of directed attention

¹ Böhlingk, sect. 53.² Ibid. sects. 422, 423.³ Ibid. sects. 424-430.⁴ Ibid. sect. 426.⁵ Ibid. sect. 410.⁶ Ibid. sect. 434.⁷ Ibid. sect. 393.

(Def. 7) which strengthens the relation to; in the first and second person singular this element of direction, which is brought out by the dative, involves of itself a sense of the pronoun as object of this relation, so that *igi* is dropped. None of the pronouns have the imperative accusative *ta*, perhaps because they are more distinct as objects than the noun, so that the sense of the command is less carried into them. But all of them, except the three personal pronouns, take *n* before all the postpositions of case except the instrumental; the personal pronouns take it before the adverbial, the comitative, and the comparative.

10. In the declension of nouns affected with the possessive suffixes,¹ the postposition of case follows the suffix. In the nominative or simple suffixed stem the suffixes of first and second singular are nasal, which is their most expressive form; but in the other cases the nasal tends to become medial, which is a more condensed utterance; also in these other cases the heavy vowel of the third singular suffix becomes light, both changes being probably due to the mental act of thinking the suffixed noun as object of a relation; for this gives unity to the idea, and causes closer combination of the suffix with the noun, and consequently an abbreviated utterance of the suffix. When the simple suffixed stem, with third singular suffix, has to be thought with great condensation, as when it expresses the governor of a genitive and is itself governed as a genitive, as *kini aĵa·tēn aĵa·ta*, his father's father, not only does the suffix assume the light vowel, but it also takes *n* to express the mental act of thinking as a single object in its present connection the suffixed noun correlated with the noun or pronoun that is dependent on it; thus *n* is used in the above example because *kini aĵaten* is so closely connected with its own governor that it is thought as a single object like *kini* in *kini aĵata*, his father.² When that which governs the suffixed noun is a strong element, as when it is a separate member of the sentence governing the suffixed noun in the accusative, or when it is one of the less abstract postpositions of case, the adverbial, the comitative, or the comparative, thought passes less readily to the idea of the suffixed noun, as object, and the act of thinking it as such gets expression in a pronominal *n* subjoined to the suffix, and to this no element of transition is added in the accusative, because it sufficiently expresses the object. Moreover, the direction of attention with which the pronoun is thought strengthens perhaps the relation to, in the dative of a noun which is suffixed with a pronoun, so that the dative ending, instead of being *ĵ'a*, is strengthened into *ĵ'ar*, subject to euphonic change in its initial. This directive or local nature of the pronoun appears also in the fact that the locative case seems to be confined to pronouns, suffixed nouns, and nouns of local signification.³ It seems to be connected with the strong sense of direction with which the pronouns are thought. Such an element is involved in the nature of a pronoun (see Def. 7), but it is natural that it should have special strength in the languages of these nomad races in whom the observation of objects

¹ Böhlingk, sect. 435.

² Ibid. sect. 655.

³ Ibid. sect. 395.

at great distances is so keen that it has led to a development of sense which has probably affected the shape of the skull¹ (see 21, 38, 71; also chap. iv. 14).

11. The above-mentioned use of *n* is probably to be seen also in *ne*, the accusative (28) case-ending of unsuffixed nouns,² and of all the pronouns except first and second person singular; also in the use of *n* before the adverbial, comitative, and comparative postpositions of the personal pronouns, and before all the case-endings of the other pronouns; and in the occasional use of *n* or *en*, or sometimes of *an* added to the end of nominal stems; this fuller form of the nominal stem being apt to be used before case-endings and other suffixes, and when the noun is used adverbially.³ According to this view, *n* expresses an act of attention directed to the noun or pronoun to think it in its present connection; and is used as a mediating element when the thought of the noun or pronoun does not involve a sufficient sense of its present connections. If this be so, the *n* is an element of the same nature as the arthritic elements of the American languages (II. 33).

12. There are scarcely any pure elements of relation in the language except those which form the cases of nouns;⁴ for there are no other true postpositions and only four conjunctions.

There is no adjectival expression of degrees of comparison. But adverbs and gerunds and other words are repeated to give intensity or to express repetition or extension.⁵

13. The following are the formations of the verb in its moods, tenses, and persons, the verbal stem taken, for example, being *bes*, to cut.⁶

	3d sing.	2d pl.	3d pl.	
Imperative present:	<i>bes · ten</i>	<i>bes · en</i>	<i>bes · tennar</i>	; negative,
2d sing. neg.	neg. 3d sing.	neg. 2d pl.	neg. 3d pl.	
<i>bes · e · ma,</i>	<i>bes · pa · ten,</i>	<i>bes · e · ma · n̄,</i>	<i>bes · pa · tennar.</i>	Imperative
2d sing.	1st sing.	3d sing.	2d pl.	3d pl.
future:	<i>bes · ar,</i>	<i>bes · em,</i>	<i>bes · eaq · ten,</i>	<i>bes · ar · en,</i>
			1st sing.	2d sing.
negative,	<i>bes · em-</i>	for <i>bes-</i> .	Indicative present:	<i>bes · a · ben,</i>
1st pl.	2d pl.		<i>bes · a · jet;</i>	the third person is the noun of the present,
	pl.		1st sing.	

<i>besar,</i>	<i>bes · allar.</i>	Indicative present negative:	<i>bes · pap · pen,</i>	<i>bes · pak · ken,</i>
2d sing.	3d sing.	1st pl.	2d pl.	3d pl.
<i>ken,</i>	<i>bes · pat,</i>	<i>bes · pap · pet,</i>	<i>bes · pak · ket,</i>	<i>bes · pat · tar.</i>
	1st sing.	2d sing.	3d sing.	1st pl.
perfect:	<i>bes · t · em,</i>	<i>bes · t · en,</i>	<i>bes · t · a,</i>	<i>bes · t · e · bet,</i>
3d pl.				<i>bes · t · e · get,</i>
				1st sing.

<i>bes · t · e · lara;</i>	negative,	<i>bes · pa-</i>	for <i>bes-</i> .	Potential:	<i>bes · aya · ben,</i>	<i>bes · aya · jen,</i>
2d sing.	3d sing.	1st pl.	2d pl.	3d pl.		
<i>aya · jen,</i>	<i>bes · ar · ai,</i>	<i>bes · aya · bet,</i>	<i>bes · aya · jet,</i>	<i>bes · aya · allar;</i>	nega-	
		3d sing.	2d sing.	1st sing.		
tive,	<i>bes · em-</i>	for <i>bes-</i> .	Hypothetical:	<i>bes · tar,</i>	<i>bes · tar · gen,</i>	<i>bes · tar · ben,</i>

¹ Prichard's Researches, vol. iv. p. 407.

³ Ibid. sects. 226, 402.

⁵ Ibid. sect. 779.

² Böhtlingk, sect. 392.

⁴ Ibid. sect. 773, 778.

⁶ Ibid. sects. 515-521.

	3d pl.	2d pl.	1st pl.	
	<i>bęs·tal·lar</i> ,	<i>bęs·tar·get</i> ,	<i>bęs·tar·bet</i> ;	negative, <i>bęspa-</i> for <i>bęs-</i> .
		3d sing.	2d sing.	1st sing.
				3d pl.
Present future :	<i>bęs·ęse</i> ,	<i>bęs·ęse·gen</i> ,	<i>bęs·ęse·ben</i> ,	<i>bęs·ęse·lar</i> ,
2d pl.	1st pl.			
	<i>get</i> ,	<i>bęs·ęse·bet</i> .		

The second singular of the imperative is in the present the verbal stem ; it may be strengthened both in the present and future by subjoining *ei*, which is used also as an interrogative suffix,¹ and when this is used with the second plural, the person-element becomes *eięet*.² The second singular imperative future, the third singular present indicative, the third singular potential, the third singular hypothetical, and the third singular present future, have no element of person. The present future, called by Böhntlingk the perfective, is thus explained by him—*bęsęse*, he is in a condition to cut (*er ist im stande abzuschneiden, er wird abschneiden können*).³ The perfect denotes what has just been completed.⁴ The personal elements of the perfect are the same as the possessive suffixes ; those of the imperative are peculiar to itself ; the rest are the subjective suffixes.

There are also the following formations.⁵ Present gerund, *bęsar*, eat

siän ; negative, *bęs·ę·meņa*, *siä·mi·ņa* ; also *bęs·ę·meņa*, *bęs·ę·m·ņa*.

Gerund of the immediate past, *bęsät*, *siät*. Neither this nor the following gerund occurs in a negative form.

Gerund of the future, which sometimes corresponds to Teutonic infinitive, *bęsa*, *sī* (from *siä*). Supine, *bęsar·ę* ; negative, *bęs·ęm·är·ę* ; accusative of *bęsar*, *bęsemär* ;⁶ it denotes a being or doing thought as an aim or object.⁷

The gerunds accompany always other verbs, as complementary to them. The verbal nouns act as participles, for every nominal stem may be used adjectively.

The verbal noun of the present, *bęsar*, negative *bęspat*, which may denote the action or the agent or the object, may also with the possessive suffixes attached express an imperfect tense, with a sense of repetition or duration ;⁸ for all its meanings involve a going on. It is worthy of note that the final *r* of the noun of the present becomes *l* in the plural before the plural ending *lar*, whereas in general it is the *l* which is changed after *r*, and becomes *d*. When the noun of the present has come to be used as an appellative noun, the general rule is followed, and *l* becomes *d* ; thus from *köt*, to fly, comes *kötör*, a bird, as well as *kötör*, flying ; and the birds are flying is in Yakut *kötördör* *kötöllör*.⁹ This shows weakness in the thought of verbal *-ar*, and a strength as of substance in nominal *ar*.

The verbal noun of the past (*bet*) *bęspet*, which may denote the past action, or its agent or object, may also, with the possessive suffixes, express an historical past tense.¹⁰

The verbal noun of indefinite time (*taq'*), *bęstaq'*, which may

¹ Böhntlingk, sect. 533.

² Ibid. sect. 515, 4.

³ Ibid. sect. 521.

⁴ Ibid. sect. 715.

⁵ Ibid. sects. 522-524.

⁶ Ibid. sect. 526.

⁷ Ibid. sect. 771.

⁸ Ibid. sects. 724-732.

⁹ Ibid. sect. 173.

¹⁰ Ibid. sects. 733-741.

denote the action as of any time, may also with the possessive suffixes form a tense of indefinite time.¹

The negative verbal noun (*bataq'*) of the past or of the indefinite *bešpataq'*, which may denote the absence of the action in the past or in any time, or the agent from whom it was absent, may also with the possessive suffixes, or, in the third person without any suffix, express a negative past or negative indefinite tense.²

The verbal noun of the future (*caq'*) *bešcaq'*, negative *bešmeaq'*, which may denote the future action or agent, may also with the possessive suffixes form a future tense.³ It sometimes drops *q'* in the first and second singular.⁴

Those parts of the verb which involve most sense of process—the potential, the future, both indicative and imperative, the present imperative in the second person, the present gerund, and the supine, when they take the negative, insert a light vowel between the stem and the negative element when the stem ends in a consonant or *i*-diphthong; and this of course saves the negative element *ba* or *ma* from being hardened by a tenuis or *s* at the end of the stem. This light vowel doubtless expresses process, the idea being a negation of the process rather than of the accomplishment. Thus: don't cut, he mayn't cut, he won't cut; whereas the other parts are, he does not cut, let him not cut, he has not cut.

The verbal elements *ät-*, perfect of *ä*, to be; *är*, being; *ibit*, having been; *bār*, being (at hand, *vorhanden daseiend*); *buol*, to become, continue, are used also as auxiliaries with gerunds and verbal nouns.

Thus *bār* with the possessive suffixes forms an imperfect tense, *bārem*, I was; and this following the verbal noun of the past expresses a pluperfect; *buol* in its future tense following the verbal noun of the past expresses a future past (*futurum exactum*);⁵ and the noun of the future may be followed by *ä* in its perfect, by *ibit*, *bār*, *buol*, to express corresponding varieties of being future.⁶

There are in Yakut, as in the kindred languages, verbs of a more general meaning which, in connection with a gerund, are used to give a particular shade of being or doing to the verbal idea which the gerund expresses. Such are, *är*, to be; *olor*, to sit; *el*, to take; *is*, to go; *käbis*, to throw (give impulse of energy); *kül*, to come; *kör*, to see (exercise care, circumspection); *qäl*, to continue; *tur*, to stand; *bar*, to go forth; *šet*, to lie; *šetet*, to go.⁷

The gerund of the present, with its own subject, may have the meaning of the Latin ablative absolute; it sometimes takes the subjective suffixes, and becomes a participle, agreeing with the person.⁸

Any substantive or adjective in its singular stem form, even a substantive stem with possessive suffix, may as predicate take the subjective

¹ Böhlingk, sects. 742-745.

² Ibid. sects. 746-750.

³ Ibid. sects. 751-755.

⁴ Ibid. sect. 755.

⁵ Ibid. sect. 740.

⁶ Ibid. sect. 755.

⁷ Ibid. sect. 759.

⁸ Ibid. sects. 760, 761.

suffixes, and so imply the present copula,¹ or if unsuffixed, may as predicate take the possessive suffixes, and imply the past copula.²

14. In this great verbal development there are four features which are specially deserving of notice.

(1.) Notwithstanding all the variety of verbal formations, there is a singular weakness of distinction between the verb and the noun; for though the tenses and moods given above with their persons are used only as true verbs, all except the third singular indicative present, yet this last is used also as a verbal noun, which shows that when it is used as a verb the idea involves no such sense of verbal subjectivity as would require distinctive expression. The other tenses and moods are by their nature less assertive than the present indicative, and therefore involve still less suggestion of subjectivity (Def. 11); and those of them that do not belong to the present time are so objectively connected in thought with the personal element which represents their subject that the combination suggests the same expression as that of the noun with possessive suffixes. This nominal character is still stronger in those parts of the verb which consist of a verbal noun with possessive suffixes. And though it might be thought that the present or subjective persons imply in themselves a subjectivity truly verbal, yet that this is not so appears from their use with the present gerund, for with it they form not an assertive verb, but only a participle. The slightness of distinction between the verb and the noun interferes with the development of mood, for facts which are dependent on other facts as parts or objects or conditions of them are reduced to nouns by the weakening of their sense of realisation, and are expressed, not in a subjunctive or infinitive mood, but by nouns and gerunds³ (see III. 7, 55).

The subjective inherence is the element of assertion (Def. 11), and to it properly the negative belongs, and it is because it is thought in the subject without penetrating the stem, that the negative goes with the subject as a verb (90).

(2.) Along with this deficient subjectivity of the verb is to be noted a strong sense of the process or succession of doing or being. This is to be seen not only in the elements subjoined to the stem, especially in the present, indicative, and present gerund, but also in the verbal stem itself (7) and in the great use of auxiliary verbs. The detachment of these from the verbal stem shows that the succession of being or doing which they express is thought not quite as the process of accomplishment, but rather as the process of being or doing which leads to accomplishment. It is as if the subject was thought not quite as accomplishing, but rather as occupied about the accomplishment, and as if the state of being or doing of the subject in reference to the accomplishment attracted thought strongly.

(3.) Agreeably to the two preceding features, it is to be noted also how readily the idea of the verbal stem combines with the object. The affinity between them is not indeed so great as in Tagala, where the verb so enters into its object as to be realised passively in it as subject (III. 57). But a less degree of this tendency is to be observed in Yakut,

¹ Böhlingk, sect. 640.

² *Ibid.* sect. 658.

³ *Ibid.* sects. 543, 557, 558, 566, 635, 763, 766.

in the verbal nouns of the present and of the past being used not only to denote the action and the agent, but also to denote the object.

(4.) The development also of tense is worthy of being noted. The distinction of a present and a future in the imperative is remarkable. The present future is almost a future of the potential mood, but its person-elements show that it is not a true future, but a future thought as a present capability. For this distinction of the present persons from those which are not present, shows in a remarkable manner how completely the past or future tense is thought in the past or future time. Even the perfect, which denotes a fact just completed, is shown by its person-elements to be thought, not from the standpoint of a present subject, but with its subject in the past. And the future, which in Greek has present persons, is in Yakut thought out of the present, being expressed by the noun of the future with the non-present persons. So strong is this sense of removal out of the present that it gets expression in the third singular, which in all the present tenses except the imperative has no person-element, but in the non-present formations requires a non-present person.

15. The laws of vowel harmony, governing as they do all the syllables in each word in accordance with the beginning or radical part, mark out the words distinctly from each other. They also distinguish the elements of speech into two categories, roots and affixes; the roots having their own determinate vowels, the affixes being indeterminate in their vowels, as these depend on the vowels which precede them in the word. The root can never be an affix, nor the affix a root; so there is no composition in the language, only derivation (Def. 21). The interest with which the Yakut thinks what he takes for the principal element in the nature of substantive objects, and of the states and actions which are realised or may be thought as realised, so predominates in his thought of these as their determining elements, that the rest of the idea is quite subordinated as merely supplementary, while the principal element is thought independently in its general associations, and therefore goes first in the combination. A principal element would change its nature if it were thus subordinated to another principal element; it would lose its identity and change its expression, so that composition cannot take place.

16. Facts are thought as determined by their objects and conditions, and substantive objects are thought as determined by their attributes and by their relations to other objects; so that the order of expression of the members of a sentence is the reverse of the order of thought, except that the subject does not follow the verb. Emphasis, however, or magnitude in a member of a sentence, may cause its position to be changed.¹

I direction my dat. was it all speech
 17. Examples: (1.) *Min q'uolu · b'ar bāra bare Toius tel' ·*
 having live noun pres. manner its accus. describe noun fut. my accus.

lūq' olor · or maige · te · n suruy · uoq' · pu · n, it was in my instructions that I should describe the manner of life of all who speak Tungusian;² the strength with which possession is thought, and the possessor in connection with his possession, appears in the use of the

¹ Böhlingk, sect. 786.

² Ibid. sect. 542.

personal pronoun in addition to the possessive suffix; such, too, is the strength with which the verb is thought as pertaining to the subject, and the subject as including the verb; *ol'oror* is qualified by *bare* *Toinus tellāq̄*, and is connected as a genitive with *maigetēn* by the suffix *tē*, the idea being, the manner in which all who speak Tungusian live; the dependent verb that I should describe is expressed as a noun of the future, and its subject as possessive suffix; it is in the accusative,

because to it the instructions directly referred. (2.) *Ut'ugasat kör*^{bring near see}
noun fut. my accus.

üöq̄ · pū · n, bring (it) near that I may see (it);¹ *ut'ugasat* is a verbal stem formed from *ut'ugas*, near; the dependent verbal nouns in this and the preceding example follow what governs them, because the object or purpose which they express is thought too distinctly

from the governor to be made determinant of it. (3.) *ütüö · nü*^{good accus.}
think noun fut. than do noun fut. dat. better

san · eaq̄ · taq̄ar on'or · uoq̄ · q̄a orduk, (it is) better to do good than to think it;² it is better to, that is, the superiority is attached to (dative). (4.) *Bu man · e barete · n surui · daq̄ · q̄a q̄as da*^{this this accus. all its accus. write noun indef. dat. indef. also}
thick book manuscript come forth fut. 3d sing. be perf. 3d sing.

q̄alen kinigä suruk taq̄s · eaq̄ · a ä · t · ä, if one wrote all this (in case of writing all this) more thick book-writing should come forth;³ the perfect *ätä* removes the future out of actuality, making it a mere contingency,⁴ like should, the past of shall. (5.)

Kini tuoq̄ as · a bār · e · n biär · är, he gives whatever food he has.⁵ (6.) *San · ē · ben man'nek sanā kör · iäq̄ tustaj̄ · e · n*^{he whatever food his accus. give noun pres.}
all man dat. think pres. I this like thought enter noun fut. necessity its acc.

bare kisi'äq̄ä, I believe that such a thought must come into every man;⁵ I believe the necessity of the future entering of such a thought to every man, to, being the relation of necessity to man; *sanā* is the stem, which becomes *sanē* in the present, because long heavy vowels become light in combining with *a* of the gerund, or of the *nomen pre-*

I love noun pres. man my
sentis or present tense.⁶ (7.) *Min tapt · ēr kisi · m*, the man whom I love,⁷ my beloved man; here the noun of the present is an attribute of the object (13). (8.) *öl̄ doidu ot · o mas'a ün · är kūs · ä*^{that region grass its tree its grow noun pres. strength its}

of growing is determined by what precedes as by a genitive. (9.) *Min*
house my is
jii · m bār, I have a house;⁸ possession is asserted or denied by stating the object as possessed and then asserting its existence *bār*, or its non-

existence *suoq̄*. (10.) *Säp'rit'i · n q̄al̄ · eaq̄ bat · ar · eaq̄ v̄ir*^{nothing our accus. put noun fut. go in caus. noun fut. one}

¹ Böhlingk, sect. 543. ² Ibid. sect. 558. ³ Ibid. sect. 566. ⁴ Ibid. sect. 718.

⁵ Ibid. sect. 65. ⁶ Ibid. sect. 71. ⁷ Ibid. sect. 653. ⁸ Ibid. sect. 645.

even bag our one even case our was not 3d sing.

da q'abēt bīr da isip'pīt suoq' a, we had not even one bag or
need

even one case in which to pack or put our things.¹ (11.) *Kesal'ja'*
3d sing. poss. non-existent day

ta suoq' kün, a day without need;² the possessive suffix connects the noun with a possessor (*kün*) and *suoq'* negatives the connection; and this construction of a noun with the third singular possessive suffix followed by *suoq'* expresses without, even when the antecedent of the relation is not a mere noun, but a verb in its subject (see Example 16); the possessive suffix in such a construction refers to the antecedent of the relation without, the noun which has the

suffix being the consequent. (12.) *ät on'uoqa kim i bājäsä kör'*
say that dat. who accus. yesterday see
past 2d sing.

büt ün, say to him whom thou sawest yesterday; *öl* and its derivatives are used as antecedents to the interrogative pronouns used as

I question my dat. name his what 3d sing. poss. accus.
relatives.³ (13.) *Mīn eyetē b ar ät a kim i n*, on
my asking what was his name⁴ (the what of his name). (14.)
3d pers. pron. lie noun pret. manner 3d sing. poss. dat. one even die ger. pres.

Kini sep pēt maige te gar bīr da janē öl ün
be noun pres. man cut 3d sing. poss. be not 3d sing.
är är kisi bešē ta suoq' a, there was not any likeness
of a dying person in the manner in which she lay; *set* is the stem of

the verb to lie, *t* is assimilated by the suffix. (15.) *Seray e gar*
visage 3d poss. dat.
one even trait 3d poss. change neg. indef. 3d sing.

bīr da surāsen a kubului'ba taj a, not a trait in her visage
had changed; *āsen* is a suffix formative of nominal stems. (16.)
3d pers. pron. die noun pret. 3d sing. poss. weary noun pret. man light sleep

Kini öl büt ä sełai bēt kisi t'et'as nurayē
3d sing. poss. from difference 3d sing. poss. neg. verb was 3d sing.

te ttan aten a suoq' bār a, her death was
without difference from the light sleep of a weary man; *nurayē* is the
noun of action of *nurai* to sleep; *atenu* is connected as a possession
by suffix *a* with the subject of *bara*, and the connection is negated

that do ger. pres. collect together themselves noun pret. four
by *suoq'*. (17.) *öl gen an munn us tu but tüörd*
ten about man abl. one even man accus. one even child accus. frighten

uon fa kisi ttän bīr da kisi ni bīr da ojo nu kuttū
neg. indef. 3d sing.
ba taj a, so that (doing that) she did not frighten a
single child or man of about forty persons who had assembled;
mus means to collect, its co-operative form (suffix *es*) is *mun-*
nus; the reflexive of this is *munnusun*, which becomes before

the suffix (9) *munnusnu munnustu*. (18.) *Bu q'on tösö da*
frighten reflex. neg. ger. pres. be ger. pres. see praet. 3d pl. 3d pers. pron. pleasure

kutta n em na är än kör'büt tärä kini üörü
smile do noun pret. look 3d sing. poss. accus. rel. as sin 3d poss. neg. man

külüm gem meṭ maige te n q'ai'taq' ayē ta suoq' kisi

¹ Böhlingk, sect. 645.

² Ibid. sect. 651.

³ Ibid. sect. 662.

⁴ Ibid. sect. 669.

breath 3d poss. possessor 3d sing. poss. sick noun pres. die noun pres. body 3d poss.

t̄en · ɛ · n it̄t̄i · tā ɛal̄ā · ar öl · ör üt · i ·
 abl. go forth noun pres. 3d sing. poss. time loc. high creator region 3d poss.
ttan taq̄s · ar · ɛn sāġ · ɛna ürdük ayē doïdu · tu · n
 bright place 3d sing. poss. dat. prepare pass. noun pret. seat 3d sing. accus.
serd̄ek sir · i · ġār bälännü · m · mit oloġ · u · n

see ger. pres. rejoice noun pret. 3d poss. like
kör · ön üör · büt · ün kurduk, these people being quite free from fright saw her countenance, which had assumed a smile of pleasure, like as if she rejoiced seeing her seat prepared in the bright place of the region of the high creator at the time of the going forth from the body of sickness and dying of the possessor of breath (the soul) of the sinless man; *üörü* is the abstract noun of *üör* to rejoice; *külüm* is formed from *kül* to laugh; *ġaitaq̄* (see 9); *ayēta* as belonging to *kisi* is negatived by *suoġ*; for final *n* of *tēnen taq̄saren doïdutun* see 10; *serd̄ek* is formed from *serdā* to be bright.

The last five examples are consecutive sentences in Böhlingk's Text, p. 20.

TURKISH.

18. The Turkish language is so closely akin to Yakut, that almost all its formations are to be found in Yakut, with differences only of utterance. The Turk has for centuries lived a different life from his nomadic kinsmen in Asia; yet his nature still is much the same as theirs. He is impassive like them, and slow to change; and has somewhat the same combination of energy and indolence; being indisposed to action, when not stimulated by fanaticism or danger. His utterance, however, seems to be softer than that of the Yakut, so that he has *f* as well as *p* and *b*, though it is little used, and *š* and *z* as well as *s*;¹ and a foreigner may take it as a rule in speaking Turkish that the softer his pronunciation is, the more likely is it to be correct.² Like the Yakut, he avoids hiatus; but his utterance is more versatile, and he has much greater liberty than the Yakut in the concurrences of his consonants.³ The great characteristic feature, the first law of vowel harmony, prevails, as has been said above (1) in Turkish⁴ as in Yakut; though it is disguised by the changes of the vowels not being marked in writing, but regarded only as diversities of pronunciation, and by the fact that the educated classes, tending perhaps to separate the affix, under the influence of a growing generality of thought, do not observe the vowel harmony so much as it is observed in popular speech.⁴

The second law (3), or something like it, prevails also in Turkish, though less distinctly than the first. "In popular speech *u* is very often pronounced *i*, *y*, when *ī*, *ȳ*, *a*, *e*, precede."⁵ "In the beginning or end of a word *i* takes almost the pronunciation of *o*, *u*, or *ü* preceding it."⁶ "It is almost impossible to give positive rules for the

¹ Böhlingk, Yakut Grammatik, sect. 27.

² Zenker, Grammatik der Türkisch-Tatarischen Sprache, sect. 6.

³ Böhlingk, sect. 146.

⁴ Zenker, Vorrede, p. viii.

⁵ Zenker, sect. 54.

⁶ Ibid, sect. 59.

formation of sounds according to the requirements of euphony; but we will venture on one for the direction of the learner. When a word commences with a syllable containing *u* or *i*, the vowels throughout the word (if at the option of the speaker) conform to the first or dominating sound; thus *ü'ünd'i*, not *ü'ind'i*; *düründ'i*, not *dürind'i*; *kap kürü*, not *kürü* as written; *yapyalınız*, not *yapyalunuz*, which is harsh and vulgar."¹

19. There is the same abundant formation of nominal stems in Turkish as in Yakut; no article nor gender;² the plural element is *-ler*.

The declension is, nominative without suffix, genitive *-i*, dative *-e*, accusative *-i*, ablative *-dan*, or sometimes *-ile*, *-bile*, locative *-da*, *-den*. The ablative in *-ile* seems to be the same as Yakut comitative,³ but the imperative accusative, the instrumental, the adverbial, the comparative, do not appear in the Turkish declension. On the other hand, there is a genitive which does not appear in Yakut. From a comparison of the Turkish and Yakut declensions it would seem that Turkish had less sense of the relations of substantive objects than Yakut; but this is not so. For while Yakut has no true postpositions except those of the cases (12), there are in Turkish a dozen.⁴ Nor does there seem to be any essential distinction between the postpositions of case and the other postpositions. The former are said to take the place of the postpositions of other languages; and they are separable from the noun, so that when several nouns are in the same case relation, only the last takes the postposition of case;⁵ they are sometimes separated from the noun by several intervening words (32). It appears, therefore, that all the true postpositions might be regarded as forming so many different cases; but this is uncertain, as it is not stated whether all these postpositions are so combined with the noun that their vowels are determined by it. The case-endings are more separable from the noun in Turkish than in Yakut, in which the noun retains its case-ending when followed by an adjective which takes it (8). Now, the larger development in Turkish than in Yakut of true transitional elements of relation should naturally be accompanied by a stronger sense of the noun as denoting a distinct object, so that the substantive idea should involve a stronger element of substance (Def. 4). And that this is so is indicated by the fact that a noun which is connected with another noun as a genitive dependent on it is thought more distinctly from it in Turkish than in Yakut; so that instead of always accompanying its governing noun without any case ending, as if in the correlation of the two there was no sense of transition from one object to another, the genitive has a case-ending whenever its governor is distinguished by being thought with definiteness or particularisation, provided that the genitive is not a mere attribute or supplement of the governing noun.⁶ The general rule is that the genitive goes before

¹ Barker's Turkish Reading-Book, p. 16.

³ Ibid. sects. 90, 332.

⁵ Ibid. sect. 96.

² Zenker, sect. 73.

⁴ Ibid. sect. 383.

⁶ Ibid. Syntax, sect. 60.

its governing noun; but it may sometimes follow it, the governor being then thought more generally than under the limitation of the genitive to which it belongs. The genitive is then more distinct from the governing noun, and has the case-ending.¹ Always the governing noun takes, as in Yakut, the possessive suffix referring to the genitive.² And whenever a noun is governed in the ablative by a cardinal number (see Yakut, Example 17), or an indefinite pronoun thought as part of the object denoted by the noun, the cardinal number or the pronoun takes a possessive suffix referring to the noun.³

The stronger sense of relation in Turkish has hindered the use of the special accusative, which in Yakut is governed by the imperative mood. For the noun is thought more readily as object, and does not need so strong an element to denote it strongly as such.

The accusative *-i* is used for the direct object, when this is thought with definiteness or particularisation, or when the sense of transition to it is brought out by the need for noting that it is not the subject or by its being separated from the verb by intervening words. Otherwise the case-ending *-i* is dropped.⁴

20. The adjective forms a comparative degree in *-rak* or *-raq*,⁵ which, however, in the dialect of Constantinople is known only in books,⁶ though it is found in the Tartar dialects.

The adjective also is strengthened in Turkish and in the Tartar dialects by a reduplication (12) in which a labial is generally subjoined to the reduplicating syllable;⁷ and it is weakened in Turkish by *-d'ek* or *-d'e*, which also forms diminutives of nouns; in Tartar by *-su*, *-simal*, *gldem*.⁸ There is in Yakut also a diminutive suffix *t'aq*.⁹

There seems to be a greater use in Turkish and in the Tartar dialects than in Yakut of such suffixes as *-d'il* and *-d'an* to form adjectives from substantives,¹⁰ and of *-lik* to form substantives from adjectives,¹¹ though adjectives may generally be used also as substantives.¹²

21. The personal pronouns are, in the singular, *ben*, *sen*, *ol*; in the plural, *biz* or *bizler*, *siz*, *onlar*. They are declined like the nouns, except that the genitive case of the first person ends in *m* instead of *ni* (*benim*, *bizum*), but *bizler* makes *bizlerin*, and that the dative changes the final *n* of the stem to *ni*, and adds *a* instead of *ek*.¹³ This stronger dative, which is also in the demonstrative pronouns, corresponds to the stronger dative of the Yakut pronouns (9, 10, 38, 71); and as in Yakut (11) the demonstrative stems in Turkish take *n* before the case-endings, in Turkish also before the plural element.¹⁴

The personal possessive suffixes are: singular, *-m*, *-ni*, *-i* or *-si*; plural,

¹ Zenker, Syntax, sect. 153.

² Ibid. sect. 58.

³ Ibid. sect. 66.

⁴ Ibid. sects. 70, 72.

⁵ Zenker, Gram., sect. 97.

⁶ Ibid. p. xvii.

⁷ Ibid. sects. 126, 127.

⁸ Ibid. sects. 123, 125.

⁹ Böhlingk, sect. 315.

¹⁰ Zenker, Gram., sect. 130 B.

¹¹ Ibid. sects. 117, 118.

¹² Barker, Reading-Book Grammar, p. 8.

¹³ Zenker, sects. 149, 150.

¹⁴ Ibid. sect. 155.

1 2 3
-miz, -ñiz, -i. The third singular suffix is *-i* after consonants, *-si* after vowels, unless the stem be a monosyllable, when *s* is dropped.¹ The first and second persons singular and plural may take before them a light connective vowel.

The dative of a primitive noun suffixed with the first person singular ends in *a*. The other case-endings of suffixed nouns are regular. Nouns suffixed with the third person add *n* to the suffix before the case-endings¹ (10).

22. Derivative verbal stems are formed by subjoining to the simple stem, with or without connective vowels, for causatives *-dir, -t, or -r,*² *t* being used with stems of more than one syllable after a vowel, or *l* or *r*; for reflexives, *-n*;³ for passives, *l* or *-n*⁴ (*-n* being used when the stem ends in a vowel or in *l* or *r*); monosyllabic stems in *-i* can form passive in *-nil*.⁵ Reciprocal and co-operatives are formed with *-s*. Negative verbs are formed by adding to the positive stem *-me*, and if the process or possibility is to be negated, *-eh* is inserted before *-me*.⁶ Two derivative elements may be combined so as to form causatives of reflexives, or reflexives of causatives, &c., and these may be negated with or without *eh*.⁷

Verbal stems signifying to apply or use are formed from nouns by subjoining *-le*, and from these are formed causatives, reflexives, reciprocals, co-operatives.⁸

23. There are, as in Yakut, two sets of personal suffixes, one for the persons which are thought in the actual present, and the other for those which are not thought in the actual present. The former are:

1 2 1 2 1 2 3
 singular, *-em, -sen*; plural, *-iz, -siz.* The latter are: singular, *-m, -ñ, -i*;

1 2 3
 plural, *-k, -ñiz, -ler*.⁹ The former have no person-element for the third singular, and only *-ler* for the third plural. The latter are the same as the possessive suffixes, except that they have *k* instead of *miz* for the first plural, and the plural element *-ler* for the third plural. The first plural *-k* is probably the same as *-iqi*, which in Yakut is the objective element or substance (Def. 4) of the first and second personal pronouns, being brought out in them by the relations of case and by plurality (9). The persons of the imperative are, singular,

1 2 3 1 2 3
-m, —, -sin; plural, *-lim, -ek'ñiz, -sinler*.¹⁰

24. The following are the parts of the Turkish verb, which are formed simply without the use of auxiliary verbs. They are given in the second person singular, because it marks most distinctly whether the persons are present or possessive. The stem is *sev*, love; present and future, *sever'sen*, lovest, wilt love, third singular, *sever*; imperfect, *sever'd'ün*; second present, *seve'yur'sen*, art in the condition of loving; second imperfect, *sever'yur'd'ün*; preterite, *sev'd'ün*, lovedst; perfect, *sevmiş'sen*, third singular, *sevmiş'dir*; *miş* corresponds to Yakut *bet*, *dir* to Yakut *tur* stand (13), reduced to an affix; second future,

¹ Zenker, sects. 186-193.

² Ibid. sects. 218, 362.

³ Ibid. sect. 222.

⁴ Ibid. sects. 220, 360.

⁵ Ibid. sects. 223, 224.

⁶ Ibid. sect. 215.

⁷ Ibid. sects. 227, 228.

⁸ Ibid. sect. 234.

⁹ Ibid. sect. 244.

¹⁰ Ibid. sect. 274.

sev'ek'd'ek'sen, wilt probably love. Böhlingk takes *d'ek* to correspond to Yakut *eaq'*.¹ Necessary, *sev'menli'sen*, must love; previous to its being known, *sev'er'mis'sen*, art or wast loving still unknown;² potential or optative, *sev'ek'sen*, that, in order that, would that, thou mayest love; hypothetical, *sev'er's'en*, if thou love; *se* is the hypothetical element.

Besides the above, there are four indicative pluperfects, a future perfect, a conditional perfect, and other potential and hypothetical tenses formed with *sever*, *sev'e*, *sev'se*, *sev'mis*, *sev'er'mis*, and the full tense *sev'drünü*, followed by tenses of the auxiliary verbs *i*, be, and *ol*, become,³ the former being used only in the preterite *i'd'in*, perfect *i'mis'sen*, and hypothetical *i's'en*; *ol* is used as an auxiliary in the present, preterite, imperfect, potential, and hypothetical; *ol* is Yakut *buol*, and *i* is in Yakut *ibit*, noun of the past. There are also *war* and *yoq*,⁴ corresponding to Yakut *bār* and *suoq'*. It is to be observed also that *dir* (Yakut *tur*) is used as copula third singular.

The infinitive is *sev'mek*, and is declined as a substantive;⁵ *mek*, *maq* corresponds to Yakut *baq* in properative *-baq'ta*. Gerund of present, *sev'er'ken*, loving; of perfect, *sev'ip*, having loved; of process towards, *sev'ek*, tending to love; *seven* seems to correspond to Yakut gerund of the future in *-a*. Other gerunds are formed with elements of a postpositional nature: *sev'ek'rek*, going on to love; *seved'ek* (another subject), having just loved; *sev'in'd'e*, up to the loving (of another subject); *sev'dik't'e*, according to the loving; and there is also *sever'iken*, formed with gerund of auxiliary *i*.⁶

The participles used as adjectives, and which may also be declined as substantives, are: present, *seven*; future, *sev'ek'd'ek*; necessary, *sev'menli*; indefinite, *sev'dük*. They may be applied to the subject, the action, or the object; *seven* corresponds to Yakut gerund of the present, and *sev'dük* to Yakut indefinite verbal noun in *-taq'*.

Kasembek regards *menli* as derived from the infinitive ending, and the suffix *-li*, which corresponds to Yakut *-laq'*, possessed of; and this is confirmed by a similar formation from the gerund in *-ek*, *sev'ek'li*, love possessing.⁷

25. The subjective persons are differently used in Turkish from what they are in Yakut, being the person-endings of the perfect, of both the futures, and of the necessary formation, as well as of the indicative present and of the potential, whereas in Yakut all the past tenses and the simple future have the possessive suffixes. On the other hand, the hypothetical has the subjective suffixes in Yakut, the possessive suffixes in Turkish. The necessary formation, meaning must, is not in Yakut. The use of the subjective persons in the Turkish perfect seems to indicate a stronger sense of the subjectivity than there is in Yakut; and the use of the possessive suffixes in the Turkish hypothetical, while the present suffixes are used in the Yakut hypothetical, seems to indicate a greater sense of difference between the hypothetical and

¹ Böhlingk's Yakut Grammatik, sect. 380.

³ Ibid. sect. 274.

⁵ Ibid. sect. 304.

² Zenker, sect. 292.

⁴ Ibid. sect. 267.

⁶ Ibid. sects. 311-322.

⁷ Ibid. sects. 323-328; Syntax, sects. 108-119.

the actual in Turkish than in Yakut, less ideality, a more matter-of-fact character in the former than in the latter.

The greater subjectivity of the verbal formations in Turkish than in Yakut is confirmed by the fact that what corresponds in Turkish to the Yakut noun of the present in *-ar* and the Yakut noun of the past in *bat*, and which, as in Yakut, are stems of present and past tenses, cannot be used like adjectives or declined as substantives in Turkish, though they can in Yakut; they have more of the essential subjectivity of the verb, and are not therefore thought as nouns.

There is a greater sense of process in the Turkish verb than in the Yakut, as appears from the great use of *-er-* and of *-eh-* in the verbal formations and the addition of the second present and imperfect. And it is owing to this sense of process that the same tense expresses present and future, and that the second future and the subjunctive have the present persons; for the process proceeds from the present.

26. There is in Turkish a much stronger sense than in Yakut of the relations of facts thought properly in their subjective realisation. This appears not only from the considerable development of conjunctions, but also from the use of a subjunctive mood governed by these.

27. The order of the members of the sentence is similar in Turkish to what it is in Yakut; the governed word precedes the governing, the determining word precedes the determined; words of time come first, then words of place, the verb at the end.¹

There are many Arabic and Persian words and expressions which have come into use in Turkish, but the original structure of the language still remains.

TURKI.

28. The Turki language, spoken in Kashgar and Yarkand in Eastern Turkistan, is the same language as Turkish; the slight differences between them not being sufficient to make them different languages. It might be a sufficient account of Turki to note the differences which exist between it and Turkish, but the structure of the verb deserves a fuller description.

The genitive case-ending is *-niñ* instead of Turkish *-ni*, the dative *-g'a* instead of *-eh*, the accusative *-ni* instead of *-i* (8); this last seems to be pronominal, as conjectured for the Yakut (11), for *ni* occurs in Turki as a demonstrative.²

The first personal pronoun forms its genitive regularly instead of in *-m*.³

The diminutive suffix of adjectives is *-g'ana*.⁴

Adjectival pronouns are formed as in Yakut (9) by subjoining to the demonstratives *-dak*, signifying like, such as, and *-t'a* extent, amount.⁵

The relative *ki* may be subjoined to a genitive and form a possessive noun, as *ma'nin'ki*, mine; *badŕa'nin'ki*, the king's.⁶

¹ Zenker, Syntax, sect. 152.

² Shaw's Turki Language, p. 11.

³ Ibid. p. 15.

⁴ Ibid. p. 14.

⁵ Ibid. p. 17.

⁶ Ibid. p. 18.

29. The development of the Turki verb may be seen in the following list¹ of the formations of the verb *kel*, do, *-man* being the present first person, *-m* the possessive. The auxiliary verbs are, as in Turkish and Yakut, *dur*, stand; *i*, be; *bol*, become. *Kel'a-man*, I do; *kel'a-dur-man*, I am in the condition of doing (when the root ends in a vowel *i* is added instead of *a*);² *kel'd'im*, I did; *kel'sa'm*, I may do or if I do; *kel'sa idim*, I might have done; *kel'ar ir'sa'm*, I may be doing; *kel'ar-man*, I am doing or about doing; *kelar idim* or *kel'at'tim*, I was continuously doing; *kel'ip-man*, I have done; *kel'ip dur-man*, I am in the condition of having done; *kelip idim*, I was having done, I had done; *kel'gan-man*, I did (indefinite time); *kel'gan dur-man*, I, &c.; *kel'gan idim*; *kel'gan bol'sa'm*, I may (become) have done; *kela dur'gan bol'd-um*, I became about to do; *kel'g'u-dak-man*, I am likely to do; *kel'g'u-dak dur-man*, I, &c.; *kel'g'u-dak bol'sa'm*, I may be likely to do; *keldak* is the indefinite in Yakut and Turkish; *kel'gai-man*, I will do, let me do, optative future; *kel*, *kel'in*, *kel'g'il*, *kel'g'in*, do;³ *kel'sun*, let him do; *kel'iniz*, *kel'in'lar*, do ye; *kel'sun'lar*, let them do;⁴ *kel'ai*, let me do; *kel'ali*, *kel'alik*, let us do;⁴ *i'mis-man*, subjoined to *kela*, *kelar*, *kelip*, *kel'gan*, means, I am understood to do, to be doing, &c.,⁵ the want of manifestation putting it into the past with *imis* (24); also *kela dur'mis-man*, I am understood to be doing; *kelip dur'mis-man*,—to have done; *i'kan man*, the indefinite of *i*, be, may be subjoined to *kela dur*, *kelar*, *kelip*, *kel'gan*, to express a presumption rather than an actuality.⁶

The verbal adjective *kel'g'u'luk*, fit to do (Yakut *laq*, possessed of) is used with auxiliaries, *kel'g'uluk idim*, I was fit to do; *kel'g'uluk ikan-man*, I am to do. It is also used as an adjective; *kel'g'uluk*, that has to be done.⁶

There are also verbal formations, consisting of a verbal noun with a possessive suffix, followed by an auxiliary in the third person singular, to which it stands in the relation of subject; the auxiliary asserts whether absolutely or potentially, and in its proper time the reality of the act or state; *kel'gan'im bar*,⁷ *kel'd'im i'kan*,⁸ *kel'sa'm i'di*,⁹ *kel'd'im ir'sa*,¹⁰ *kel'g'u'm bar*,¹¹ *kel'sa'm bolur i'kan*,¹² *kel'sa'm bolur idi*.¹²

The verbal substantives are: *kel'mak* infinitive, *kel'ar*, the doing, *kel'gan*, subject, action, or object.

The gerunds are: *kela* present, *kelip* perfect, *kel'gat'* past. See also *bārur* and *bolsa* in 33, Example 2.

The participles, *kel'gan* applied to subject or object, *kela dur'gan*, *kel'g'u-dak* applied to subject.¹³ *Yoq* is a verbal negative as in Turkish.¹⁴

Any adjective or substantive can be turned into a verb by affixing to it the personal elements.¹⁴

30. The affixes subjoined to the stem to form derivative verbs

¹ Shaw, p. 27-43.

² Ibid. p. 22.

³ Ibid. p. 28.

⁴ Ibid. pp. 39, 40.

⁵ Ibid. p. 34.

⁶ Ibid. pp. 23, 33, 37, 50.

⁷ Ibid. p. 28.

⁸ Ibid. p. 36.

⁹ Ibid. p. 38.

¹⁰ Ibid. p. 39.

¹¹ Ibid. p. 41.

¹² Ibid. pp. 43, 44.

¹³ Ibid. p. 45-51.

¹⁴ Ibid. p. 55.

are: ¹ negative *-ma*; causative *-t*, after vowel *l* or *r*, otherwise *-ur*, *-dur*, *-sur*, *-kur*; passive *-l*, or after *l*, *-n*; reflexive *-n*; co-operative or reciprocal *-s*.

Complex derivatives with an accumulation of forms are rare, but the longest accumulation may be used.²

31. The law of vowel harmony in Turki is differently stated from what it is in Yakut, and does not seem to be observed in writing. It is that *a*, *e*, *i*, and *ui*, in the root, require *i* in the affix; *o*, *u*, *ü*, and *oi* require *u*, and *ö* requires *ö*.³

Whether or no this is an accurate statement of the law of vowel harmony in Turki, that harmony at all events prevails throughout the word, however many elements it contain, which indicates, as has been already said (4), that the radical idea continues before the mind while all the subordinate elements are being added in succession. The following observations on this process of agglutination are of great interest:—

“With all these possible combinations before him, the Turk of the East appears to construct his words on each occasion from the elements at his disposal as a compositor sets up type, rather than to employ ready-made or stereotyped forms. He accumulates affix upon affix until he has completed his meaning, instead of looking about him for a single word to which that meaning is already assigned. Hence the fact that to him each element of his words retains its separate vitality and meaning.”⁴ Yet, particular combinations may come into frequent use. And then their parts will tend to coalesce so as to be thought in a single mental act, and to be blended together in expression. Thus *bolup ir-di*, it had become, is familiarly uttered as *wopti*. “Yet a native of Khokand who will use the latter in conversation will spell it out at the full length of the former if he has occasion to write it.” “The Yarkandi, who lives further east, has not proceeded so far in his corruption of the word. He contents himself with shortening it into *bolupti*. So *aparado* is used where the true form is *alip bara turur*, he is taking away. And the imperative *alip kel* is shortened to *apke* or *akke*.”⁵

32. The order of the words is the same as in Turkish; and if an adjective should for any reason follow its noun, the case-ending or postposition is attached to the adjective instead of to the noun.⁶

The English constructions with relative pronoun are supplied by participles,⁷ or by *gi* suffixed to nouns or locatives of nouns (see Yakut, 6).⁸

33. The following examples are stories given in Shaw's sketch of the Turki language, as translated into Turki from Forbes's Persian Grammar:—

one	beggar	one	rich	gen.	door	3d	poss.	to	go	pret.	3d	sing.	and
(1.)	<i>Bir</i>	<i>gadā</i>	<i>bir</i>	<i>bā'nin</i>	<i>darwāza</i>	<i>si</i>	<i>ga</i>	<i>bār</i>	<i>di</i>	<i>wu</i>			
somewhat	ask	pret.	3d	sing.	house	gen.	inside	3d	poss.	from	voice	do	pret.
<i>bir'nima</i>	<i>tila</i>	<i>di</i> ;	<i>ui</i>	<i>nin</i>	<i>it</i>	<i>i</i>	<i>din</i>	<i>awāz</i>	<i>kel</i>	<i>di</i>			

¹ Shaw, p. 55-65.

⁴ Ibid., Preface, p. ix.

⁷ Ibid. p. 94.

² Ibid. p. 65.

⁵ Ibid. p. xi.

⁸ Ibid. p. 95. ¹

³ Ibid. p. 89.

⁶ Ibid. p. 91-93.

that woman house in is not beggar say pret. 3d sing. bread piece 3d poss. accus. *kim aġat'a ui · da yoq; ġadā de · di nān par't'a · si · ni*
ask past be pret. 1st sing. woman accus. ask neg. past that that like
tila · p i · d · im aġat'a · ni tila'ma · p i d'im kim sun'daġ
answer receive pret. 1st sing.

yawāb tap · t · im. A beggar went to the door of a rich man and asked for something; a voice spake from within the house, that the woman is not in the house. The beggar said, I asked for a piece of bread, I did not ask for a woman, that I got such an answer. *Nima* is the interrogative pronoun used indefinitely; the use of the relative *kim* for the conjunction that, is noteworthy; *ki* is similarly used in Turkish; *nān*, though a genitive, has not the genitive case-ending (19).

one doctor all times graveyard to go continu. become poten. sheet
(2.) *Bir tabīb har waqt qabristān'ġa bār · ur bol · sa t'ādīr*
3d poss. accus. head 3d poss. dat. wrap refl. past go auxiliary man pl. ask pret.
i · ni bās · i · ġa yaf · in · ip bār'ur i'di; adam'lar sur'di
3d pl. this gen. reason 3d poss. what interrog. doctor say pret. this graveyard
lar kim, mu'nin sabab · i ni · ma tabīb de · di bu qabristān
in adj. dead pl. from feel shame continu. 1st sing. that gen. because of that all
da'ġi ülük'lar'din uwat · ur · man a · nin uġ'un kim hama
3d poss. me gen. medicine my accus. eat past die past auxiliary

si ma'nin dawā · im · ni ye · p ül · ip dur. A doctor whenever he might go to the graveyard used to go having wrapped his sheet on his head. Men asked him what was the reason of this? The doctor said, I am ashamed of the dead people who are in this graveyard, because that all of them died, having eaten my medicine. *Bārur bolsa* (see 29); *nima* consists of indefinite pronoun and interrogative suffix *ma*; *uġ'un* is probably the same as Yakut *ustun*, which Böhlingk long 3d poss. accus.

in his dictionary translates along and explains as *us · tu · n.*

KOIBALIAN AND KARAGASSIAN.

34. These dialects are spoken along the highest waters of the Yenissei, between about the fifty-third and fifty-fifth degrees of north latitude. Their differences from Turki are slight and unimportant. Their law of vowel harmony is much the same as the first law in Yakut.¹ Their principal deviations from the other dialects are in the structure of the verb. But the derivative verbal stems are formed as in Turki, except that no causative element is mentioned but *-der*.

They do not make so much use of auxiliary verbs in the formation of compound tenses and moods as the Turkish and Turki;² yet, like Yakut (13), they use many verbs in less close connection with a gerund to define with particular shades of meaning the fact which they would express.³

The formations of the verb made by suffixes to the stem are as follows:

The infinitive is formed by *-r*, which in the Yakut, Turkish, and Turki gives to the verb an element of going on, and when used for

¹ Castren, Koibal. und Karagass. Sprachlehre, sect. 11.

² Ibid. sect. 70.

³ Ibid. Vorwort, p. xv.

the infinitive shows that the abstract idea of the verb involves a strong sense of process.

This element *-r* also expresses a future; and there is besides *-gai* to express a probable future.

Perhaps it is on account of the strong sense of process that the element *-gan*, which in the Turkish gerund *severken* has a present significance, like the Yakut present gerund in *-an*, and which in Turki is indefinite, has in these dialects such a sense of quiescence, corresponding to the contrast of *n* and *r*, that it denotes a past.

There is also in both dialects a simple past in *-d*; and Koibalian (not Karagassian) has a hypothetical in *-za*.

There is in Koibalian an element *dek*, which expresses both a past and an optative, but in Karagassian the past element is *dek*, and the optative element is *yek*. The optative element in both is subjoined to both futures *-r*- and *-gai*-, and corresponds no doubt to Turki *dak* or *dik*, to Turkish *yek*, and to Yakut *eaq'*, which are future elements. The past element *dek* corresponds to Yakut *taq'* and to Turkish *duk*, both which express the indefinite in respect to time. The past element *dek* in Koibalian and Karagassian seems to express rather completion than position in time.

There is a precative *-āl* in Koibalian, *-āla* in Karagassian, used with first plural as in Turki.

The element *galak*, which in both dialects expresses that the subject has not yet come to perform the action, is evidently the same as Turki *g'uluk*, being formed of the verbal element *ga*, and *lak*, which means possessed of; *-galakpen*, I have to.

The subjective person-elements are: in Koibalian, ¹ *ben*, ² *zai*, singular; ¹ *bes*, ² *zār*, plural. In Karagassian, ¹ *men*, ² *sen*, singular; ¹ *bes*, ² *silar*, plural.

The possessive personal elements are: in Koibalian, ¹ *m*, ² *n̄*, ³ *e* or *ze*, singular; ¹ *bes*, ² *n̄ār*, ³ *e* or *ze*, plural. They are the same in Karagassian except that second plural is *nar*, and third person *e* or *se*.

The third person plural, both present and possessive, may take *lar* in both dialects. The personal suffixes of both classes are used as in Turkish and Turki.

The imperative person-endings are: in Koibalian, ¹ *im*, ² —, ³ *zen*, singular; ¹ *rbes*, ² *n̄ār*, ³ *zen* or *zennar*, plural. In Karagassian, ¹ *ēn*, ² —, ³ *sen*, singular; ¹ *rbes*, ² *n̄ār*, ³ *sen* or *sennar*, plural. The first plural in both is the future.

The gerunds are: present *-a*, past *-p*, or *dek*, or *gan*.

The participles are: present *-r* or *derjan* (Turkish auxiliary, *der*), past *gan*.

The negative is in the *-r* formations *bas*, as in Yakut it is *bat*. The elements which begin with *g* drop *g* after the negative *ba*.¹

¹ Castren, sects. 70-95.

MONGOLIAN.

35. The phonetic laws of Mongolian are less strict than those of Yakut; there is more liberty in the successions of utterance, freer scope for change of action in the organs of speech. There is, however, still the indecisive utterance which produces the soft vowels as distinguished from the hard; except that there is no *e* distinguished as hard from *i* regarded as soft, both being sounded *i*, which is treated as neutral. There are no diphthongs, as in Yakut, consisting of a light vowel followed by the corresponding heavy one. The only diphthongs are *ao* and the *i* diphthongs;¹ the language being less vocalic.

The consonants are the same as in Yakut, except that Yakut *t'* and *d'* are replaced respectively in Mongolian by *t'* and *d'*, which, however, become *t'* and *d'* before *i*, and there seems to be no *z*, nor its softened form *ȷ*.²

The gutturals *q'* and *g'* can be used only in words which have hard vowels, or hard vowels and *i*. The post-palatals *k* and *g* can be used only with soft vowels, or soft vowels and *i*; and though *q'* and *g'* may immediately follow *i*, they cannot immediately precede it, for they then become *k* and *g*;³ *s* also before *i* becomes *s*;⁴ but *s* precedes other vowels also.⁵

It appears from this that the Mongolian *q'* and *g'* are not uttered so far back in the throat as the Yakut, for they may go with light vowels, where the Yakut *q'* and *g'* would require the greater guttural opening of heavy vowels. At the same time, the Mongolian *q'* and *g'* are uttered with less facility than the Yakut; for, unlike the latter, they require always the strong decisive utterance which belongs to the hard vowels; while, on the other hand, *k* and *g* being uttered with more facility than *q'* and *g'*, have become characteristically soft utterances, and require soft vowels.

Medials, it is said, cannot end a word,⁶ nor can *r* begin one.⁷

The first law of vowel harmony prevails; the vowels of a word must be all hard or neutral, or all soft or neutral.⁸ The language, therefore, is massive like Yakut, thought spreading through all the elements of a word so as to have them all present together to the mind (4).

Of the second law there are traces; for it seems that in popular speech *o*, hard or soft, can follow only *o* or *u* hard or soft in a preceding syllable, and cannot be followed by *a*, *ä* in a following syllable.⁹

36. There are verbal stems, which are also used as nominal stems,

¹ Schmidt, Mongol. Grammatik, sect. 9.

² Ibid. sects. 17, 18; Böhlingk, sect. 27.

⁴ Ibid. sect. 19.

⁶ Böhlingk, sect. 153; Schmidt, sects. 11, 13; but Schmidt, p. 17, has final *d*.

⁷ Schmidt, sect. 15.

⁸ Ibid. sect. 8. 2.

³ Schmidt, sect. 8. 1.

⁵ Ibid. sect. 20.

⁹ Böhlingk, sect. 32.

to express the substantive idea of the act or state denoted by the verb;¹ but such ideas are also expressed by subjoining to the verbal stem *-l*, *-lal*, *-dal*, *-an*, *-lan*, or *-i*.²

Nouns of agent are formed from verbal stems by *-q't'i*, *-k't'i*, and from nominal stems by *-t'i*.³

There are also other endings of nominal stems, not now felt in their own significance, many of which are also in Yakut.⁴

There is no definite article,⁵ nor any distinction of gender except that of the sex of living beings.⁶ The sex is expressed by a separate word preceding the noun as an adjective, unless the noun is qualified by an adjective denoting colour; for then the adjective takes for the female a suffix *-k'in*.⁷

The declension of nouns is by suffixes to the stem as follows:

Nominative may take *-anu*, *-inu*, or *-bar*.⁸

Of these particles which are attached to the nominative, Schmidt says that they emphasise (*hervorheben*) the nominative as subject; "they have no meaning of their own, nor do they change in the least the meaning of the word to which they are attached (*zugegeben*)."
"They merely serve to denote the subject, and stand therefore usually with the nominative. Only then an exception takes place when the subject, varying from the nominative, retains its property (*eigenthümlichkeit*) in another case also."⁹ This means that these particles are suffixes, and that as suffixes they can be attached to an oblique case; always however being demonstrative of the subject, even when agglutinated to an object or condition, as if the volition of the subject was determined by that object or condition rather than by his own choice (see Examples 6, 13).

Genitive *-yin*, if stem end in vowel, *-u* if in *n*, *-un* if in any other consonant; the essential part of the suffix is *n*, which is dropped after stems ending in *n* to avoid the repetition. When the genitive relation is that of a part to its whole, or that of a thing to the material of which it consists, the genitive ending is often dropped.¹⁰

Dative (to, beside, in, on) *-dur*, *-tur*; but if the stem end in a consonant, the dative is often formed in *-a*, when there are other datives with it;¹¹ *-da* is also used, principally as locative.¹¹

Dative (possessive), *-daġan*, *-dägän*; *gan* is a pronominal suffix representing the subject whatever be its person or number, and expressing possession by the subject.¹²

Accusative, *-i*; but if stem end in vowel, *-yi*.

Accusative (possessive), *-iyan*; but if stem end in vowel *-van*; *-an* represents the subject, and this case seems to express only possession; for its suffix is used after those of the instrumental comitative and ablative to denote possession by the subject.¹³ Moreover, *gan* may be subjoined as possessive suffix to the genitive.¹⁴

¹ Schmidt, sect. 31.

² Ibid. sect. 32.

³ Ibid. sect. 32.

⁴ Böhrling, sects. 239-256.

⁵ Schmidt, sect. 35.

⁶ Ibid. sect. 36.

⁷ Ibid. sect. 37.

⁸ Ibid. sects. 44, 174, 192.

⁹ Ibid. sect. 44.

¹⁰ Ibid. sect. 161.

¹¹ Ibid. sect. 46.

¹² Ibid. sect. 47.

¹³ Ibid. sects. 51-53.

¹⁴ Ibid. sect. 134.

Vocative, *-ā*.

Instrumental (along of, by means of), *-iyar*; but if stem end in vowel, *-var*.

Comitative (with), *-luq'a*, *-lühä*.

Ablative (from), *-at'a*.¹

The case-endings are subjoined to the plural as to a singular stem.² They are as loosely connected with the stem in Mongolian as in the Turkish languages; so that when several substantives are governed in the same case, the case-ending follows only the last of them, and if they are connected by *kikat*, and, this may follow the last, and be followed by the case-ending³ (see Examples 6, 15).

The plural is formed by *-nar*, or *-s*, if stem end in vowel; but nouns of the agent form the plural by *-t*; adjectives ending in *-tu* (37), when used as nouns, form the plural by changing *-tu* to *-tan*; stems ending in a diphthong drop the second vowel and take *-s*.

Stems ending in *n* form the plural by changing *-n* to *-t*.

Stems ending in any other consonant form the plural by subjoining *-ut*; disyllabic stems in *r* sometimes change *-r* to *-t*.

A stronger plural can be formed by subjoining *-nujut*, *-nügüt*.⁴ In the Buriat dialect, *nögö* means another.⁵

Nouns preceded by a numeral are used in the singular;⁶ and in general the plural is not much used in Mongolian.⁷

The plural ending *-nar* seems to be a stronger element than *-s*; and in the Buriat dialect, *-nar* is used with those stems ending in a vowel which denote living beings, and express the higher personal conceptions, while other stems ending in a vowel form the plural in *-nut*, *ut* being the general plural ending, and *n* probably euphonic.⁷

Schmidt remarks that in Mongolian *äkäs* means the mothers, but *äkänär* means women as mothers in general.⁸ Now, the essential attribute of mother is stronger in the former conception than in the latter, and the substance (Def. 4), probably on that account weaker, so that there is less sense of the individuals and a weaker plurality.

So also in the nouns of the agent, and the adjectives in *-tu*, used as nouns, the attributive part of the idea is strong, and the substance probably is weak. Moreover, the suffix of the former is highly consonantal with a weak vowel *i*, and perhaps on that account *-t* is preferred to *-s* as its plural ending.

The final *n* of nominal stems seems to be an element attached to them rather than belonging to them (see 11); for not only is it dropped in the plural but also in the accusative when this does not take the case-ending.⁹

Like the case-ending, the plural element is so loosely connected with the stem that when several plural nouns are connected together only the last of them takes the plural element.¹⁰ The plural indi-

¹ Schmidt, sect. 40.

⁴ Ibid. sect. 41.

⁷ Castren's Buriat Grammar, sect. 42.

⁹ Ibid. sect. 181.

² Ibid. sect. 42.

⁵ Castren, Vocabulary.

¹⁰ Ibid. sect. 159.

³ Ibid. sect. 159.

⁶ Schmidt, sect. 43.

⁸ Schmidt, sect. 41.

viduals are not thought along with the idea of the stem, but this is thought without number, and then the plurality is added (see Example 16).

37. Adjectives are formed from nouns by the suffix *-tu* or *tai*, meaning possessed of; from words of locality by *-ki*, meaning in the place; and from other adjectives or adverbs by *-qan*, *-kän*, meaning small degree of the quality. The adjectives are often intensified by reduplication of the first syllable with insertion of *b*.

Adjectives take case-endings only when they are used as substantives.

There is no adjectival expression of degrees of comparison.¹

38. The first and second personal pronouns change their stems in different cases in a remarkable manner; they are declined as follows:²—

	1st singular.	2d singular.	1st plural.	2d plural.
Nom.	<i>bi</i>	<i>ṭi</i>	<i>bidä</i>	<i>tü</i>
Gen.	<i>min'ü</i>	<i>ṭin'ü</i>	<i>bidän'ü, män'ü</i>	<i>tän'ü</i>
Dat.	<i>nä'dür, nü'dä</i>	<i>ṭimä'dür</i>	<i>bidän'dür, män'dür</i>	<i>tän'dür</i>
Accus.	<i>nä'mä'yi</i>	<i>ṭimä'yi</i>	<i>bidän'i, män'i</i>	<i>tän'i</i>
Instr.	<i>nä'dü'wär</i>	<i>ṭimä'wär</i>	<i>bidän'iyär</i>	<i>tän'iyär</i>
Com.	<i>nä'dä'lükü</i>	<i>ṭimä'lükü</i>	<i>bidän'lükü</i>	<i>tän'lükü</i>
Abl.	<i>nä'dü'üt'ä</i>	<i>ṭimä'üt'ä</i>	<i>bidän'üt'ä</i>	<i>tän'üt'ä</i>

In the above declension *mü* is an objective element taken by the stem of the second person singular when thought as object of the case relation, and in the accusative by the stem of the first person singular, and substituted for the stem in the first person plural, when the individuals are less thought; the stem itself having become less subjective in the first person singular before all the case-endings except the genitive, and changed to *nü* instead of *bi* or *mi*. For these races are such keen observers of the objects and conditions of their life (10). Their thought has such an outward tendency in reference to these, that in thinking the inner personality as an object or condition, the direction of attention to it as such adds to it an outer objective element, or, where there is more need to make it external, an element of transition. The objective element is merely *n* in the genitive, in which there is least transition, and in the plural, in which the sense of transition is weakened by the indefiniteness of the object. But the first person singular, which has the most inner personality, takes an element of relation in the instrumental, comitative, and ablative cases, instead of taking an objective element added to itself. The element of relation into which the objectivity is thus transformed is that which is most akin to direction of attention, namely, the dative or locative element; and for this in the dative of the first singular *nä* is sufficiently objective.

The demonstrative pronouns are: *änä* this, *tärä* that, which are used only in the nominative singular; in the other cases of the singular they are *ägün* this, *tägün* that; in the plural, *ädä* or *üdügär* these;

¹ Schmidt, sects. 55-63.

² Ibid. sect. 66.

tüdü or *tüdügür*, those. These stems are all declined regularly, and the demonstrative of the near is used in all its cases except the nominative singular for third personal pronoun.¹

There are adverbs *ain*, *tain*, thus; and pronouns *aimu*, *taimu*, such.²

The reflexive pronoun is *bäyä*, which means body, or *übär*, bosom.³

The interrogative pronouns are *kän* or *älükän*, who? and *yaġun*, what.⁴

Abstract possessives, mine, thine, are formed by subjoining *-käi* to the genitives of the personal pronouns.⁵ It is when there are several pronouns in the sentence that the possessive suffixes to the cases are used instead of the genitives of the personal pronouns.⁶

There is no relative pronoun.⁷

39. There are scarcely any pure elements of relation except the postpositions of case. Other postpositions almost all govern the genitive as nouns.⁸ There are only one or two true conjunctions.⁹

40. The following is the paradigm of the Mongolian verb:¹⁰

pres. 1st sing.	past 1st sing.	past 3d pers. sing. or pl.
<i>Bi abrumui</i> or <i>bi abrunam</i> ; <i>bi abu'bai</i> , <i>abu'bai</i> or <i>aburün</i> ;		
present habitual	perf. 3d person sing. or pl.	future 1st sing.
<i>bi ab · dak</i> <i>bi abu'tuġa</i> , <i>abu'tuġa</i> or <i>abu'tuġ'ui</i> ; <i>bi ap'suġai</i> ,		
future 2d person	fut. 3d person sing. or pl.	future 1st pl.
<i>t'i</i> , or <i>tä</i> (pl.) <i>ap'q'u</i> , <i>ap'q'u</i> or <i>abuyu</i> , <i>bidä ap'q'u</i> or <i>abuya</i> ,		
hypothetical	potential	
<i>bi ab'uba'su</i> ; <i>-d'a</i> , subjoined to indicative, present, or past;		
imperative.		

optative	2d person sing.	2d person pl.
<i>bi ap · tuġ'ai</i> ; <i>ap</i> or <i>ab · u · q'taq'ui</i> , <i>ab · u · q'tui</i> or <i>ab · utq'ui</i> ;		
imperative.		

1st pers. pl. 3d pers. sing. or pl.	pres. gerund.	past gerund.	till or while
<i>abu'ya</i> , <i>ap'tuġ'ai</i> ; <i>abu'n</i> or <i>ap'tu</i> ; <i>ab · u'ġat</i> ; <i>ap · tala</i> ;			
supine	infinitive	pres. part.	past part.
<i>abu'ra</i> ; <i>ap'q'u</i> ; <i>abu'q't'i</i> ; <i>abu'q'san</i> ; the participles are declinable as substantives. ¹²			

The present *abunam* is emphatic or used for an affirmative answer.¹³

The habitual *abdak* may be declined as a substantive.¹⁴ The past is often *abuba*,¹⁵ and the first singular of the future is in ordinary discourse *absu*; ¹⁶ *ap'q'u*, which is used as the future, is the infinitive.

¹ Schmidt, sect. 73.

⁴ Ibid. sect. 69.

⁷ Ibid. sect. 75.

¹⁰ Ibid. sect. 120.

¹³ Ibid. sect. 96.

² Ibid. sect. 74.

⁵ Ibid. sect. 72.

⁸ Ibid. sect. 140.

¹¹ Ibid. sect. 92.

¹⁴ Ibid. sect. 98.

¹⁶ Ibid. sect. 103.

³ Ibid. sect. 68.

⁶ Ibid. sect. 71.

⁹ Ibid. sect. 150.

¹² Ibid. sect. 94.

¹⁵ Ibid. sect. 99.

The hypothetical is formed with *ba* of the past and *su* of the future.¹

The infinitive may take *-i*, and be declined as a substantive.²

The auxiliary verbs are *bii* and *a*, signifying be. The following is

their conjugation:³ *Bi* ^{pres. 1st pers.} *büi*, ^{pres. 3d pers.} *büi* or *büyü*; ^{past} *bi* *bülüi*; ^{perfect} *bi* *bürlügä*;
 hypothetical ^{potential} *bi* *büird'ü* or *bübd'ü*; ^{pres. gerund} *bür'in*; ^{past gerund} *bügät*; ^{till} *bügätülä*;
 future.

infinitive present past 1st sing. 3d pers. sing. and pl. 1st pl.
bükü. *Bi* *amui*; *bi* *abai*; *bi* *a'qu*, *u'qu*, or *ayu*, *büdä* *a'qu* or
 potential. imperative.

hypothetical pres. past optative 2d pl. 1st pl.
aya; *aba'su*; *amuid'a*, *abaid'a*; *atu'jai*; *aqtui*, *aya*;
 pres. gerund past gerund till or while infinitive being been
a'du; *a'jat*; *a'tala*; *a'qu*; *a'q'i*; *a'q'san*.

The auxiliary verbs *bai*, continue, and *bol*, become, are quite regular.⁴

Besides the above tenses of the regular verb, a pluperfect is formed with the past participle, followed by the perfect of *bü*; a hypothetical pluperfect with the past participle, followed by the hypothetical of *bol*. The infinitive may be followed by the hypothetical or by the perfect of *bü*,⁵ and the past participle or the infinitive may be followed by *büird'ü*, the present potential of *bü*. The two first and the two last of these compound tenses, but not the others, are formed by the verb *a*, as by the regular verb *ab*.⁶

41. The derivative formatives of verbal stems are the following:⁷ Passive, *-kta*, or less frequently *-ta*; causal, *-j'ul*, *-güil*, or *j'a*, *-j'ü*; if the root ends in *g* or in an *i* diphthong, *l* is inserted after it; co-operative or reciprocal, *-l'a*, *-lda*; neuter, *-ra*, sometimes *-da*; active subjoined to substantives, and signifying to use, apply, affect with what the root denotes, *-la*, sometimes *-da*. These last can take in addition the causal form.

42. There is an extraordinary difference between Mongolian and the Turkish-Tartar languages in respect of the connection of personal elements as possessive with nouns, and as subjective with verbs. In the latter languages, the noun which governs a genitive takes a possessive suffix to represent the genitive, even though this immediately precedes, and though it be the same personal pronoun as the suffix denotes; and the verb whose subject is a first or second personal pronoun takes a person element to represent its subject, even though this may immediately precede, sometimes a third person, though the subject be expressed. But in the Mongolian language there are no person elements attached to the verb, nor any possessive suffix to the noun except what follows the case ending, to denote possession by the subject. The position, too, of this suffix is very remarkable, for it shows that the noun is combined with the case relation before it is

¹ Schmidt, sect. 105.

² Ibid. sect. 115.

³ Ibid. sect. 118.

⁴ Ibid. sect. 119.

⁵ Ibid. sect. 120.

⁶ Ibid. sect. 118, 2.

⁷ Ibid. sects. 123-131.

thought as possessed, as if the interest of the former correlation was greater than that of the latter.

It might be conjectured that the want of person endings and possessive suffixes in Mongolian, as in Manju, the two languages of literary cultivation, while Buriat and Tungusian have both, was due to Chinese influence.

The absence of the person is most remarkable when the subject is the third person, and is not expressed at all (see Examples 4, 11).

43. There is less sense of process in the Mongolian than in the Tartar verb, though the *u* which the former inserts between the stem, and most of the formatives of tense and mood, probably expresses such an element; and those formatives also seem many of them to involve a similar significance.

The use before a verb of a gerund of another verb to express the verbal idea more fully, and the considerable use of auxiliary verbs,¹ are prompted by a sense of verbal process.

The sense of the subject in connection with the verb is sufficient to affect it with different degrees of subjectivity which give it different forms. The differences which may be observed between the verb with the first person and with the third must be due to this cause, the former being more subjective than the latter. In the future, the verb with the second person, as well as that with the third, shows an inferior subjectivity by being merely the infinitive; and though the first plural may be equally objective, the subject in that person sometimes asserts itself in the plural ending *a*.

There is no subjunctive mood; a fact subjoined to another fact as an object or condition of it is expressed by a verbal noun or gerund.²

When the predicate is not involved in a verb, the copula is always expressed and follows the predicate.³

44. The subject generally goes first,⁴ the adjective or apposition always before its noun,⁵ and the governed member before the governing,⁶ but the dative may either precede or follow the accusative.⁷ In poetry the greatest freedom of arrangement prevails.⁷

45. (1.) ^{thy me to give past part. book} *t'invü nü'dür ögö · ksän taptar*, the book which thou gavest me.⁸ (2.) ^{thou me loc. from ask past part. aux. vb. hypoth. I thee} *t'i nü'dür'ät'ü üri · ksän bol · basu bi t'imü* ^{to give past part. aux. vb. perf.} *dür ögü · ksän bün · lügü*, if thou hadst asked from me I had given to thee;⁹ *bol* is the same as Yakut *buol*, equivalent to German *werden* to become (40); *bü* is a verb substantive. (3.) ^{I that} *Bi tärü* ^{man dat. help infin. aux. vb. optat. say ger. wish pres.} *kümün'dür tusala · q'u bol · tuj'ai kümän kusa'mui*, I wish that I could help that man⁹ (I wish, saying, would that I could help that ^{my father die past say ger. me dat. tell past} man). (4.) *Min'ü üt'ägü ükü'büi kümän nü'dür mütäküm'büi*, he

¹ Schmidt, sect. 171.² Ibid. sects. 154, 170.³ Ibid. sects. 190, 194.⁴ Ibid. sect. 190.⁵ Ibid. sect. 160.⁶ Ibid. sects. 162, 165-168, 198.⁷ Ibid. sect. 198.⁸ Ibid. sect. 75.⁹ Ibid. sect. 170.

told me that his father was dead;¹ the subject is not expressed.

assemble past part. pl. subject scholar pl. with common in teacher gen.
(5.) *ġ'ig'ula · q'sa · t · bar sabi · nar · lu'ja sal · du bai'si · yin*
word accus. praise co-oper. past
d'arlik · i maq'ta · lt'a · bai, the assembly, in common with the

scholars, praised the words of the teacher.² (6.) *Uq'aj'an bilin kikat*
intelligence wisdom and
virtue instr. subject honour and fame and dignity to attain past
buyan'iyar · inu kündülül kikat alda ba t'ula · dur kur · bai, through
intelligence, wisdom, and virtue, he attained honour, fame, and

dignity;³ -*inu* (see 36). (7.) *Min'ü üt'ägü · inü q'aniamui*, my
father subject cough pres.
father coughs.⁴ (8.) *ät'ägü min'ü ürgülüt'üdü buyan'atu kümün*
father my always loc. virtu(e)ons man
continue perf.

bai · lu'ja, my father continued always a virtuous man;⁵ here the
genitive follows its governor, but this it never does when it is a sub-
stantive.⁶ (9.) *Bayan üt'ägä · inü ül'üskülän-tü ökin · iyan bayan*
rich father subj. beauti-ful daughter his rich
man ablat. other to not give pres.

kümün'üt'ü busut-tur ülü ög'ö-müi, the rich father does not give
his beautiful daughter to other than a rich man;⁷ *iyän* is the pos-
sive accusative (36). (10.) *q'ad'ar · anu q'amuk bü · kü · tü · yi*
earth subj. all be infin. adjec. accus.
nourish accus. poss. be infin. gen. account on all life having pl. gen. mother

taf' · iyan bü · kü · yin tula · da q'amuk ami · tan · u ükü
also is
t'u büi; the earth, because she nourishes all that has being, is
the mother also of all that has life;⁸ *bükütai* is the adjective
formed on *bükü* to express having existence (37); *iyän* denotes
the accusative possessed by the subject, so that *taf'iyän* must be
governed by *bü* in the sense of the realising (on account of the realising

her nourishing). (11.) *Tain kün · ü · n ügül · ü · güt ülü üt' ·*
thus say pres. ger. speak past ger. not see
äktü · küi bol · bai, having spoken to that effect he became
invisible⁹ (became invisibility); the subject is not expressed. (12.)
father gen. this like speak past part. on son subj. very much
üt'ägü · yin änü madu ügül · ü · ksün · dür köbügün · inü d'äküdü
rejoice past

bayas · bai, when the father had spoken thus the son rejoiced very
much⁹ (on the father having spoken thus). (13.) *ügü · yi · inü abru*
word subj. take
past ger.
q'at, he having apprehended the word; the particle of the subject *inu*

is attached to the accusative¹⁰ (36). (14.) *Kör · tür uru · q'at*
seat dat. sit past part. dat.
saq'urin'a saq'u · q'san · dur, when he had gone into the house and
sat on the seat¹¹ (on having sat on the seat after having gone into the
house). (15.) *Aldai kündülül ul'da nara · kikat · i buu küsü*, desire

house). (15.) *Aldai kündülül ul'da nara · kikat · i buu küsü*, desire

¹ Schmidt, sect. 180.² Ibid. sect. 188.³ Ibid. sect. 189.⁴ Ibid. sect. 175.⁵ Ibid. sect. 174.⁶ Ibid. sects. 45, 162.⁷ Ibid. sect. 198.⁸ Ibid. sect. 199.⁹ Ibid. sect. 200.¹⁰ Ibid. p. 135, 13.¹¹ Ibid. sect. 46.

Buddha Bodhisatva Pratyeka
 not fame, honour, riches, and title.¹ (16.) *Buraġa bodisatva prätikä*
 honourable Srawak plural life adjec. pl. gen. good gen. account on realisation
ġuluġ tu sirawak nuġut ami tan u tusa ġin tula da ügä
 dat. become pres.
dä bul u muü, the Buddhas, Bodhisatvas, Pratyekas, and honour-
 able Srawaks appear for the good of living beings; ¹ the plural element
 belonging to all the nominatives is attached only to the last (36);
 perhaps *ügä* should be written *ögö*, which means give.

BURIAT.

46. The Buriat Mongols dwell around Lake Baikal north of the eastern end of the Altai Mountains; ² and their speech, though only a dialect of Mongolian, yet differs from Mongolian in some important respects.

The Buriat has the Yakut vowel *e*, which does not appear in Mongolian; ³ but this vowel is not hard as in Yakut (3), but neutral like *i*, its indecisive utterance still retaining the vowel sound.

It has not only the *i* diphthongs as in Mongolian, and a diphthong *oa* consisting, like Mongolian *ao*, of two heavy vowels; but also some at least of the Buriat dialects have the diphthongs consisting of a light vowel and a heavy one which are in Yakut. It is to be observed, however, that Buriat is disinclined to *u*, and consequently has not the diphthong *uo*, but *eo* instead.⁴ It has no triphthongs such as Yakut has. A tendency has been noted in Buriat, which seems not to have been observed in the Mongolian or Tartar languages, to sound the unaccented vowels of a word with a slight infusion of *e*.⁵ This, though it does not go the length of changing a hard vowel into a soft, is yet an affection of the same kind, for it is due to relaxed utterance tending to bring the organs towards the position of rest (3). When *ē* occurs at the end of a word it is sounded in some of the Buriat dialects as *eä*,⁶ which corresponds to what has been said in 2 as to the nature of *ea* in Yakut.

Buriat differs from both Mongolian and Yakut in not having *ġ'*; and it also shows a tendency which has not been noted in these languages to soften and palatalise its consonants as if with incorporation of *y* (see Def. 29); it also has *h*, which does not appear in Mongolian though it does in Yakut;⁷ but with these exceptions its consonants are the same as the Mongolian.

The consonants *k*, *t*, *s*, are uttered emphatically before hard vowels; in most of the dialects also *ġ'* becomes *k* before hard vowels; *k* and *t* are aspirated before soft vowels;⁸ there is no aspirate of the labial. A guttural or post-palatal consonant preceding *a* in an unaccented syllable hinders it from taking the infusion of *e*, which it otherwise would take,⁹ as they bring into activity the root of the tongue, so that it acts decisively in giving an opening to the vowel.

¹ Schmidt, sect. 159.

² Castren's Buriat Sprachlehre, Vorwort.

³ Ibid. sect. 5.

⁴ Ibid. sect. 3.

⁵ Ibid. sects. 4, 1, 6.

⁶ Ibid. sect. 5.

⁷ Ibid. sects. 2, 11.

⁸ Ibid. sect. 11. 4.

⁹ Ibid. sect. 4. 2.

It appears from the above that Buriat *q'* is more softly uttered than Mongolian *q'*, as it can go with the soft vowels, and that it approaches more nearly to the post-palatal *k*, as it becomes *k* before hard vowels. This dialect has given up the decisive guttural utterance, which in Mongolian caused the gutturals to be felt as hard, and the post-palatals by distinction from these to be felt as soft. The Buriat guttural has become less guttural and a more careless utterance, and its medial has been given up. The post-palatals are not distinguished as easy utterances. And while the language has become less guttural than Mongolian or Yakut, it is, as has been observed, more palatal than either. In connection with this it is to be observed also that Buriat utterance is less tense, more easily relaxed than Mongolian or Yakut. For not only does the utterance of the unaccented vowels tend to be relaxed, but also the indecisive utterance of the soft vowels produces in Buriat a greater relaxation of the consonants than in Mongolian or Yakut, so weakening the closure of the tenuis that it is aspirated.

Yakut utterance is more guttural than Mongolian, with more pressure of breath from the chest (35); Buriat softer than either.

Buriat does not tolerate *p*, *r*, or *n* at the beginning of a word, nor a medial or medial aspirate at the end. A tenuis, tenuis aspirate, *s*, or *ś* can each be followed only by a tenuis, tenuis aspirate, *s*, or *ś*; and a medial, medial aspirate, *z*, or *z̄* can each be followed only by a medial, medial aspirate, *z*, or *z̄*, whereas in Yakut *g* may be followed by *n*, *r*, or *l*, and *b* by *r*. A concurrence of two consonants is not permitted at the beginning or end of a word except that some dialects allow *nt* and *ns* exceptionally at the end.¹

47. Buriat gives the usual evidence of its massive character in maintaining the first law of vowel harmony (3). The vowels of a word must be all hard, or hard and neutral; or all soft, or soft and neutral; the neutral vowels being *e* and *i*.²

There are also traces of the second law of vowel harmony.

If *a* in a syllable follows *o* in the preceding syllable it becomes *o*; and in some dialects if it follows *u* it becomes *u*; but most dialects do not suffer *u* in a final syllable.³

48. The declension of the noun in Buriat is by the following case endings added to the stem, according as it ends in a vowel or in a consonant:—

Nominative	—	—	Accusative	- <i>igi</i> (<i>iyi</i>)	- <i>i</i>
Genitive	- <i>in</i>	- <i>i</i>	Ablative	- <i>aha</i>	- <i>aha</i>
Dative and	} - <i>da</i>	- <i>da</i> , (<i>ta</i>)	Instrumental	- <i>r</i>	- <i>ar</i>
Locative			Comitative	- <i>tai</i>	- <i>tai</i> ⁴

If the stem ends in a long vowel, *g* is inserted before the genitive and ablative case endings, and *ga* before the instrumental, and the accusative case ending drops its initial vowel.⁵ In the Selenghian dialect nouns ending in a vowel and not denoting personal objects take *n* before the case ending of genitive, dative, and ablative;⁶

¹ Castren, sects. 21, 22.

² Ibid. sect. 13.

³ Ibid. sect. 3. 3. 4.

⁴ Ibid. sect. 44.

⁵ Ibid. sect. 52.

⁶ Ibid. sect. 51.

perhaps because these elements tend to enter into close connection with such stems, and take an arthritic *n* (11) to connect them, when this is not excluded by a final consonant of the stem.

In Buriat, as in Mongolian, the genitive may be expressed by the bare stem when it is closely connected in thought with the governing noun.¹

The accusative has usually a case ending only when it denotes living objects.²

The comitative ending *tai* is an adjective ending, as in Mongolian.

The plural is formed with *-nar* by stems ending in a vowel, and which express the higher personal conceptions ; with *-nut* by all other stems ending in a vowel or in *l* or *r* ; with *-t* by stems ending in *n*, the *n* being changed into *t* ; with *-ut* by stems ending in other consonants.³

The case endings are attached to the plural as to a singular stem.⁴

The Buriat adjective has a suffix *-sik* as well as the Mongolian *-g'an*, to express a small degree of the quality.⁵

There is no other difference worth noting between the Buriat and Mongolian adjective.

49. The demonstrative pronouns *tärä* that, *änä* this, take *n* before all the case endings ; they refer so strongly to what they demonstrate that they drop the sense of relation, and need *n* to connect them with the element of case.⁶

The personal pronouns are almost the same as in Mongolian. The first singular, however, can form its dative on the stronger stem *nama*, and its instrumental, comitative, and ablative on that same stem and without the dative ending ; the first plural has *bidü* only in the nominative, its stem in the other cases being only *man*. The third personal pronoun is *öhöñ*, singular ; *öhöt*, plural. The first and second singular form the instrumental with *-lar*.⁷

In respect of personal suffixes Buriat differs less than Mongolian from the Turkish-Tartar languages ; for it not only subjoins to all the cases except the nominative and the genitive the suffix *a*, which in the accusative takes the place of the case ending, to express possession by the subject ;⁸ but it also subjoins to all the cases, as a possessive suffix, the genitive both singular and plural of the first and second personal pronoun abbreviated in some of the dialects, and *ni* or *n* as possessive suffix of the third person, both singular and plural. These suffixes all follow the case endings.⁹

50. Personal suffixes of the first and second person singular and plural are also taken by the verb. These are sometimes the full nominative, but generally an abbreviated form of it ; first singular, *-bi*, *-p*, *-m* ; second singular, *-t'i*, *-si*, *-t'*, *-s* ; first plural, *-bida*, *-bda*, *-mda* ; second plural, *-ta*, *-t*.¹⁰ The person endings can be attached to nouns and to some adverbs, and give them a verbal significance ;¹¹ *ugēp*, I am not, *üdiṗ*, I not yet, *aldanaṗ*, I not nearly.

¹ Castren, sect. 35.

² Ibid. sect. 37.

³ Ibid. sect. 42.

⁴ Ibid. sect. 43.

⁵ Ibid. sect. 64.

⁶ Ibid. sect. 96.

⁷ Ibid. sect. 85.

⁸ Ibid. sect. 94.

⁹ Ibid. sects. 90-94.

¹⁰ Ibid. sect. 107.

¹¹ Ibid. sects. 105, 154.

The derived forms of the verb are as in Mongolian.¹

The characteristic of the present tense is *-na-*; past *-ñ-*; perfect, *-āha-*; emphatic perfect, *-lai-*; future, *-q'a-*; hypothetical, *-āha-*; potential auxiliary, *-bi'za-*; optative or necessary, *-q'a'ha-*; imperative, *-hup*, *-ūze'p*, first singular; *-hū'bda*, *-hu*, *-ūze'bda*, *-ya*, first plural; *-is*, *-rai*, second singular; *-ktui*, *-ktuida*, second plural; *-k*, *-gda*, *-ūze*, *-ūzedā*, *-tagai*, third singular and plural; infinitive, *-q'a*; gerund present, *-zi*; gerund past, *-āt*; supine, *-q'aya*; participle present, *-kt'i*, *-si*; participle past, *-han*.²

There are also compound tenses as in Mongolian.²

TUNGUSIAN.

NERTCHINSK.

51. The Tungusian dialect, which Castren found east of the Buriats, was thought by him to show marks of their influence. It is, however, still less guttural than Buriat and more labial, for it has no true guttural, and it has *f* and *v* as well as *p*, *b*, and *m*. It has no post-palatal aspirate or spirant, but it has the post-palatal tenuis and medial, and the nasal *ñ*. Its ante-palatals and dentals are complete, except that it wants the medial spirant and vibratile of both, and it has *h*, which is apt to change with *s*. It has the hard and soft vowels, except that it wants *ö*, though this has been noted in other Tungusian dialects;³ and *e* is not distinguished from *i* as hard, both being neutral. It has the *i* diphthongs as well as *ie* and *uo*, but no triphthongs.

The massive nature of the language is evidenced by the first law of vowel harmony (3). The vowels of a word must be either all hard or all soft, except that neutrals are admitted with either. And there seem to be traces of the second law, for if a stem contains *o*, it is apt to subjoin *o* as a connective vowel.

Two consonants cannot either begin or end a word.

A medial consonant cannot end a word; it becomes tenuis. Nor can a medial end a syllable, if followed by a tenuis. Medial and tenuis cannot concur; they become both medial, or both tenuis.

The accent, as in Turkish and Mongolian, is on the last syllable, but it is weakened by the presence of a long syllable in the word.⁴

52. There is a great scarcity of elements of relation, very few conjunctions, and no true postpositions,⁵ except those which are given in the declension of the noun. This is as follows:⁶—

Genitive, *-ñi*; final *n* is dropped before *-ñi*, and *k*, *t*, *f* become *g*, *d*, *v*.

Dative, locative, causative (in, into, to, by), *-du*; final *k*, *t*, *f* become *g*, *d*, *v*, but in some dialects remain and change *du* to *tu*.

¹ Castren, sect. 104.

³ Castren, Grundzuge Vorwort, p. xi.

⁵ Ibid. sects. 108, 118.

² Ibid. sect. 140.

⁴ Ibid. sects. 1-19.

⁶ Ibid. sects. 22-32.

Accusative, *-va*, *-ya*, *-ma*; *ya* seems to be borrowed from Buriat, *ma* belongs to stems ending in *m* or *n*.

Ablative, *-duk*, *-git*; *-duk* is joined to the stem like dative, *git* is used only in a local sense (out of).

Instrumental, *-d'i*, *-di*, in some dialects *-t*, which becomes *-it* after consonant, *-ut* after *v*.

Comitative (with), *-nun*; *k*, *t*, *f* become *g*, *d*, *v*, as in the other cases.

Prosecutive (along), *-li*; the stem frequently takes *-du* before *-li*, almost always if it ends in *l*, and generally if it ends in *m* or *n*.

Nouns used for postpositions or adverbs often have *-tiki* or *-ski* in dative, and *-lū* in locative.

There are only two numbers—the singular and the plural. The plural is formed by *-l*, which takes a connective vowel after a final consonant, and this is softened; by *-gil* after a long vowel; by *-r* after *n*; sometimes by *-sal*, **hal*, after *n* or *r*; by *-nasal*, **nahal* in some nouns which express a mutual relation.

The asterisk here and elsewhere for this language denotes a dialectical variety.

In some dialects nouns ending in *-kun*, *-kin*, instead of making their plural *-kunil*, *-kinil*, make it *-nil*.

The case endings are subjoined to the plural as to the singular.

53. The adjective is declined only when used as a substantive. There is no adjectival expression of degrees of comparison.¹ Adjectives, when not followed by a substantive, take the demonstrative element *-n*.²

	singular.		
	1	2	3

54. The personal pronouns are, in the nominative, *bī*, *ḡi*, *nuḡan*; plural. singular.

	singular.		
	1	2	3

bū, *ḡū*, *nuḡar*. The stems of the oblique cases are *min*, *ḡin*, *nuḡan*, *mun*, *ḡun*, *nuḡar*.³

The reflexive pronoun is *mānūkūn*, the stem of its oblique cases being *mān* in the singular, *mār* in the plural; it takes the possessive suffixes to express myself, thyself, &c.,⁴ and its genitive when thus suffixed expresses also my own, thy own, &c.⁵ The demonstrative of the near is *ār*, of the less near *tavar*, of the remote *tar*.⁶

	singular.			plural.		
	1	2	3	1	2	3

The personal possessive suffixes are: *-u* *-f*, *-s*, *-n*; *-vun*, *-sun* *-hun*, *-tin*.⁷ The possessive suffixes are subjoined to the element of case.⁸

55. The verb⁹ has person endings subjective and possessive, the former being used only in the present indicative and present subjunc-

¹ Castren, sects. 45-48.

² Ibid. sect. 51.

³ Ibid. sect. 59.

⁴ Castren, sect. 60.

⁵ Ibid. sect. 61.

⁶ Ibid. sect. 62.

⁷ Ibid. sect. 68.

⁸ Ibid. sect. 69.

⁹ Ibid. sects. 72-88.

tive. The subjective person endings are: $\overbrace{-m, -ndi, -ran}^{\text{singular.}}$ $\overbrace{-ndi, -ran}^{\text{singular.}}$ $\overbrace{-ndi, -ran, -dan}^{\text{singular.}}$ $\overbrace{-ndi, -ran, -dan, -tan}^{\text{singular.}}$; plural.

$\overbrace{1 \quad 2 \quad 3}^{\text{plural.}}$
 $\overbrace{-rawun, -raf, -rasun, -ras, -ra}^{\text{plural.}}$; the third person singular and all the plural persons begin with *r* after vowels, *d* after medial consonants, *t* after tenues. The non-present person endings are the possessive suffixes; but the non-present third person, both singular and plural, has generally no person ending.

In the imperative present the person endings are: $\overbrace{-kta, -kal, -gin}^{\text{singular.}}$ $\overbrace{-kta, -kal, -gin}^{\text{singular.}}$ $\overbrace{-kta, -kal, -gin}^{\text{singular.}}$ $\overbrace{-kta, -kal, -gin}^{\text{singular.}}$; plural.

$\overbrace{1 \quad 2 \quad 3}^{\text{plural.}}$
 $\overbrace{-ktawun, -kaldun, -gitin}^{\text{plural.}}$ (*kitin*); the first plural may also be *-gar* (*kar*), *gat* (*kat*); in the imperative future the person endings are: plural.

$\overbrace{1 \quad 2 \quad 3}^{\text{singular.}}$ $\overbrace{1 \quad 2 \quad 3}^{\text{plural.}}$
 $\overbrace{-inäm, -däwi, -änän}^{\text{singular.}}$; $\overbrace{-inüwun, -däwar, -inwitin}^{\text{plural.}}$.

The stem of the present indicative is the stem of the verb itself. There are two perfects; one subjoins *-t'a* to the verbal stem, the other *rka*; there seems to be no difference in meaning between them; the second is not much used.

The future subjoins to the verbal stem *-ligā, *dā*.

The subjunctive, which is also potential, forms its present by subjoining *-d'a* to the person endings of the present indicative.

The optative subjoins *-m't'a* to the verbal stem; and to the person endings of the optative, *-d'a* may be subjoined to form a subjunctive optative.

There are also compound tenses and moods formed with the auxiliaries *birän* and *birkü*. These compound tenses differ remarkably from those of the Mongolian and Buriat in this respect, that the principal verb takes the person endings, while the auxiliaries are in the third singular throughout; whereas in Mongolian and Buriat the auxiliaries take the person endings, and the principal verb is a participle or infinitive. The Tungusian auxiliary *bi-rän* is formed of the stem of the verb to be, with the third singular person ending subjoined to it.¹ It is thus that the third singular present indicative of regular verbs is formed; but

the verb *bi* takes *-hi, *si* in the present, and *-n* for its third person singular, *bihin*. Perhaps *birän* not having *hi* has less actuality than *bihin*; *birkü* is the third singular of the second form of the perfect of *bi*.

The compound tenses formed by these are a perfect or pluperfect subjunctive, formed of the perfect indicative, followed by *birän*; a future subjunctive, formed of the future indicative, followed by *birän*;

¹ Castren, sect. 78. 2.

a pluperfect indicative, formed of the perfect indicative, followed by *birkü*; and an optative is formed of the future indicative, followed by *birkü*.

In these formations the person endings of the principal verb are the possessive suffixes; and its remotion from actuality as subjunctive, optative, or pluperfect seems to have so reduced its verbal nature that it is thought as a noun which is the subject of the auxiliary. As *birkü* is the past, it removes from actuality a preceding future so as to express an optative.

A past future is in many languages expressive of the contingent or imaginary; as we say in English, he would come, or, O that he would come. But the reduction of the verb to a noun with the subject as a possessive indicates a low degree of subjectivity in the verb. It is to be found in Polynesian in some of the Melanesian languages and in Tagala. See III., 7, 34, 37, 39 (11), 55.

The infinitive is formed by *-vđiga* (in which *v* may become *b* and *d* may become *d'*), **-đigā*, **-dā*; the supine by *-dāvi* (accusative of *dā*);¹ the present gerund by *-na*, *-ni*, *-mmin*, *-mvin*; the past gerund by *-ksa*, *ha*; the Mongolian postpositional gerund (while) by *-dalū*; the present participle by *-rī*, more usually by *-ūki*; the past participle by *t'ā*; the future participle by *-điga*. There seems to be also a gerund in *-ra* used after the negative verb *ā*.² A medial at the end of a verbal stem or the beginning of a suffix is generally hardened into a tenuis by contact with a tenuis.³

56. The derivative verbal stems are: the passive formed by *-v*, the co-operative by *-māt*, *mať*, or by *-ld* in sense of helping, the desiderative by *-gla*, the continuative or frequentative by *-a'a*, the causative by *-fkāna*, each subjoined to the simple stem.⁴

The following verbs are used with gerunds or infinitives of other verbs to express elements supplementary to them (14, 2): *ō*, become or do; *ā*, be not; *t'ūk*, can not; *nūhā*, will. They are all regular except *ā*, which, like *bi*, takes *hi*, **-si* in the present, *-hin* as third singular present, and like *bi* is regular in all its other parts.⁵

57. The following examples of Tungusian are appended to Castren's Grammar by the editor, and are stated to have been given by Middendorf: (1.) *Bi bakūt'an q'ögdeñōvo orōm · mo, q'ulukūn oro · r*
I possess large acc. reindeer acc. small reindeer pl.
 my brother gen.

mi'ni aki · nī, I possess a large reindeer, the small reindeer are my brother's; bakūt'an is not to be found in the vocabulary, but there is a verb *bakam*, I find, of which *bakat'af* would be first singular perfect indicative in the Nertchinsk dialect; the adjective takes accusative ending contrary to 53. (2.) *Mi'ni asi q'ögdeñōva oldrōva d'āv'*
3d sing. small fish acc. to-morrow eat fut. 1st sing.
uida · ran, q'ulukūn oldrōva tōgomī devde · m, my wife eats the large fish, I will eat the small fish to-morrow; the adjective has the

¹ Castren, sect. 84.

² Ibid. sect. 105.

³ Ibid. sect. 91.

⁴ Ibid. sect. 107.

⁵ Ibid. sects. 103-106, 107. 4.

accusative ending; *-uūda-* seems to be a derivative formative; the

future *devedem* has present person contrary to 55. (3.) *Bi tēnera*^{I yesterday}
eat three acc. fish pl. acc.

q'āv't'al ilan'ma oldro'ld'vo, I yesterday ate three fishes; *t'al* is inexplicable; if it were *-t'af* it would be first singular perfect according to

the Nertchinsk dialect. (4.) *Mi'ni nākun buq't'ede · ron*, my sister is sick 3d sing.
my sister sick 3d sing.
my brother gen.

sick; is the verb a derivative from *bum*, I die? (5.) *Mi'ni aki · ni*
reindeer pl. large my father gen. reindeer pl. small pl. all
oro · r q'egdēna mi'ni ami'ni oro · r q'ulukur upka't, my
brother's reindeer are large, my father's reindeer are all small.

The preceding examples are from the dialect spoken on the Lower Tunguska. They are remarkable not only for declining the adjective, but also for putting the verb before its object, at least in the first and third examples. It is remarkable that Tawge Samoiede, with which Lower Tungusian is in contact, alone of the Samoiede dialects declines the adjective;¹ but all the Samoiede dialects can put the verb before its object.

The following examples of Tungusian are from the borders of China: (6.) *Mir'du hogdō oron bi'hi · n, nitkukar, oro · r*
me to large reindeer be pres. 3d sing. small pl. reindeer pl.
my brother gen. be pres. 3d sing.

mi'ni inuki · ni bi'hi · n, I have a large reindeer, the small reindeer are my brother's. (7.) *Mir'ni aliv hōgdinū oldrō'vo dōp'iinō*·
3d sing small acc. to-morrow eat fut. 3d sing.

rōn, nitkukān'ma timi dōp'digā · n, my wife eats the large fish, she will eat the small one to-morrow; *-iinō-* corresponds to *-uūda-* in Example 2.

The variations in spelling the same word show that the orthography cannot be depended on in respect of either law of vowel harmony.

MANJU.

58. Manju is a Tungusian dialect which has received literary cultivation under Chinese influence. It has no gutturals; its post-palatals are *k*, *g*, *z*, and *ñ*; its palatal, *y*; its ante-palatals are *t'*, *q'*, and *s*; its dentals, *t*, *d*, *s*, *r*, *l*, *n*; its labials, *p*, *b*, *f*, *m*, *w*.²

Its vowels are *a*, *o*, hard; *e*, *u*, soft; and *i*, *ō*, neutral. A hard vowel is generally followed by a hard, and a soft by a soft; the neutral go with both. Many affixes, however, are invariable, and the affinity of vowels is often neglected when they are separated by two consonants,³ so that the first law of vowel harmony is impaired, probably owing to Chinese influence; and perhaps, as in Turkish, more in writing than in speaking. The second law appears in the tendency of *o* to be followed by *o* in a succeeding syllable.⁴

The penultimate syllable is generally short and almost eclipsed.

¹ Castren, Samoied. Grammatik, i. sect. 349.

² Gabelentz, Grammaire Mandchoue, sect. 9.

³ Ibid. sects. 17, 18.

⁴ Ibid. sect. 66.

Before *i*, *s* is pronounced as *z*, *k* as *t'*, *g* as *d'*, *t'* as *t'*, *d'* as *d'*.¹

59. Most Manju nouns may be used either as substantives or adjectives, and a large number of primitive nouns may be used also as verbs, adverbs, or particles of relation.²

Nouns are formed from nouns by *-lan*, *-ziyan*, *-liyan*, *-ri*, *-fun*; adjectives from substantives and from verbs by *-nga*; nouns from verbs by *-kan*, *-ku*, *-t'un*, *-n*, *-bun*; adjectives from verbs by *-zun*, *-t'uka*.³ By suffixing *-nge* to the past and future or processive of the verb nouns are formed which often are used in place of a verb and relative pronoun.⁴

There is no grammatical gender.⁵

Only those nouns which denote living beings form a plural, with *-sa*, *-ta* or *-ri*, which denotes plurality or totality.⁶

There are also separate words used after nouns to denote plurality or totality.⁷

The postpositions of case seem not to change for vowel harmony with the noun, and are generally written separate from it. They are genitive *i* or after consonant *ni*, dative *de*, accusative *be*, ablative *t'i* (from, on account of).⁸ They follow the plural as the singular.⁹

The adjective is not declined if it is followed by a substantive.¹⁰

When several substantives are connected as objects of the same case relation, it is only the last which is followed by the postposition.¹⁰

sing.			plural.		
1	2	3	1	2	3

60. The personal pronouns are: *bi*, *si*, *i*; *be*, *sue*, *t'e*; the stems of the oblique cases are *min*, *sin*, *in*, *ben*, *suen*, *t'en*; *be* is exclusive of the persons addressed; *muse* is the inclusive first plural, and is declined like a noun; *-se* is the plural element, so that *muse* has more sense of the individuals.

The demonstrative pronouns are *ere*, this; *ese*, these; *tere*, that; *tese*, those; *uba*, this (side); *tuba*, that (side), which do not take a substantive, for *ba* means place; *beye*, body, expresses self; *we* is who? *ai* what?

There are no possessive suffixes; abstract possessives subjoin *-nge* to the genitive of the personal pronouns.¹¹

61. The verb has no person affixes. The imperative is the verbal stem. The other parts of the verb are formed by the following suffixes: ¹² present, *-mbi*; imperfect, or rather present in the past or in the future,¹³ *-mbixε*; preterite, *-za*; perfect, *-zabi*; processive, *-ra*, the verb thought in its going on, sometimes but rarely as future;¹⁴ hypothetical, *-t'i*; hypothetical more removed from the actual, *-t'ibe*. The hypothetical or ideal conception of the verb answers for an infinitive. Optative, *-ki*; gerund, *-me*; present gerund, *-mbime*; anterior condition, *-fi*.¹⁵ The elements *bi* and *be* seem to come from the verb *bi*, to be; *-za* corresponds to Tungusian *-rka* perfect, or *-ksa* past par-

¹ Gabelentz, sect. 19.

² Ibid. sect. 21.

³ Ibid. sect. 22.

⁴ Ibid. sect. 208.

⁵ Ibid. sect. 23.

⁶ Ibid. sect. 24.

⁷ Ibid. sect. 25.

⁸ Ibid. sects. 27, 28, 113.

⁹ Ibid. sect. 29.

¹⁰ Ibid. sect. 31.

¹¹ Ibid. sects. 45-58.

¹² Ibid. sects. 70, 72.

¹³ Ibid. sect. 182.

¹⁴ Ibid. sect. 189-192.

¹⁵ Ibid. sect. 207.

tiple, *-t'i* to Tungusian *-t'a* potential, *-ki* to Tungusian *-ki* imperative third person, *-me* to Tungusian *-mi* gerund.

Manju has many verbs which, joined to other verbs, modify the sense in which they are used.¹

The past and the processive parts of the verb are also used as nouns, and like other nouns, may be used as adjectives.²

The verb is negated by subjoining to the stem the following elements: present, *-rakō*; imperfect, *-mbixε akō*; preterite, *-χakō*; perfect, *-χakōbi*; hypothetical, *-rakōt'i*; optative, *-raxō*. The prohibitive is expressed by *ume*, followed by the future.³

62. Derivative verbs are formed by subjoining to the primitive stem for passive and causative *-bu*, which as a separate verb means to give; reflexive, *-d'a*; reciprocal, *-nu* or *-du*; frequentative or collective, *-t'a* (Tungusian, *-d'a*); inchoative, *-na*, go. The verb *t'i*, to come, is also subjoined to a verbal stem, and signifies to come to do a thing. The want of distinction between causative and passive shows that both are thought in the effect.

Verbs are formed from nouns by *-sa*, *-la*, *-da*, *-ra*, *-mi*, signifying to realise what the root denotes. These same syllables and others, such as *-ta*, *-niye*, *-kiya*, *-xiya*, &c., are subjoined to verbal stems, and seem sometimes to have the effect of diminishing the accomplishment by giving more of the idea to the process. Many verbs take these syllables with *m*, *n*, or *r* prefixed to them; and some verbs sometimes have these letters interposed, and sometimes not. Many of these derivative verbs can also form a passive, and often double derivatives are formed by two of the above elements.⁴

63. There are very few pure elements of relation. There is no copulative conjunction; its place is supplied sometimes by using after the last of the connected words *gemu*, which signifies all together. There are scarcely any true conjunctions.⁵ There are scarcely any true postpositions, except those given in the declension of the noun; and *tata*, which means till. Most other words used as postpositions are nouns.⁶

64. The arrangement of the members of the sentence is the same in Manju as in the Turkish-Tartar and Mongolian languages. First come adverbial expressions of time and place. The adjective precedes its substantive, and the adverb its verb; the governed word goes before the governing; the verb which expresses the main fact is preceded by all its objects and conditions;⁷ and often an element which belongs to connected members is expressed only with the last. Thus, if the perfect tense occurs in two propositions in immediate succession, it is only the last which takes the full form *-χabi*, the first being only preterite *-χα*.⁸ Also, if several verbal adjectives occur in succession, each of which, if separate, would be formed with *-nye*, it is only the last which has this suffix.⁹

¹ Gabelentz, sect. 233.

² Ibid. sect. 73.

³ Ibid. sects. 106-116.

⁴ Ibid. sects. 184, 190-194, 219-231.

⁵ Ibid. sects. 74-85.

⁶ Ibid. sects. 89-105.

⁷ Ibid. sects. 276, 278.

⁸ Ibid. sect. 188.

⁹ Ibid. sect. 209.

65. Examples: (1.) *Dergi ed'en · i bi · si're · ñge enduri niyatma*
 above lord gen. be processive spirit man
 gen. be ing noun-form. to compare hypoth. be neg.
i bi·si're · ñge de duibule · t'i o'd'orakō, the spirit which is
 of the Supreme Lord is not comparable to that which is of man;¹
 the verb *bi*, which in Tungusian takes *hi* in the present, takes in
 Manju *si* in what may be called the processive tense (61); *ñge* forms
 nouns and adjectives, and supplies place of relative pronoun; *duibule*,
 to compare, seems to be akin to *duin*, four (two pairs), *bu* being causative
 and *le* an element of process; the hypothetical used as infinitive (61).
 The verb *o*, which corresponds to Tungusian *ō*, to become, makes its
 processive in *-d'oro*, strengthening itself with *d'o* as *bi* does with *si*; *o*
 is probably the same element as Turkish *ol*, Yakut *buol*, Mongolian *bol*.

(2.) *D'urkun be isi · bu · xa · i d'ud'uru de isi · na · mbi*, by
 inch accus. come caus. past gen. foot to come inchoat. pres.
 having added inches they reach a foot;² the verbal derivative *na* is
 inchoative (62). (3.) *D'ulge · i fon'de daifu xafan sun'd a d'ukton*
 antiquity gen. time in magnate magistrate five sacrifice
 accus. kill imperf.

be ve · t'embiçe, in the time of antiquity the magnates and magis-
 trates used to sacrifice five sacrifices;³ *-t'e* seems to be the element of

collective verbs (62). (4.) *Enteçeme d'alan d'alan akda · mbiçe*, for
 ever age age believe
 ever the ages will believe,³ so Gabelentz translates it, *tous les siecles*
s'y fieront, *-mbiçe* being future as well as past (61). (5.) *Tumen d'aka*
 all thing
 accus. live caus. past above lord

be band'i · bu · xa deryi ed'en, the Supreme Lord that created all
 things;⁴ the past tense is here a participle, *band'i* is perhaps

inchoative of *ban* (62); *banin* means nature or existence. (6.) *Irgebu'n*
 song
 sing. ger. can process. know past neg.

irge·bu'me mute · re sabu · xako, we did not know that he could
 sing songs;⁵ we and he are unexpressed; *irgebu* seems causative of

irge, and *sabu* of *sa*. (7.) *Bi yen gurun · i dorolon be tat'i · ki*
 I kingdom gen. rite accus. learn opt.
 say hypoth. kingdom gen. alone preserve perf.

se · t'i sun' gurun · i teile taksi · xabi, if I wish to learn the
 rites of the dynasty of Yen, the kingdom of Sung alone has preserved
 them,⁶ (if I say let me learn); the word for alone is constructed
 with the genitive as in many languages; so in the north of Ireland

my lone is said for I alone. (8.) *Uneñji se're · ñge beye beye · be*
 perfect saying what self self accus.
 able caus. proc. only not thing accus. able caus. proc. affirm.

mute · bu · re teile ako, d'aka · be mute · bu · re · ñge kai, the
 perfect man, mark you, himself, not only completes himself, but is the
 one who completes things;⁷ *seme*, the gerund of *se*, to say, and
sereñge, the saying, what is being said, are used after a word to draw
 attention to it;⁸ *beye*, which means body, is used for self; *mutebure*,

¹ Gabelentz, sect. 179.

⁴ Ibid. sect. 184.

⁷ Ibid. sect. 189.

² Ibid. sect. 181.

⁵ Ibid. sect. 186.

⁸ Ibid. sect. 241.

³ Ibid. sect. 182.

⁶ Ibid. sect. 187.

ixavón; *kai* is an affirmative particle, which, though not a verb, absorbs the copula of the assertion and holds the position of a principal verb; *dabala*, only, and other particles are used in the same way. (9.) *Udu buya ad'igen ten de isi · na · t'ibe narañgi*

how much small minute top to come inchoat. hypoth. nevertheless
form is
arboun bi, however much it may reach the extreme of smallness and minuteness, nevertheless there is form.¹ (10.) *Abka na tumen d'aka*
heaven earth all thing
accus. one time at one thought in comprehend ger. able pres. ger.
be emu erin de emu gonin de baktam · bu · me mute · mbime
heaven earth. gen. outside accus. penetrate ger. can pres.

abka na · i tulergi be xafuna · me mute · mbi, being able to comprehend in one thought at one time heaven, earth, and all things, he can penetrate the things outside of earth and heaven; *be* and *i* go

only with the last noun.² (11.) *Te muse · i beye · be d'afa*
now we incl. gen. self accus. take
anter. cond. compare opt.

· fi duibule · ki, let us take and compare ourselves³ (having first taken); *beye*, body, is used for self. (12.) *Niyalma gonin*
will gen. one inch small be caus. hypoth. can proc. not

t'ixa · i emu urxun fañgala o · bu · t'i mute · r · akō, man cannot make (himself) small one inch by the will and mind; ⁴ hypothetical

used as infinitive (61). (13.) *Te akba na niyalma tumen d'aka*
now heaven earth man all thing
exist inchoat. past noun form. truth gen above lord gen. end neg. power
ban · d'i · xa · ñge yargiyani dergi ed'en · i moxonakō muten
wisdom gen. beginning come ger. finish caus. ger. exist inchoat. caus. past accus.
mergen · i it'ixiyun · d'a · me sañga · bu · me ban · d'i · bu · xa be
doubt inchoat. proc. place not affirm.

kenekun · d'e · re ba akō kai, now there is no room for doubting that heaven, earth, man, and all things that came into existence were in truth created from beginning to end by the infinite wisdom and

power of the Supreme Lord.⁵ (14.) *Niyalma · i kidure gonire*
man gen. desire ing thinking
noun form. colour tincture neg.

· ñge t'ira bot'o akō, the desire and thought of a man is without colour and tincture; ⁶ *ñge* belongs to both verbals, but goes only with the last.

(15.) *But'e · xe d'aka o · xo be daxame urunakō*
die past thing be past accus. follow ger. doubt neg.
light heavy is

veixuken ul'en bi, in consequence of being a dead thing it is without doubt light or heavy.⁷ (16.) *Emu ba · de emu erin · de xalxon o · xo*
one place in one time at hot be past
be ger. also cold be ger. can proc. not

bi · me geli saxörün o · me mute · r · akō, (a thing) being become hot cannot be also cold at the same place and time.⁸ (17.) *Uttu o · xo*
so be past

de, teni niyalma se · me d'alan · de band'i · re · de yertel'un akō o · mbi, in then man say ger. time in live ing to blame neg. be pres.

¹ Gabelentz, sect. 199.

² Ibid. sect. 200.

³ Ibid. sect. 201.

⁴ Ibid. sect. 203.

⁵ Ibid. sect. 206.

⁶ Ibid. sect. 209.

⁷ Ibid. sect. 227.

⁸ Ibid. sect. 236.

case it were so then man mark you (speaking of him) living in time has no blame¹ (blame is not to); *band'i* is probably inchoative of
 house peace be hypoth. poor say ger. also happy
ban (62). (18.) *Boo* *χoatiyasun* *o* · *t'i* *yadaζōn* *se* · *me inu sain*,
 justice neg. riches accus. what? inchoat. pres.
d'urqan'akō bayan · *be ai* · *na* · *mbi*, if a house be peaceful a poor
 (man) mark you is also happy, why mind (or what do for?) unjust
 riches?²

SAMOIEDE.

66. The Samoiedes live as nomads on the treeless swamps which are bordered by the Arctic Ocean, from the White Sea in Russia to the river Chatanga in Siberia. They also live, partly as nomads, partly as hunters, in the forest regions, towards the upper basins of the Obi and Yenissei; those who live in the vicinity of the rivers having an easy supply of food in fishing. Five dialects have been distinguished in their language: the Yurak, spoken from the White Sea to the neighbourhood of the Yenissei; the Tawge, spoken from the neighbourhood of the Yenissei to the Chatanga; between these the Yenissei, spoken in the neighbourhood of that river in its lower course; the Upper Obi Samoiede, called by Castren the Ostiak Samoiede; and the Upper Yenissei Samoiede, called by Castren the Kamassin.³

All these dialects show a remarkable preference for soft consonant utterance with imperfect distinction of its varieties.⁴

Only the two southern dialects have *q'*, and in these it occurs very rarely; all the dialects except Tawge have *h*; they all have *k*, *g*, *n*, and *y*, but no post-palatal aspirate; also *t*, *d*, *s*, *l*, *n*; *s* being softer in the northern dialects than in the southern. Yurak and Upper Obi have also *t'*, which is softer in the former than in the latter; Yurak and Upper Yenissei have *z*, softer in the former than in the latter; Yurak alone has *r*. The absence of *q'* and *k'*, as well as in general of strong sibilants and sharp aspirates from the pure dialects,⁴ indicates weak pressure of breath from the chest.

They all have *t*, *d*, *s*, *r*, *l*, *n*; Yurak and the southern dialects have *t'* and *z*. Upper Obi alone has *d'*, but in Yurak in some localities *d* is slightly aspirated.⁵

They all have *b* and *m*; Yurak and the southern dialects have *p* and *w*; Tawge, Yenissei, and Upper Obi have *f*.⁶

Yenissei has in one locality a consonant intermediate between *l* and *r*, both consonants being heard in it like *lr*, but joined together as one.⁷ It might be written as a concurrence of small *l* and small *r*.

In the southern dialects *k* and *g* before a hard vowel are uttered deeper in the throat than before a soft vowel (3); and in Upper Yenissei *k* at the beginning of a word before a soft vowel takes an aspiration.⁸

Initial *t* and *p* in Yurak are often uttered almost as *d* and *b*, and in

¹ Gabelentz, sect. 241.

³ Castren, Gram. Samoj. Vorwort, p. vi.-viii.

⁵ Ibid. sect. 32.

⁶ Ibid. sect. 2.

⁸ Ibid. sect. 13.

² Ibid. sect. 268.

⁴ Ibid. sect. 1.

⁷ Ibid. sect. 21.

Upper Yenissei are apt to take a slight aspiration like German *th*, *ph*.¹

In Yurak and Tawge every initial vowel may be preceded by a faint sound of *i*, which Castren denotes by $\tilde{}$.²

In all the dialects except the Upper Obi there is a peculiar aspiration, followed by a break in the voice, written by Castren as an apostrophe ('), because it has arisen, at least in many cases, from elision of a consonant or syllable.³

The vowels are liable to be affected in their utterance by the consonants or by the vowels which accompany them, and only in the southern dialects is there a distinction of them as hard and soft.⁴

All the dialects except the Upper Yenissei, which shows Tartar influence, have a much greater development of diphthongs and triphthongs than the Turkish-Tartar languages, not being limited like Yakut to a light vowel followed by a heavy, and to these followed by *i*, but admitting such combinations as *oa* and *aeu*.⁵

67. The vowel harmony exists only in the Upper Yenissei dialect, and in it doubtless is due to Tartar influence. The semblance of it which is found in Tawge, and which is devoid of rule or principle,⁶ is doubtless due, as Castren suggests,⁷ to intermixture with the Yakuts, and to their carrying into the language their own habits of speech. The changes of the vowels, which are noted by Castren as traces of the vowel harmony in Yurak, Yenissei, and Upper Obi,⁸ belong to a different class of phenomena from the first law of vowel harmony, and are to be found generally in languages in which the vowels predominate and the consonants are weak, so that vowels affect each other through an intervening consonant. All that distinguishes Samoiede in this respect is, that owing to the strength with which the stem is thought in these northern languages, it is the vowel of the stem which affects that of the affix, and not the contrary, though sometimes the latter takes place, showing a strong sense of the affix with the stem.⁹

The law that in the same word hard and soft vowels cannot co-exist is unknown in Northern Samoiede and in the Upper Obi dialect;¹⁰ yet it prevails in Finnish, in Tsheremissian, and in Hungarian; and these are undoubtedly languages of the same family with the northern dialects of Sirianian, and with the Lapponic, from which it is absent. Now it is to be observed that the Finnish and Tsheremissian languages, and probably also the Hungarian, belonged to more southern regions than the other members of the family, and that in such regions, owing to the warmth of the summer, there was more contrast between the activity of that season and the inactivity of winter than in the icy swamps of the northern regions, or in the forests of the Siberian highlands, to which the other languages belonged.

The first law of vowel harmony has been attributed in 4 to a view of nature and life, which leads to a marked distinction between stems

¹ Castren, sects. 30, 32, 41, 42.

² Ibid. sect. 17.

³ Ibid. sect. 46.

⁴ Ibid. sect. 54.

⁵ Ibid. sects. 50-52.

⁶ Ibid. sect. 60.

⁷ Ibid. sects. 57, 61.

⁸ Ibid. sects. 55, 56, 61-67.

⁹ Ibid. sects. 73, 74, 101.

¹⁰ Ibid. sect. 54.

which are so thought as to get the full strength of expression, and those which are so thought as to be indolently and imperfectly uttered, and to a massive or spreading quality of thought which can carry this distinction thus established through all the affixes which are attached to the respective stems in the words of the language.

With regard to the first of these two causes, it is extremely remarkable that the languages in which it prevails belong all originally to regions which, according to the isothermal lines in Johnston's Physical Atlas, have a July temperature above 59°, and a January temperature below 23°, and the want of this cause would be sufficient to account for the absence of the vowel harmony from the most northern of the languages of Asia and Europe. The second cause being evidenced by the vowel harmony in kindred languages further south, must be supposed to exist in these also, because it is a feature of the mental constitution not easily modified by local influence. In the preceding sections of this chapter, the character of thought as massive or fragmentary has been found to prevail with most remarkable uniformity of degree over large portions of the earth's surface. And if the Finnish, Tsheremissian, and Hungarian languages are massive, the other languages of the same family, as well as the Samoiede, may also be supposed to be massive in a similar degree—a supposition to which all their structure corresponds.

68. A want of versatility of utterance may be observed in Samoiede in the tendency to slur the transitions of utterance, giving the vowels various shades of vowel sound, according to their position in a word, or according to the consonants or vowels which precede or follow them,¹ as well as in the tendency in the southern dialects to modify *k* and *g* according to the vowel which follows them.

A vocal character or tendency to favour the vowels may be seen in the development of diphthongs and triphthongs, and a corresponding weakening of the consonants may be observed in their liability to elision, with substitution for them of the aspiration, or of the faint nasal, if the elided consonant be *n* or *ñ*.² And a comparative disinclination to consonant utterance may be seen in the limitation of the consonant concurrences, so that in the northern dialects no consonant can follow a tenuis or *s*. In Yenissei Samoiede scarcely any concurrence is permitted at all.³

The faint nasal $\tilde{}$, which in Yurak and Tawge is apt to precede an initial vowel, may perhaps be due to a want of alertness in giving fully a new utterance. The nasal is intermediate between the closed condition of the organs and the utterance of the initial vowel, and facilitates the transition from the former to the latter. It is, moreover, uttered with weak pressure of breath from the chest, and therefore falls in with this habit of speech (66).

The final consonant of a word is always uttered with a half vowel or vocal aspiration in pure Yurak,⁴ and is always *ñ*, *m*, *r*, or *'* in Tawge.⁵ Yenissei Samoiede is still more vocal than Yurak or Tawge,⁶ and it does not generally suffer this closure of the organs before an

¹ Castren, sects. 4–12.

² Ibid. sects. 232, 234.

³ Ibid. sects. 136, 158, 167.

⁴ Ibid. sect. 134.

⁵ Ibid. sect. 156.

⁶ Ibid. sect. 166.

initial vowel. The other two dialects are subject to foreign influence, which hinders this peculiarity; and it has no tendency to be developed in those languages of the same family which have the vowel harmony, for the determination of the utterance which gives hardness or softness to the vowels marks the beginning of the word (see 137).

69. "The different parts of speech," says Castren, "are less distinguished from each other in Samoiede than in most other languages. The nouns coincide in many respects with verbs. The adverbs and prepositions are for the most part different forms of verbs and nouns. The conjunctions consist principally of dependent particles which belong to other words, such as case endings or nominal or verbal affixes."¹ The same stem may be used as adjective, verb, or adverb, or may serve for both substantive and verb.²

70. The noun often takes a demonstrative suffix *da* as a definite article.³ It has three numbers, singular, dual, and plural, except in the Upper Yenissei dialect, in which it has no dual. In the Upper Obi the dual is rare, but in the northern dialects it is in general use. It is, however, only the nominative case of the dual or plural which often occurs. In the other cases duality or plurality is generally expressed by the words for, two, many, all, &c., accompanying the noun in the singular. In the northern dialects plurality of the object may be expressed in the verb, and sometimes also they use collective forms for the plural.⁴

The sense of number natural to the race was sufficient to produce its expression as found in the language in the original effort to convey thought, though afterwards, as this effort became less necessary, that expression of number was less used.

The element of case does not always follow that of number, but in several cases precedes it in whole or in part, as may be seen in the following table of the declension of the noun.⁵

The case endings being thought on so close to the noun, tended to draw out a distinct sense of objective individuality and to develop number, but by virtue of their closeness, they tended also to absorb it; so that the habitual sense of number which was developed showed itself rather in the nominative (157).

The plural ending *la* in Upper Obi, which is sometimes replaced by *t*, is borrowed from Tartar, as also *zan* in Upper Yenissei, which corresponds to Tsuvasian *sam*; *ye'* seems to be collective. Upper Ob and Upper Yenissei subjoin the singular case endings to the element of number. The case endings in the table belong respectively in Yurak to stems ending in a vowel or vocal aspiration, in *m* or *n*, and in *l*, *r*, *d*, or *s*; in Yenissei to stems ending in a vowel, in $\bar{\quad}$, and in $\acute{\quad}$; in Tawge to stems ending in a long vowel not preceded by $\acute{\quad}$, $\underline{\quad}$, *n*, *m*, or $\acute{\quad}$, or to those in a short vowel not preceded by $\acute{\quad}$, $\underline{\quad}$, *n*, *m*, or $\acute{\quad}$, which have an even number of syllables and a short penultima; to other stems ending in a short vowel and to stems ending in *i* or a consonant; in Upper Obi to stems ending in a vowel or which take a connective

¹ Castren, sect. 214.² Ibid. sect. 215.³ Ibid. sect. 377. 2.⁴ Ibid. sect. 220.⁵ Ibid. sects. 232, 236, 271, 300, 317, 323, 341.

	Yurak.	Yenissei.	Tawgē.	Upper Obi.	Upper Yenissei.
Nominative sing.					
Dual	$\bar{h}a\bar{a}^{\sim}, \bar{g}^{\sim}, \bar{k}^{\sim}$	$\bar{h}o, \bar{g}o, \bar{k}o$	$\bar{g}ai, \bar{g}ai, \bar{g}ai$	$\bar{g}, \bar{k} \text{ -ka -g}$	$\bar{z}ai, \bar{z}ai, \bar{s}ai,$ or $\bar{y}e^{\sim}, \bar{y}e^{\sim}, \bar{y}e^{\sim}$
Plural			\bar{a}	$\bar{a}(t), \bar{a}(t)$	
Genitive sing.			$\bar{a}\bar{i}, \bar{a}\bar{i}, \bar{a}\bar{i}$		$\bar{n}, \bar{n}, \bar{n}$
Dual	$\bar{h}a\bar{a}^{\sim}, \bar{g}^{\sim}, \bar{k}^{\sim}$	$\bar{h}\bar{i}^{\sim}, \bar{g}\bar{i}^{\sim}, \bar{k}\bar{i}^{\sim}$	$\bar{g}\bar{i}, \bar{g}\bar{i}, \bar{k}\bar{i}, \bar{g}\bar{i}$	\bar{n}, \bar{n}	
Plural	$\bar{v}^{\sim}, \bar{o}^{\sim}, \bar{h}\bar{o}^{\sim}$ $\bar{a}\bar{v}\bar{o}^{\sim}, \bar{y}\bar{i}^{\sim}$	$\bar{a}\bar{v}^{\sim}, \bar{e}^{\sim}, \bar{a}\bar{v}^{\sim}$	$\bar{v}^{\sim}, \bar{a}\bar{v}^{\sim}$	$\bar{g}, \bar{k} \text{ -ka -g}$	
Accusative sing.					
Dual	$\bar{m}, \bar{m} \text{ -m}$	$\bar{h}\bar{i}^{\sim}, \bar{g}\bar{i}^{\sim}, \bar{k}\bar{i}^{\sim}$	$\bar{m}, \bar{m}, \bar{a}\bar{m}$	\bar{m}, \bar{p}	$\bar{m}, \bar{m}, \bar{m}$
Plural	$\bar{h}\bar{a}\bar{a}^{\sim}, \bar{g}^{\sim}, \bar{k}^{\sim}$ $\bar{i} \text{ -o}, \bar{h}\bar{o} \text{ -wo -yi}, \bar{i} \text{ -o}$	$\bar{a}\bar{v}^{\sim}, \bar{e}^{\sim}, \bar{a}\bar{v}^{\sim}$	$\bar{g}\bar{i}, \bar{g}\bar{i}, \bar{k}\bar{i}, \bar{g}\bar{i}$	$\bar{g}, \bar{k} \text{ -ka -g}$	
Dative sing.	$\bar{n}, \bar{d}, \bar{t}$	$\bar{d}d\bar{o}, \bar{d}o, \bar{t}o$	$\bar{t}ai, \bar{n}dai$	$\bar{n}, \bar{t}, \bar{n}d$	$\bar{n}e, \bar{d}e, \bar{t}e$
Dual	$\bar{h}\bar{a}\bar{a}\bar{a}^{\sim}, \bar{g}\bar{a}\bar{a}\bar{a}^{\sim}, \bar{k}\bar{a}\bar{a}\bar{a}^{\sim}$	$\bar{h}\bar{i}\bar{u}\bar{e}^{\sim}, \bar{g}\bar{i}\bar{u}\bar{e}^{\sim}, \bar{k}\bar{i}\bar{u}\bar{e}^{\sim}$	$\bar{t}\bar{u}\bar{i}, \bar{d}\bar{a}\bar{i}$	to lifeless objects	
Plural	$\bar{h}\bar{a}\bar{a}^{\sim}, \bar{g}^{\sim}, \bar{k}^{\sim}$	$\bar{h}\bar{i}\bar{r}\bar{o}, \bar{g}\bar{i}\bar{r}\bar{o}, \bar{k}\bar{i}\bar{r}\bar{o}$	$\bar{g}\bar{i}\bar{a}\bar{a}\bar{i}, \bar{g}\bar{i}\bar{a}\bar{a}\bar{i}, \bar{k}\bar{i}\bar{a}\bar{a}\bar{i}$		

Locative sing.	-hana (na), -gana, -kana	-hone, -gone, -kone	^e -tanu, ^e -tanu -ntanu, ^e -tanu	-nnan, -nnan (-gan, -kan for lifeless objects)	-gan, -gan, -kan
Dual	-hañāna, -gañāna, -kañāna	-hinēne, -ginēne, -kinēne	-ginatanu, -ginatanu, -kinatanu		
Plural	-hā'na, -ga'na, -ka'na	-hine, -gine, -kine	-tini, -ntini -ndini, -tini -dini		
Ablative sing.	-had(ɬ), -gad, -kad	-horo, -goro, -koro	-gata, -gata, -gata -kata,	-nnan -nnan (-gan, -kan for lifeless objects)	-ga, -ga, -ka
Dual	-hañād, -gañād, -kañād	-hinero, -ginero, -kinero	-ginata, -ginata, -kinata		
Plural	-hā't, -ga't, -ka't	-hito, -gito, -kito	atu -ginata		
Prosecutive (along) sing.					
Dual	-ana, -mana, -mana	-one, -mone, -mone	^e -manu, ^e -manu, ^e -manu	-uu, -men	
Plural	-hapaana, -gapaana, -kapaana	-hinōne, -ginōne, -kinōne	-ginamanu, -ginamanu, -ginamanu		
	-māna, -mana, 'māna, 'māna	-one, -one, -one	-manu, -manu, -manu formed on genitive plural without'		
Instrumental sing.					
Plural	-mboi, -mboi, -poi				-ze', -ze', -se'
Caritive (without)	-poi, -poi, -poi				
Comitative (with)	-si, -si, -si				-he (se sea), -he (se sea)
					-he (se), -he (se)

vowel, and to all other stems; in Upper Yenissei to stems ending in a vowel, to stems in an aspirated vowel, or a vowel followed by *i* or in a liquid or medial, and to stems in a tenuis or *s*. The endings which belong respectively to these classes of stems are separated by commas. And varieties in the endings of the same class are ranged one over the other, or one in a parenthesis, after the other.

71. The dual element which forms the ending of the nominative dual, and the plural element', are used respectively as subjective suffixes for the third person dual and plural (78). They seem, therefore, to be thought pronominally with a distinct act of attention directed to the dual or plural objects. The dual element, which is much stronger than the plural, takes *-nā, -nē, &c.*, in all the cases except the nominative, genitive, and accusative; and this element belongs to the same cases in all numbers in the declension of the personal pronouns. This element, *nā, nē, &c.*, consists probably of the pronominal element *na* or *n*, and a dative element *a* or *añ*, and this would account for the long vowel. It corresponds to the tendency which has been observed in Tartar and Mongolian pronouns to be thought in the dative relation (9, 10, 21, 38). The dual element ends with a nasal which coalesces with this subjoined *nā, nē*, and is probably of the same nature. In the dative plural and the locative and ablative singular and plural of Yurak and Yenissei, *ha hi* is quite a different element from the *ha* of duality, and probably denotes inner place. For such is the meaning of *h* or *s* in Finnish; whereas *l* in Finnish denotes outer place, and *n* place in general; *t* occurs for *n* in Tsheremissian and Lapponic, and is the locative element in Tartar.¹ The above Samoiede cases have this common element, *ha hi*, compounded with the rest of the case ending. And in the plural cases this common element comes between the stem and the plurality. Its significance fits it to do so, for the thought of inner place tends to be identified with that to which it belongs. In the ablative singular and plural of Tawḡ *ga gi* corresponds to this *ha hi*, but in the dative and locative of Tawḡ *ta ti* is used instead; *i* being taken in the plural both in *ti* and *ni*, as a reduced expression of plurality which follows the elements of case in the dative and locative, and partly also in the ablative.

The case endings of the genitive and accusative plural in Yurak and Yenissei do not contain any element which can be taken to express an element of relation distinguishing one of these cases from the other. They seem therefore to express not relation but only connection; and this the two vowels *i* and *u* are qualified to express by virtue of their use in the pronouns, for in them *u* denotes the proximate, *i* the near, *a* or *o* the remote.² The initials *n, w, y*, spring euphonicly from the stem. If this be a correct analysis, then these case endings are arthritic (II. 33) pronominal connective affixes (79); and probably the reason why the accusative does not take the mark of plurality in Yurak is that thought passes more readily to it as direct object, and it does not need so strong an act of attention to connect it as such.

¹ Castren, sects. 227, 232.

² Ibid. sect. 453.

In Yurak and Upper Obi the accusative singular often dispenses with its ending;¹ and *h* when it occurs in the case endings in Yurak is often dropped.² In Upper Yenissei the dative ending *ne* is often omitted, and the accusative ending *m* when the stem ends in *m*.³

In Yurak the accusative plural and the genitive plural sometimes drop before the case ending a final vowel or vocal aspiration of the stem,⁴ and sometimes they drop the case ending and are merely the plural stem.

In some dialects of Upper Obi the dative is formed in the plural by adjoining to the nominative *kin*, *kin*, or *kini*.⁵ In some dialects also of Upper Obi the plural ending *la* drops *a*, becoming in the nominative *l* and in the other cases inserting before the case ending the indefinite pronoun *me*.⁵ And throughout Upper Obi there is a remarkable difference between nouns which denote living objects and those which denote lifeless objects as to the way in which they receive the distinctions of case, the former showing more readiness to take those distinctions than the latter. This appears in those declensions in which connective vowels are taken before the case endings; for in these the nouns of lifeless meaning require a rather heavier connective vowel than the others.⁶ And where a final consonant of the stem is doubled, as with incorporation of a pronominal element, to connect it with the relation of case, this is carried through more of the cases with nouns of lifeless meaning than with the others.⁷ The latter also drop their final consonant more readily than the former in incorporating the relation of case.⁸ The case ending itself is apt to be more mute in its consonants with the nouns of lifeless than with those of living meaning.⁹

But it is in the Tawge dialect that the declension of the noun is most remarkable, from the way in which it brings into view certain features which characterise the Finnish family of languages, in which the Samoiede seems to share.

72. The accentuation of Finnish and of the languages most closely akin to it is peculiar. The accent falls in general on the first syllable, and is repeated very faintly on the following odd syllables¹⁰ (138). This indicates an effort to utter two syllables together, thereby giving condensation to the word by reducing its parts. And such an effort would naturally be connected with the great development in these languages of case endings, which are remarkable not only for their great number but also for the compound nature of many of them. For many of the case endings consist of a more general part and a more particular part; and the more general part is apt to enter into combination with the noun so as to facilitate a closer union of the case ending with the stem. This is to be seen also in Samoiede, in which many of the case endings unite so closely with the stem as to get, either in whole or in part, between it and the element of number. Such a development of the relations of case and intimate union of these with the nouns shows a habit of thinking objects strongly in

¹ Castren, sects. 237, 272.

² Ibid. sect. 237.

³ Ibid. sect. 342.

⁴ Ibid. sect. 239.

⁵ Ibid. sect. 274.

⁶ Ibid. sect. 277 b.

⁷ Ibid. sect. 278.

⁸ Ibid. sect. 291.

⁹ Ibid. sects. 280-286.

¹⁰ Castren, Sryaen. Grammar, sect. 22; Sjögren, Finnische Sprache, p. 39.

such relations, and this tends to condense the ideas of the correlatives, and, of course, to give to them a corresponding condensation of expression. A minor accent on the odd syllables arising from such a cause would be quite distinct from the principal accent of the word, which falls where the sense of the whole word is strongest (Def. 27), and might co-exist with the principal accent, no matter where that accent fell.

73. Another principle which is to be found in Finnish and in some kindred languages is that a tenuis is softened or dropped if it be the initial of a short syllable, which is closed by getting a final consonant.¹ This principle seems to be akin to that of the Northern Samoiede mentioned above (68), that a tenuis or *s* cannot be immediately followed by another consonant. And it is probably due to the same cause, namely, the tendency to reduce consonant utterance.

74. Now in Tawge the case endings have a tendency to blend with the last syllable of the stem if it end in a vowel, or to take up from the stem a final consonant if it end in a consonant. This tendency does not show itself either in Yurak or Yenissei. For in Yurak a final consonant is always uttered with a half-vowel or vocal aspiration (68), and this hinders the final consonant of a stem from being quite taken up by a case ending; while it also causes the initial consonant of a case ending to be uttered with the vowel of the case ending, so that such initial consonant does not attach itself to a final vowel of the stem.

In Yenissei every word ends in a vowel, and therefore every syllable tends to do so, and if a case ending has an initial consonant, that consonant is uttered with its own vowel instead of being taken up by the last syllable in the stem. In Upper Obi and Upper Yenissei, which have both been subject to foreign influence, the case endings have not the same tendency to unite closely with the stem which they have in the northern dialects.

Thus it is that in Tawge there is a tendency which does not appear in the other dialects for the case number ending to blend with the final syllable of a stem ending in a vowel, or to take up the final consonant of a stem ending in a consonant. Now, when the former takes place so that the case number ending gives its initial consonant to the final syllable of a stem ending in a short vowel, then by the second principle above mentioned of the Hyperborean languages, a hard consonant (tenuis or *s*) preceding that short vowel will tend to be softened to a medial or *d'*; but this is hindered if the final syllable of the stem be an odd syllable, the penultimate, if long, counting for two;² because then the final syllable has the minor accent, and subordinates to itself the first syllable of the case ending instead of merely receiving its initial consonant, and the strength of the final syllable hinders its own initial consonant from being softened. If the affix begins with *g* or *k*, this does not become attached to the stem as the last letter of its final syllable; for the utterance of *g* or *k* as a final is contrary to the habits of the language, in which no

¹ Castren, Syryaen. Gram., sect. 13; Samoied. Gram., sect. 161.

² Castren, sects. 303, 307.

word can end in these letters, whereas *t* occurs at the end of a word reduced to '. Neither does the initial *m* of the prosecutive join on to the last syllable of the stem, probably because this case ending is not thought in such close connection with the stem as appears from its being formed on the genitive in the plural.¹ If, on the other hand, a case ending takes up from a stem a final consonant which is preceded by a short vowel, then the consonant preceding that vowel which had been softened by the influence of the final consonant becomes hard again when this is taken by the case ending; unless it be preceded by a long vowel or diphthong whose softening influence causes it to remain soft.² A final consonant is thus taken up only by the case endings which consist of a vowel, or which begin with a vowel. It is remarkable that *i* at the end of a stem acts as a consonant, but it is dropped before case endings which consist of a vowel, or which begin with a vowel.² If a stem end in ' this becomes *d* or *d'* before the vowel of a case ending.³

If a stem end in a short vowel, and be such that the first syllable of the case ending is weak as being in an even place, then the first syllable of the endings of the dative singular and plural and of the locative plural, which is either identical with the dative plural or formed on it, blend into the stem, softening their *t* to *nd*.⁴ The case ending is too distinct for this when the final vowel of the stem is long; and is too strong for it, if its first syllable be in an odd place. And the case ending of the locative singular being less general or abstract in its meaning, does not combine closely enough to experience this change. The initial consonants of the other case endings are already soft.

If a stem end in a vowel preceded by a nasal, the case endings of the dative and locative, both singular and plural, take *n* prefixed; and if their first syllable be in the weak place as an even syllable, the *t* is softened to *d* except in the locative singular,⁴ whose case ending probably does not combine so closely. If the stem be a monosyllable the *t* is not softened,⁴ probably because the affix is then felt as more distinct. The affixes which begin with *g* do not prefix a nasal except in the case of stems ending in *ñ*, and whose final syllable begins with a nasal. With these, *n* is prefixed to the affix, and *g* becomes *k*; other stems ending in *ñ* if the final syllable is weak because in an even place drop the *ñ* throughout, but change initial *g* of the affix to *k*; but if the final syllable be strong because in an odd place *ñ* is changed to *n*, and retained before affixes beginning with a vowel and before those of the dative singular and plural, and the locative plural, which then change *t* to *d* as being in an even syllable. The nasal, however, is dropped before initial consonants of case endings which do not combine closely, and therefore in the locative singular before *tanu* and in the prosecutive singular before *manu*, as well as before *g*, which then is not hardened to *k*.⁵

75. Some adjectival or adverbial stems, when used attributively with a substantive, always take the suffix *-da*⁶ in Yurak, which is

¹ Castren, sect. 304.² Ibid. sect. 313.³ Ibid. sect. 316.⁴ Ibid. sect. 308.⁵ Ibid. sect. 317.⁶ Ibid. sect. 348.

probably a pronominal element referring to the substantive in connection with the adjective.

Adjectives when used attributively are declined only in Tawge, and in it have only a genitive and accusative in the singular, and nominative, genitive, and accusative in the plural. They take the genitive form to agree with a dative, ablative, locative, or prosecutive.¹

A comparative degree is often expressed by putting the adjective in the prosecutive case, which Castren thinks to be an expedient borrowed from Russian.² It is also expressed by subjoining to the adjective a suffix, which in Yurak is *-rka*, in Upper Obi *-lage*, in Upper Yenissei *-arak*. This is evidently akin to the Turkish comparative suffix *-rak* (20); and according to Castren it is a diminutive, though the Turkish suffix does not seem to have this significance;³ if so, it may express a sense of speciality common to the two significations, but see 129.

The augmentative formation in *-ya* Yurak, *-gā* Tawge, is used as a superlative.⁴

76. The most characteristic feature of the Samoiede languages is their system of personal pronominal suffixes which are attached as subjects to verbs, and to nouns which are predicates, and as possessives to nouns. They are also suffixed to nouns as direct or as indirect objects.⁵ The possessive suffixes are, as in the Tartar languages, attached also as subjects to verbs, while there are also more purely subjective suffixes which are not used as possessives, but only as subjects to verbs or predicates. Which class of the suffixes is to be used with the verb is not, however, determined, as in Tartar, by the time in which the person is thought as present or not present, but by the degree in which the verb is thought in its application to an object, and by the number of the object. If the verb has no object, but is intransitive, or if its object be defined so as to be definitely distinguished in thought from the verb, then the verb takes the purely subjective suffixes for its persons; and these, of course, are always used also with a predicate. But if the verb is transitive with an indefinite object, or with an object which is supposed without being expressed, then it takes for its persons the possessive suffixes. These, moreover, when they are used as possessives with nouns, differ in the three northern dialects according as the noun is singular, or as it is dual or plural; and those which are taken by a dual or plural noun are taken by a verb with an indefinite dual or plural object; and those which are taken by a singular noun are taken by a verb

with an indefinite singular object. Thus

	Russian	I			
	<i>Lūt'a · m</i> ,	I am a Russian;			
burn	I	this reindeer (accus.)			
<i>paraw'a · m</i> ,	I burn;	<i>tikē</i>	<i>tē · m</i>	<i>teamd'a · m</i> ,	I bought this

 reindeer, in all which *m* is the purely subjective suffix of first

boat	my	fish	accus.	eat
------	----	------	--------	-----

singular; *~ano · u*, my boat; *halea · m* *~amaru*, I ate fish; in both

hand	dual	my
------	------	----

which *u* is the first singular possessive of the singular; *~uda · hayu · n*,

¹ Castren, sect. 349.

² Ibid. sect. 351.

³ Ibid. sect. 352.

⁴ Ibid. sect. 355.

⁵ Ibid. sect. 377. 3.

reindeer dual kill dual
 my two hands; *te · he' hāda·hayu'n*, I killed two reindeer;
 reindeer pl. kill
te · ' hāda·i'n, I killed (many) reindeer, in which *n* is the first
 singular possessive of the dual or plural.¹

The reflexive suffixes of the verb express the person as both subject and object.

77. There are also object suffixes which with few exceptions are attached only to nouns.² They are the same suffixes as the possessive, used not as possessives, but to denote either an indirect object, being then suffixed to the direct object, or the direct object, being suffixed to an apposition of the direct object (75).

In Yurak, however, the dative suffix may sometimes be subjoined to the third person of the imperative.² The pronominal element of the third person is used to connect them with a noun. This element is always *da* in Yurak, being subjoined to the dual or plural element of the noun; but in Tawḡe and Yenissei it is followed by the dual or plural element, being in Tawḡe *da, dukei, di*, in Yenissei *ro, rohu, ri*. It refers in the usual arthritic (II. 33) way to the noun, as thought passes to the suffix. And to this element the dative suffix is attached as a possessive is attached to an accusative;³ while the suffix to an apposition which is formed only in Yurak⁴ is connected with *da* by an additional pronominal connective *n*.⁵ It is only the three northern dialects which have object suffixes; and only they which have the purely subjective suffixes connected with the noun as their predicate.⁶ Only in Yurak and Yenissei⁷ do they form a past by taking *-s* soft when thus suffixed to a nominal predicate.

78. The proper element of the first person as a purely subjective suffix is *m*, which may continue *m* or become *u* when possessive, being then more weakly thought in its personality. It becomes *n* when possessive of a dual or plural, by which the sense of its personality is further reduced by diffusion.

The proper element of the second person as a purely subjective suffix is this expression of reduced personality *n*; and when possessive, and therefore more weakly thought as a person, it becomes *r*; and when possessive of a dual or plural, and consequently still less personal, it becomes *d* or *t*, which is merely demonstrative. To *n* of second person corresponds in Yenissei *dd*, to *r* *lr*, and to *d* *r*.

The change in the letter and therefore the reduction of personality appears in each step to be greater in the second person than in the first, the consciousness of self being stronger than the sense of a personality addressed.

The proper element of the third person is *da* in Yurak, *ra* in Yenissei, *du* in Tawḡe, and when less subjective in Tawḡe *tu*.

The dual ending of first and second person is *i'*, which is reduced from *in*. The plural ending of first and second person is *a'* reduced from *at*; but Tawḡe takes *u'* instead of *a'*.

¹ Castren, sect. 377.² Ibid. sect. 377. 3.³ Ibid. sect. 389.⁴ Ibid. sect. 378.⁵ Ibid. sect. 388.⁶ Ibid. sect. 390.⁷ Ibid. sects. 394, 396, 401.

In Yurak the first person dual when purely subjective is *ni'*, when possessive it is *mi'*, when possessive of dual or plural it is *ni'*. The personality associated with self is strongest in the subjective, but is more reduced than self in the possessive and again in the possessive of dual and plural; this follows from what has been said above of the first and second singular. In the subjective, therefore, the sense of self is most affected by the associated personality, as it predominates least; and the subjective dual is therefore brought down to *n*, while the possessive dual has *m*. But in the possessive of a dual or plural, self, though predominant, is properly *n*, and therefore the dual is *ni'*. This distinction, however, is peculiar to Yurak, the sense of self being apparently stronger in Yenissei and Tawge. In the plural the personality which is associated with self is weaker than in the dual, because it is more abstract, being an element common to several instead of being the full personality of an individual. The sense of self is therefore less diluted in the plural, and it has *w* or *m* even when purely subjective and when possessive of a singular. But when possessive of a dual or plural it is, in accordance with the above, reduced to *n*.

The second person dual and plural changes the personality *n* of the subjective singular for *r*, *l*. In Yurak it is *d* when subjective, perhaps because the duality or plurality is then more strongly thought, and also when possessive of dual and plural the personality being impaired by diffusion.

The third person when purely subjective has no proper suffix, but in the dual and plural it takes the dual and plural elements *ha'* and *'* in the three northern dialects. When possessive it is *da* singular, *di'* dual, *du'* plural, reduced from *dun*; *d* changing to *r* in Yenissei, and to *t* in the Tawge possessive of dual and plural. In Tawge also the plural takes *-i*.

The element *da* is demonstrative, and is suffixed to nouns not only as possessive but also as a definite article; and to adjectives, as has been said above, it is subjoined in Yurak apparently as a connective element. It is thus used also in the object suffixes; and *d*, *ro* connects arthritically the purely subjective suffix of first singular in Yurak and Yenissei with the predicate, as if in these the predicate was not thought subjectively enough to coalesce of itself with self as subject. In Tawge the possessive first and second singular take *-a* because they do not combine so closely as the subjective, and make an additional syllable.

The reflexive suffixes show in some of their consonants a more objective character than the subjective suffixes, being object as well as subject.

In his table of the personal suffixes Castren makes no use of *~* as distinguished from *'*.¹

79. The suffixes are very subject to euphonic change arising from the letter to which they are subjoined, and generally a vowel is interposed between an initial consonant of suffix and a final consonant

¹ Castren, sect. 378, &c.; Introduction, p. 16.

PERSONAL SUFFIXES.

	FIRST PERSON.				SECOND PERSON.				THIRD PERSON.						
	Subjective.	Reflexive.	Possessive.	Possessive of Dual and Plural.	Subjective.	Reflexive.	Possessive.	Possessive of Dual and Plural.	Subjective.	Reflexive.	Possessive.	Possessive of Dual and Plural.			
Singular.															
Yurak . . .	<i>m</i>	<i>u</i>	<i>u</i>	} <i>·šuis jo</i>	<i>n</i>	<i>n</i>	<i>r</i>	} <i>·šuis jo</i>	<i>d</i>	—	<i>da</i>	} <i>·šuis jo</i>	<i>da</i>		
Yenissei . . .		<i>bo'</i>	<i>bo</i>		<i>no</i>	<i>ddo</i>	<i>ro</i>		<i>ro</i>	—	<i>ro'</i>		<i>ra</i>	<i>ra</i>	
Tawge . . .	<i>m</i>	<i>na</i>	<i>ma</i>		<i>na</i>	<i>n̄</i>	<i>ra</i>		<i>ta</i>	—	<i>dan</i>		<i>du</i>	<i>tu</i>	
Upper Obi . . .			<i>u</i>				<i>l</i>		<i>l</i>				<i>t</i>	<i>t</i>	
Upper Yenissei			<i>m</i>												
Dual.															
Yurak . . .	<i>ni'</i>	<i>ni'</i>	<i>mi'</i>	} <i>·šuis jo</i>	<i>ni'</i>	<i>di'</i>	<i>di'</i>	} <i>·šuis jo</i>	<i>di'</i>	<i>ha'</i>	<i>ha'</i>	} <i>·šuis jo</i>	<i>di'</i>		
Yenissei . . .	<i>bi'</i>	<i>ni'</i>	<i>bi'</i>		<i>ni'</i>	<i>wi'</i>	<i>ri'</i>		<i>ri'</i>	<i>ri'</i>	<i>ho'</i>		<i>ho'</i>	<i>ri'</i>	<i>ri'</i>
Tawge . . .	<i>mi</i>	<i>ni</i>	<i>mi</i>		<i>ni</i>	<i>ri</i>	<i>ri</i>		<i>ti</i>	<i>ti</i>	<i>gai</i>		<i>ti</i>	<i>di</i>	<i>ti</i>
Upper Obi . . .			<i>ui</i>				<i>li</i>		<i>lei</i>					<i>dei</i>	
Upper Yenissei			<i>wei</i>												
Plural.															
Yurak . . .	<i>wa'</i>	<i>na'</i>	<i>wa'</i>	} <i>·šuis jo</i>	<i>na'</i>	<i>da'</i>	<i>da'</i>	} <i>·šuis jo</i>	<i>da'</i>	—	<i>d'</i>	} <i>·šuis jo</i>	<i>du'</i>		
Yenissei . . .	<i>ba'</i>	<i>na'</i>	<i>ba'</i>		<i>na'</i>	<i>wa'</i>	<i>ra'</i>		<i>ra'</i>	<i>ra'</i>	—		<i>ro'</i>	<i>ru'</i>	<i>ru'</i>
Tawge . . .	<i>mu'</i>	<i>nu'</i>	<i>mu'</i>		<i>nu'</i>	<i>lu'</i>	<i>tu'</i>		<i>tu'</i>	<i>tu'</i>	—		<i>ta'</i>	<i>du'</i>	<i>tu'</i>
Upper Obi . . .			<i>ut</i>				<i>let</i>		<i>la'</i>					<i>den</i>	
Upper Yenissei			<i>wa'</i>												

of noun.¹ When suffixed to singular or to plural nouns the possessive suffixes follow case and number in the three northern dialects.² But when suffixed to dual nouns, they follow the dual element, which is strengthened pronominally in the connection, and becomes *hayu* in Yurak, *hu* in Yenissei, *gai* in Tawge.³ In all the three northern dialects the suffix is followed in the dual by the element of case;² as snow-shoe dual *my locative*
lamba · ha · yu · n̄ · nāna, in my two snow-shoes. They probably combine more readily than the case relation with a duality on account of the unity which a relation requires in its object. In the nominative plural in the three northern dialects, the suffix is connected with the stem by the same vowel which is used in the genitive and accusative case endings. In the genitive this vowel retains ' (71), which makes itself felt on the suffix; but this ' is dropped in the nominative and accusative, which cases also in the dual drop the aspiration after the dual element⁴ that is retained by the others. The use of the vowel in the nominative confirms what has been said above (71), that it is not an element of relation, but a pronominal connective representing the plural noun. In connecting the suffixes with the singular case endings in Yurak and Yenissei, the element *n* is used, subject to euphonic change, as a pronominal connective or

¹ Castren, sect. 411.³ Ibid. sects. 410, 422, 425.² Ibid. sect. 407.⁴ Ibid. sects. 406, 410, 420, 424.

arthritic element (II. 33), unless the stem in Yurak ends in *m*,¹ because the singular noun when loaded with the element of case does not readily combine. This is not used with the nominative, because it has no element of case, nor with the accusative, because its element of case is so lightly thought. It is not needed with a plural noun, as the pronominal nature of the plural element renders it unnecessary. But both in the plural and in the dual the presence of the aspiration, as seen in the initial of the suffix, shows the stress that is thrown on the plural and dual elements as connectives in all cases except the nominative and accusative.

In Yurak and Yenissei *h* is taken as the element of the dative singular before the suffix. And the dative plural in Yenissei drops its final *ro*.²

80. In Tawge, the subjective suffixes *m*, *n*, and ' soften a tenuis or *s* at the beginning of an even final syllable ending in a short vowel, and harden a soft consonant beginning a final syllable which ends in a consonant or *i* (74).³ The subjective suffixes take *a* as connective vowel when the stem ends in a consonant.⁴

In Tawge, the third person singular suffix *du*, possessive of singular, when subjoined to a stem whose final syllable is odd and ends in a short vowel, does not combine with that syllable like a dative case ending (74); for the possessive suffixes do not enter into such close union with a noun. It, however, coalesces partially, and the stress of utterance which belongs to the minor accent, and which springs from the volition to utter together the odd syllable and the following syllable (72), falls where the sense of combination is strongest, at the junction of the two, and hardens *du* to *tu*.⁵ The dual *di*, and the plural *dui*, do not combine close enough for this effect.

In Tawge, in the nominative and accusative dual and plural, the element of number to which the suffix is attached has an audible *i* which the initial of the suffix takes up, and is ante-palatalised by it.⁶ The connective *n*, which in Yurak is used with the oblique cases of the singular, is found in Tawge in the plural also; probably because less stress is put on the plural element, being less distinctly thought in Tawge, more blended into the case ending than in Yurak, and therefore less fit to serve as a connective. The nasal initial of the first person absorbs the connective *n*. And the singular suffixes of the second and third person swallow it in the genitive, dative, and ablative singular and plural, the second person changing its *r* to *t*. In the genitive plural, indeed, the pronominal *i*, *u*, *a*, dispenses with *n*. These suffixes have probably less need of *n* than in Yurak, the connection of possession being thought less closely. This connection, however, is strong enough to require *n* when the person is weighted with dual or plural number or the noun with locative or prosecutive case relation. When the suffix is an odd syllable its *d* becomes *t*, and in the dative and ablative swallows *n*.⁷

In the dual the suffix precedes the case ending and combines with-

¹ Castren, sect. 408.

² Ibid. sects. 410, 425.

³ Ibid. sect. 398.

⁴ Ibid. sect. 399.

⁵ Ibid. sect. 415.

⁶ Ibid. sect. 417 a.

⁷ Ibid. sect. 416.

out the help of *n* with the noun when not weighted with the case relation.

The initial nasal of first person, when suffixed to the dative singular, absorbs the final *n* of the case ending, and this hardens the initial of the case ending if soft, changing *nd* to *t* (74).¹

81. In the Upper Obi dialect there are no purely subjective suffixes used with predicate nouns, nor any special suffixes for possessives of dual and plural;² suffixed duals were unknown to Castren.³ There are many euphonic changes in the connection of the suffixes with the noun, and several dialectic varieties. But omitting these, the system of the suffixes may be briefly stated. In all the cases, except the instrumental or comitative, the suffix follows the case ending; in these it immediately precedes the latter.⁴ And in all the cases except the nominative and accusative, the suffix is preceded by arthritic *n* (II. 33). In the genitive, however, the one *n* is sufficient, for probably the genitive *n* is itself connective.⁵ In the dative the element *ga* is taken for the relation of case;⁶ it corresponds to the expression of inner place which seems from its use in the case endings to enter into closer union with the noun than the element of outer place. This is probably the reason of its use with the suffix, which condenses the thought of the noun in combination with the relation of case. With the dative and with the prosecutive the suffix of the first person is either *ñ* or *k*;⁵ *ñ* being a combination of *u* with the arthritic *n*, in which the guttural utterance of *u* makes itself felt on account of the strength which the first person requires as possessive of the heavy combination of noun and case, and *k* being a still stronger form. The dative is used also as locative and ablative.⁷

82. In the Upper Yenissei dialect the noun has no subjective suffixes, and only one set of possessives for singular and plural.⁸ The accusative and genitive drop their case endings, and are suffixed like the nominative.⁹ The instrumental case ending follows the suffix, this being attached to the stem as in the nominative.⁹ With the other cases, the suffixes of the first and second persons singular are weakened in their personality by being involved with the noun as objects of the case relation. The element of the first person, which is most subjective, disappears altogether, leaving the connective vowel at the end of the word; the element of the second person *l* sinks to the weak pronominal *n*, but the dual and plural of these persons being more objective, owing to the objective nature of the dual and plural elements, do not experience this change.¹⁰ The dative and locative case ending is *-gan*, the ablative *-gat*, but when the stem to which the case ending is attached ends in a vowel, as in the singular of the first declension, the *g* is dropped; monosyllabic vowels of the first declension, however, retain it.¹¹ These case endings take a connective vowel *i* before all the suffixes of first and second person,

¹ Castren, sect. 422.

⁴ Ibid. sect. 436.

⁷ Ibid. sect. 433.

¹⁰ Ibid. sect. 444.

² Ibid. sect. 429.

⁵ Ibid. sect. 429.

⁸ Ibid. sect. 443.

¹¹ Ibid. sect. 442.

³ Ibid. sect. 432.

⁶ Ibid. sect. 433.

⁹ Ibid. sect. 440.

but combine with the suffixes of third person without any connective.¹

83. The separate personal pronouns are: in Yurak, ¹ *man*, ² *pudar*,
³ *puda*; in Yenissei, ¹ *modi*, ² *tođi*, ³ *n̄itoda*; in Tawge, ¹ *mannān*, ² *tannān*,
³ *sete*; in Upper Obi, ¹ *man*, ² *tan*, ³ *tep*; in Upper Yenissei, ¹ *man*, ² *θan*,

³ *di*. The dual and plural are: in Yurak, *manī*~, *pudari*~, *pudi*~, *mana*’,
pudara’, *pudu*~; in Yenissei, *modi*~, *tođi*~, *n̄itodi*~, *modi*’, *tođi*’, *n̄itodu*~;
in Tawge, *mā*, *tī*, *seti*, *mēñ*, *tēñ*, *setēñ*; in Upper Obi, *mē*, *te*, *tēpka*, *mē*, *tē*,
tebala; in Upper Yenissei, *mište*, *sište*, *dištei*, *mi*’, *si*’, *dizān*. In the
three northern dialects the genitive of the personal pronouns is the
same as the nominative in all numbers, and in Tawge the accusative also.
In the two southern dialects the genitive is the same as the nomi-
native in the first and second personal pronouns, except that in the
dual genitive Upper Yenissei adds *-n* to the nominative. Both these
dialects decline the third personal pronoun like a noun.²

84. In the other cases in the three northern dialects the case relation draws out from the three personal pronouns an objective element (see 38), which combines with the relation as its object; and this element is thought as belonging to the personal pronouns, so that it takes the corresponding possessive suffix after the element of case. This objective element or substance of the person is in the accusative in Yurak and Yenissei *si*, which is a demonstrative element forming the first part of the Tawge third personal *sete*, and found in Yakut as a demonstrative of identification *eben derselbe*. It requires no case element, being itself objective. In the other cases, which involve more sense of locality, the objective element is *nā*, *ne*, *na*, which is found also in the dual cases of the noun (71), and which probably itself involves an element of dative relation. In the declension of the personal pronouns in the three northern dialects, *nā*, *ne*, *na* is used in all numbers in the oblique cases except the genitive, and is followed by the same elements of case as in the dual noun. The objective element with its case and suffix may be preceded by the personal pro-

noun, or used by itself, as: ^I *man* ^{my} *siem*, or *siem* (*i.e.*, my objectivity);
^{abl. my} *man* ^{abl. my} *nāda·n*, or *nāda·n*, from me (from the direction of my
^{our} objectivity); *mana’ nāda·na*’, or *nādana*’, from us.²

In the Upper Obi dialect the accusative is formed by *s* suffixed, but in the other cases *na* is not used, and only in the dative is the case ending suffixed as if the end of the stem was an objective element.²

In Upper Yenissei the accusative, dative, and locative singular of the first personal pronoun add *a* to the stem, and the same cases of the second add *-an*, as if there were an objective element involved, which, like the dative and locative of nouns, takes *n* as suffix for second person, and drops that of the first person. Both these pronouns, in the dual, form

¹ Castren, sect. 444.

² Ibid. sect. 448.

the accusative with *-m*; but in the dative and locative dual, as well as in the accusative, dative, and locative plural, they subjoin to the stem the suffixed case-element like the dative and locative of a noun, as if there were an objective element understood. Such an element seems to be expressed in the ablative plural, in which *gi* intervenes between the stem and the suffixed case element; but no such element precedes the suffixed case element in the ablative singular and dual. The instrumental annexes to the stem the case ending without suffix.¹

85. The stem of the reflexive pronoun is in Yurak *har*, in Yenissei *kere'*, in Tawge *~ona*, in Upper Obi *one*, in Upper Yenissei *bos*. In Upper Yenissei *bos* is reflected regularly.

In the three northern dialects the reflexive stem is used in the genitive, suffixed according to the person, and followed by the same objective element with case and suffix as the personal pronouns; thus

accusative *har · n si'em*, myself, *n* being the possessive suffix first
 self my my
 singular of genitive, my objectivity of myself; *har · t n̄man · d*, in
 thy loc. thy
 thyself² (in thy objectivity there of thyself). In Yurak *puda* is used
 in the suffixed genitive and accusative as a reflexive stem.³

86. The above remarkable constructions of the cases of the personal and reflexive pronouns are doubtless due to an objective outward tendency of thought. For that habitual keenness of observation of the objects and conditions of life which has been referred to in 38 as characterising the Mongolian and Tartar races is still more needful for the Samoiede in his less productive region. This gives an intensely outward tendency to thought in conceiving an object or condition. And when personality has to be thought in this way, it gets a strong objective element in the mental act of making it an outward object, which involves a sense of demonstration or attention directed to it (Def. 7).

87. The extraordinary objectivity with which the verb is thought in Samoiede appears from its personal suffix and its number being determined by its object (76); and the weakness of its subjectivity appears also from the fact that the most subjective verbs, those which are intransitive, have so weak a sense of their subject that they take no person ending for the third person singular, and in the three northern dialects only the element of number for the third person dual and plural. The interest of a verb in Samoiede extends to its subject more when it denotes an influence on others, than when it is thought clear of such an element.

All the dialects except the Upper Yenissei form a potential mood by subjoining to the stem of the verb, Yurak *yi*, *ni*, Yenissei *yi*, *i*, *ni*, Tawge *bā*, *fā*, *bāda*, *fāda*, Upper Obi *ni*, *ne*.⁴ Yurak alone forms an optative, subjoining to the stem *rava*, *lava*; ⁵ Yurak and Tawge a precativè, the former by *har*, *gar*, *kar*, strengthened in the first person

¹ Castren, sect. 448.² Ibid. sect. 449.³ Ibid. sect. 451.⁴ Ibid. sect. 469.⁵ Ibid. sect. 470.

of all numbers by *-d*, *-t* inserted before the personal suffix, the latter by *gal*, *kal*, strengthened in first person by *-ku*. This element *-hu*, *-gu*, *-ku*, is attached to the stem in the first person of the imperative in all the three northern dialects.¹

In the third singular of the imperative and precativè of intransitives and of transitives to a definite object, Yurak has for its ending *-yea*, Yenissei *ba*, Tawgè *na*, Upper Obi *-i*, Upper Yenissei *-gai*, *-guwi*, and in the third plural the same endings with plural element except Upper Obi, which has *-mdet*; *y*, *b*, *n*, *ga*, *gu*, are probably verbal elements. In verbs transitive to an indefinite singular or to a dual or plural object, and in reflexives, Yurak and Upper Obi prefix *m* to the suffix of third person of the imperative or precativè in all numbers. The other personal suffixes of the imperative and precativè are the same as those of the other moods, except that the second person of the latter changes generally, in the imperative and precativè, its *r* to *d*, its *d* to *n*, and its *n* to *d*. This is probably due to a loss of spontaneous personality which the second person suffers as the object of command or desire, the *n* to which *d* is changed being the demonstrative *n*, the *n* which is changed to *d* being personal. In the singular the second person of the imperative and precativè of verbs intransitive or transitive to a definite object is reduced to ' , the energy of direct address taking up the singular person in these verbs in which it is weakest. Upper Obi has *-k* or *-n*, which is probably verbal. In Tawgè the second singular imperative of reflexives is both objective and subjective, being *din*.² Upper Yenissei takes for the ending in the imperative *st*, in the first singular if a vowel follows, *s* before a consonant in the first dual and plural, *gu*, *ga* in the second dual, *go* in the second plural of transitive verbs, *ga* in the second plural of intransitive, *gei* in the third singular intransitive, *guwi* third singular transitive, *guwi* third dual transitive, *geigei*, *guigui*, third dual intransitive, *quwin* third plural transitive, *ga*, *gu*, before *ye'*, third plural intransitive.¹

Only the two southern dialects form an infinitive, the Upper Obi with *gu*, *ku*, the Upper Yenissei with *zet*.³

Only Yurak forms a supine, *-wanz*, *-manz*.³ It has also verbal nouns *-wa*, *-ma*,³ *wa* probably expressing the process thought as a whole, *ma* as going on (96).

The formatives of the gerunds are: Yurak, *-s*, *-b*, or a long final vowel (see Example 8); Yenissei, *-si*, *-di*, *-ti*, *-bu*, *-fu*; Tawgè, *-ya*, *-sa*, *-bu*, *-fu*; Upper Obi, *-le* present, *-bele* past; Upper Yenissei *-la* present, *-wi* past.³

In the three northern dialects the gerunds do not seem to involve any distinction of tense.

88. Those verbs in Samoiede which involve in their meaning any duration of process express in their simple form the thought of that process as going on in the present. But in general, primitive verbs in their simple form denote a past in all the dialects except the

¹ Castren, sect. 471.² Ibid. sect. 378.³ Ibid. sect. 472.

Upper Yenissei (95), the fact being thought as momentary. This shows what little sense of process is involved in the verb. The past, however, which is expressed by the simple form, is one which has just happened, and which is still present in idea and in effect.

Upper Yenissei forms a present going on to the future by subjoining *l* to the verbal stem.¹

A fact which is thought as completely past is expressed in Yurak by *s*, *t'*, *t*, *d*, in Yenissei by *si*, subjoined in both to the personal suffix; in Tawge by *yu*, *su*; in Upper Obi by *h*, *s*, subjoined in both to the verbal stem.

Upper Yenissei forms a past by *bi*, *wi*, subjoined to the stem.

Only Upper Obi and Upper Yenissei form a future, the former by *l* subjoined to the stem, with *he*, *se*, *s*, subjoined to the personal suffix; the latter by *l* subjoined to the stem.

The distinction of tenses is in Yurak carried through the indicative, potential, and optative moods, and in Yenissei through the indicative and potential, but in the other dialects the only mood which has it is the indicative.²

There is no passive.³

The three northern dialects insert before the reflexive suffixes a vowel which in Yurak and Tawge is *i*, in Yenissei *e*; ⁴ the other dialects have not those suffixes.

89. In Yurak, the final consonants of verbal stems are only *m*, *n*, *l*, *r*, and *s*, the last replaced by the aspiration. Nominal stems may end in *d*.⁵

In the second singular imperative of verbs intransitive or transitive to a definite object, a final *m* of the stem in Yurak changes to *u*, and *n* to *i*.⁵

The Yurak verb, intransitive, or transitive to a singular or dual object, definite or indefinite, often takes, in the indicative, imperative, and precativ, an additional vowel after the stem of the mood; the process of being or doing, or attainment, being more strongly thought in these than in the other moods, unless diffused by being involved in a plural object. If the stem ends in *a*, this becomes *ā*; final *e* becomes *ea* or *ē*; final *i* becomes *ie*; final *o* and *u* do not take an addition. This additional vowel would be absorbed by *h* following it, for *h* does not suffer before it a prolonged vowel sound; the additional vowel is therefore separated from the vowel which precedes by *ñ*. It is omitted also in the second singular imperative and precativ of verbs intransitive or transitive to a definite singular object; the sense of process being partly taken up into the direct address; but this is not so when the thought of the verb is more involved in that of the object. When the verbal stem ends in a consonant, the additional vowel is short, but sometimes *e* after final *m* or *n* is lengthened to *ea*. If the additional vowel be preceded by *l* or *r*, it is separated from them by *ñ*, because otherwise it would take up *l* or *r* as the initial of a new syllable.⁶ This use of *ñ* to save the end of one element from

¹ Castren, sects. 474-478.

² Ibid. sects. 474, 513.

³ Ibid. sect. 479.

⁴ Ibid. sect. 481.

⁵ Ibid. sect. 483.

⁶ Ibid. sects. 485-487.

being impaired by a following element which begins with a vowel is analogous to that of the initial ~.

90. It is a remarkable feature in the three northern dialects that the Yurak and Tawge negative *ni*; Yenissei *ne*, not, *le'i*, cannot; Yurak *hat'eau*, scarcely; Yenissei *hoti*, nearly; Tawge *kasa*, scarcely, are treated as verbal stems, and conjugated as intransitive, transitive, or reflexive, just like verbs, according to the conception of the verb which they affect; while this verb follows separately in its stem form.¹ This no doubt arises from the degree in which the subjective inherence is thought in the subject without being taken up by the stem, for as the subjective inherence is the element of assertion (Def. 11), the order of thought being subject, inherence, stem; negation, complete or partial, is applied to the inherence; and where this element is thought subjectively, without penetrating the verbal stem, the negative naturally combines with it and becomes thereby a verb separate from the stem. This tendency is to be seen in the Tartar languages also (14, 2).

This detachment of the subjectivity from the stem appears in another peculiarity of the verb in the northern Samoiede dialects, that just as elements of relation attach themselves directly to the stem of the noun, getting between it and the possessive suffix, so also enclitic particles attach themselves directly to the stem of the verb, getting between it and the element which precedes the personal

cover as poten. 1st sing.

suffix; thus *tondaraha · yi · u*, as I would cover.² The element of relation refers to the stem, and this is not sufficiently penetrated by the subjectivity to carry the latter with it as object of the relation.

The interrogative particle, however, is not thus attached to the stem except in Tawge, but follows the person, the element of tense having been put before the person. It is in Yurak *u* after a vowel, *m* after a consonant or ' ; in Yenissei it is *niū*, in Tawge *gu*.³

91. In Yenissei Samoiede no word ends in a consonant; verbal stems end in no other consonants except *m*, *n*, and *s*, though nominal stems may end also in *v*, *r*, *b*, and *w*.⁴

In the indicative mood, Yenissei Samoiede is apt to take an additional vowel after the stem, but it does not usually lengthen a vowel except in the third person singular, dual, and plural of the imperative.⁵

92. In Tawge the affixes which are subjoined to the verbal stem are subject to changes in their initial consonant, which are due either to the stem ending in a consonant, or to its ending in a short vowel, and, at the same time, consisting of an uneven number of syllables, the penultimate, if long, counting for two. In either of these cases a soft initial of the affix, *b*, *g*, *d*, *y*, becomes hardened into *f*, *k*, *t*, *s*.⁶ In the latter case this takes place, because the affix or its first syllable is in an even place, and therefore tends to be taken up into the one

¹ Castren, sects. 500, 501, 521, 522, 535, 538.

² Ibid. sects. 502, 523, 538.

³ Ibid. sects. 503, 524, 538.

⁴ Ibid. sect. 525.

⁵ Ibid. sect. 527.

⁶ Ibid. sect. 505.

volition of utterance along with the final syllable of the stem (74, 80). Its union, however, with the stem in the conception of the verbal formation is not so close as that of the case ending with the noun. But, like the pronominal suffixes of the noun, it is only partially combined with the final syllable of the stem; and the stress of utterance falls where the sense of the combination is strongest, namely, at the junction of the two, so as to harden the initial of the affix (80). It is to be observed that the precativ element *gal* does not combine closely enough with the stem to experience this effect except in the second singular,¹ in which the energy of direct address compresses the thought.

The initial consonant of the last syllable of a stem, unless preceded by a long vowel or diphthong, is hardened when an affix takes up a final consonant of the stem, and is softened when an affix gives a final consonant to the stem; the stem, in the latter case, ending in a short vowel, and having an even number of syllables (74).²

93. In Tawgē, verbs intransitive or transitive to a singular or dual object take an additional vowel after the stem in the indicative, and all verbs do so in the imperative and precativ; in the past tense this vowel follows the element of the past, and in the precativ the element of mood.³ This additional vowel in the indicative takes the place of the last vowel of the final diphthong of a stem, and then the first vowel of the diphthong is lengthened. If the stem ends in a diphthong whose second vowel is *i*, this *i*, if of a consonantal nature, is dropped before the vocalisation of the indicative, and preserved before the consonants of mood and tense; if it be more vocal, it is preserved before the vocalisation of the indicative, and dropped before the consonants of mood and tense. When *i* is dropped the preceding vowel is lengthened. The vocalisation of the imperative has no effect on the stem, as it is always preceded by *ā*.⁴

94. In Upper Obi there are only two sets of personal suffixes used as persons with verbs, one for verbs intransitive or transitive to a definite object, which may both be called intransitives, and the other for other transitives, which for distinction may be called transitives.⁵

1 2 3

The essential elements of the persons are *u*, *l*, *d*, which take *-i* for dual, and *-et* for plural. The first singular, however, generally becomes *k* with intransitives, and *p* with transitives. The second singular becomes *nd* with intransitives; the third singular has no person element with intransitives, but the third dual intransitive is *g*. The vowel which precedes the person in the indicative, and which probably expresses a sense of the process of being or doing, is weaker for the second person dual and plural intransitive and transitive, and the third dual and plural transitive, than for the others; as if these persons were thought more objectively than the others, and therefore with weaker sense of the being or doing, taking *e* before them, while the others take *a*; except the first plural, whose own vowel *u* dispenses with any other.⁶

¹ Castren, sect. 505.² Ibid. sect. 506.³ Ibid. sects. 514-517.⁴ Ibid. sect. 507.⁵ Ibid. sect. 539.⁶ Ibid. sect. 542.

When the stem ends in a consonant, the vowel which precedes the person is itself preceded by *n*, in the present indicative.¹

95. In the Upper Yenissei dialect there are differences between the personal suffixes of intransitive verbs and those of transitives (94); but transitive verbs generally have all the same suffixes.²

It forms a present and future by subjoining to the stem *l* or *n*, or with some intransitives *l* or *n*. A few verbs, probably derivative in their origin, form their present with *g* or *m*.³

Some verbs, however, express a present by the stem without the addition of any element of tense; and these, as well as the verbs whose present has *g* or *m*, form a future with *l*, *n*, *l*, or *n*.⁴

The past is formed by *wi*, *bi*, *p'i*; the potential by *n*, *d*, *t*, followed by *izü*.⁴

The personal elements are preceded by *a* in the singular, except in some transitives, which take *i* after *l*, and these omit *i* in the third singular, and throughout the dual and plural. On the other hand, *a* is lengthened in the dual and plural of the present when this is formed by *n*, *g*, or *m*. Those stems ending in a vowel, which take *l* instead of *l*, take *a* only in the first and second singular, *e* in the third singular and plural, and no vowel in the other persons. Those stems ending in *i* or a consonant, which take *l*, and all those which take *l*, lengthen the vowel in the third dual of intransitives. In the third singular, and in the dual and plural of the past, the vowel after *wi* is omitted, except in the third dual, which has *e*. In the potential it is dropped in the dual and plural, except in the third person of both which lengthen it. If the stem end in *i* or a consonant the *a* is apt to be changed to *e*, instead of being dropped.⁵

			singular.			dual.		
			1	2	3	1	2	3
The personal suffixes are, for intransitives,			<i>m, l, —</i> ;			<i>wel, lei, gei</i> ;		
plural.			singular.			dual.		
plural.			singular.			dual.		
1	2	3	1	2	3	1	2	3
<i>wa', la', ye'</i> ;			for transitives, <i>m, l, t de</i> ;			<i>wel, lei, dei</i> ;		
Transitives in <i>li</i> take <i>de</i> in third singular. ⁶						<i>wa', la', den.</i>		

In the imperative the element of the second person singular and plural is reduced to ' in intransitives and to *t* in transitives.⁵

The negative *el* in Upper Yenissei is inflected as a verb in the present and potential, making in the present its second singular *elle*, and third singular *el*. In the past it takes no personal suffixes, but becomes *ei*, and the principal verb takes the persons.⁷

96. It is much to be lamented that Castren did not live to give an account of the formation of words in Samoiede;⁸ especially as the formation of derivative verbs is a characteristic feature of the Hyperborean languages. That these are abundant in Samoiede may be seen in Castren's *Worterbuch*; some are incidentally mentioned in the *Grammar*.

¹ Castren, sect. 542.

⁴ *Ibid.* sect. 552.

⁷ *Ibid.* sect. 562.

² *Ibid.* sect. 552.

⁵ *Ibid.* sect. 558.

⁸ *Ibid.* Vorwort, p. 20.

³ *Ibid.* sect. 556.

⁶ *Ibid.* sect. 557.

Continuative verbs are formed in Yurak by *-bi-*, *-pi-*, or *-na-*, and in Upper Obi by *-spa-*.¹

Inchoative verbs are formed by *-gu-*, *-ku-*, *-nu-*, and these in Yurak and Tawgę supply the place of a future.²

In Tawgę there are such verbs as ^{cut} *matutatu*, be about to cut; ^{thank} *yadabtu guitu*, thank continuously.³

In Yurak there are such as ^{cover} *tōnda'nu* inchoative, ^{grow} *~ārm'dalu* inchoative, ^{cover} *tōnda'bsu* should cover, *tōnda'bsu'käu* dubitative, *tōnda'wa'käu* potential, ^{wash} *haltā'yen* frequentative, ^{stray} *yuhō'boria* frequentative, ^{grow} *~ārm'da* nourish, ^{pour} *~ārm'd'etę* frequentative, *hamda'setę* frequentative, ^{sin} *hae'bea* substantive, *hae'be'hama* verb, ^{wait} *~ate'btie* diminutive, ^{cold} *han'me* freeze, *han'me'arka* diminutive, ^{red} *hēm'asatę* become red, ^{narrow} *tęye'ma* become narrow, ^{roam} *tęye'm'da* make narrow, *tan'ir'ia* augmentative.⁴

Yurak has participles, *-na* present or present past, *-we* complete, *-nōda*, *-unda*, *~nōwe* future;⁴ some of which may be seen in the examples; *~n* seems to express the origination of the process, *n* its going on, *w* the thought of it as a whole, referring rather to the process than to position in time.

The following derivative nouns in Yurak may be found in the *Wörterbuch*: ^{father} *nise'mboi* diminutive, ^{head} *~aewō'ko* diminutive, *~aewō'k* diminutive, ^{blood} *hēm'di* bloodless, ^{teach} *tohol'kōda* teacher; and the following compounds, ^{boat good} *~ano'sawa'ei* boat-possessing, ^{idol} *hahe'dai'ada* priest, ^{go} *haiye'obtā* flow, ^{deer-ox} *hōra'nābt* deer after castration, *yale'mbae* midday.

In Upper Obi derivative verbs are formed with the following elements subjoined to the root expressive of the following meanings: *-lna-* with haste, *-etā-* with greater haste, *-rna-* augmentative, *-ra-* augmentative, *-d'el'd'emba-* frequentative, *-kol'temba-* frequentative, *-el'temba-* intensive; inchoatives are formed from monosyllabic stems by *-da-*, *-nda-*, *-d'a-*, *-nd'a-*, *-tta-*, *-t'a-*, from disyllabic by *-tūnda-*, *-t'ūnd'a-*, *-d'ūnd'a-*.⁵

97. There are scarcely any pure elements of relation in Samoiede except the case endings. The words which are used as postpositions are in general thought as nouns, for they are used in different cases;⁶ and there are no proper conjunctions native to the language except one or two relative particles which attach themselves to the stem of

¹ Castren, sect. 476. ² Castren, Grammatik, sect. 478. ³ Ibid. sect. 518.

⁴ Castren, *Wörterbuch* under the roots, and *Vorwort*, xxiv.-xxvii.

⁵ Castren, *Wörterbuch* under the roots, and *Vorwort*, xxiv.-xxvii.

⁶ Castren, sects. 565-567.

the verb (90).¹ Related facts are expressed by gerunds or participles or other constructions which take the place of conjunctions.¹

98. The following are examples of the Yurak dialect :

- (1.) *Tike nienete man mālitea · n · da ~ad'arta · ma · u*
 this man I hide gen. his tear vbl. noun 1st sing.
 man boat his burn vbl. noun 1st sing. man
nienete ~an'orda parada · ma · u nienete, this man is the man
 whose hide I have torn, whose boat I have burned ;² the verb of the
 relative clause, being reduced in subjectivity by its subordination to
 the main fact, is expressed by a verbal noun which qualifies the
 antecedent (my tearing of his hide qualifies man). (2.) *Har nam*
 vbl. noun 1st sing. man tent his break
ma · u nienete ; mea · ta mallie'ma'u nienete, a man whose
 knife I have taken, a man whose tent I have broken.² (3.) *Nie'd*
 to me take vbl. noun 1st sing. year loc. brother my die
u mue · ma · u po · hona na · u hā, in the year in
 which I took to me a wife my brother died ;² in *niedu*, *u* is an object
 suffix (77), *d* is an arthritic connective (78, II. 25) ; my taking to
 me a wife qualifies year. (4.) *Man mansara · ma · u nienete ;*
 I work place my be past part.
man mansara'ma'u ya · u ~ae · we, the man with whom I have
 worked, the place where I have worked (long ago).³ (5.) *Man hā*
 inchoat. vbl. noun 1st sing. place my
no · ma · u ya · u, a place where I intend to die (*vo*
ich sterben will).³ (6.) *Man te teamda · no · ma · u*
 I reindeer buy inchoat. vbl. noun 1st sing.
 man
nienete, the man from whom I intended to buy the reindeer (*kaufen*
 thou command vbl. noun. gen. thy hinten loc. hew vbl. noun
wollte).³ (7.) *Pudar tābeda · ma · n · d ta · hana sap · ma · e*
 1st. sing. past.
dam · d, before thou hadst commanded I felled ; in *sapmaedamd*,
e seems to be an additional vowel to give process of doing (89), *d*
 before *am* arthritic (78). It is remarkable that priority in the past is
 expressed by behind ; this perhaps arises from deficient subjectivity
 in thinking position in time, the speaker not putting himself in
 the position which the subject of the event occupies in the pro-
 cession of events, as these march into the past each with its sub-
 ject, the earlier before the later, but looking on events from
 outside as they meet him and pass him, those which passed first
 being farther behind him than those which passed later ; on the side
 of the latter which is in the direction of the speaker's back as
 he stands in the present, meeting events as they occur. (8.) *Mēte*
 the still ger. 3d sing. quickly go poten. 1st sing. past
n'da heana · ba · ta near hai · yi · d'am · d, if the wind would

¹ Castren, sect. 572.

² Castren, Worterbuch, p. 377.

³ Ibid. p. 378.

lull, I should set out at once; ¹ *da* seems to be used as the definite article (70), *n* probably euphonic; the gerund in *b* expresses a condition of the fact, and its construction with personal suffixes is a feature like the so-called nominal participle in Eskimo (see II. 10, 15). The singular possessive suffixes which are used with the gerund in *b*, are *n*, *t*, *ta*, and the suffix of the third plural is *tu'*, which seems to indicate a dropped consonant after *a*, such as to leave after it the aspiration ', for these are the suffixes as affected with the plural aspiration ' (79); we find such a final consonant in the gerund formative *s*, and it is probable that this is present in its effect on the suffixes in these *-ba-* formations; in *haijidamū*, *d* is arthritic connective before the first person intransitive (78); *d* the element of the past, same as *s*, abstracts the fact from the real as from the present, making it ideal. There seems to be another formation of the gerund in *b* with *-nan-* having more sense of process going on.

go gerund say poten.
(9.) *Hæ'bnaw'd mai'yi'n* if thou goest thou mayest say; ² *d* possessive suffix of second singular, *r* being changed to *d* after *n*; *n* subjective suffix of second singular; *teamda · nō · banam yekar*, I know not whether I shall sell; the possessive first singular has coalesced with final *n* of *nan*; *yli'wē ~æ'ba · nan ~atebea · u mtrte · nū*, if I live I will pay my debt; ² *wē* the verbal element of total process (87, 96); *n* is the possessive first singular, but it is absorbed by final *n* of *nan*; it is used as person of the verb transitive with indefinite object (76).

live be ger. 1st sing. debt 1st sing. pay inchoat. 1st sing.
thou sleep loc. reindeer take vbl. noun 1st sing. poss.
(10.) *Pular hōnodā'han'da tē mue · wa · e · u*, while thou sleptst I have taken the reindeer; ³ *da* is the possessive suffix of third person, and if it be not a mistake for *d*, it must refer abstractly to *pudar* or rather to its root *puda*; for *pula* is the third personal pronoun, which becomes the second by taking *r* the second possessive suffix; *e* probably gives process of doing to the verbal noun; Castren translates *tē* with definite article, though the verb has possessive suffix; there is, however, no defining element in the original, and therefore that

clothe 1st sing.
suffix is used (76). (11.) *Tōnda'udū'wa'e'd · m*, I am not yet clothed; inchoa. 1st sing. poss.
tōnda · nō · udū'wa'e · u, I have not yet begun to clothe; *wa* is verbal noun of completion, *d* connects *m* arthritically (78); *m* is subjective; *e* is possessive, the verb being thought transitively with undefined object (76); *udū* must be a particle signi-

though three year dat.
fying not yet, annexed to verbal stem (90). (12.) *Yub nahar pō · n* behind loc. wife to me take I past even so son there is not
ta · hana niē'd · u muc'da'm'd taren'nod nu yañu, though I took a wife to myself three years ago, there is no son; ⁴ *yub* looks like a gerund of a stem signifying abstract fact; Castren translates it

¹ Castren, Wörterbuch, p. 381.² Ibid. p. 380.³ Ibid. p. 384.⁴ Ibid. p. 390.

in der that, obwohl; *u* is objective suffix, connected by *d* to direct object (77); *da* connects *m* to verb (78). (13.) *Hūberi man d'ei'ed'a* any one I instead 1st sing. go be ger. 3d sing. I pay poten. 1st sing. past *u haewē ~aeba · ta man teamda · yi · w · as*, if any one would go instead of me I would pay him; ¹ *wē* participial element of completion; *w* for *u* first singular possessive, the verb being transitive to undefined object; the element of the past, *s*, removes the verb from actuality. (14.) *Haroa' bta hala'da tanā hāda'wa'n ni · u* though fish be there kill dat. neg. 1st sing. will

haroa', though there be fishes I will not kill them; ¹ *haroa' bta* seems to be the gerund third singular of *haroa*, to wish, will; *da* is probably the definite article; *hā* means to die, *hāda*, to kill; *wa* is verbal noun (87); supposing the fish would be there I will not be to kill.

(15.) *Pudar tālei nienete'am ni'wē ~aeba · t mue', hubehart ni · u* thou thief man accus. neg. be ger. 2d sing. take no one neg. poten. 3d sing. past take

yi · da · s mue', if thou hadst not taken the thief no one would have taken him; *wē* participial element of completion; for *-bat* see

Example 8. (16.) *Ya hoi' ni · ne nahar piebea · s, nahar ya · n* land hill above loc. three brother past three land dat. deer-owner one servant their servant three land dat. deer-owner *deata*; *~opoi habi · du', Tabadoda habi*; *nahar ya · n deata* small brother gen. their two wife his son his there be part. compl.

nūdea piebe · n · du' side nie'dea nū'dea tana · wē ~Esi Leatam- there live freq. they short live ger. 3d pl. year loc. live ger. 3d pl.

bada; *tanā yile'sete · ' ; haeu yile'ba · tu', pō'na yile'ba · tu'*; *Taba-* servant head accus. his sick inchoat. head only abl. arth. his die three

doda habi ~aewa · m · da yedel · nū ~aewa'ri hid · an · da hū; *nahar* master his wrap 3d pl. good instr. only prosec. enclose 3d pl. morn. prox. loc.

yierwuda palnā'du' sawa'mboi'ri · una wa'a · du'; hū · nā · na sun come part. compl. one stand up three tent prosec. arth.

hāyer tū · wē; *~opoi yurkē Siesetayēseni nahar meama'na · n* the all (alles) see 3d sing. all die part. compl. 3d pl. empty place dat.

da; *tuku' man'yei · da*; *tuku' hū · wē'*; *taeri ya · n* go inchoat. refl. seven day long dat. farther go seven day course loc.

*yāda · l · i s'ū yale yāmba'n, pi'nārē' yādā s'ū yale ~ēsoi'ana.*²

On the high land of the country were three brothers, three rich ones in the land; they had one servant, the servant Tabadoda; the youngest brother of the three rich ones in the land had two wives and a son, Esi Leatambada; there they used to live, living short? or living a year? the servant Tabadoda got ill in his head; of his head only he died; his three masters wrapped him and enclosed him in the best manner; in the morning the sun came; one Sieseta-Yēse-Ni stood up beside the three tents; he saw all; all were dead; he set forth into the open country for the length of seven days; he went farther in the course of seven days. *Piebeas* has the element of the past like a verb, yet the verbal idea includes *nahar*, for the fact is not that three were brothers, but that there were three brothers. None of the nouns

¹ Castren, Worterbuch, p. 381.

² Ibid. p. 311.

which denote a plurality are in the plural number'; the only plurals are the pronominal suffixes; *dea* for *da* in *n̄ielea* and *n̄udea* is euphonic;¹ for *-latu'* see Example 8; *n* before *da* is arthritic (79); *sawamboiriuna* seems to mean literally, in the manner of only with good means; *maniyeida* is transitive with undefined object, and therefore has possessive suffix, and also *paliādu'* and *wa'adu'*, because they are transitive with object unexpressed (76). There is singularly little construction, the successive statements are so short and unconnected. Yet the arrangement of the words is like that of the nomad languages. The auxiliary to be is much used to express a fact not present, as relative to another fact, for events are not themselves thought with sufficient interest in their position in time, and in their subordinations, to include such expression in the verb itself.

OSTIAK.

99. The Ostiaks, and the kindred race the Voguls, live eastward of the most northern Ural Mountains between 56° and 67° north latitude, as far east as the river Nadym, which flows into the Gulf of Obi, and as far south as the river Agan, which flows into the Obi above Surgut, besides occupying regions on the lower Irtysh, the Tawda, the Tura, and Tschussowaja. On the south they touch the Tartar race, on the north the Samoiede. Recently many families, principally of Voguls, have become settled; but the greatest number still roam continually from forest to forest, from river to river, dwelling in poor huts constructed of timber, turf, bark, or skins of the reindeer. Their principal occupation is in winter hunting, in summer fishing; some keep cattle, only a few follow agriculture. Most of them are nominally Christian, but still have much belief in their Shamans.² Castren's Ostiak Grammar treats principally of the Ostiak dialect which he found on the Irtysh.

100. The consonants are developed by the Ostiak in the different parts of the mouth, but there is a tendency to soften them by palatalisation; and also there is a liability to confuse *t* and *d* with *l* so as to produce an indistinct *tl*, *thl*, *dl*, *dhl*,³ and a want of distinction between tenuis medial and aspirate. The medials are uttered harder than ours, more nearly as tenuous;⁴ and they need the sonancy of the voice which goes through a word, so that they cannot either begin or end a word;⁵ a medial cannot even end a syllable, but may begin a syllable unless a tenuis tenuis-aspirate *s* or *ś* immediately precede. These hard consonants at the beginning of a syllable may follow a medial. If they follow a vowel⁶ it is generally long. The only aspirates are *q̄*, *t̄*, *d̄*, *l̄*, and *d̄*; but *k* and *g* are generally aspirated and made more guttural before *a*, *o*, or *u*, *g* always when it is also preceded by *ā*, *ō*, or *ū*.⁷

¹ Castren, Grammatik, sect. 56. 3.

² Ibid. Ostiak Grammatik, Vorwort, pp. 5. 6.

³ Ibid. Grammatik, sects. 18, 21.

⁴ Ibid. sect. 14.

⁵ Ibid. sect. 36.

⁶ Castren, Grammatik, sects. 37, 38.

⁷ Ibid. sects. 14, 15.

The vowels also are liable to be indistinct, especially when short ; a short vowel in a final syllable is especially liable to change, it becomes mere sheva if the vowel of the preceding syllable be long.¹

Ostiak has almost lost the soft vowels *ä, ö, ü*, in consequence, Castren thinks, of Russian influence ;² yet still roots and stems are distinguished by their vowels being hard or soft, and in roots and stems hard and soft vowels do not occur together,² but the vowel harmony is not carried on to derivative or inflectional suffixes,³ perhaps because the hardness or softness of the stem is not noted with sufficient strength.

101. There does not seem to be the same tendency to vowel utterance which exists in Samoiede. Triphthongs have not been observed ; and in diphthongs the last vowel is always short, generally *i* or *u*.⁴

In the middle of a word any short vowel can be elided, the vowel of the preceding syllable being long, provided the consonants which the elision would bring together are such as can concur.⁵ Yet sometimes a short vowel is inserted between two consonants for facility of utterance.⁶

The Surgut dialect generally adds an aspiration *q'* after a final vowel.⁷

Two consonants cannot either begin or end a word or a syllable, except that sometimes two are allowed at the end of a word if the first of them be a liquid or a sibilant.⁸

102. The accent is on the last syllable, and is strongest when the vowel is long, weak when short and final, intermediate when short, and followed by a consonant.⁹

103. There is little sense of difference between the substantive and the adjective. Often the same noun can be used adjectively and substantively. There is no adjectival expression of degrees of comparison, and no grammatical gender.¹⁰

The following are derivative nominal endings : *-ep* (*-ap, -op*) forms from verbal roots nouns of the means or instrument ; *-en* (*-an, -on*) from nominal roots, forms nouns possessive of the root ; *-li* in some dialects forms diminutives of substantives and adjectives ; generally diminutives of adjectives are formed by *-oq'tep* ; *-at* forms indefinite nouns, pronouns, and adverbs, as *yem'at etwas gutes*.¹¹

Adjectives are declined only when used substantively.¹²

In the Surgut dialect nouns and pronouns have three numbers, singular, dual, and plural ; but in the Irtysh dialect the dual is confined to the personal pronouns. The plural ending is *-et* (*-it, -t, -at, -ot*) ; the dual ending *-gan* (*-gen*), *g* being changed euphonically to *q'* or *k* or omitted.¹³

The case endings are :¹⁴—

Accusative *-et, -t*.¹⁵

¹ Castren, Gram., sects. 6–12.

Ibid. sect. 3.

⁷ Ibid. sect. 45.

¹⁰ Ibid. sect. 53.

¹³ Ibid. sect. 58.

² Ibid. sect. 23.

⁵ Ibid. sect. 32.

⁸ Ibid. sect. 41.

¹¹ Ibid. sect. 56.

¹⁴ Ibid. sects. 67, 68.

³ Ibid. sect. 24.

⁶ Ibid. sect. 33.

⁹ Ibid. sect. 51.

¹² Ibid. sect. 57.

¹⁵ Ibid. sect. 61.

Dative *-a (-e)* ; in some adverbs and postpositions *-ga*.

Locative *-na (-ne, -n), -ūwen* ; in some adverbs and postpositions *-ti*.

Ablative *-ūwet (-ēwet)* ; in some adverbs and postpositions *-tta*, Obdorsk *-tta*.

Instrumental *-at (-nat)*.

Caritive *-da (-de), -ta (-te)*.

The Obdorsk dialect has also an allative adessive ending used with nouns *-tti*.

The element of case follows that of number.

In taking the case endings, a nominal stem changes a final *a* to *e*, except before the ablative ending, where final *a* or *e* is dropped. If, however, final *a* be preceded by *k* or *g*, it is unchanged. Hiatus is prevented by insertion of *g* or *y*. A hard final consonant (tenuis or *s*) is softened before initial vowel of case ending, unless the stem be monosyllabic.¹

The nominative, the genitive, and, for the most part, the accusative, have no case endings, but are known by their position, the nominative in the beginning of the sentence, the genitive before its governing noun, the accusative immediately before its governing verb.²

104. The personal possessive suffixes also used with some additions

	1st			2d		
	sing.	dual.	pl.	sing.	dual.	pl.

as persons of verbs are: *-em, -emen, -eu* ; *-en, -eden -ten, -eden -ten* ;

	3d		
	sing.	dual.	pl.

-et, -eden -ten, -et ; when suffixed to a plural noun, or in

	1st			2d		
	sing.	dual.	pl.	sing.	dual.	pl.

Surgut to a dual, they are *-an, -emen, -eu* ; *-an, -en, -en* ;

	3d		
	sing.	dual.	pl.

-et, -en, -et.³

They follow the element of number and precede that of case.⁴

	1st		
	sing.	dual.	pl.

The full forms of the personal pronouns are: *na, min, meñ*,

	2d			3d		
	sing.	dual.	pl.	sing.	dual.	pl.

neñ, nñn, neñ ; *teu, tñn, teg*.⁵ The *n* of the second plural suffix is probably an altered form of the plural element *n̄* ; the *d* or *t* of second and third dual and second plural suffix is probably demon-

¹ Castren, Gram., sects. 69, 70. ² Ibid. sect. 61. ³ Ibid. sect. 84.
⁴ Ibid. sect. 83. ⁵ Ibid. sect. 81.

strative, and it is dropped after the *-t* of a plural noun. The third plural suffix is thought as singular in an aggregate. Personal possession of a plurality has a sense of extension which is expressed by *a*, but this is lost in the dual and plural and in the third person, for in these there is less thought of personality.

The declension of the three personal pronouns is remarkable, as in Samoiede, but differs from Samoiede, as it does not develop a demonstrative object thought as belonging to the pronoun, but it is the element of case which is thought as a possession. There is less of a pure sense of relation in Ostiak than even in Samoiede. The Ostiak postpositions are almost all nouns which take the possessive suffixes, and govern nouns in the genitive. They have not, therefore, quite the same suggestion of an object element or substance (Def. 4) to which they pass, as the Samoiede, Mongolian, and Tartar postpositions; but are thought more than even these as belonging to what they govern, the stronger relations being thought more distinctly as substantives than the weaker.¹

The fine relations of case, indeed, combine with a noun with less of a substantive nature or substance of their own, for the stronger substance of the noun, or sense of it as object, causes thought to pass to it as such, reducing the case endings to transitional elements; but with the personal pronouns the sense of substance is weak, owing to their subjective nature, and the more distinct case relations are felt as substantives belonging to the personal pronoun, instead of mere transitions to them (130).

The accusative and locative elements, however, are not distinct enough for this, the former on account of its fineness, and the latter because the inside of an object is less readily thought as a distinct thing than what is external (71), and these case endings are attached to the personal pronoun as to a noun. To the element of case, regarded as an appurtenance of the object, thought passes as if it were a relation, but the instrumental is thought more strongly as an object itself, and requires the case ending to be added a second time, as if we said through my instrumentality, and the dative plural of the first and second persons so combines with the plurality as to form an object strong enough to require the case ending also; that of the third person is lighter as the pronoun is more abstract.

The singular cases of first personal pronoun are nominative *ma*, accusative *man't*, dative *men'em*, locative *ma'na*, ablative *ma'att'em*, instrumental *ma'ad'em'at*.²

The dative plural is *men'e'wa*, in which *w* is the possessive suffix, *e* and *a* the dative repeated.

When the demonstrative and other pronouns are used like an adjective, they are not declined, otherwise they take the case endings like the noun.³

It is remarkable that in the Surgut dialect many monosyllabic nominal stems with long vowel before a final consonant change their vowel when they take the possessive suffixes, *ā* to *ī* or *ū*, *ē* to *ī*, *ō* to

¹ Castren, Gram., sect. 127.

² Ibid. sect. 81.

³ Ibid. sect. 79.

\bar{u} .¹ This is contrary to the general habit of these languages, for generally the vowel of the stem governs that of the suffix and remains itself unchanged. It is not, however, the vowel of the suffix which affects the vowel of these Surgut stems, but rather the loading of the stem with the suffix that has the effect of closing the long vowel (108).

105. Derived verbs are formed in great abundance by subjoining derivative elements to verbal or nominal stems. Of such elements the following are only the principal: *-d*, *-t* forms diminutives with a sense of going on; *-t* forms transitives and causatives; *-īd*, and also *-k*, *-g*, *-q̇*, form frequentatives; *-m* forms momentary verbs and others; *-s* augmentatives; *-ṡ* reflexives.² These formations may be combined one with another.³

The last syllable of the stem of intransitive verbs is frequently long, that of transitives short, but this is by no means a general rule.⁴

106. There are only two tenses; the simple stem with or without a subjoined vowel expresses the past; *-d*, *-t* in the Irtysh dialect, *-dl*, *-tl* in the Surgut is subjoined to the stem for present or future,⁵ to convey a sense of going on (105). From this it appears that there is a greater sense of process in Ostiak than in Samoiede; for in the latter the present has in general no sense of process (88), and the distinctive element of the past is irrespective of the process, referring rather to the whole idea of fact as an element external to the entire formation; whereas in Ostiak the past is generally distinguished from the present by reduction of the process to the mere vowel which precedes the personal element.

With regard to this vowel and the person there are some remarkable differences between transitive and intransitive verbs.⁶ The verb is thought so objectively that in all the persons except the first and second singular the transitive verb has a stronger sense of process and of person than the intransitive, the effect on an object increasing the interest in both (87). But in the first and second singular the sense of self and of the subjectivity of the person addressed is sufficient to make the sense of process stronger in the intransitive verb than in the transitive. The consequence of this latter peculiarity is that in the present or future, intransitive verbs in the Irtysh dialect take *da* before the elements of first and second singular, whereas transitives have *de*, the full and open *a* being the stronger expression. The consequences of the former peculiarity are that transitives, having more sense of process, retain always in the Irtysh dialect the vowel which precedes the element of person, whereas the intransitives drop it throughout the dual and in the second plural, *i.e.*, before every person ending which involves an additional syllable if the consonants on each side of it can concur, sometimes also in the present future before the third singular, *d* being sufficient to express the process; that intransitives in the Irtysh dialect, having less sense of process than transitives, cannot sufficiently express by mere reduction of the

¹ Castren, Gram., sect. 91.

⁴ Ibid. sect. 99.

² Ibid. sect. 97.

⁵ Ibid. sect. 102.

³ Ibid. sect. 98.

⁶ Ibid. sects. 105, 115.

process where this is weakest, as in third person, that sense of the past which in the third singular is more distinct than in third plural, on account of the distinct thought of the person (at present disengaged), but incorporate with the process in third singular a sense of remotion by lengthening the vowel, some intransitives denoting a perfect by *ō*, and an imperfect by *ē*; and that intransitives in both dialects having less thought of the person than transitives, have less sense of the individual in the third person dual and in the second plural, so that in the former they substitute *g*, which is part of the mere element of duality, for the distinct demonstrative *d* which the transitives retain, and in the second plural they give up the plural element *n*, which the transitives retain. The third plural has not in any Ostiak verb a plural element. In the Surgut dialect the intransitive verbs have no element of person or of process in the third singular of the past; but transitives take in the third singular, and first dual and plural of the past, an element of objective process *da*, which they do not take in the first and second singular in consequence of their subjectivity, nor in the other persons on account of their more indistinct sense of process. In the present future in Surgut *dla* or *dl* is prefixed to the person and process of the past.¹

The Irtysh dialect forms no potential mood; but the Surgut dialect forms a potential by subjoining *ñ* to the verbal stem, and taking for persons the same suffixes which serve as possessives with the noun, making no difference between transitives and intransitives.²

107. The imperative in both dialects has no first person; its second singular has no person ending, but ends in *e*, except in Irtysh intransitives, which have *a*. In the Irtysh dialect *a* is subjoined to the verbal stem in the second person of all numbers, and *ag* in the third person of all numbers, but in the plural *g* may be dropped. The Surgut dialect takes *eg* or *ig* instead of *ag*, and *e* or *i* instead of *a*. In the third person dual in Irtysh, the person element *d* is dropped after *g*, so that the person is *agen* instead of *agden*; but in Surgut it is supplied at the end, so that the person is *egenat* instead of *egden*.³ The impulse of command is stronger with the third person than with the second, as with the second it is partly expressed in the force of direct address.

The infinitive in Irtysh has *-dai*, *-tai*, in Surgut *-daga*, *-taga*, but *i* and *ga* are frequently omitted.⁴

The gerund has *-men*,⁵ present future participle *-da*, *-dla* (Surgut), past or passive participle *-em*.⁶ Castren thinks that the *n* of the gerund is probably locative, the stem ending in *ma*, which may take

I go my loc.

personal suffix, as *ma ui'me'm·na*, by my going.⁵

108. It is extremely remarkable that in the Surgut dialect many verbal stems, more intransitives than transitives, take a different vowel in the present future, the potential, the infinitive, the gerund, and the present participle, from that which they have in the past,

¹ Castren, Gram., sect. 115.

² Ibid. sect. 109.

³ Ibid. sects. 110, 111, 115.

⁴ Ibid. sect. 112.

⁵ Ibid. sect. 113.

⁶ Ibid. sect. 114.

the imperative, and the past or passive participle; \bar{a} in the former corresponds to \bar{i} or \bar{u} in the latter, \bar{e} in the former to \bar{i} in the latter, \bar{o} in the former to \bar{u} in the latter, $\bar{ö}$ in the former to $\bar{ü}$ in the latter.¹ Evidently the more open vowel corresponds to the fuller sense of process (VI. 15); and this being so, suggests that in the noun also the closing of the stem-vowel, when the noun takes a possessive suffix (104), arises from the thought of it being less full in consequence of the simultaneous thought of the person. The different expressiveness of the two forms, both in nouns and verbs, is more felt when the vowel is long, and there is generally no such difference of form when the vowel of the stem is short.

109. Passives or reflexives can be formed from verbal stems, and verbs of becoming from nominal stems, by subjoining to them $\bar{a}i$ or $\bar{a}i$ in the past, $\bar{d}ai$ or $\bar{d}ai$ in the present future. In Surgut these elements have o instead of a . No person ending is taken by them in the third singular.² The formation is used only in the indicative. But a passive can be expressed in all moods and tenses by the past participle, and the auxiliary \bar{u} , to be; in Surgut wa .³ There is another verb, tai to be there, in Surgut toi ; tai can be used impersonally, and has a very incomplete conjugation.⁴ The verb yi , to come, is used as an auxiliary to express become, or the future.⁵ The negative is ent or en . There is a verbal negative $endám$, or $endem$, signifying is not; it takes no inflection except the elements of duality and plurality, \bar{gen} , \bar{et} .⁶

110. The postpositions are with few exceptions nouns. The conjunctions are few, and several of them are borrowed from Russian.⁷

HUNGARIAN.

111. The Hungarian consonants are: $k, g, t, d, t', d', s, b, h, s, s, f, y, z, v, r, l, n, n, m$.

The vowels are: $a, e, o, ö, u, ü, i$, long or short; "the full and deep sounds," a, o , and u , are hard; "the closed ones," $e, i, ö, ü$, are soft; but the long \bar{i} may be considered medium between the two. "According to this division of the vowels, the words of the Hungarian language are divided into two different classes, hard sounding ones, and soft sounding ones, the former containing hard vowels, the latter soft." "When the same word contains vowels of the two different classes, the hard vowels are considered as the principal ones, and the words belong to the class of hard words." "Many words, in which the sound \bar{i} predominates or is the only vowel occurring, belong to the class of soft words." "All others in which \bar{i} is the vowel of the radical syllable belong to the class of hard words." "All affixes assimilate their vowels to those of the root of the word;" hard to soft, soft to soft.

¹ Castren, Gram., sects. 28, 116.

³ Ibid. sect. 120. ⁴ Ibid. sects. 121, 122.

⁶ Ibid. sects. 125, 126.

² Ibid. sects. 117, 118.

⁵ Ibid. sect. 124.

⁷ Ibid. sects. 127, 133.

Such are the statements of the Hungarian grammarian Csink.¹ And it may be asked, if hard vowels in the root require hard vowels in the affix, how is it that they permit soft vowels to exist along with them in the root itself? The explanation probably is that these so-called soft vowels are in reality medium vowels, like *i*; and it appears from the above that *i* has a hard utterance as well as a soft utterance, but that its nature is such that the difference in utterance does not perceptibly alter it as a vowel. Possibly *e*, which is counted a soft vowel, has also a hard or definite utterance which has not been distinguished from the soft; for such a definite *e* approaches very near to the soft *ä*. And though the distinction is noted in Yakut by Böhlingk, it may be easily overlooked, and perhaps is not so clear in other languages.

The first law of vowel harmony, however, prevails in Hungarian, and evidences its massive character.

Y, as the initial of a suffix to a verb, becomes *s* if the stem ends in *s*, *z* if it ends in *z*, *ś* if it ends in *ś* or *t*, the final *t* also becoming *ś* if it is preceded by a short vowel.²

The *z* of the demonstrative pronoun *az* is assimilated to the initial of the postposition of case; *v* when initial of a postposition of case (*val*, *va*) is assimilated to final consonant of noun.³

112. The definite article is a very remarkable feature in the Hungarian language. It precedes its substantive, and can be separated from the substantive only by an adjective; it is *az* before a vowel, *a'* before a consonant.⁴ It is used when the demonstrative pronoun,

that house

az, *ez*, precedes the substantive, as *az a' haz*, that house; when the

father my

substantive has a possessive affix, as *az ata'm*, my father; when a substantive object is distinguished from another, or has been mentioned before, or is referred to as already known, or is thought as embracing an entire class,⁵ it is omitted before proper nouns, and before a substantive with possessive suffix when this follows a substantive to which it belongs as to a genitive, and which is so closely connected with it in

father my house his

thought as to particularise it, as *az ata'm haz'a*, my father's house.⁶ There is no indefinite article.⁷

It is very instructive to observe that this great use of the article co-exists in Hungarian with a large development and great use of postpositional affixes, and with considerable use of the element of plurality; for in Egyptian and Polynesian the great use of the article might seem to be connected with the small sense of relation weakening the individual substance of the noun, and rendering the article necessary to give it definiteness.

113. In taking a suffix which begins with a consonant, the stem of a noun, if it ends in a consonant, generally takes a vowel before the suffix, and is apt to shorten the vowel of its last syllable if long, and to drop it if short. Some monosyllabic stems with long vowel change

¹ Csink's Hungarian Grammar, pp. 9, 10.

³ Ibid. p. 12.

⁶ Ibid. p. 228.

⁴ Ibid. p. 171.

⁷ Ibid. p. 229.

² Ibid. p. 11.

⁵ Ibid. p. 227.

their vowel, and some disyllables ending in *u*, *ü*, or *ű* drop it, when they take a suffix.¹

The plural ending is *-k*. But many nouns are thought as collectives, and have no plural. And if the noun be preceded by a numeral, or by an adjective, or pronoun of quantity, it does not take

the plural form unless the number embraces the whole, as *tíz apostol*,^{ten}
the twelve
ten apostles; but *a' tizenket apostol-*o*k*, the twelve apostles.² In the former case the individuals are thought indefinitely, and therefore the sense of the individuals is weak; in the latter case definitely, and therefore it is strong. There is no grammatical gender.³

The direct object of a verb⁴ takes *-t*, but there are also seventeen postpositional affixes whose vowels are governed by those of the stem, besides several separate words expressive of relation which are used after the noun.⁵ There is, moreover, a considerable supply of conjunctions.⁵

The postpositions are not regarded by the grammarian as forming cases, and are therefore probably felt as more separate than the case endings of the other languages of this section.

There are about three dozen suffixes formative of derivative nouns,⁶ and there is also a large number of what are called compound nouns. But that these are not true compounds appears from the fact that the

vowel harmony is not observed in them, as *után-öntet*, counterfeit.⁷
after
father

Accordingly they are liable to be broken in construction, as *ata · fi*,

relative; *ata · m fi · a*, my relative.⁸
father my his

singular.

1 2 3
-m, -d, -ya;

114. The possessive personal suffixes are:

plural.

1 2 3
-nk, -tok, -yok. When these are taken by a plural noun they are preceded by *i*, which then expresses the plurality instead of *k*; *-iya, -iyak*, becoming *-i, -ik*. The suffix of third person drops the *y*, when the substantive contracts its last syllable, or changes its vowel, or ends in *p, b, v, g, h, ok, ek*, or *et*.⁹ The element of case follows the plural element if there be no possessive suffix; and it follows that suffix if there be one.¹⁰

The genitive or possessive may be expressed by the stem form of the noun going before its governor, the latter taking the third possessive suffix to represent the former, and therefore, of the same number as it. If the genitive is used without its governor being expressed, the stem form will take the demonstrative element *-ē* to

¹ Csink, pp. 172, 175-180.

² Ibid. pp. 181, 230.

³ Ibid. p. 171.

⁴ Ibid. p. 234.

⁵ Ibid. p. 221-223.

⁶ Ibid. p. 194-202.

⁷ Ibid. p. 203.

⁸ Ibid. p. 186.

⁹ Ibid. p. 183-185.

¹⁰ Ibid. pp. 182, 187.

represent its governor if singular, *-ei* if plural, as *a' somsed · ē*, the neighbour's. If the genitive relation is stronger, or enters less readily into the idea of the genitive, it takes the postpositional affix *-nak*,

which signifies of or to, as *a' ju'nak a' könv · e*, the boy's book.¹

It seems that if several nouns be in apposition, the postposition of case is taken only by the last; this is so at least with genitives having the postposition *nak*.¹

When the genitive follows its governor this has still the possessive suffix, but the genitive then always has *-nak*;¹ for the reason of its following is that the governor does not combine with it closely enough to be thought as determined by it; and this detachment of the genitive renders *nak* necessary.

115. The adjective generally precedes its substantive, but if an emphasis affects it, it may follow; for the emphasis detaches it from the substantive, so that the substantive does not merge itself in the adjective as determined by it. When it thus follows the substantive, the element of case or number is taken by it as well as by the substantive, but when it precedes the substantive, it does not take those elements.² When used as a substantive it is declined like one. For the adjective, and in many instances the adverb, may be used as a substantive, as *a' nad' o · t*, the large one.³

Adjectives form a comparative degree by taking *-abb*, and a superlative by prefixing *leg-* to the comparative (75); and when these are used without their substantive being expressed, they take, if the adjective be not of more than two syllables, *-ik* or *-ika*, which is probably pronominal. A stronger superlative is formed by prefixing *legisleg-* to the comparative. If any adjective suffers any change in its stem in taking the objective case or the plural, it suffers the same change in comparison.

Substantives may be used as adjectives, and take the degrees of comparison, as *ember*, a man; *emberebb*, more human; *ördög*, Satan; *ördögebb*, more Satan-like.⁴

Adverbs also are compared, as *oda* there, *odabb* farther, *be* inside, *belebb* more inwards.⁵

There are fifteen suffixes given for the formation of derivative adjectives, some of which are also used to form substantives.⁶ The so-called compound adjectives are not true compounds. They do not observe the vowel harmony, as *aran'sinü*, of a gold colour.⁷ And in the comparative or superlative degree, the first part receives the suffix of comparison, while the second remains unchanged.⁸

116. The personal pronouns are: *én, te, ő*; *mi, ti, ök*. The declension of these differs somewhat from Ostiak. The objective case of the

singular.			plural.		
1	2	3	1	2	3

¹ Csink, pp. 187, 245.

² Ibid. pp. 229, 230.

³ Ibid. p. 205.

⁴ Ibid. p. 206-210.

⁵ Ibid. p. 215.

⁶ Ibid. p. 210-212.

⁷ Ibid. p. 212.

⁸ Ibid. p. 209.

first and second persons singular is formed as in Samoiede (84, 86) ; for an objective element *ge*, which reminds of Yakut *igi* (9), is developed by the transition to the person as an object, and this element is thought as an appurtenance belonging to the person, so that the

objective case is ^I _{my} *en'ge'm'et*, me ; *te'ge'd'et*, thee. In the plural the person takes up the objectivity, so that the stem is the objective ^{we} _{our} appurtenance, *mi'nk'et*, us ; *ti'tek'et*, you. The third person makes the objective case by taking *-t* like a substantive ; *öt* him, *öket* them ; but in the singular sometimes a second *t* is taken, *ötet*.¹ With the postpositions of case the personal pronouns combine as possessive suffixes, so that the relation is thought, as in Ostiak, as a thing belonging to the person ; but the stem of the pronoun does not, as in Ostiak, precede the postposition,² which seems to indicate that in Hungarian the person is thought with less strength as object of the relation.

Possessive pronouns are formed by subjoining to the stem of the personal pronoun *ē* singular, *ēi* plural, with the corresponding possessive suffix added to it ; *en'ē'm*, mine ; *mi'ē'nk*, ours ; *en'ē'i'm*, mine, plural ; *mi'ē'i'nk*, ours, plural.²

The pronouns *ki* who, *mell* which, *mi* what, are both relative and interrogative ; they take the case and plural endings.³

The demonstrative pronouns agree with their substantives in taking the same suffixes of number and relation which these have, as ^{that pl.} *az · ok* art. man pl. ^{that pl. obj. art. boy pl. obj.} *az ember'ek*, those men ; *az · ok'at a' jiu'k'at*, those boys ; ^{that out of} *ab · bōl* art. room *a' sobā'bōl*, out of that room ; but *azon*, that, and *ezen*, this, are invariable.⁴ The relative pronoun agrees with its antecedent in number, and takes the plural ending even when the antecedent, because it follows a numeral, has not it.⁵

117. The vowel of the last syllable of a verbal stem not monosyllabic is omitted, if it be short, before all the grammatical suffixes, provided that the consequent concurrence of consonants suits the habits of utterance, as *l, n, r*, or *z* before or after *g, b* or *d* before *z, l, m, n, r* with each other or with sibilants ; *d* or *t* before *r*.⁶ The verbal stem always ends in a consonant.⁷

A few monosyllabic verbal stems ending in *v* and in *y*, drop these before an initial consonant of suffix, and lengthen the preceding vowel ; others assimilate *v* to the initial consonant of the suffix.⁸

A few monosyllabic verbal stems double the consonant of tense and mood,⁹ which is probably due to a lost final consonant of the stem.

Verbal stems ending in *ed, od, ud*, are apt to change *d* to *s* in the present, to *v* in the imperfect.¹⁰

118. There is a remarkable development of derivative verbal

¹ Csink, p. 217.

⁴ Ibid. p. 233.

⁷ Ibid. p. 108.

² Ibid. p. 218.

⁵ Ibid. p. 274.

⁸ Ibid. p. 110.

¹⁰ Ibid. p. 112.

³ Ibid. pp. 218, 219.

⁶ Ibid. p. 109.

⁹ Ibid. p. 111.

stems formed by subjoining to the root the following elements:¹ passive, *-at*, but if the root ends in *t* preceded by a long vowel, or if it have more than one syllable, the passive has *-tat*; causative *-tat*, sometimes *-at*, the stem being thought as passive and the difference being in the persons; frequentative, *-gat*, *-kāl*, *-des*; diminutive frequentative, *i.e.*, often, a little at a time, *-dogāl* used with roots ending in *l* or *r*; potential, *-hat*, which may be added to other derivatives; future of conditionality, necessity, duty, *-and*, which may be added to the other derivatives; diminutive, *-int*; reciprocal, *-ked*. These are given by the grammarian of the language only as specimens of the fertility of the Hungarian verb. The following examples also are given: *mozog*, be in motion; *mozgat*, move; *mozdül*, move one's self; *mozdit*, put in motion; *mozga'doz*, be in repeated motion; *mozzan*, stir. Many of these verbal stems are used metaphorically; the following are given as examples: *ves*, perish; *vest*, causative, lose (permit to perish); *veste'get*, squander (let become lost frequently); *veste'gel*, be idle (lose time continually or frequently); *vese'ked*, quarrel (lose words and friendship for one another).

119. There are only two tenses in familiar use, one for present and future, and another for past; the stem of the former is the stem of the verb, that of the latter adds to the stem of the verb *-t* preceded by a vowel when this is necessary to facilitate utterance. There is also an imperfect or remote present and a pluperfect, which, however, are used only in solemn speech, as well as a compound future, which is probably a European invention not originally in the language.²

There are, besides the indicative mood, an optative and a contingent. The imperative and optative moods add to the stem of the verb *-y*, subject to euphonic change (111); the contingent adds *-n*, which is preceded by a vowel when the perfect *-t* requires one.³

Every tense and mood has two sets of personal terminations, one when the object is defined by the definite article, by a demonstrative pronoun, or by a possessive suffix, when it is the third personal pronoun, the reflexive of the subject, or a proper name not used generally like a common noun;⁴ the other when there is either no object, or an object not thus definite. And besides these there is another set of person endings for passives and neutro-passives, the latter being analogous to the middle voice in Greek. The definite persons of the third singular and all the plural in the present indicative take before them *y* subject to euphonic change,⁵ doubtless to represent the object. And when a verb in the first person singular governs the second person singular as its direct object, whatever be the tense or mood, the person ending takes before it *l* to denote the object and becomes *lak*, and this may need a vowel before it to facilitate utterance.

The following are the elements of tense, mood, and person, in which the vowels are subject to change for the vowel harmony:

¹ Csink, p. 113-118.

³ Ibid. pp. 122, 123, 267, 268.

⁵ Ibid. p. 122-159.

² Ibid. pp. 119, 263.

⁴ Ibid. pp. 266, 267.

	Indefinite.						Definite.					
	singular.			plural.			singular.			plural.		
	1	2	3	1	2	3	1	2	3	1	2	3
Present	-ok	-s	—	-unk	-tok	-nak;	-om	-od	-a,	-uk	-atok	-ak.
Imperfect	-ék	-ál	-a,	-ánk	-atok	-anak;	-ám	-ád	-á,	-ök	-atok	-ak.
Perfect	-tam	-tál	-t,	-tunk	-tatok	-tanak;	-tam	-tad	-ta,	-tuk	-tákok	-ták.
Optative	-yak	-yál	-yon,	-yunk	-yatok	-yanak;	-yam	-yad	-ya,	-yuk	-yákok	-yák.
Contingent	-nék	-nál	-na,	-nánk	-nátok	-nának;	-nám	-nád	-ná,	-nök	-nátok	-nák.

	Passive and middle.					
	singular.			plural.		
	1	2	3	1	2	3
Present	-om	-ol	-ik,	-unk	-tok	-nak.
Imperfect	-ám	-ál	-ék,	-ánk	-atok	-anak.
Perfect	-tam	-tál	-t,	-tunk	-tatok	-tanak or -tak.
Optative	-yam	-yál	-yék,	-yunk	-yatok	-yanak.
Contingent	-nám	-nál	-nék,	-nánk	-nátok	-nának.

The termination for first singular governing second singular is present *-lak*, perfect *-talak*, optative *-yalak*, contingent *-nälak*.¹

All verbs which take a connective vowel before the *t* of the perfect to facilitate utterance, take such a vowel before all the above terminations which begin with a consonant, except those of the optative.²

It seems from the person endings of the verbs and the possessive suffixes (114), that the essential element of the first person is either *k* or *m*, the former being the more subjective; that of the second person *s*, *l*, *d*, or *t*, that of the third *na*, *ya*, or *a*, the more subjective preceding the less so. The persons are less subjective in the perfect than in the present, in the definite than in the indefinite, those of the middle being intermediate.

The connective vowel is lengthened in the imperfect by remotion from the present, and in the contingent by remotion from the actual.

The definite persons seem to have more vowel as connective than the indefinite, as if, as seems to be the case in Ostiak (106), there was more sense of process in the former.

The second person singular, when most subjective (*s*), has immediate connection with the verb, but when it is less subjective (*l*) the connection is less immediate. The demonstrative element in the second person is perhaps then felt more strongly so as to make the person a heavier element than either first or more abstract third, and tend to require a stronger connective element. But when still less subjective (*d*) it is more abstract and more easily connected.

A pluperfect is expressed by using after the perfect *vala*³ the third singular imperfect of the verb to be, or *volt* its third singular perfect,⁴

and as *talaltam vala* or *volt*, I had found; *talaltam* seems to be the subject of *vala* or *volt*. So in the English phrase it was that I have found it; the fact is, in truth, demonstrated as a noun by that.

A compound future is formed by the infinitive of the verb, followed by the present indefinite or present definite of *fog*, seize, according as the verb has not or has a definite object.⁵

¹ Csink, p. 122-159.

² Ibid. p. 124.

³ Ibid. p. 132.

⁴ Ibid. pp. 25, 26.

⁵ Ibid. p. 126.

An optative past is expressed by the perfect, followed by *legen*, the third singular optative of *len'ni* to become;¹ and a contingent past is expressed by the perfect, followed by *volna*, the third singular contingent of *vol'ni* to be.²

The optative is used for an imperative, but may then drop the ending of second singular if not definite, and take *d* instead of *yad* if definite, as *talaly* find, *talald* find it.³

The infinitive is formed by subjoining *-ni* to the verbal stem.⁴

The participles are formed by *-vān* for present, *-va* for past; the latter was used formerly with the possessive affixes in the same sense as the Latin ablative absolute. There are also verbal adjectives or nouns in *-o* for present, *-ott*, *-t* for past, which govern like the verb.⁵ The participle in *-va*, when predicate with a plural subject, takes the plural ending.⁵

120. Besides the derivative verbs above mentioned, which are formed from any verb, there are also derivative verbs which may themselves furnish the simple stem from which the first-mentioned derivatives may spring. Verbs may be formed from nominal stems by adding *-l*, *-ol*, *-el*, mostly neuter; *-ul* neuter; *-og* intransitive; *-ing*, *-ong*, *-eng*, *-gat*, *-st*, preceded by a vowel, causative; *-z*, *-it* active; *-doz* neuter; *-hast* active diminutive; *-kod*, *-od* middle; *-lal* neuter; *-tal* active; *-az* derivative substantives, denoting those who follow an occupation, used as verbs; and from other verbs derivative verbs are formed in surprising abundance.⁶ Verbs are said also to be compounded by prefixing adverbs and prepositions; but it is remarkable that the postpositions of case which are suffixed to nouns when used as component prepositions of verbs have always attached to them the possessive suffix of the third person singular.⁷ This suffix furnishes an abstract object without which they cannot be thought separately; and its use seems to indicate that the preposition is not properly compounded with the verb, but independent of it. This is confirmed by the fact that in verbs which are said to be compounded with the adverbs *fel*, *le*, *meg*, &c., these are in construction separable from the verbs. They follow the verb as often as the emphasis is on the preceding substantive or on the verb itself, and may be separated from the verb by the conjunction of the sentence, or by the verb *fog* as auxiliary of the future tense.⁸ More-
over, the vowel harmony is not observed by them, as *össe'hoz'ni*, to get up (a quantity).⁹

121. The verb to have is expressed by the construction of *sum* for *habeo*.¹⁰

There is great freedom in the arrangement of the members of the sentence; but generally the subject holds its natural place before the verb, the qualifying word precedes the qualified, and the genitive its governor. The verb is not ordinarily preceded by its objects and conditions as in Tartar, Mongolian, and Tungusian; and it may be

¹ Csink, pp. 68, 125.

² Ibid. pp. 26, 125.

³ Ibid. pp. 125, 127.

⁴ Ibid. pp. 125, 128.

⁵ Ibid. pp. 161, 239, 271.

⁶ Ibid. p. 163-169.

⁷ Ibid. pp. 169, 170.

⁸ Ibid. p. 279.

⁹ Ibid. p. 299.

¹⁰ Ibid. p. 43.

observed that there is much less sense of conditions of a fact in Hungarian, and consequently a deficiency of a true subjunctive or gerund.

The imperfect compounds which are so much used are a very remarkable feature in Hungarian. These formations, as has been shown (113, 115, 120), are not truly compounded into single words; yet in their meaning there is great fusion of the elements of thought which their parts express. And a tendency of words to coalesce when often used together to express the same combination of ideas may be observed in Finnish and in the kindred languages. Castren says that there is a tendency to join words together in Samoiede,¹ and he describes compounds in Tscheremissian and Sirianian, some of which, at least in the former, are mere juxtaposition of words which have coalesced.

122. The following are examples of the Hungarian language :

(1.) *Hunadi ki ak · kor-i-ban Torokor · s̄y · ban vol · t nem r̄d ·*
 who that time at Turk - country in be perf. not defend
 poten. perf. 3d sing. def. self his obj. dem. under belonging to calumny pl. against
het · te mag-ā · t azon alā · valō r̄galmazās-ok ellen
 art. which with art. evil minded 3d pers. obj. attack 3d sing. perf. def.
a' mell · ekkel a' ros lelk-ū Cillej ō · tet megtamal · ta
 though know 3d sing. perf. def. what obj. machination art. wicked counsel
umbār tul · ta mi · t miv-el a' gonos-tauāt' nok, &c.

Hunadi, who at that time was in Turkey, could not defend himself against the underhand calumnies with which the evil-minded Cillej attacked him, though he knew what machinations the wicked counsellor, &c.² *Alā valō* is an improper compound, *valō* being a verbal adjective;³ *rā galmazasok* is another, *rā* being the postpositional suffix *ra*, on, with possessive suffix of third person⁴ (120); *galmazās* seems to be a derivative noun akin to *galazni*, to defame; there is a derivative suffix, *omās*, which forms abstract verbal nouns; *ros lelkū* is an improper compound, being rather a juxtaposition of two words which do not agree in vowel harmony; *meg tamadta* also is an improper compound, *meg* expresses completeness or force,

tamad means to rise; *nok* is derivative of the agent. (2.) *A' mell*
 art. what
 man pl. sacrifice for not fall perf. 3d pl. mid. art. tyrant sword his to that
fērfi-ak aldozat-ul nem es · t · ek a' zarnok pallos-ānak az.
 pl. obj. far country in persecute 3d sing. imperf. def. intrigues his by
ok-at messe föld · ön üldöz · ē t'elsöven · i · vel, what men

fell not as a sacrifice to the tyrant's sword, them he persecuted in distant countries by his intrigues;² *aldozat* is verbal noun formed from *aldozni*, to sacrifice; *t'elsöven* must be a compound; *-i* is third singular suffix of plural noun.

(3.) *Pest megsáll-ās · a utān*
 art. Austrian leader around lying village pl. in quarter 3d sing. imperf. def.
az ostrák vez'er körülette fekv-ō falvak-ba besáll-ās-ol · ā
 soldier his obj.

katona-i · t, after the occupation of Pest the Austrian leader quartered his soldiers in the surrounding villages; ⁵ *sállās* is verbal noun formed from the verbal stem *sáll*, and is the root of a derivative verb *sállásol*,

¹ Castren, Tscheremiss. Gram., p. 4.

² Csink, p. 273.

³ Ibid. p. 204.

⁴ Ibid. p. 170.

⁵ Ibid. p. 283.

it is qualified by *meg* in the first instance, which gives it force, and in the second its derivative verb is qualified by *be*, inside; ¹ the root of *körülette* is *kör*, a circle, hence *körül* as a circle; *-ette* seems akin to

the termination of the verbal adjective of the past. (4.) *A' Kopolnai* battle after art. Austrian army back drive pass. pres. part. towards stick
†ata utān az ostrak sereg vissza sorongatāt · vān Pest felē bot
 with and bullet with threaten 3d sing. perf. indef. all that pl. to who pl. divulge
tal ēs golō · val feneget · ett mind az · ok · nak ki · k hīr · es
 inf. dare 3d pl. cont. that the glory adj. adv. victory adj. emperor army
tel · ni mer · nek hod a' dit'ō · sēg · es · en dozedelm · es †asar · i sereg
 back move a from to travel verb. adj. journeyman art.
vissavonul. Ed Debred' en bōl Pest · re utaz · ō vandorlegēn az
 Austrian camp on across travel 3d sing. perf. way his in Austrian officer pl.
ostrak taboron kerestül ut · az · ott; ut · ya · ban ostrak tist · ek ·
 by ask pass. part. if know 3d sing. aught obj. art. pl. concerning know
töl kerdes · tet · ve ha tud · e valami · t a' Madar · ok · felöl tud ·
 1st sing. of course say 3d sing. imperf. yet again that back move 3d pl. where
ok bizon · mond · ō meg pedig hod vissavonul · nak; mer ·
 to where to ask 3d sing. pres. mid. joy with the former all
re? mer re? kerdez · ik örömmel az előbbiek mind Pest
 towards say the traveller
felē mond a' vādor. After the battle of Kopolna the Austrian army

being driven back towards Pest threatened with stick and bullet all those who would dare to divulge that the gloriously victorious army of the emperor was retreating. A journeyman travelling from Debretsen to Pest went across the Austrian camp on his way; being asked by Austrian officers if he knew aught of the Hungarians. Of course I do, said he, and that is, they are retreating. Where to? where to? asked the former with joy. All towards Pest, answers the traveller. ² *Kapolnai*, *†asari*, are adjectives formed with *i*; *sorong* is a derived verb from a root, *sor*, from which comes *soritari*, to press; *hirestel* is a verb derived from *hir*, reputation, or from *hires*, by the active element *tel*; *dit'ō* is an adjective signifying glorious; *dit'ōsēg*, glory; *-es* forms adjectives, and *-en* adverbs; *doz* is stem of the verb to overcome; *dozedelm*, a derived substantive, victory; *utaz* is a verbal stem derived from *ut*, way; *kerdes*, derived from *ker*, ask; *előbb* is the comparative, and it takes the suffix *ik*, &c., when the substantive is not mentioned. ³

TSCHEREMISSIAN.

123. The Tscheremisses belong to the south-eastern branch of the aborigines of Russia, who seem to have inhabited that country prior to the invasion of it by the Slavonic nations. The region occupied by this branch of the old population comprehended the countries on the Volga and the Lower Kama, and the plains reaching thence towards the Black and Caspian Seas. ⁴ At present the Tscheremisses dwell between the Volga and the Sura, where the country rises into a plateau covered with oak forests. They inhabit low huts in the forests; and are very slow in adopting agricultural habits. ⁵

¹ Csink, p. 214.

² Ibid. p. 283.

³ Ibid. p. 207.

⁴ Prichard's Researches, vol. iii. p. 277.

⁵ Ibid. p. 318.

124. The Tscheremissian consonants are \dot{X} , k , g , y , t' , s , z , t , t' , d , s , z , r , l , n , f , v , p , b , m ; f is rarely used. The medials b , g , d between two vowels are aspirated; k has a guttural, and l a hard utterance.¹

The vowels are a , o , u hard, \ddot{a} , \ddot{o} , \ddot{u} soft, and e , i middle; e and i may occur in the same word with hard or soft vowels; but these do not properly occur with each other. In the same root they never co-exist,² but some affixes have become fixed in their vowels so as not to change them for the sake of harmony with the root. And thus the first law of vowel harmony has become somewhat impaired in Tscheremissian.³

125. There is another difference in the utterance of the vowels; they are either reduced to sheva or emphatic. The difference is thus described by Castren: "*Ille pronuntiantur sono celeri aures pane præterlabente, confuso; harum vero sonus plenior latior gravior est quam ipsarum earum que proprio nomine vocales appellantur.*"⁴ The shevas are only found in short unaccented syllables, and serve principally to help the utterance of concurrent consonants. Moreover, unaccented syllables at the end of words are often reduced to sheva, and then drop the vowel both before another word and before a suffix; a in an unaccented final syllable approaches in pronunciation to \ddot{a} .⁴ A more accurate observation of the vowel sounds in Tscheremissian confirmed Castren in this distinction which he drew between emphatic vowels and shevas; and led him to perceive that the former were independent of any particular consonants, and that the latter may be in any short unaccented syllable and even in monosyllables. A in the first syllable is generally emphatic, and is pronounced almost as o .⁵

This peculiarity of utterance seems to prevail also in Lapland; it is thus described by Scheffer: "The Laplanders have a peculiar way of pronouncing words, according to which it is impossible to express them in letters; for they do mouth out all their words so that the vowels might be heard loud enough, but the other letters come very softly out. They do also quite cut off and drown the last syllables, especially of nouns."⁶

In Tscheremissian not only the vowel of the last syllable of a stem is liable to change, but the other vowels also, as \underline{seder} , \underline{sidir} , star; \underline{koat} , \underline{kuat} , strength.⁷

126. In disyllables the first syllable is often accented, but often it is the second; if it be the first, then most frequently, at least with some speakers, the second has a lighter accent, which reduces or does away with the stronger accent of the first.⁸

In polysyllables the accent may fall on the first syllable or on the second. It often falls on the last syllable of trisyllables, and the vowel of the preceding syllable is sometimes elided.⁸ But polysyllables are generally derived from primitive disyllables, and the

¹ Castren, Tscheremiss. Gram., sect. 2.

³ Ibid. Gram., sect. 3.

⁴ Ibid. sect. 1.

⁶ Scheffer's Lapland, chap. xv. p. 79.

⁸ Ibid. sect. 5.

² Ibid. Pref. sect. 3.

⁵ Ibid. Pref. sect. 1.

⁷ Castren, Pref. sect. 2.

accentuation of these is, for the most part, preserved in the derivatives.

In the so-called compounds each component retains its own accent; except when the first is a monosyllable, for then generally the accent is on the second.¹ The independent accentuation of the components seems to indicate that they are not really compounded into one word, and when they do not agree in the vowel harmony they cannot be so (124); but often the vowels of the second component are changed so as to harmonise with those of the first;² which indicates a combination of the two.

127. Two consonants cannot concur in the same syllable, unless one of them be a liquid nasal or sibilant.³ The *tenues*, *tenuis aspirates* *s* and *ś* being called hard and the other consonants soft, it is a law that a hard consonant cannot follow a soft of the same organ; and to avoid such concurrence the hard consonant is apt to become soft, *i.e.*, medial, even when it is not in the same word, but in the beginning of a following word. Often hard consonants become soft after a vowel, especially in the end of a word. On the other hand, soft consonants become hard after hard consonants, and in the end of a word a soft consonant becomes hard most frequently though not always. If in the end of a word a soft consonant precedes a hard, it too becomes hard. A soft consonant is seldom found in the beginning of a separate word, but if a word be joined with another word, the initial of the second is softened. A soft initial of one word after a hard final of another is sometimes hardened, but on account of the very great proclivity to soft utterance a *sheva* or *en* is often added to the hard final and then the soft initial remains unchanged. When the same or a cognate consonant ends one word or syllable, and begins another, the first is apt to be dropped.⁴ Final *m* before initial *g* often becomes *n* (*n̄*); initial *p* after final vowel sometimes becomes *v*, and initial *v* after final *m* sometimes becomes *b*; *dt̄* is sometimes changed to *rt̄*.⁵

128. The substantive has no grammatical gender, nor dual number. Its case endings are:

Nominative . . . —	Ablative (from, out	} - <i>kit̄</i>
Genitive . . . —, or - <i>n</i>	of, along)	
Accusative . . . - <i>m</i>	Superlative (beyond)	- <i>kadt̄</i> ^c
Dative . . . - <i>lan</i>	Caritive (without)	- <i>te</i>
Consecutive (after)	Instrumental	- <i>ton</i>
Illative (into)	Comitative (with)	- <i>ka -ke</i>
Inessive (in)		- <i>sta</i>

These case suffixes when attached to a stem which ends in a consonant are preceded by a vowel, when this is needed to facilitate utterance. They all except the superlative and instrumental change their vowels when this is required by the law of vowel harmony. And they are subjoined to the element of plurality. The other relations which

¹ Castren, Gram., sect. 8.

² Ibid. sect. 3.

³ Ibid. sect. 5.

⁴ Ibid. sect. 6.

⁵ Ibid. sect. 7.

in Finnish are denoted by case endings are in Tscheremissian denoted by separate postpositions.¹ And these are for the most part cases of nouns whose stem often still exists as a noun. Those conjunctions also which are not borrowed from Russian are very few and enclitic.²

The suffix of plurality is *vülü*, it retains its soft vowels, even when those of the stem are hard ;¹ which seems to indicate for it as well as for the superlative and instrumental case elements, imperfect combination with the stem.

129. The adjective, when used attributively, precedes its substantive, and is not declined.³

A comparative degree is expressed by *-rak*, which is also a diminutive suffix ; for when there is no object of comparison, it denotes a small degree of the quality ; when there is, it denotes a somewhat greater degree of the quality than that which belongs to that other object. So in English we say rather good when we would denote a small degree of goodness (75). When the object of comparison is expressed, it is put in the ablative ; and an adjective in the positive degree when thus constructed with an ablative assumes the significance of a comparative degree. The superlative is expressed by means of separate adverbs.⁴

130. The personal pronouns are : *min*, *tin*, *tidü* ; *mä*, *tä*, *ninä* ; to the plural forms *vülü* may also be subjoined. The possessive personal

suffixes are : *-em*, *-et*, *-ze* ; *-na*, *-da*, *-st*.⁵ The third personal pronoun, both singular and plural, is declined like the nouns, but has only the same cases as the first and second. The first and second singular are almost regular in the genitive and accusative, but in the dative, ablative, superlative, and instrumental they subjoin the possessive suffix of the person to the element of case. In the dative, however, the suffix of the first person seems to be assimilated and absorbed by the *n* of the case ending, and in both first and second the stem is changed ; in the plural they subjoin the possessive suffix to the stem in the genitive and accusative, and to the element of case in the other cases.

	singular.			plural.		
	1	2	3	1	2	3
Nominative	<i>min</i>	<i>tin</i>	<i>tidü</i>	<i>mä</i>	<i>tä</i>	<i>ninä</i>
Genitive	<i>min'in</i>	<i>tin'in</i>	<i>tidü'in</i>	<i>män'nän</i>	<i>tän'dän</i>	<i>nän'dän</i>
Accusative	<i>min'im</i>	<i>tin'im</i>	<i>tidü'im</i>	<i>män'näm</i>	<i>tän'däm</i>	<i>nän'däm</i>
Dative	<i>me'län</i>	<i>te'lat</i>	<i>tidü'lä</i>	<i>mä'länü</i>	<i>tä'län'dä</i>	<i>nän'län'dä</i>
Ablative	<i>min'gät'em</i>	<i>tin'gät'et</i>	<i>tidü'gät'et</i>	<i>mä'gät'nä</i>	<i>tä'gät'tä</i>	<i>nän'gät'tä</i>
Superlative	<i>min'gadt'em</i>	<i>tin'gadt'et</i>	<i>tidü'gadt'et</i>	<i>mä'gadt'na</i>	<i>tä'gadt'ta</i>	<i>nän'gadt'ta</i>
Instrumental	<i>min'don'em</i>	<i>tin'donet</i>	<i>tidü'donet</i>	<i>mä'donna</i>	<i>tä'donda</i>	<i>nän'donda</i> ⁶

These constructions are probably to be understood as the similar ones in Ostiak (see 104). The *m*, which is added to the stem in the

¹ Castren, sects. 10-14.

² Ibid. sects. 47, 49.

³ Ibid. sect. 15.

⁴ Ibid. sect. 16.

⁵ Ibid. sect. 28.

⁶ Ibid. sect. 24.

genitive and accusative plural, has probably a plural significance. When the first and second personal pronouns, without any case ending, are governed by separate postpositions, these take the possessive suffixes, as *min vül' em*, in me.¹

The reflexive pronouns are in the nominative singular: *min'ske*, *tin'ske*, *tidü'ske*; in the nominative plural, *mü'ske*, or *mü'skevülü*, &c. In the genitive and accusative singular and plural *ske* has the fuller form *skem*, and to it the possessive suffix is attached, and then the element of case. In all the other cases the stem is *ske*, and the suffix of case precedes that of person.²

In affecting the substantive with the possessive suffixes, these may either precede or follow the element of case, except in the accusative, in which they always precede; they may either precede or follow the element of plurality *vülü*.³ The accusative relation has closer connection with the governor than those of the other cases, and is consequently less attracted by the stem of the noun.

There is another plural element *-met*, which may be used instead of or along with *vülü* with nouns which have the personal suffixes; it always follows these.³

The substantive affected with the possessive suffix may also be preceded by the personal pronoun either in its stem form or in its genitive case.⁴

Besides *tidü*, there is another demonstrative, *sedü*, that, which is declined like *tidü*.⁵ The interrogatives are *kü*, who? *ma*, what? and are similarly declined.⁶ From these the following are derived or compounded: *koda*, *kodaze*, who? *mada*, what? *mazara*, *mañara* quotus quantus, *mağanä* qualis, *tegenä* talis, *kü gүнäte*, *koda gүнät*, *kodaze gүнät* aliquis, *ma (mada) gүнät* aliquid, *niquat* nemo, *nimat* nihil. In declension *gүнät* remains unchanged, and it is the preceding pronoun that is declined; in the negatives *nigu* and *nima* are declined, and *at üt* subjoined to the case ending.⁷

131. Abstract nouns of quality are formed by *-za*, nouns of the agent by *-oza*.

Adjectives are formed by *-n*, also by *-da*; privative adjectives by *-temü*, which is formed from the caritive case ending *te* and the termination of past participle *ma*.

There are many other nominal terminations, *-z*, *-s*, *-k*, *-ka*, *-ga*, *-nga*, &c.

Present participles in *-se* are also often used as nouns of the agent; and a remarkable formation of this kind is made by subjoining *-se* to the inessive case of a noun of place, as *sola*, village, *sola'sta'se*, dweller in a village.⁸

singular.	plural.
1 2 3	1 2 3

132. The person endings of the verb are, *-m*, *-t*, *-s*; *-na*, *-da*, *-t*. Some verbs add to the stem in the indicative a stronger element of process of being or doing *a*, others a weaker *e*, so as to form two conjugations.

¹ Castren, sect. 24.

² Ibid. sect. 26.

³ Ibid. sect. 29.

⁴ Ibid. sect. 28.

⁵ Ibid. sect. 30.

⁶ Ibid. sect. 31.

⁷ Ibid. sect. 32.

⁸ Ibid. Pref. sect. 6.

The third singular present in the *a* conjugation, instead of being *-as*, is *-es*, the element of process being weakened to *e*; and in the *e* conjugation, instead of being *-es*, it is *-a*, which is probably a demonstrative element weaker than *s*, the element of process being dropped. In the past the third singular has no element of person, and the element of tense is only *n*. The third plural of the present is *-at* in both conjugations, the *a* being probably the element of process in the *a* conjugation, and demonstrative in the *e* conjugation. In the contingent and imperative the element of third person is *-ze* singular, *-st* plural, like the possessive suffixes.

If the stem end in a vowel, and belong to the *a* conjugation, it drops the element of process where this is less strongly thought, that is, in the plural of the present and throughout the past; but if it be of the *e* conjugation it retains the element of process in both tenses, as if it ended in a consonant. In the *e* conjugation also, in other parts than the indicative, if the affix begin with a consonant the course of too many consonants is prevented by the insertion of a vowel; in the *a* conjugation by dropping the last consonant of the stem. The *e* conjugation has more affinity for a connective vowel, because perhaps in it the idea of the stem is less verbal.

There are only two tenses, the present, which may also denote the future, and the past. The present adds *-a* or *-e* to the stem, the past adds *-na* to this vowel of process.

There is a contingent mood formed by dropping the vowel of process and subjoining *-ne* to the stem. The imperative is the simple stem in second singular in the *a* conjugation, but in the *e* conjugation it

plural.
3d sing. 2 3

retains *e*, but subjoins to the stem for the other persons, *-ze*, *-da*, *-st*.

The infinitive in both conjugations adds *-as* to the stem; and there is a future infinitive which adds *-sas*. The present participle adds *-se* to the stem, and the past participle adds *-ma*; the gerund *-mala*, *-muka*.¹

133. There are two auxiliary verbs, *ol* be, and *li* become, which are regular in their formations, and of the *a* conjugation; *ol* is also pronounced *il* or *el*.

It furnishes certain conditional particles which may be used with verbs in the indicative or in the contingent; thus *tol'am ol'ye* ^{come} *veniam* *tol'nam ol'ye* *venturus essem*; also *tol'am ol'get'* *si venero*, *tol'ne'm ol'get'* *si venturus sim*, *tol'nam ol'get'* *si venerim*. This participle *get'* may be attached to the stem of any verb and be followed by the possessive suffixes, *uz'get'em* *si viderem*. The contingent third person of *ol* may also follow a verb *tol'at ol'ne'ze* *venias*, *tol'ne'm ol'ne'ze* *venirem*, *tol'nam ol'ne'ze* *venturus essem*.² So Castren gives these expressions, and translates them without giving any explanation why the past tense of *tol* is *tolnam* instead of *tolanam* (but see 125). The particle *get'* is perhaps postpositional like the ablative case ending *git'*; and

¹ Castren, sects. 34-36.

² Ibid. sect. 37.

then *uz'get'em* would be in case of my seeing; *olye* corresponds to the Hungarian optative *-ya*.

Instead of *-nat*, third plural past, *ebe* is often used subjoined to the stem, as *uz'ebe*, they saw. This is doubtless akin to *pi paragogie*, third person in Finnish.¹

The verb *ol* is often subjoined to the predicate, having dropped its vowel,² as *ätü'l'äm* pater sum; the verb *li* following the infinitive expresses a future.³

134. As in Samoiede, and for the same reason (90) the negative is inflected as a verb in the present, the contingent, and the imperative. Its stem in the present is *ak*, and in third person singular and plural of the present it has no element of person; before the other persons it drops *k*; so that the stem is *a*. This becomes *e* in the contingent before *-ne*; and the third singular and third plural are the same in the imperative as in the contingent, except that in the third singular imperative the person is stronger and has closer union; thus *e'ne'ze* third singular contingent, *e'n'dze* third singular imperative. In the second person both singular and plural of the imperative the stem of the negative is *i*, which perhaps comes from the negative *ni* of *nimat*, &c. (130), which corresponds to the Samoiede negative *ni*.

The negative thus inflected in the present, the contingent, and the imperative is followed by the stem of the verb with *e* added to it if it be of the *e* conjugation, and *-eb* in third plural of both conjugations; but negation of the past is differently expressed. The being or doing of the past has ceased, and it consequently is more liable to be thought as a substantive. As a substantive it is thought in negation in this language. The stem of the verb is suffixed with the caritive case ending *te*, and to this as to a predicate the verb *ol* is attached, dropping its vowel *o* and taking the proper person ending. There is also, however, an inflected negative *s*, which, followed by the stem of the verb as above, expresses a negative of the past. Castren thinks that this is of Tartar origin.

The infinitive, gerunds, and participles are negated by being followed by *agal*. *Ol* and *li* are negated like other verbs, except that after the present of the negative *ol* becomes *al*.⁴

There is also a negative *uke*, to which as to a predicate the verb *ol* may be subjoined, dropping *o*.⁵

135. Derivative verbs are abundant; the following are some of them in first singular: verbs of becoming, *-emäm*; causatives, *-tem*, *-ktem*; diminutives, *-lam*; diminutive causatives, *-ltem*; frequentatives, *-kalem*; besides *stam* and others,⁶ whose significance was unknown to Castren.

SIRIANIAN.

136. The Siriani belong to another branch of the old population of Russia, whose region lies to the north of that of the branch to which

¹ Castren, sect. 38.

² Ibid. sect. 39.

³ Ibid. sect. 40.

⁴ Ibid. sects. 41-43.

⁵ Ibid. sect. 44.

⁶ Ibid. sect. 46.

the Tscheremisses belong.¹ They dwell south of the Yurak Samoiedes; and the dialect of their language, which Castren's Grammar describes, is that spoken about the river Ishma, in the northern part of their region.²

Its consonants are: *k, g, y, t, t', d, d', s, z, l, n, t, t', d, d', s, z, l, r, n, p, b, v, m*; *h* is sometimes heard after a final vowel; *l* is hard. The vowels are: *a, e, i, o, u, e, ä, ö*, of which the following diphthongs are formed, *ai, ei, oi, ui, ei, öi, ae, ie, ea, ia, oa, ua, ea, ai, ii, oi, ui, ei, uo, io, üö*.³

In some Sirianian dialects the first law of vowel harmony is said to prevail, but in the Ishemic dialect it does not exist⁴ (67).

137. Sirianian, like Tscheremissian, has an indisposition to combine hard and soft consonants which has been noted in Yakut. At least it is a law in Sirianian that medials cannot follow tenuis; the medial generally becomes tenuis, but sometimes the tenuis becomes medial.⁵

In order to avoid hiatus *y* is often inserted between two vowels.⁶

All the other laws of change of consonants in Sirianian indicate a tendency to give voice and vowel sound to the utterance of speech. Thus two consonants cannot come together in the same syllable; and in formations which would cause such concurrence the second consonant is dropped, but sometimes the first; in the end of a word a liquid, especially *r*, may concur with another consonant.⁷

If any syllable end in *l* after a vowel, *l* is preserved in some dialects, in others it is vocalised into *w*; in the Ishemic dialect it is absorbed into the preceding vowel, which is thus lengthened.⁸

It is a law in Finnish which seems to indicate a tendency to reduce the surd consonants and favour sonancy (73), that if a tenuis begin a short syllable it is either dropped or changed to the medial, when the syllable gets a final consonant. In Sirianian, however, this is to be found only in some words.⁹

After a long vowel *s* is apt to become *z*,¹⁰ and in the end of a word after a vowel, *s*, and also *k*, is often changed into an aspiration'.¹¹

It is probably owing to weak pressure of breath from the chest that in Sirianian an initial vowel is apt to take before it *y* or *w*¹² (Def. 26). There are in consequence comparatively few words which begin with a vowel.

And it is probably owing to the consonants being slighted in utterance compared with the vowels that they are liable to be transposed in Sirianian, as *arkma* for *karma*, *yubirtne* for *yurbitne*.¹³

138. The accent falls on the uneven syllables, on the first more strongly, on the others so lightly as to be scarcely perceptible (see 72). Some disyllabic nouns lose the accent on the first syllable on account

¹ Prichard's Researches, vol. iii. p. 277.

² Castren, Gram., Pref. p. 1.

³ Ibid. sects. 1-6.

⁴ Ibid. sect. 7. 2.

⁵ Ibid. sect. 14.

⁶ Ibid. sect. 18.

⁷ Ibid. sect. 11.

⁸ Ibid. sect. 12.

⁹ Ibid. sect. 13.

¹⁰ Ibid. sect. 15.

¹¹ Ibid. sect. 16.

¹² Ibid. sect. 19.

¹³ Ibid. sect. 21.

of a strong aspiration at the end of the second, as *pemda'* darkness, from *pemda* grow dark.¹

A long vowel occurs most frequently in the first syllable of a verb. When found in other places it seems always to have arisen from contraction.²

139. The Sirianian has no article. Its substantive has no gender, and only singular and plural number, but it has fourteen cases besides the singular and the plural stem, which are used as nominative, as genitive, and as accusative, unless the substantive denotes what has life and ends in a consonant, for then the accusative has the ending given in the following list of case endings—

Accusative . . .	-äs	Inessive	-en
Instrumental . . .	-än	Ablative	-les
Caritive	-täg -tägya	Ablative of cause or origin	-sän
Dative	-le	Elative	-es
Allative	-lan	Consecutive (end or aim) .	-la
Illative	-ä'	Prosecutive (along) . . .	-äd
Adessive	-läin	Terminative (<i>usque ad</i>) .	-ed'

In all the case endings in which *l*₁ is found it denotes external place.³ In the adessive and inessive *n* denotes position, *i.e.*, occupation of place, and perhaps occupation is its meaning also in the instrumental (with by). In the two ablatives and the elative *s* seems to denote separation, but the *s* of the accusative is different. In the allative, *an*, in the ablative of origin, *än*, and in the consecutive, *a* seems to denote motion.

The plural ending is *yas*; and to it the case endings are subjoined. Stems which have dropped a final consonant generally resume it, and many which have dropped *i* take *y*, before the case endings which begin with a vowel.⁴

Besides the case endings, there are expressions of relation by cases of nouns used for postpositions, many of which have almost lost their nature as nouns and become pure postpositions.⁵ There are scarcely any conjunctions which have not come from Russian.⁶

140. Sirianian is poor in derived substantives, rendering abstract substantive ideas by Russian words.⁷

Diminutives in *-öy* and *-le*, the former intimating pity, the latter praise, occur only in the nominative, and are not used in ordinary discourse.⁸

Augmentatives are formed from other substantives by *-ka*.⁹

Substantives in *-as*, *-äs*, and *-es*, derived from verbs and nouns, and in *-äd*, from verbs, express various embodiments of the root.¹⁰

Abstract substantives of quality are derived from adjectives by *-ä'*.¹¹

¹ Castren, sect. 22.

⁴ Ibid. sects. 25-28.

⁷ Ibid. sect. 32.

¹⁰ Ibid. sects. 35-37.

² Ibid. sect. 23.

⁵ Ibid. sect. 24.

⁸ Ibid. sect. 33.

¹¹ Ibid. sect. 39.

³ Ibid. sect. 25. 6.

⁶ Ibid. sect. 100.

⁹ Ibid. sect. 34.

Substantives involving a sense of cavity are derived from substantives by *-äg, -täg*.¹

Substantives of place are formed by *-in*.²

141. Many adjectives are at the same time substantives and adverbs. They are declined only when used as substantives. Their plural ending is *-yas* or *-äs*; the latter is always taken by predicates, but both are taken by attributes, and often the mere stem precedes plural nouns.³

A comparative degree is formed by *-l'ek*, the stem being changed, and not the suffix, if euphony requires change; the superlative is expressed by separate particles. Adverbs and nouns used for adverbs may form a comparative degree.⁴

Adjectives are formed from substantives by *-a*; from adverbs by *-ed*; from substantives by *-äs*, denoting copiousness; adjectives of place are formed by *-sa*, diminutives by *-o*, privatives by *-täm*.⁵

Compound substantives and adjectives are formed as in Finnish.⁶

142. The personal pronouns are: *me, te, şea*; *mi, ti, nea*.⁷ The

singular.			plural.		
1	2	3	1	2	3

singular.			plural.		
1	2	3	1	2	3

possessive suffixes are: *-ä* or *-m, -d, -s*; *-num, -ned, -nes*.⁸

It is remarkable that when the possessive suffixes are attached to the noun, whether singular or plural, the following case endings come between the singular or plural stem and the suffix, namely, the instrumental, caritive, allative, illative, ablative of origin, elative, prosecutive, and terminative. The other case endings follow the suffix, namely, the accusative, dative, adessive, ablative, and consecutive.⁹ The former are more closely connected in thought with the object than the latter. For instrumentality, exemption, access, entrance, origination, exit, prosecution, attainment, are thought with stronger sense of the object than the relations expressed by the other cases; the latter have more sense of the action and attend less to the object, as they mean either the direction of the action, whether to or from, immediate or remote, or its proximity or aim. While the former, therefore, cling to the object itself, the latter are attracted by the verb so as to be outside the suffix. In suffixed nouns the illative is used for the inessive, and for the suffix of the first singular it takes *m*, which is taken also by the elative and the instrumental, while the other cases have the weaker suffix *ä*. These inner cases, and the instrumental, perhaps involve a stronger sense than the others of the object and of self as its possessor.

The accusative ending of nouns suffixed with the first singular or first plural is *äs*, which absorbs into its *ä* the *ä* of the first singular suffix. The accusative ending of nouns with any other of the possessive suffixes is *ä*.

The suffixed noun requires before it the personal or reflexive pro-

¹ Castren, sect. 40.

² Ibid. sect. 41.

³ Ibid. sects. 43, 44.

⁴ Ibid. sects. 45-47.

⁵ Ibid. sect. 48.

⁶ Ibid. sects. 42, 49.

⁷ Ibid. sect. 57.

⁸ Ibid. sect. 59.

⁹ Ibid. sect. 60.

noun, either in the stem form, or in a case which may supply a genitive.¹

The first and second personal pronouns are declined as in Tschermisian.² The relation of case, instead of being thought as a relation, is thought as the object to which thought passes, and as part or appurtenance of the pronoun, except the accusative relation, which is too fine to be thought as a substance, and also the dative when not strongly thought. The relation thus thought as a part of the pronoun, and suffixed, therefore, with its possessive element, is treated as the substance of the pronoun, and is preceded by its personal stem. The case ending thus taken up into the pronoun tends to be weakened in its expression, so that the dative is weakened to *n*, the adessive to *ya* or *na*, the illative and inessive to *a*, and the ablative to *nt'*.

It is very remarkable that as the accusative case ending does not furnish a substance to the personal pronoun as a part or appurtenance of it, an objective element is developed in that case to supply a substance. This is *n* in the singular, *yant* in the plural, the latter being a stronger form of the plural element *yas*. Thus the accusative singular of the first person is *men'ä*, the accusative plural *mi'yant'ä*, *ä* being the element of case in both. The dative singular when more strongly thought, with the element of case an appurtenance of the pronoun, is *men'um*, *n* being the abbreviated dative element, and *um* the possessive suffix first singular; when the dative element is thought lightly and not as an appurtenance, an objective element *n* should be developed as in the accusative, but this *n* coalesces with the light case ending, and in the plural the objective element *yant* coalesces with the dative *n* into *yan*. Thus the short dative singular of the first person is *men*, and the dative plural is *mi'yan*. The adessive plural is not distinguished from the dative plural; for plurality tends to weaken the relations of case, the transition to a plural object being less distinct.

The third personal pronoun is declined regularly except that the accusative ending is *ä* instead of *äs*, and that final *a* of *sea*, *nea*, is peculiar to the nominative, the stem being *se* singular, *ne* plural.

The reflexive element (self) is *as*, and is combined with the possessive suffixes.³

The demonstrative pronouns are *eta*, *ta*, that, *ena* those; declined like *sea*; in the nominative case they subjoin *-ya*. Also *ezda* that, *ezdayas* those, is sometimes used in the nominative.⁴

The interrogative and relative pronouns are *kod* who, *mey* what, declined regularly, but *kod* only has a plural, *kodyas*.⁵

There are besides the following derivative or compound pronouns: *kuť'üm*, qualis; *seť'am*, *tať'am*, talis; *kodkä*, aliquis; *meikä*, aliquid; *kuť'ümkä*, qualiscunque; *seť'ümkä*, *täť'amkä*, taliscunque. These are all regularly declined, but those which have the suffix decline their first part and subjoin *kä* to the case endings.⁶ There are also *nikod*, nemo; *nikuť'üm*, nullus; *ninäm*, nihil.⁷

¹ Castren, sect. 58.

² Ibid. sect. 57.

³ Ibid. sect. 61.

⁴ Ibid. sect. 62.

⁵ Ibid. sect. 63.

⁶ Ibid. sect. 64.

⁷ Ibid. sect. 65.

singular.

	1	2	3
	—	-n,	-or -s ;

143. The person endings of the verb are: —, -n, -or -s ;
 plural.

1	2	3
-m,	-ned,	-nes or -nes.

There are only two tenses, a present, which also serves for future, and a past. The present has *a* before the person endings, and the past has *i*. The imperative also has *a*, except in the second singular, which is the mere stem, sometimes curtailed by dropping final *l* or *n* ; in the second plural the imperative has no person ending, and changes *a* to *ä*. And *a* is changed to *ä* in the third singular and plural, both present and imperative, when not followed by *s*. The imperative first and third person singular and plural is preceded by *med*, which seems to be an intensive particle, for it is used before the adjective to express a superlative degree.

The sense of the being or doing is so strong in the first person singular and plural that the vowel overpowers the nasal in whole or in part ; but in the second plural, which is more objective, the being or doing reduplicates the initial ; in the third person the more active verbs have *s*, and the less active or neuter drop *s*, and weaken *a* to *ä* ; some have both forms, and then the *s* form denotes the future.

The infinitive is formed by *-ne* ; and there is no other mood. The active participle is formed by *-es*, the passive by *-äma* ; the present gerund by *-eg* ; the past by *-emes*, *-mes*. There is a verbal noun of the actum formed by *-äm*, and of the agendum by *-an* ; a supine is formed by subjoining the terminative *-tel'* to the stem, and an instrumental of present gerund by *-ejün*, of past by *-emestün*.¹

144. The negative *og* is inflected as a verb (134), but takes only the singular person endings, using them for the plural as well as the singular. Its vowel *o* is changed to *i* in the past. It is followed by the stem of the verb which it negatives ; and for the plural the stem takes *-ä* in the first and second persons and *-nes* in the third, preceded by *og* in the present, past, or imperative.

There is also a negative verb substantive *abu*, which, however, is not inflected, except that in the plural it takes *-äs*.

Negative participles and verbal nouns are formed by *-tüm*, like Tscheremissian *-temü* ² (131).

There is an affirmative verb substantive, *veiyem*, which is not inflected except that in the plural it takes *-äs*, besides the verb substantive *völ*, which, however, is not used in the present.

The verbs *loa* become, and *ku'a* begin, are used as auxiliaries to express the future, both active and passive. The passive may be expressed either by its proper form or by auxiliaries.³

145. Derived verbs are numerous. The following are only the principal. Passives used also as reflexives, and always reflexive in the participle, are formed by *-a*. Castren thinks that this has been bor-

¹ Castren, sects. 66-70.² Ibid. sects. 76, 77.³ Ibid. sect. 78.

rowed from Russian, but it corresponds to the Ostiak reflexive formation (105). Inchoatives are formed by *-a*, *-ma*; momentaries by *šta*; causatives by *-da*, *-ta*, added to the root with or without *ä* intervening; frequentatives by *ala*; diminutives by *la*. And secondary derivatives may be formed by binary combinations of these.¹

146. The following is from a version of the Gospel of St. Matthew altered by Castren to suit the genius of the Ishemic dialect, because he considered that as it stood it kept so close to the Slavonic version as to violate the nature of the Sirianian language:²—

MATT. IV. 1.

then lead pass. part. be past spirit instr. desert illat. err caus.
(1.) *Sek Jesus nuüda · ma vol · i duχ · an pustina · ä elä · d*
actum end consec. devil elat.

äm pom · la diävül · sän, then Jesus was led by the Spirit into the wilderness to be tempted of the devil; *nuüda* is evidently a causative; *duχ* is Russian. (2.) *I vid'omes · t · an nelämen lun i nelämen*
and fast past ger. instr. forty day and forty

night dem. behind hunger continu. past

voi se · börti t'eg' · al · i, and by having fasted forty days and forty nights he afterwards hungered; *vid'a* means I guard, *vid'ala* I fast, being frequentative of *vid'a*, or, as perhaps it might sometimes be better called, continuative; *vid'alemes* should be the gerund, but *l* is absorbed

and come past ger. instr.
into the vowels (137), and these become *ö*. (3.) *I vo · mes · t · ün*
3d pers. nearness illat. err caus. act. part. say past 3d sing. thou if God son say
se din · ä' elä · d · es vöip · i · s te · kü Yen pi vöip
imper. part. this stone pl. become 3d pl. bread pl.

med etaya iz · yas löä · nes nan'yas, and the tempter (by) having come near him said, If thou (be) the Son of God, say, let these stones become bread. (4.) *A sea vöip · i · s vod'ta giz · äm vel · en*
but he say past 3d sing. contra write actum above iness.

is neg. 3d pers. alone bread end abl. alive become man but every word abl. which
veijem oz ötik nun pom · las löya löä mort a beät · ama ke · les kode
God mouth elat. go out pres. 3d sing.

Yen vom · es pet · ä, but he said in reply, The writing (*scriptum*) above is, 'tis not alone by the effect of bread man shall live, but by every word which proceedeth out of the mouth of God; *gizäm* is the verbal noun of the actum, *gizäma* the participle; *loya loa* expresses a future and take past 3d sing. he accus. devil holy city illat. rise caus.

(144). (5.) *Sek bost · i · s se · y · e diävül veza kar · ä' sütä · d*
past 3d sing. he accus. temple roof above illat.

i · s se · y · e vit'ko veit vyl · ä', and the devil took him

and
into the holy city, raised him on the roof of the temple. (6.) *I*
say past 3d sing. he dat. thou if God son fall caus. pass. or refl. below
vöip · i · s se · le, te · kü Yen pi uske · d · t'e ul ·
illat. write actum above iness. indeed say pres. begin pres. pl. his

ä' giz · äm vel · en ved vöip · ä kud' · ä angel'yas · es
dat. order pass. part. thou end ablat. 2d sing suff. guard infin. thou accus.
le t'ökt · äma te pom · las · ed vid' · ne te · n · ä

¹ Castren, sects. 74, 79-86.² Ibid. Pref. pp. iii. v.

and hand above illat. 3d pl. suff. bear pres. 3d pl. thou accus. imper. part.
i ki · vel · a · nes bost · a · s'nes te · n · ä med
 neg. 2d pers. strike caus. self elat. thy foot thy accus. stone surface illat.
on doi · d as · s · ed kok · t · ä iz bard · ü,
 and said to him, If thou (be) the Son of God, cast thyself down, for the writing above says, it shall be ordered to his angels from regard to thee to guard thee, and on their hand they shall bear thee lest thou dash thine own foot against a stone; the construction of the genitive, when not possessive in the above, is by putting the mere stem before the governor, which follows without possessive suffix; the adjective precedes its substantive; *ved* is translated *quidem* by Castren;¹ *kud'ü* is in Castren's text *kut'*, which seems to be a misprint, for it would be the second singular imperative; *kivelanēs* is remarkable, as it incorporates a postposition of nominal nature between the stem of the noun and the possessive suffix; *vela* seems to be properly *velü*, but perhaps it changes euphonically when thus incorporated; *med* seems to express urgency towards an end; *doi* seems to be the same stem as *toi'a tundo*, the *t* being softened to *d* after *n*; in *assel* the relative element seems to have a meaning like English of; *kud'ü angelyaseste t'öktiima* reminds of the Germanic construction, the auxiliary first and the participle last.

FINNISH.

147. The Finnish consonants are: *h, k, g, y, t, t', d, s, r, l, n, v, p, m.*² The vowels are: *a, o, u* hard, *ä, ö, ü* soft, *e, i* middle. The language loves vowels, and is especially rich in diphthongs; and when a foreign word is used, its vowel is apt to be changed to a diphthong, this being often done by inserting *i* before it. Diphthongs are formed by *i* subjoined to all the other vowels; but the following are diphthongs only in the first syllable, elsewhere they have hiatus—*au, ou, eu, iu, uo, üö, üü, öü, ie.* Triphthongs are rare.³ The vowels *a, ä, e,* and *i* in the end of a stem are liable to be dropped or changed; especially before suffixes beginning with *i.* The other vowels remain unchanged. In disyllabic stems final *ü* always disappears before *i,* final *a* only if the first syllable has *o* or *u;* in other cases final *a* becomes *o,* and forms a diphthong with *i.* In polysyllabic stems final *a* and *ä* either disappear before *i,* or are changed to *o, ö.* Final *e* is always dropped before *i.*⁴

The consonants are soft, so that *k* and *t* approach in their utterance to *g* and *d,* especially after *l* or *n,* and *p* to *b,* especially after *m;* *s* also approaches to *z;* *t'* is Karelian, other dialects have *tt, ss, ht* instead of it.⁵ The word generally ends with a vowel, and does not admit, except in a few instances, more than a single consonant in the beginning. Even in the middle of a word one seldom meets two concurrent consonants, still less in the end; except that *h* very often

¹ Castren, sect. 99.² Syögren, Finn. Sprache, p. 13; also p. 21, prosecutive ending.³ Ibid. pp. 15, 16.⁴ Ujfalvy's Gram. Finn., sect. 3; and p. 64.⁵ Syögren, pp. 13, 14, 17.

precedes or follows another consonant, having a stronger utterance when it precedes. Of the other consonants, *l* and *r* are those which most frequently enter into concurrences.¹

The medials *g* and *d* never occur either at the beginning or end of a word. Consonants which concur are apt to be assimilated; for the immediate change of action does not suit utterance which is not versatile, especially when the consonants are slighted, compared with the vowels.¹

A tenuis at the beginning of a final open syllable, with a short vowel, or a short vowel and *i*, is softened to its medial or medial spirant or dropped, if the syllable is closed by a consonant; but *k* and *t* are preserved by *s* immediately preceding them, and *k* also by *t*² (73).

The Karelian dialect is less vocal, less soft, more open and guttural.³ The absence of aspirates from Finnish seems to indicate weak pressure of breath from the chest.

The first law of vowel harmony (3) prevails in Finnish,⁴ the middle vowels *e* and *i* being allowed along with the hard and also with the soft. If a stem has no vowel except *e* and *i*, its suffixes have soft vowels.⁴

The massive character of the language is distinctly marked in Finnish, for while it observes the vowel harmony throughout the word, it loves long words⁵ (see 4).

148. The Finnish noun has no gender nor article.⁶ It has only singular and plural number,⁷ and the following case endings:⁸ —

Partitive (of, than), *-a* or *-ta*.

Possessive, *-n*.

Accusative, —, *-n*.

Illative, { *-n*.

{ *-h-n*, with final vowel of stem repeated between *h* and *n*.⁹

Allative, *-lle* or *-llen*.

Elicative, *-sta*.

Ablative, *-ta*.

Inessive, *-ssa*.

Adessive, *-lla*.

Qualitative or essive (as *loco instar*), *-na*.¹⁰

Qualificative or factive (become as, turn into), *-ksi*.¹⁰

Caritive (without), *-ta* or *-tta*.

Comitative (with), *-ne*.⁹

Instrumental, *-n*.⁹

Prosecutive (along), *-t'e*.

The plural ending in the nominative case is *t*. In the other cases *i* is prefixed to the case ending in the plural,⁹ but this *i* seems to be sometimes omitted before the caritive *-ta*. The case called by Ujfalvy the comitative is called by Syögren the suffixive, because it is used

¹ Syögren, pp. 16, 17.

² Ujfalvy, p. 66.

³ Syögren, p. 18.

⁴ Ibid. p. 15.

⁵ Ibid. p. 18.

⁶ Ibid. p. 19.

⁷ Ibid. p. 20.

⁸ Ibid. p. 21.

⁹ Ujfalvy, sects. 55, 56.

¹⁰ Syögren, p. 25.

generally with the possessive suffixes, and only in the plural; and he says its meaning is with.¹ The usual expression for the instrumental relation is *-lla*.² The instrumental *-n* is very rarely used in the singular.³ The prosecutive *t'e* is only found in some words used as adverbs.⁴ The qualitative is called by Castren *essive*, and the qualificative he calls *factive*.⁵ The case which is here called *partitive* is by Syögren called *quantitative*, because in mentioning how much of a thing it expresses of, and with a comparative degree it expresses than.⁶ The adverbial termination *-sti*, given by Syögren, is used only with adjectives to form adverbs, and cannot be counted as a case ending.⁷

The singular stem is used for the accusative after an imperative, but after other moods the direct object, if singular, takes *-n*; if plural, it always has only the plural ending.⁸ This *n* is probably an arthritic element (11), in which the mind connects with the governing verb the direct object by directing attention to it as such. This is accomplished for the plural by the plural ending, in which, as in a pronominal element, attention is directed to the plural object. But with an imperative no connective element is needed, because the energy of command presses forward the thought of the action towards the object, so as to include in the thought of the action a sense of the object which renders a connective element unnecessary.

Syögren says that nine of the cases, which he does not name, are formed on the possessive,⁹ but this probably means only that an arthritic *n* is needed to connect the stem with these case endings.

The law prevails in the declension that a tenuis beginning a short syllable is either dropped or softened if the syllable gets a final consonant.¹⁰

In ordinary conversation the instrumental case of substantives called by Syögren *adverbial*, the *comitative*, called by him *suffixive*, and the *caritive* are apt to drop the case ending, and then the relation may be otherwise expressed.¹⁰

149. Diminutive substantives are formed by *-uinen*, *-kainen*; and these also are diminutive of adjectives.¹¹

There is a great number of substantive and adjective endings; *-u* or *-o* subjoined to verbal stems forms the abstract nouns of the being or doing; *-ma* the noun of the actum; *-kas*, *-os*, *-us*, not explained; *-oin* is a privative ending.¹²

A comparative degree is formed by *-mpi*, and a superlative by *-in*.¹³

singular.			plural.		
1	2	3	1	2	3

150. The personal pronouns¹⁴ are: *minü*, *sinü*, *hän*; *mē*, *tē*, *hē*. In the oblique cases of the singular the stems are *minu*, *sinu*, *hän*; in the plural *mei*, *tei*, *hei*.¹⁵

¹ Syögren, p. 25.

² Ibid. pp. 24, 66, last line.

³ Ujfalvy, p. 74.

⁴ Syögren, p. 21.

⁵ Castren, *Tscher. Gram.*, sect. 10; *Sirian. Gram.*, p. 21.

⁶ Syögren, p. 22.

⁷ Ibid. p. 26; Castren, *Sirian. Gram.*, sect. 96.

⁸ Syögren, pp. 22, 23.

⁹ Ibid. p. 22.

¹⁰ Ibid. p. 26.

¹¹ Ibid. p. 27.

¹² Ibid. pp. 27, 28.

¹³ Ibid. p. 23.

¹⁴ Ibid. p. 30.

¹⁵ Ujfalvy, sect. 70.

singular.			plural.		
1	2	3	1	2	3

The possessive suffixes are: *-ni, -si, -nsa*; *-me, -ne, -nsa*; they follow the case ending of the noun (42, 49, 54, 79, 130, 142, 159). Sometimes the possessive case of the personal pronoun is used before the noun instead of the suffix, much oftener along with it. The personal pronouns are regularly declined; as if personality was thought less subjectively than in the preceding languages of this section, so as to be more capable of relations of case without requiring the addition of an objective element. Sometimes they take the suffix of the person subjoined to the case ending to express the reflexive; but there is a reflexive stem *it'e* self, which takes the possessive suffixes.

The possessive suffixes are subjoined to verbal stems taken as substantives; also to so-called prepositions which are in truth substantives, and are preceded by the possessive case of the pronoun, as *min*^I poss. through my
un kautta · ni, through me.¹

The demonstrative pronouns are, in the singular, *tü* or *tämä*, *tuo*, *se*; in the plural, *nü* or *nämä*, *nuo*, *ne*. The relative pronoun is *yo*; it subjoins *-ka* to the nominative and to the genitive singular and to the nominative plural, as also do the interrogatives *ku* and *mi*. The indefinite pronouns are *yompi*, and compounds of *yo*, *ku*, *mi*, and *kin*.²
singular.

1 2 3

151. The person endings of the verb are: *-n, -t*, long vowel; plural.

1 2 3

-mme, -tte, -vat; ³ but in the imperative the second singular subjoins ⁷ to the stem, in the optative the element of person in the second singular is *-s*, and in both optative and imperative the element of the third singular is *-n*, and that of the third plural *-t*; ⁴ the verb *ol*, be, makes its third singular present in *-n*, dropping *l*.⁵

The verb has only two tenses, the present and the past. The past subjoins *i* to the verbal stem. The other tenses are expressed by the participle and the verb *ol*, be; or by the verbal noun and another I hold 1st sing. do verb. noun accus.
verb, as *minä pidü · n teke · mü · n*, I hold the deed, for I shall do.⁶

There is a concessive mood formed by *-ne* subjoined to the stem, a potential formed by *-isi*, and an optative by *-kõ*, which is shortened in first and second singular. The imperative subjoins *-kã* to the stem in the plural and in the third singular, *-ka* in the first singular. The infinitive is treated quite as a substantive, it adds to the stem *-a'* or *-ta'*, the aspiration being the trace of a lost factive case ending *-ksi*. The present participle is formed by *va*; the past participle by *-nut*; the gerund by *-ma*.⁷

¹ Syögren, p. 31.⁴ Ujfalvy, sect. 84.² Ujfalvy, sects. 71-75.⁵ Ibid. sect. 85.⁷ Ujfalvy, sects. 79-84.³ Syögren, p. 31-33.⁶ Syögren, pp. 31, 32.

singular.

1 2 3

The negative takes the persons (see 90, 134, 144); it is *en, et, ei*;

plural.

1 2 3

e'mmē, e'ttē, ei'vat; the root is *ei* or *el*, and it forms like other verbs an optative, an imperative, and a subjunctive or hypothetical. It is followed by the stem of the verb.¹

Verbs may be distinguished into two conjugations; those which make the past with *-i*, and the infinitive in *-a*, and those which have *-si* in the past, and *-ta* in the infinitive.² There is no verb to have, but this is expressed by the verb to be, with a possessive, inessive, or adessive (17, Ex. 9, 10).³

There is a great abundance of derived verbs, but the only formations which are mentioned by Syögren are *-ta* causative, and *-tele* diminutive frequentative (118). There is also a reflexive formed by *-u* or *-i*, and a passive formed by *-da* or *-ta*; the latter has a long vowel before the person endings, or a repeated vowel with *h* between.⁴

152. There are many enclitic particles of affirmation, negation, or interrogation; as *-ko* interrogative, *-kin* even, *-kan* not even, *-han, -pa, -mar*, emphatic. There are no proper adverbs, conjunctions, or postpositions; they are mostly nouns.⁵

153. There are very few compound words; ⁶ and those which are found seem to be syntactical combinations which have coalesced from frequent use. The first part may be a stem which qualifies the second part like an adjective or adverb, or it may be a case of a noun, most frequently a possessive, governed by the second part.

There are no compound verbs.

154. The principal accent rests on the first syllable, and a weaker accent on all the other odd syllables except the last. Hence Finnish verse is naturally trochaic and alliterative.⁷

155. The defining word, the possessive or adjective, precedes what it defines. The order of the words changes according to the case and the verbal form, and is affected also by emphasis.⁸

The following are Finnish proverbs: ⁹

(1.) *Ei aika mies · tü odota, jos ei mies aika*
neg. 3d sing. time man partit. ask when neg. 3d sing. man time
partit.

a, time asks not for man, when man does not for time. (2.)
neg. 3d sing. good word salve partit. need

Ei hiiwä sana woidet · ta tarvitse, a good word needs no salve.

neg. 3d. sing. that heart trouble what neg. 3d. sing. eye see
(3.) *Ei sitä mieli tie, yota ei silmä näe*, what the
oats adess. entice 3d sing.
eye does not see the heart does not feel. (4.) *Kaura · lla ottä*

¹ Syögren, p. 33; Ujfalvy, sect. 89.

³ Ujfalvy, sect. 86.

⁵ Ibid. pp. 34, 35.

⁸ Ibid. pp. 43, 44.

² Syögren, p. 33.

⁴ Ibid. sects. 84, 88; Syögren, p. 31.

⁶ Syögren, pp. 36, 37.

⁷ Ibid. p. 39.

⁹ Ibid. Appendix.

spur adess. hunt 3d sing.
kannukse · lla ayā, with oats one entices, with spur one hunts.
 money heart accus. change 3d sing. poverty honour accus. betray 3d sing.
 (5.) *Raha miele · n müttä tarwe kunnia · n pettä*
 come 3d sing.

money changes the heart, poverty betrays honour. (6.) *Tulē*
 wolf poss. emphatic water eye illat. as grave illat. falls 3d sing.

suden · gin wesi silmā · n kuin kuoppā · n youtū, even into
 the wolf's eye the water comes when he falls into the grave; *kuole*

means to die. (7.) *Kerra · n tul · i · vat kettu ya yänis ühte · hen ;*
 fox say past hare adess. neg. 3d sing. emphatic thee partit. any one
kettu sano · i yänikse · lle ei · pä su · a kukana
 fear 3d sing. who interrog. thee partit. fear 3d sing. answer past hare every

pelkū ; kuka · s su · a pelkū ? vastas · i yänis ; kaikki
 me partit. fear 3d pl. reply past fox me adess. be 3d sing. long tail

mu · a pelkū · vät tūmas · i kettu, mu · lla o · n pitkä häntä
 those instr. every one believe 3d pl. me partit. wolf factive when distance gen.

ni · in kaikki lule · vat mu · a sude · ksi, kun malka · n
 end elat. behold 3d pl. that factive me partit. fear pass. illat. but neg. 3d sing.

pästä näke · vät si · ksi mu · a pelyä · tü · hūn, müttä ei
 thee partit. fear 3d sing. any one

*su · a pelkū kukān,*¹ on a time a fox and a hare came
 together; the fox said to the hare, No one is afraid of thee. Who is
 afraid of thee? answered the hare. All are afraid of me, replied the
 fox; I have a long tail, therefore all take me for a wolf, when from afar
 they look at me as such, thrown into a fright at me, but no one is
 afraid of thee; *ühte · hen* is illative case of *üksi* one, *ks* being euphonic
 equivalent for *ht*; *sua* is abbreviated from *sinua*, and *mua* from
minua.

LAPPONIC.

156. The natives of Lapland, according to the account given in
 125 of their mode of speaking, give the principal force of their
 utterance to the vowels, and utter the consonants with comparative
 weakness and indistinctness.

Their consonants are: *h, k, g, x, y, t, d, t̄, d̄, s, z, n, t, d, t̄, d̄, s, z,*
*r, l, n, f, v, p, b, m;*² their vowels, *a, o, o, u, ä, ö, ü, e, i;* *ü* is rarely
 met with.³ The tenues and medials scarcely differ; yet sometimes
 express different meanings.⁴ Consonants of the same organ are
 readily used for each other; labials especially admitting such inter-
 change.⁵ There is a combination which is written *hgn* or *gkn*, which
 is said to be most difficult of pronunciation, but of which no further
 account is given except that it is uttered with the throat and the
 nose;⁶ *b* before *m*, and *d* before *n*, may be retained or omitted at
 pleasure.⁷

The diphthongs are: *ai, oi, oi, ui, äi, ei, au, ou, ou, eu, iu, uo, io, ie.*

¹ Ujfalvy, p. 77.

³ Ibid. p. 2, sect. 5.

⁶ Ibid. p. 2, note 5.

² Ganander's Gram. Lapponica, pp. 1, 6, 7.

⁴ Ibid. p. 2, note 3.

⁷ Ibid. p. 32.

⁵ Ibid. p. 1, note 2.

In the concurrence of several vowels, the latter part is scarcely heard.¹

A very few polysyllabic nouns have the accent on the last syllable; disyllabic nouns have the accent on the first syllable, as also adjectives of three or more syllables.²

To an initial consonant *s* is sometimes prefixed, and to an initial vowel *y* or *v*; a final vowel is sometimes dropped; to a final nasal a vowel is sometimes added. Consonants are sometimes transposed.³

There is no trace of the first law of vowel harmony.

157. The substantive takes no article; nor has it grammatical gender; its numbers are only singular and plural. The case endings are the following:⁴

	singular.	plural.
Nominative	—	- χ
Genitive	—	- <i>i</i>
Dative	- <i>i</i>	- <i>ili</i> or - <i>idin</i> .
Accusative	—	- <i>idt</i>
Ablative	- <i>st</i>	- <i>ist</i>
Locative	{ - <i>n</i> - <i>sn</i> - <i>st</i> }	- <i>in</i>
Instrumental	- <i>in</i>	- <i>i</i>
Caritive	{ - <i>taga</i> - <i>tu</i> }	- <i>itaga</i> - <i>itta</i>
Factive (turn into)	- <i>n</i>	- <i>in</i>
Essive (as)	- <i>n</i>	- <i>in</i>
Illative	- <i>i</i>	- <i>ili</i> or - <i>ilin</i> .
Adverbial (like to)	{ - <i>i</i> - <i>lai</i> - <i>lagai</i> }	- <i>i</i> - <i>ilai</i> - <i>ilagai</i> .

The plural element is in the nominative χ , and in the other cases *i* or *id*. Stems ending in *a* drop *a* in the dative and illative singular, as if the relation of these cases was more closely connected with the stem. But stems in *ʹa* retain *a* throughout.

The locative endings -*sn*, -*st*, seem to correspond to the Finnish inessive. The adverbial *lai* reminds of Yakut *le*.

Stems ending in *ie* change *ie* to *a*, perhaps euphonically, in the dative and illative singular, and sometimes in the adverbial before -*lagai*; they have no case ending in the instrumental singular or plural or in the adverbial, except sometimes -*lagai*; in the plural the *i* of the plural mingles with that of *ie*, and the *e* is dropped except in the nominative and the ablative, which last drops the plural *i*. Stems ending in *o* take -*lagai* for the adverbial case. Stems ending in a consonant subjoin to their final letter -*a*, expressive probably of the transition of relation in the genitive, accusative, ablative, locative, and essive singular, and in the nominative plural; in the caritive and factive singular they subjoin -*e*, but they take immediately in the dative and illative singular the case ending *i*, in the instrumental singular -*ina*, and in the adverbial -*lai*. In the

¹ Ganander, p. 3.

² Ibid. p. 8.

³ Ibid. p. 9-11.

⁴ Ibid. p. 12-30.

plural they make the genitive in \bar{i} , and the dative, illative, and caritive in $\bar{i}tta$, the dative illative i preceding the plural id , and being supplemented by $-a$. Stems, however, which end in s take a , except in dative and illative singular, before the regular case endings, and those which end in ies change ie to a throughout both numbers. Stems which have bp , dt , gk , or rr before a final vowel, drop the second consonant throughout the plural, and in all the cases of the singular except the nominative, dative, illative, factive, and adverbial. This cannot be accounted for on euphonic principles; for no such explanation can be given of the difference between *yagen* locative, and *yagken* factive, of the substantive *yagkie*, a year. Probably it is because the substance (Def. 4) is less distinct in the plural than in the singular; and because in the singular it is most distinct in the nominative in which the substantive object is most strongly thought (70), and in those cases which involve a stronger sense of *to*, so as to direct thought most strongly to it as the aim or object of the relation. Those stems which have ks before a final vowel drop the k in the same parts as the above, except that they retain it in the essive singular.

158. The adjective is not declined when it agrees with a substantive, but generally has the plural ending when the substantive is plural. If it ends in a vowel, this is dropped before an initial vowel following.¹ It forms a comparative degree in $-bbuo$, which is generally curtailed to $-b$, and a superlative in $-mus$, both preceded by a connective vowel if the adjective ends in a consonant. Sometimes the superlative ending is added to the comparative $-b$.²

Adjectives are formed by $-sat$ or $-lat$, as *aikasat* temporal, from *aike* time, *Sāonelat* Lapp; by $-gas$ or $-kas$, as *armokas* element, from *armuo* clemency; by $-ek$ or $-ak$, as *taktiek* bony, from *taktie* a bone; by $-ai$, as *d'uurwai* horned, from *d'uurwe* a horn; by $-es$, as *vaivies* laborious, from *vaive* labour; by $-eiya$ from nouns in $-ag$, as *muottaeiya* snowy, from *muottag* snow; by $-tem$ or $-teme$ or $-tis$, as *yerbmetebne* insane, from *yerbme* mind; by $-kena$, $-kedta$, or $-dekka$, without, subjoined to infinitives. Adjectives in $-tis$, $-es$, $-ai$, and $-gas$, are not declined.³

Substantives of quality are formed by $-vuodt$, or $-dagk$, as *almai*, man; *almaivuodt*, manliness; diminutives by $-t$, or $-at$, as *ākka*, wife; *ākkat*, little wife. Verbal nouns of the action are formed by $-m$, with a vowel before it, or by $-mie$, by $-o$, or $-uo$; of the object by $-g$ or $-k$.⁴ Adjectives expressive of habit are formed from verbs by $-akies$, $-ies$, $-es$, or $-t$, and adjectives negative of the verbal root by $-mettuom$.⁵

Adjectives of time are formed from words of time by $-at$, or $-is$, and adjectives of place from words of place by $-sat$.⁶

There are also inseparable derivative suffixes which form nouns that are almost compounds. Such are $-dagk$, an adjunct; $-skatt$, or $-gat$, a skin; $-paiye$, a certain time; $-pällie$, $-pälla$, time; $-sasa$, determined; $-logk$, divers, sundry.⁷

¹ Ganander, p. 30.

⁴ Ibid. p. 40-44.

² Ibid. p. 32.

⁵ Ibid. pp. 44, 45.

⁷ Ibid. p. 144-146.

³ Ibid. p. 36-40.

⁶ Ibid. pp. 45, 46.

159. The personal pronouns have a dual number as well as a singular.

singular and a plural. They are, in the nominative: $\overbrace{\text{mon, ton, son}}^{\text{singular.}}$;
 dual. $\overbrace{\text{1 2 3}}$;
 plural. $\overbrace{\text{1 2 3}}$;
moi, toi, soi; mī, tī, sī.

The stems of the other cases are: $\overbrace{\text{1 2 3}}^{\text{singular.}}$ $\overbrace{\text{1 2 3}}^{\text{dual.}}$;
 plural.
 $\overbrace{\text{1 2 3}}$
mī, tī, sī.

The case endings are as follows:—

	singular.	dual.	plural.
Genitive . . .	$\left\{ \begin{array}{l} -o -un \\ -u \end{array} \right\}$	—	-en
Dative . . .	$\left\{ \begin{array}{l} -idni -nien \\ -idnai -idnien \end{array} \right\}$	-idi -di	-din
Accusative . . .	$\left\{ \begin{array}{l} -o -un \\ -u \end{array} \right\}$	—	— -n
Ablative . . .	-ste	-st	-ste
Locative . . .	-stnai	-stnai	-stnai
Instrumental . . .	-idna	-in	-nna
Caritive . . .	-utta	-taga	-tta
Factive . . .	-nien	-n	-en
Illative . . .	-idnien -nen	-idi -idin	-din

The first person dual drops final *o* of stem in dative, ablative, locative, and instrumental, and the second and third dual in dative. Only the second makes accusative plural without *n*.

The possessive suffixes are: *-m, -d, -s* singular; *-mi, -di, -sa*, plural. They follow the case ending (150), taking a vowel before them, if the case ending end in a consonant, and the case endings of dative, locative, and illative singular being changed to *-s*, genitive and accusative plural to *-id*, and dative and illative plural to *-idas*.¹

The case endings of the demonstrative pronouns are:²—

	singular.	plural.		singular.	plural.
Nominative	-t	-χ -k	Locative	-st	-in
Genitive .	-m	-i	Caritive .	-tta	-itta
Dative .	-sa	-idta	Factive .	-nien	-nien
Accusative .	-m	-ilt	Illative .	-sa	
Ablative .	-ste	-ist			

The genitive and accusative singular of the relative pronoun end in *-i*, the ablative singular in *-st*, the locative singular in *-ne*, the instru-

¹ Ganander, p. 17-25.

² Ibid. p. 53.

mental singular in *-in*; the genitive singular of the interrogative pronoun ends in *-n* or *-na*, the accusative singular in *-n*, the ablative singular in *-st*, the instrumental singular in *-na*. The other cases are the same as those of the demonstratives.¹ The *-t* of the nominative of the demonstrative must be regarded as demonstrative strengthening the stem.

The reflexive pronoun is *iyed^c* with the possessive suffixes.²

singular.			dual.		
1	2	3	1	2	3

160. The person endings of verbs are: *-m, -k, —; -ie, -te, -a;*
plural.

$\overbrace{1 \quad 2 \quad 3}^{\text{plural}}$
-p, -tidt, -ix³ in the present, a final *a* of the stem being retained in singular, and changed to *e* in dual and plural, except in third plural, where it is dropped. The first dual varies between *ne, nie,* and *ie*; *k* is sometimes uttered as *h*, the third dual sometimes takes *-n.*³ In the

singular.			dual.			plural.		
1	2	3	1	2	3	1	2	3

past the person endings are: *-m, k, —; -me, -te, -a; -me, -te, -n.*⁴ The second dual and plural and the third dual are probably thought with more objective strength of substance than the other persons; and perhaps it is on this account that in the present an element of realisation is felt external to them, they being thought with too strong an objectivity to take it up. The first person of all numbers and the second singular are more personal and subjective than those persons, and the third singular and plural more abstract; and these are therefore less distinct from the being or doing, so that it is not felt as external to them. This element is weaker in the past, and makes itself felt only in the third dual, which is more objective than the second dual or plural. It is expressed by *b* or *be* in the present and by *g* in the past; *b* is sometimes pronounced *v.*⁴

The only true tenses are the present and the past. If the verbal stem ends in *a*, *a* is changed to *i* in the past;⁵ if in *uo*, *o* is dropped;⁶ if in *i*, *i* is added.⁷ Compound tenses are formed by the verb *lä* be, with the verbal noun in *-m* or the past participle; futures by the verb *kalgka* owe, and the infinitive, or by *lä* with the future participle.⁸

There is a potential mood⁹ whose past is used with an interjection for an optative.¹⁰ It is formed by subjoining to the verbal stem *za* in the singular of the present, *ze* in the dual and plural; and in the past *ze* or *zi* in the singular, *zi* in the dual and plural.¹¹

singular.		dual.		
2	3	1	2	3

The person endings of the imperative are: *—, -us; -ednuo, -ette, -uska;*

¹ Ganander, p. 57.

⁴ Ibid. pp. 77, 78.

⁷ Ibid. p. 107.

¹⁰ Ibid. p. 72.

² Ibid. p. 59.

⁵ Ibid. p. 85.

⁸ Ibid. p. 71.

¹¹ Ibid. p. 79.

³ Ibid. pp. 73, 74.

⁶ Ibid. p. 104.

⁹ Ibid. p. 73.

plural.

1 2 3
-op, -edt, -usa.¹ In the potential present and imperative final *a* of stem is changed to *e* or *ie*; in the potential past it is unchanged.²

The infinitive is formed by *-dt*; the gerund by *-ma*; the supine by *d'et*; the past participle, active, or passive, by *-m*, subjoined to active or passive stem; the future participle active by *-ie*, the same passive by *-ehettepe*, both subjoined to the stem, having dropped its final vowel.³

161. A passive is formed by *-yufvu* or *-yufvuyu* subjoined to the verbal stem in the singular, and *-yufvuo* or *-yufvuyuo* in the dual and plural, final *a* of the stem being changed to *u* in the singular, to *uo* in the dual and plural; in the past both stem and suffix seem to take the additional *o* in all the numbers, besides the *i* which precedes the persons.⁴

Neuters of being or becoming are characterised by *-ana*, *-da*, *-uo*, *-dofva*, *-alla*, subjoined to the root.

Derivative verbs are numerous.⁵ Frequentatives or intensives are formed by *-da*, *-la*, *-l'a*, *-za*, before which if final *a* of the verbal stem be changed to *e*, the force is diminished;⁶ causatives or from neuter verbs transitives by *-hta*;⁷ diminutives by *-sta*; diminutive of frequentatives (151) by *-lela*; diminutive in the superlative degree by *-lesta*;⁸ reflexives by *-mua*, or by *-ufva* preceded by *h* or a dental, the final *a* maintaining itself in the past in the third singular and throughout the dual and plural;⁹ desideratives by *-stuca*. From nouns also imitatives are formed by *-statta*; privative neuters by *-tu* or *-tura*; recipients of accession of the root by *-dofva* subjoined to its dative case;¹⁰ from numerals partitive transitives, meaning to divide, are formed by *-sta*, the root expressing the number of the parts.¹⁰

162. The negative takes the persons as a verb (151). In the indicative its stem is *i* in the singular, *e* in the first and second dual and first plural, *ä* in the other persons; its potential is the same as the indicative, except that throughout the dual and plural its stem is *ä*; it does not distinguish tense. In the imperative the stem is *all*. The verb negated follows in the stem form of the mood or tense, but without persons.¹¹

163. Prepositional or postpositional elements governing a personal pronoun take it as a possessive suffix.¹² Those elements are compared as adjectives.¹³ Some of them generally, others sometimes, precede what they govern;¹⁴ but of these it is impossible to say what their real nature is. The nominative goes before the verb. The genitive precedes its governor, and the adjective its substantive;¹⁵ the verb seems generally to precede what it governs,¹⁶ and perhaps the prepositions which precede are verbal, they govern the noun in particular cases.¹⁷

164. The language is characterised by a tendency to affix enclitic particles, copulative, emphatic, and interrogative, to nouns and verbs.

¹ Ganander, p. 107.

⁴ Ibid. pp. 81, 82.

⁷ Ibid. p. 99.

¹⁰ Ibid. p. 69.

¹³ Ibid. p. 142.

¹⁵ Ibid. pp. 143, 147, 156, 157.

² Ibid. p. 85.

⁵ Ibid. p. 64-70.

⁸ Ibid. p. 66.

¹¹ Ibid. p. 110.

¹⁴ Ibid. pp. 140, 141.

¹⁶ Ibid. p. 161-168.

³ Ibid. pp. 75, 80, 127.

⁶ Ibid. p. 93.

⁹ Ibid. p. 103.

¹² Ibid. p. 141.

¹⁷ Ibid. p. 173.

Such are *-g*, *-ges*, *-nai* copulative, *-pe*, *-be*, *-bai* emphatic, *-gos*, *-gost* interrogative, suffixed to nouns like Latin *-que* and *-ne*; and *-ag*, *-ges*, *-be* emphatic, *-gos*, *-gost* interrogative, suffixed to verbs. They are attached at the end of the nominal or verbal formations.¹

165. Compound nouns are formed by the coalition with a noun of a noun or adjective which qualifies it;² compounds also are formed by prefixing a verbal root to the verb *kadu* to begin, so as to form an inchoative.³

166. Through all the languages of this section, spoken in Central and Northern Asia and Northern Europe, there is great similarity of structure. But there are also closer resemblances which form amongst them groups of languages more nearly allied to each other. And in every such group the first law of the vowel harmony (3) appears. Its presence proves that the large formations which it binds together are present together in all their parts to the mind, and that the language consequently has a massive character (4, 67), less in degree than that of the American languages, and corresponding to the minor degree of slow excitability which marks these races as compared with the American (pp. 76, 77). In this respect the structure of these languages corresponds exactly with the theory of Book I, chap i., 9.

MIDDLE YENISSEIAN AND KOTTIAN.

167. There still remain two of those Siberian languages which have been studied by Castren; and they have a special interest on account of their difference in structure from all the others, as if they represented a different family of nations now almost extinct.

"The so-called Yenissei Ostiaks dwell for the most part on the Yenissei and its tributaries between the towns Yenisseisk and Turuchansk. Their occupation is hunting and fishing. They have no reindeer, their beast of burden is the dog. They dwell in huts, which usually consist of the bark of the birch tree. They are nominally Christians, but in reality heathen, and pay great honour to the bear. They at present number not quite 1000 individuals." Such is Castren's account of this people, whom it seems simpler to call Middle Yenisseians, as it is in the basin of that river in the middle part of its course that they live; and thus any suggestion is avoided of their being akin to the Ostiaks, with whom they do not seem to have any affinity. There are two dialects of their language, that spoken on the Sym, and that spoken about the villages of Upper and Lower Imbask.

To the same stock as the Middle Yenisseians the Kottians belong; of whom Castren met five individuals who had established a little village on the Agul, a tributary of the Kan, and were being joined by others, all bent on maintaining their language and nationality, partly from a national feeling, and partly because as natives of Siberia they paid less tax than as Russians.⁴

¹ Ganander, pp. 22, 28, 62, 116.

² Ibid. p. 35.

³ Ibid. p. 67.

⁴ Castren, Yen., Ostiak. und Kott. Sprachlehre, Vorwort, p. v.-viii.

Castren gives the grammar of the two languages together; and he shall be followed here.

"In respect of its phonesis, the Yenisseian has the same soft nature which marks all the Turkish and Finnish languages. This shows itself in its strange richness in vowels, liquids, aspirated and soft consonants, and in its extraordinary poverty in sibilants."¹

Neither of these languages observes the first law of vowel harmony; but there is in both a certain approach to it. The vowels have a more and a less decided utterance; the utterance of *a* is determined in great degree by the nature of the other vowels of the word, that of *e* and *i* rather by the accent.²

The Yenisseian consonants are: *q', k, k', g, g', t, d, t', d', p, b, f, n, n, n, m, h, y, s, s, l, l, r*. Kottian wants *t'* and *d'*, but has *t'*; it has also a combination *th*, in which both letters are sounded; and sometimes utters *f* as *p'*.³

The Yenisseian vowels are, *a, ä, e, e, i, o, u*. Kottian wants *e* and *e*.³

The consonants *k, g, and l* are harder before *a, o, u*, and sometimes before *e*, than before *ä* and *i*. An initial *n* is always followed by a long vowel, and is sometimes uttered as a mere *~*.⁴

A long vowel or diphthong in the end of a word tends in Yenisseian, as in Samoiede, to break into two short vowels, the last being scarcely audible; but *i* remains combined with the vowel preceding it.⁵ There are about twenty-eight diphthongs in Yenisseian, but in Kottian the diphthongs ending in *i* are the most frequent.⁶

The accent lengthens any syllable after the first, unless the vowel is followed by two consonants.⁷ In Yenisseian the accent tends to fall on the first syllable, but in compounds on the first syllable of the second word. In Kottian it tends to fall on the last syllable, most of the words being Tartar.⁸

Tenuis and medials cannot concur; a tenuis before *d, d,* or *b* becomes medial, but *g* after a tenuis becomes tenuis; if *g* is preceded by *d, d,* or *b* both become tenuis; *g, d,* and *d* become tenuis before *f*.⁹

After *b, g* becomes *b*; and *d* after a nasal generally becomes *n*.¹⁰

A medial in the end of a word becomes tenuis, unless the syllable is long, and generally takes a sheva-like vowel if the syllable is long; *r* is never initial.

Two consonants cannot begin a word or syllable; and concurrences of consonants in a word are often avoided by elision or transposition.¹¹

168. Distinction of sex is expressed sometimes by words, sometimes by terminations, and in Kottian, if the subject be female, an adjective as predicate changes final *u* to *a*.¹² There is no distinction of grammatical gender.

The noun has only two numbers, the singular and the plural.

The plural ending is *n* or *n*, which when subjoined to a stem ending in a consonant or *i*, requires to be preceded by a connective

¹ Castren, p. 1.

⁴ Ibid. sect. 8.

⁷ Ibid. sect. 12.

¹⁰ Ibid. sect. 22.

² Ibid. sects. 3, 4.

⁵ Ibid. sect. 9.

⁸ Ibid. sects. 33, 36.

¹¹ Ibid. sects. 24-29.

³ Ibid. sects. 1-7.

⁶ Ibid. sects. 9, 10.

⁹ Ibid. sects. 19, 21.

¹² Ibid. sects. 41-43.

vowel, unless the consonant be *q*, *k*, *t*, *t*, or *s*, and the final syllable be short. But some nouns drop or change the final consonant or *i* before the plural ending; thus *p* is sometimes changed to *f*. Many Yenisseian nouns, especially monosyllables, accentuate and lengthen the connective vowel.¹

But it is a remarkable feature of these languages that many of their nouns form the plural, not by a plural ending, but by a change of their radical vowel or last vowel, some by both change and ending. The tendency in the former seems to be to have a more open or a longer vowel in the plural than in the singular, that of the latter to contract the vowels, if diphthongal, before the plural ending.²

In Kottian the plural is less in use and subject to more irregularities than in Yenisseian.³

The case endings are :

		In Kottian.	
		lifeless.	living.
Genitive	In Yenisseian. <i>-da</i> or —	<i>-i</i>	<i>-ā</i>
Dative	<i>-dan</i>	<i>-iga</i>	<i>-ā'a</i>
Locative	<i>-gei</i>	<i>-ihāt</i>	<i>-āhāt</i>
Ablative	<i>-danēr</i>	<i>-it'ān</i>	<i>-āt'ān</i>
Instrumental	<i>-fās</i>	<i>-ō</i>	<i>-ō</i>
Prosecutive (along)	<i>-bes</i>	Comitative <i>-os</i>	<i>-os</i>
Caritive	<i>-fan</i>		

In Yenisseian nouns of lifeless objects *da* is apt to become *de*, and in the plural of living objects *da* is apt to become *na*.

The stem takes no case ending in the nominative and accusative.

The element of case follows that of plurality, and in the plural of Kottian nouns of living objects *ā* is replaced by *ān*, in the ablative by *ān*, and subjoined to the plural stem. Nouns of female sex in Kottian are generally declined as lifeless, at least in the singular.⁴

169. The adjective precedes its substantive, and if the latter be plural, the adjective also may take the plural form; but it never takes the elements of case unless it is used as a substantive.⁵ When an adjective is predicate it takes in the Imbask dialect of Yenisseian *-m*, but in the Sym dialect it takes *-s*, and then subjoins *m* with a connective vowel.⁶

In Kottian an adjective when predicate takes *-a*, or if it ends in a vowel, *-ga*; but if the subject have life, the adjective takes the pronominal element *-tu* for the male, *-ta* for the female.⁷

In Kottian there is no primitive adjective which is not also substantive;⁸ as derivative of Kottian adjectives *-a* corresponds to English *-y*, *-se* to *-ly*, *-fun* to *-less*; *-haño* is diminutive.

There is no adjectival expression of degrees of comparison in either language.⁹

170. The personal pronouns in Yenisseian are thus declined :

¹ Castren, sects. 44-49, 58, 62. ² Ibid. sects. 52-57. ³ Ibid. sect. 62.

⁴ Ibid. sects. 66-72. ⁵ Ibid. sects. 73, 75, 82, 83. ⁶ Ibid. sect. 74.

⁷ Ibid. sects. 80, 81. ⁸ Ibid. sects. 77, 79. ⁹ Ibid. sects. 76, 84.

		Singular.		
		1	2	3
Nominative		<i>ade</i>	<i>ūge</i>	<i>bū buda</i>
Genitive		<i>abe</i>	<i>ūge</i>	<i>bū budu</i>
Dative		<i>abañ</i>	<i>ūkñ</i>	<i>budañ</i>
Locative		<i>abañgei</i>	<i>ūkñgei</i>	<i>budañgei</i>
Ablative		<i>abañr</i>	<i>ūkñr</i>	<i>budañr</i>
Prosecutive		<i>albes</i>	<i>ūbes</i>	<i>bubes</i>
Instrumental		<i>ātjās adū</i>	<i>ūjās ūgū</i>	<i>būjās</i>
Caritive		<i>atfan</i>	<i>ūfan</i>	<i>būfan</i>
		Plural.		
Nominative		<i>etn</i>	<i>kəkñ</i>	<i>bueñ</i>
Genitive		<i>ctn</i>	<i>kəkñ</i>	<i>bueñ</i>
Dative		<i>etnai</i>	<i>kenai</i>	<i>bueñnai</i>
Locative		<i>etnaiḡei</i>	<i>kenaiḡei</i>	<i>bueñnaiḡei</i>
Ablative		<i>etnaiḡr</i>	<i>kenaiḡr</i>	<i>bueñnaiḡr</i>
Prosecutive		<i>etnbes</i>	<i>kəkñbes</i>	<i>bueñbes</i>
Instrumental		<i>ctnjās</i>	<i>kəkñjās</i>	<i>bueñjās</i>
Caritive		<i>ctnfan</i>	<i>kəkñfan</i>	<i>bueñfan</i>

The final consonants in the above are apt to take a sheva-like vowel, and *bueñ* to become *buañ* and take *-da*, which becomes *-na*.

The elements of the first and second singular, *ab* and *uk*, are used as possessive prefixes to nouns beginning with a vowel, and sometimes also that of the third singular *bu*. But in general the third singular and all three in the plural precede in their full form the noun which

governs them. The reflexive pronoun is in the singular ¹*biende*, ²*bieñu*, ³*bienddu*; in the plural, ¹*biendañ*, ²*bieñañ*, ³*bienañ*,¹ the oblique cases in the singular being formed on the genitives, ¹*biendebe*, ²*bientku*, ³*biendda*; in the plural, on the plural stem; *bieñ* means hand.

The principal Yenisseian demonstrative pronouns are *tūt*, a weak demonstrative; its plural, *túna*; *kūt*, that; *kána*, those; *kū*, this; *kína*, these.

The principal interrogatives and relatives are *ánet*, who? *assa*, what? *bit'a*, which?²

The Kottian personal pronouns are, in the singular:

	1	2	3	
Nominative accusative	<i>ai</i>	<i>au</i>	<i>uyu</i>	<i>uyá</i> , fem.
Genitive	<i>aiñ</i>	<i>au</i>	<i>uyuā</i>	<i>uyai</i>
Dative	<i>aiña</i>	<i>aua</i>	<i>uyuāa</i>	<i>uyaiḡa</i>
Locative	<i>aiñhāt</i>	<i>auhāt</i>	<i>uyuāhāt</i>	<i>uyaiḡhat</i>
Ablative	<i>aiñr' ai</i>	<i>aur' au</i>	<i>uyuār' ai</i>	<i>uyaiḡr' ai</i>
Comitative	<i>ayoḡ</i>	<i>auaḡ</i>	<i>uyuoḡ</i>	<i>uyaoḡ</i>

¹ Castren, sects. 106-109.

² Ibid. sects. 110, 111.

The stems in the plural are ¹ *ayoñ*, ² *awoñ*, ³ *uniañ*, which last forms all the oblique cases except the comitative on the genitive *uniañan*.

Kottian has a reflexive pronoun only for the third person *mintu*, *mintā* female, *mintiañ* plural. That of the first and second is expressed by the instrumental of *hitaq'*, body.

The possessive pronouns, which are much used in Kottian, are formed of *se* subjoined to the genitive singular and plural of the personal and other pronouns, and thus formed, they are regularly declined.

The principal Kottian demonstrative pronouns are: *inu*, *ina* fem., this; *inniañ*, these; *uyo*, *uñá* fem., that; *unioñ*, those; the principal interrogatives and relatives are: *asiq'*, who? *sina*, what? *bilituise*, which? ¹

171. Yenisseian distinguishes only two kinds of verbs, active and reflexive; three moods, indicative, imperative, and infinitive; two tenses, present and past; some verbs have only one tense.² The infinitive, which is also gerund and supine, is formed by *-ēseñ*. The present and past in every number and person can take the prosecutive case ending *-bes* to express during. The participles are identical with the third person present and past.³

Some Yenisseian verbs form their present, which is also future, in *-g'oas*, and these take also the past and imperative element *-na* as a suffix to the stem. But others, especially the simple verbs, distinguish the tenses by various internal changes: thus *tabāq'*, present; *tobāq'*, past; *abbatog'an*, present; *abbatog'an*, past; *datpaq'*, present; *datpiyaq'*, past.⁴

In these examples the distinction is made by the vowels. But those verbs whose meanings, according to Castren, admit a sense of continuance, take up into the stem in the past *r* or *n*, the former generally after an accented syllable, the latter after an unaccented. And the imperative takes up the same letter so far as euphony admits,⁵ dropping also sometimes an initial which is in the present; while the past sometimes changes the initial.

The verbal stem is generally formed by adding verbal elements to the root, *-g*, *-k*, *-gak*, *-goa*, *-g'aidi*, *-gūt*, *-g'ut*, *-yu*, *-ti*, *-tet*, *-t*, *-ta*, *-di*, *-do*, *-dak'*. And the consonant of the past and imperative is taken into the middle of the verbal stem subjoined to the root or incorporated in it; while the vowel preceding it is apt to be changed into *ō* in the past, *a* in the imperative: thus *taig*, present; *tōrg*, past; *tārg*, imperative; *dagafuot*, present; *dagōrfuot*, past; *agarfuot*, imperative.⁶

In the Yenisseian reflexive verbs, the reflex object is taken up generally after the root syllable, and is, according to the person, ¹ *da*, ² *ga*, ³ *ya* or *sa*, in the singular; ¹ *dañ*, ² *gañ*, ³ *yañ* or *sañ*, in the plural. Their vowel may be changed into harmony with that of the stem, or may be omitted, but that of third person is omitted only to avoid hiatus.

¹ Castren, sects. 114-118.

² Ibid. sect. 122.

³ Ibid. sect. 123.

⁴ Ibid. sects. 124, 137.

⁵ Ibid. sect. 125.

⁶ Ibid. sects. 134-137.

The *y* of the third person may be dropped after *r*, *n*, *t*;¹ and if the insertion of the reflex object would cause an accumulation of consonants it may be omitted, or if the stem begin with a vowel it may be prefixed; and then the first and third singular and third plural take *b* for their initial consonant. The vowel following such initial undergoes the usual change.²

In Yenisseian the verb substantive is *usü*, which takes the persons *-de*, *-ge*, *-ye*, *-dañe*, *-gañe*, *-ñe*; also *ūse*, there is, as *taya ūse*, there is gold, *usāban*, there will be; and the negative *bēse*, there is not.³ And substantives, adjectives, and adverbs, take subjective suffixes involving the verb substantive present or past. These for the different persons are as follows: *-di*, *-gu*, *-du*, *-dañ*, *-gañ*, *-añ*; a future is formed by adding to these suffixes *-yü* in the Sym dialect, *-gan* in the Imbask; and the second singular of the future is used for imperative. An infinitive is formed by adding *-eseñ* to the third person singular of future. These subjective suffixes may also be used with the cases of nouns. When suffixed to the dative to express be as, they may take a mediating element *-te*.⁴ They are the only person endings in the language, so that active verbs have no person ending.

When, however, a verb beginning with a vowel is preceded by a personal pronoun as its subject, the last syllable of the pronoun coalesces with the verb, the first syllable being left apart; and if the subject be plural, the plural element is at the end of the verb.⁵

Even when the verb has no element of person it takes in the plural *-n*, sometimes *-gen*, *-neñen*, *-ñen*; in reflexive verbs the plural object implies the plural subject, and the plural ending is omitted.⁶

172. In Kottian the verbal stem is formed by adding verbal elements to the root, *-ūk*, *-k*, *-tek*, *-tak*, *-ya*, *-taya*, *-gaya*, *-t'ea*, *-t'i*, *-t'a*, *-ta*, *-kita*, *-kñ*, *-ki*.

The parts of the verb are present, past, and imperative; and there are much fewer verbs with only one tense in Kottian than in Yenisseian.

The past is formed by changing the last vowel of the root, generally to *o*, or subjoining to the root or incorporating with it *ui* or *i*, subjoining also *l*, *r*, or *n*, or incorporating it in the root. The imperative is formed from the past by shortening its vowel or changing that vowel to *ā*; it also tends to strengthen *l* by adding to it *l'*. The stem serves for infinitive, present participle, gerund, and supine. A passive is formed from the past by changing the *a* of *la*, *na*, *ra* to *ā* or, if the stem ends in *kñ*, to *āu*; *i* also being taken in the latter case instead of *ñ*.

Verbs in the past tense may be used together to express one past fact thought as antecedent to the other.⁷

The Kottian reflexive verbs keep the reflex object closer to the root than the Yenisseian, for they do not let the *l*, *r*, or *n*, come between

¹ Castren, sect. 131.² Ibid. sect. 132.³ Ibid. sects. 148, 149.⁴ Ibid. sects. 151, 152.⁵ Ibid. sect. 130.⁶ Ibid. sect. 126.⁷ Ibid. sects. 153, 154, 175.

the root and the object, but rather prefix it to both. There are also Kottian verbs which take their object, when it is a personal pronoun not reflex, in similarly close connection with the root.

The Kottian verb has person endings; and sometimes the stem has a plural ending of its own followed by a plural person; and sometimes with a reflex plural object prefixed at the same time.¹ A few passives take person endings.² In some stems of a composite nature the person endings come between the root and the formative suffix, being followed by the past and imperative element.³ Kottian has an impersonal verb substantive, *hit'oga* there is, was, or will be, and a negative *mon'a* there is not, &c.⁴

The Kottian negative *mon* precedes the verb in present and past, but the negative imperative is expressed by the present with *bō* before it.⁵

Instead of a verb substantive, the Kottian substantives, adjectives, adverbs, and some postpositions take person endings which express

singular.			plural.		
1	2	3	1	2	3

both present and past, namely, *-tan*, *-u*, *-tu*; *-ton*, *-on*, *-ian*. For the future they take *-däyan*, &c., which is a verb inflected with persons, and having a past tense. Its full stem seems to be *däyek*.⁶

173. The postpositions in both languages are nouns in various cases; and some of them have, in Yenisseian, a locative ending *t*, which is not in the declension of the noun.⁷

The expression of relation in Yenisseian is peculiar in this respect that the case endings tend to detach themselves from the noun and to join the verb which follows.⁸

There are very few conjunctions in Yenisseian, rather more in Kottian.⁹

174. The internal changes which the stems of nouns and verbs undergo in these languages, and which make them so unlike the other languages of this section, are points of resemblance to the languages of the following section; those of the verb especially having a certain resemblance to the structure of the Tibetan verb. And it is remarkable that the numerals of both languages resemble the Tibetan numerals as spoken.

Yenisseian. ¹⁰	Tibetan. ¹¹
1. <i>q'o.</i>	<i>ohik.</i>
2. <i>yn.</i>	<i>nyi.</i>
3. <i>don.</i>	<i>sum.</i>
4. <i>sie.</i>	<i>z'yi.</i>
5. <i>q'a.</i>	<i>gna.</i>

It seems most probable, therefore, that these languages are originally akin to the Tibetan, and have been altered by mixture with the Siberian languages.

¹ Castren, sects. 173-176.

² Ibid. sect. 179.

³ Ibid. sect. 175.

⁴ Ibid. sect. 180.

⁵ Ibid. sect. 181.

⁶ Ibid. sects. 182, 183.

⁷ Ibid. sect. 184.

⁸ Ibid. sects. 66, 121.

⁹ Ibid. sects. 188, 189.

¹⁰ Ibid. sect. 86.

¹¹ Max Müller in *Chr. and Man.*, vol. iii. p. 512.

V.—*The Chinese, Indo-Chinese, Tibetan, and Syro-Arabian Languages.*

1. There is scarcely any greater contrast among the races of mankind than that which exists between the two groups which have their chief representatives respectively in Arabia and China. The utterly material character and development of the latter is as remarkable as the spiritual originality and religious developments of the former, so that they are contrasted as strongly on the face of history as the Chinese lowland and the oases of the Arabian Desert on that of the globe. The mode of subsistence of these two groups of races, their chief interests, their social organisation, may almost be said to constitute different worlds to which their minds are respectively conformed, and this difference of thought is stamped on their languages in as wide a difference of structure. But in the midst of this striking contrast, both of thought and of language, there is one characteristic of thought, and one characteristic of language, in which they agree; and such agreement in the midst of so great diversity is especially instructive, as indicating a connection of causation between this characteristic of thought and this characteristic of language.

The point of agreement in mental action between these two families is that they both have a medium degree of readiness of excitability (see chap. i., Part. I., Sect. V.) And the point of agreement in the structure of language is that they both tend to express their ideas as single wholes without distinction of parts. That the former peculiarity tends to produce the latter is the theoretical deduction laid down in Book I., chap. i., 10; and the correspondence in these respects between the Chinese and Arabian groups is a striking confirmation of that theory. This correspondence amidst diversity can best be shown by setting forth in all its principal parts the structure of speech in both groups. And though the Japanese language be an aberrant member, it will be taken in connection with the Chinese group on account of the degree of similarity which exists between them.

CHINESE.

2. All Chinese words consist of a single syllable ending in a vowel or a nasal, or *l*.¹

The consonants in the Mandarin dialect are the tenuis, tenuis-aspirate, and nasal of the post-palatal, palatal, ante-palatal, dental, and labial orders, the spirants *h*, *h*, *y*, *ɣ*, *z*, *s*, *z*, *f*, *v*, *w*, and the vibratile *l*. There do not seem to be any medial mutes, which is not strange when it is remembered that they could only be initials.² The concurrence *ts* has more sibilation than *t*³.

The vowels and diphthongs are *a*, *ɛ*, *e*, *i*, *o*, *u*, *ai*, *ao*, *ei*, *eu*, and also each of these except *e* may be preceded by *i*, each of them except *e*, *ao*, and *eu* may be preceded by *u*, and *ua* and *ue* may be preceded

¹ Endlicher, *Chinesische Grammatik*, sect. 53.

² *Ibid.* sects. 65–75.

by *i*; *a* and the vowel combinations which end in *a* may be followed by either *ñ* or *n*; *e* and the combinations which end in *e* may be followed by *n*, and *e*, *i*, *u*, and *iu* may be followed by *ñ*; ¹ *i* as the beginning of a vowel combination is generally taken up by an initial dental, and changes it to an ante-palatal; and *u* as the beginning of a vowel combination is taken up by an initial labial, and changes it to *f* or *v*; after *h*, *u* is itself changed to *o*.² There are other euphonic limitations; and the monosyllables of the language consist of about 500 different combinations of vowels and consonants.³ These, however, are diversified by the quantity of the vowels and by the tones; but even so they do not amount to more than 1200 or 1300 distinguishable syllables.⁴

3. The tones are five, and they may perhaps be best noted by the corresponding figures over the vowel. A monosyllable may be uttered with (1) an even high tone, with (2) a rising tone, as when we utter a word interrogatively; with (3) a falling tone, as when we say, Go! with (4) an abrupt tone, as of demand; or with (5) an even low tone. These are the tones of the Mandarin dialect, which is the language of the cultivated classes; and in their application they are limited by euphonic laws, so that they cannot all be used with all syllables. But in the mouth of the uneducated and of children the variety of tones is much greater and much more used to help the expression of thought; for the change of tone is in fact a method of derivation.⁵

The Chinese intonation differs from that which is found in many languages of Africa, as it involves an inflection of the tone, rising or falling, as well as an even tone, high or low, whereas the African tones are simply high, low, or middle (I. 21, 52, 74). This difference corresponds to the greater compass of the thought which is expressed by a Chinese syllable, and which is such as to admit within its limits a variation in the force of mental action, for it is doubtless the force of mental action in thinking the idea, noted as characteristic of it, which suggests the tone as part of the expression of it.

4. Some Chinese words express an idea always thought as a substantive idea; others an idea always thought as an adjective idea; most are substantives or adjectives according to their position in the sentence, and many may even be used also as verbs.⁶ The verb in most cases is known only by its position in the sentence, and is used on other occasions as noun or particle, and all nouns may be used adverbially before a verb.⁷

5. The same monosyllable being used to express several different ideas, there is often great ambiguity in its meaning, even though the tendency of Chinese thought towards the whole combination of fact determines in a great degree the meaning of each part by the position which it occupies in the whole. This ambiguity must be less in the spontaneous speech of China than in the cultivated Mandarin dialect,

¹ Endlicher, sects. 78-80.

³ Summers' Rudiments of Chinese, p. 3.

⁵ Endlicher, sects. 91-95.

² Ibid. sects. 82-84.

⁴ Ibid. p. 4.

⁶ Ibid. sect. 123.

⁷ Ibid. sects. 219, 250.

by reason of the greater distinction of intonation in the former. The natural mode of removing such an ambiguity in any language would be to subjoin a synonymous or explanatory word, with or without some such expression as, I mean. No such expression as this is used in Chinese, but the synonymous word is subjoined to the ambiguous one; and the two being used habitually to give definite expression to the meaning whenever it occurs, they grow from frequent concurrence into a kind of imperfect compound.¹

Another kind of imperfect compound grows out of the peculiar nature of Chinese thought, and is very characteristic of it. They are called collective compounds. They might perhaps be better called general or abstract compounds, for they do not all express a collective idea, but they do all express a general or abstract idea. This general idea cannot be abstracted from the particular ideas in which it is a common element, owing to the concrete particularity of Chinese thought. It is therefore emphasised by the combination of two particular ideas to both of which it belongs, and is expressed by the two corresponding words in connection with each other. Thus

people gen. parent

*fu*³ means father, *mu*², mother; *fu-mu*^{3 2}, parent; as *min-ti fu mu*^{3 2}, parent of the people; *kin*², light; *k'un*³, heavy; *kin-k'un*^{3 3}, weight; *yan*², far; *kin*³, near; *yan-kin*^{2 3}, distance; ² *mai*², buy; *mai*³, sell; *mai-mai*^{3 3}, trade.³

Chinese speech also, by reason of its tendency to define the meaning of one element by combination with another, throws into combinations the members of fact among themselves; and when a substantive object is denoted by a noun preceded by a qualifying word or genitive, the two words are apt, when the noun is often so used, to coalesce into an imperfect compound, and a verb and its object may similarly coalesce. This is a familiar fact in language; but what is remarkable in Chinese is the extraordinary fine meaning which the second member of the compound sometimes has, though it is a substantive governing the

other word. Thus *tse*² means son; *t'ien-tse*², heaven's son, *i.e.*, the

emperor; ^{sun} *zi-tse*^{4 2}, day; ^{eye} *meu-tse*², pupil (of the eye), in all which the idea of son is distinctly present; but how are we to understand *tse*² in the following, in which it does not seem to alter in any way the idea of the first noun? *fai* means house and *fai-tse*² means house, *k'o*⁴ is knife and *k'o-tse*² is knife. Yet *fai-tse*², *k'o-tse*² must express fuller ideas of house and knife than are expressed by *fai*⁴ and *k'o*⁴. Perhaps they mean what belongs to the species *fai*⁴ and *k'o*⁴,¹ and thus express the particularity of the idea.

Somewhat similar is the use of *t'eu*, head, to denote an object

¹ Endlicher, sects. 132, 220.

³ Ibid. sect. 220.

² Ibid. sect. 133.

⁴ Ibid. sects. 133, 134.

thought as a roundish mass, as $\underline{s}i^4$, stone; $\underline{s}i^4t^4eu$, a stone or rock; $\underline{z}i^4$, sun; $\underline{z}i^4t^4eu$, the sun.¹ The substantive *eu*, child, is subjoined as a diminutive.²

6. The so-called numeral particles also, which are used in counting, express second substantive ideas of the objects counted, or ideas of something appertaining to them, which can be more easily apprehended as an identical unit, than the substantives to which they are subjoined. They all express ideas which are less full than those of the substantives, and which stand for these in counting them, because these do not themselves yield a common element light enough for a unit. In English we say twenty head of cattle, because cattle is a collective noun not thought with substance of the individual (Def. 4); and head supplies the unit. If we said twenty head cow, it would be analogous to the Chinese idiom. In Malay and some American languages auxiliary nouns of this kind are used, owing no doubt to the same cause as in Chinese. And in Chinese they seem to be due to the concrete fulness and particularity of the substantive idea.

Of such numeral auxiliaries there are in Chinese ninety-one, each used in counting particular classes of substantive objects. Thus *kian*, inside or room, is used in counting houses or chambers, *k'o*, taproot, in counting plants which have a taproot, *yan*, ornament or badge, in counting officials; *pa*, handle, in counting implements, *wei*, tail, in counting fishes; *t'uan*, ball, in counting round things.³

7. There is no distinction of grammatical gender.⁴ Plurality is implied when the noun is preceded by an adjective, signifying many, and sometimes when it is followed by a noun of totality governing it in the genitive, or when it is accompanied by a cardinal number; but there is no expression of plurality.⁵

8. There is large expression of relation to the noun. The nominative is not otherwise distinguished than by its position before the verb.⁶ The genitive also may dispense with any other distinction than that of its position before the noun which governs it. But in the Mandarin dialect it scarcely ever occurs without its subjoined particle; and even in the old style this is generally used with the last of several genitives which are governed by the same noun, or with a genitive which is governed by more nouns than one in succession one to another. The genitive particle is the demonstrative *ti* in the old style, *t'i* in the Mandarin dialect, and represents the governing noun in connection with the genitive. Whether it have its particle or not the genitive precedes the noun which governs it.⁷

The pure accusative follows the verb without any express element of relation; but the verb may be so thought as to need a preposition to connect it with its most direct object.⁸ And there is a considerable

¹ Endlicher, sect. 135.

² Ibid. sects. 139.

³ Ibid. sects. 136-138.

⁴ Ibid. sect. 147.

⁵ Ibid. sects. 151-153.

⁶ Ibid. sect. 158.

⁷ Ibid. sects. 160, 161.

⁸ Ibid. sect. 164.

supply of words used as prepositions and as postpositions to express the various relations. The former partake of the nature of a verb, and are more nearly connected in thought with the verb of the sentence than the latter, which are more immersed in the noun which they govern, and are determined in thought by it as nouns which denote a part of it.¹

The words *pa*,² handle, *tsian*, take, and *i*,² use, are employed sometimes as prepositions to apply the action to its direct object, which, when thus constructed with these, precedes the verb. Thus *pa* *zin* *t'sun* *yu* heart ²man keep in *sin*, he keeps humanity in his heart; ² *ku* *i* *Huan* *mu* *ti* *sai* why ²mother gen. funeral tell to feudatory prince *kao* *yu* *tu* - *heu*, why he told the funeral of Huan's mother to the feudatory princes.³ These verbal prepositions governing the direct object are thought as qualifying the verb.

The ablative, locative, and instrumental, when expressed without an element of relation, precede the verb as conditions qualifying it like an adverb.⁴ When expressed with a preposition or a postposition, their position before or after the verb depends on whether the preposition or postposition with its object is thought as qualifying the verb or as exegetical of it. The dative does not precede the verb.

The so-called prepositions and postpositions, even when used as such, do not lose the strength of meaning which belongs to them as nouns or verbs. And this is the explanation of some strange peculiarities in their use. Thus when *i*² refers to something in a preceding sentence it must have the strength of a verb suggesting its object without

expression; as *Siu-tseu* *i*² *kao* *Mentseu*, *Siu-tseu* said (the words just mentioned) to Mencius,³ *i.e.*, *Siu-tseu* using (them) spoke to Mencius.

Also when *i*² follows the instrument and precedes the verb it must be taken as itself an instrumental noun, which, having no expression of relation, goes before the verb, as *t'sieu* *i*² *li* *li* wine ²accomplish rite accomplish the rites with wine,⁵ *i.e.*, with the use of wine. It is to be observed that verbs of giving govern as their direct object what we put in the dative, and the gift is instrumental with *i*², like *endow him with*.

If a noun governed by a preposition govern a genitive itself, or is qualified by an adjective, the genitive or adjective immediately precedes the noun, and is preceded by the preposition. And when the direct object governs one or more genitives, a preposition is generally needed before the latter to connect the object with the verb.⁶

9. The adjective always precedes its noun.⁶ And if the noun governs a genitive, the genitive may come between it and the adjective.⁷

¹ Endlicher, sects. 255-257.

² Stanislas Julien, *Syntaxe Nouvelle Chinoise*, p. 22.

³ *Ibid.* p. 24.

⁴ *Ibid.* p. 31.

⁵ *Ibid.* p. 35.

⁶ Endlicher, sects. 165, 175.

⁷ Julien, p. 40.

The demonstrative or relative pronoun $\overset{2}{t\acute{e}}$ in the old style, $\overset{4}{t\acute{i}}$ in the new, following an adjective or verb, may represent a noun as qualified by it so as to connect with it as with an adjective a noun which is expressed, or to make the adjective or verb a substantive.¹

There is no adjectival expression of degrees of comparison.²

10. The personal pronouns in the Mandarin dialect are : $\overset{1}{n\acute{o}}$, $\overset{2}{n\acute{i}}$, $\overset{3}{t'á}$. The plural is expressed by subjoined words expressive of plurality. The relations to them are expressed as those of the nouns.

The ceremoniousness of the Chinese causes a number of depreciative or honorific expressions to be used instead of the personal pronouns.

The demonstrative pronouns are, in the old style, $\overset{4}{k\acute{i}}$, $\overset{4}{k\acute{i}u\acute{e}}$, $\overset{3}{s\acute{i}}$, demonstrative simply without reference to distance, $\overset{4}{t\acute{s}e}$, $\overset{4}{s\acute{e}}$, $\overset{4}{f\acute{u}}$, demonstrative of the near, $\overset{2}{p\acute{i}}$ demonstrative of the far. In the Mandarin dialect or new style only some of these are used, and not frequently.

In it the usual demonstrative of the near is $\overset{3}{t\acute{e}}$; and the demonstrative of the far is $\overset{3}{n\acute{a}}$; and the noun to which these are applied takes the numeral particle $\overset{3}{k\acute{o}}$, which is used in counting persons or things to which other more special particles are not appropriated. This shows that there is an inaptitude to think a concrete object merely as occupying a position, similar to that which is experienced in thinking it as a unit. These demonstratives, however, are also used without reference to distance as a definite article, and then the numeral particle $\overset{3}{k\acute{o}}$ is not taken.³

The relative pronoun, or that which supplies its place, is $\overset{2}{t\acute{e}}$ or $\overset{2}{t\acute{i}}$ in the old style, $\overset{4}{t\acute{i}}$ in the new. The examples given do not warrant the assertion that either of them can follow a verb of which it is the subject⁴ (see below Examples 4 and 5). But they may follow a verb or sentence and be qualified by it as by a participle, and $\overset{2}{t\acute{i}}$ may follow an active verb as object. In the former use they may form with the verb a predicate with the copula understood before it, and in the latter use $\overset{2}{t\acute{i}}$ may give transitiveness to what otherwise would be inactive. This seems to be the true explanation of the use of $\overset{2}{t\acute{i}}$ on the one hand to determine a verb as neuter,⁵ and on the other hand to turn an adjective or substantive into an active verb⁶ (see Examples 6, 7, and 17). The pronoun $\overset{2}{t\acute{i}}$ as demonstrative often connects the subject with the verb⁷ (Example 8). It also as relative may come between its antecedent and the verb, being subject to the latter⁸ (Example 9). And as demonstrative it may precede the verb which governs it as object⁹ (see Examples 10–12). Also the relative pronoun $\overset{2}{s\acute{o}}$ precedes the verb which governs it¹⁰ (see Example 13), because the verb

¹ Endlicher, sects. 178, 179.

² Ibid. sect. 183.

³ Ibid. sects. 208, 209.

⁴ Ibid. sects. 211, 212.

⁵ Julien, p. 75.

⁶ Ibid. pp. 75, &c.

⁷ Ibid. p. 74.

⁸ Endlicher, p. 271.

⁹ Julien, p. 81.

¹⁰ Ibid. p. 96.

is thought merely as explanatory of the antecedent, and limited by its application to it as object.

The reflexive pronouns are: *ki*², *tse*³, and also as frequently *sin* body or person, *kun* body, *t_{sin}* own; *tse*³ precedes the verb which governs it.¹

The interrogative pronouns are: *su*⁴, *sui*¹, old style; *sin-mo*², *si-mo*⁴, new.

The indefinite pronouns are: *huo*⁵ any, some; *meu*² such; *mei*², *lo*⁴, every; *fan* whoever.²

11. The verb substantive or copula is in the old style generally omitted; when not omitted it is expressed by the demonstrative *si*³.

When the verb substantive is omitted, *ye*² or *ti* is usually inserted between the subject and the predicate;³ these are pronominal, and represent the subject to connect it with the predicate.

Other verbs of abstract realisation are: *vei*², make; *yeu*², have, there is; *tsai*³, be situated; *vei*², *yeu*², and *ta* strike, coalesce with an object into a kind of imperfect compound.⁵

In the new style the verb substantive is generally expressed by *si*¹ or *vei*¹, less frequently by *hi*³ belong, or by *tsai*³.⁶

A verb may be taken actively or passively according as the sentence requires either signification (see Example 15); but often the passive is expressed by *kian* see, *pei*³ receive, or *k'i*⁴ or *t'i*⁴ eat, governing the active verb as a noun.⁷

A causative can be made from an intransitive by subjoining a direct object, and from a transitive by the auxiliary verbs *tso*⁴ make, *se*² command, occasion, *min* command, *k'ian* and *t'a* send.⁸

Other auxiliary verbs are *kan*² dare, *nen* and *ko*² can, *hao*³ love may, *niu*⁴ and *yan*³ wish, *yao* and *tsian* will.

In the new dialect the most usual auxiliaries are: *t'o*⁴ attain, *te*⁴ be in condition to, *k'iu*² go, *lai* come, *pa*⁴ cease.⁹

There is no expression of mood or tense except by auxiliaries, conjunctions, and adverbs. A clause which conditions another always precedes it. The auxiliaries of the past are: *t'an* experience, and *yeu*² have; those of the future, *tsian* and *yao*³ will.¹⁰

The personal pronoun as separate subject is generally expressed in the new style, but in the old, unless there is a special emphasis on it, it is supplied from the connection of the sentence without being expressed.¹¹

12. The final particles, which are often used at the end of members of a proposition or of entire periods in Chinese, are most worthy of notice,

¹ Endlicher, sect. 215.

² Ibid. sects. 216-218.

³ Ibid. sect. 221.

⁴ Ibid. sect. 222.

⁵ Ibid. sects. 224-227.

⁶ Ibid. sect. 223.

⁷ Ibid. sects. 228-230.

⁸ Ibid. sect. 232.

⁹ Ibid. sects. 233, 234.

¹⁰ Ibid. sects. 235-247.

¹¹ Ibid. sect. 248.

as they indicate an essential peculiarity of the language. They do not in any way affect the meaning of the phrase which they close, but merely mark it off as if they referred to it as a whole, helping thereby that sense of rhythmic correspondence or parallelism between different clauses which naturally accompanies the thought of them as wholes.¹ The principal of these particles are: *ye*, ²*~i*, ²*~ian*, and ²*yu*; and these seem to be of pronominal nature. At least ²*ye* in 11 is pronominal, and it is interchanged in use with ²*~i*; ³*~ian* also is used quite like *ye*, being preferred when the preceding word ends in a nasal.⁴ However this may be, their use is to give totality to the clause which they conclude (see Example 1); and they show the Chinese tendency to think such a combination all together. Now it is by this tendency principally that the ambiguities of the Chinese monosyllabic words are corrected. "The Chinese characters acquire all sorts of grammatical value according to the place which they occupy in the phrase, and according to the words with which they are constructed."⁵ For it is to be remarked that position is not of itself sufficient to determine the logical function of a word in a sentence, still less to give precision to its meaning. The relative position of the members of a sentence is not absolutely fixed in Chinese (8, 10); and in some cases in which it is more strictly determined there is still a wide latitude for ambiguity. Thus not only the subject but also the ablative, locative, and instrumental, when they have no express element of relation, precede the verb, but which of these a word in that position is can be known only by having regard to the sense of the whole sentence. It is important to observe what considerable elements are thus gathered from the entire combination and incorporated without expression in the thought which corresponds to the monosyllabic word. Not only the ablative, locative, and instrumental relations may thus be taken up unexpressed, but a causative element can be given to an intransitive verb or to an adjective by putting a direct object after it (11). The interest in the whole fact expressed in the Chinese sentence facilitates the supply of these absent elements and defines the sense of the words, so that these may have in themselves a wide range of various meanings. But this interest does not altogether account for the absence from the language of those subsidiary elements. They must be weakly thought, or they would make themselves felt in expression.

13. Nor is it the absence of elements added to the stems of nouns and verbs which forms the great characteristic of the Chinese language. This is to be seen in the unbroken singleness of those stems themselves, the entire absence of parts from the ideas of substantives and verbs, which shows that the mind in its successive acts thinks entire and single the integers of thought which are formed by the associations of life. And this is the character of thought which, according to the

¹ Endlicher, sect. 274.

² Ibid. sect. 275.

³ Ibid. sect. 277.

⁴ Ibid. sect. 278.

⁵ Julien, p. 2.

theory laid down in Book I., chap. i., 10, should belong to that medium degree of mental excitability which it has been shown (p. 77, &c.) that the Chinese possess.

origin Sin prince Sin spring final part.

14. Examples: (1.) *T'su sin heu sin t'u ye*, originally the prince of Sin sprang from Sin; i.e., was born of a woman of that road man follow right woman follow left kingdom.¹ (2.) *T'ao'lu nantse yeu yeu nu'tse yeu tso*, on a road the man follows the right, the woman follows the left;² *tao'lu* is an imperfect compound of the synonymous kind; each word has eleven different meanings, and when combined they limit each other to the one in which they agree;³ *nan* is male, *nu* female, *tse* is a noun of general use (5). (3.) *T'ien tso nie yeu k'o wei tse tso* misfortune not can live *nie pu k'o huo*,⁴ misfortune caused by heaven can still be

love avoided, misfortune caused by self can be lived (through). (4.) *h'ai zin te zin heu hai ti kin zin te zin heu kin* man demon. man always love demon. honour man demon. man always honour demon.

ti, who loves men, men always love him; who honours men, men always honour him;⁵ *te* is not properly the subject of *h'ai*, but is

qualified participially by *h'ai zin*. (5.) *Yeu fe hio, hio ti fe nei; yeu fe wen, wen ti fe k'i; yeu fe se, se ti fe* have not inquire inquire demon. not understand have not think think demon. not attain have not distinguish distinguish demon. not clear

te; yeu fe pian pian ti fe miu, it has (there are who) do not learn, those who learn cannot (apply); it has (who) do not inquire, those who inquire do not understand; it has (who) do not think, those who think do not attain; it has (who) do not distinguish, those who distinguish are not clear;⁵ here also *ti* is not subject to a verb, but is qualified participially. (6.) *Wei su seu* only millet grows.⁶ *ti* demon.

ti, only millet grows.⁶ Julien says that *ti* marks the verb as neuter, and has no other meaning; is it by making it a verbal noun and predicate? (7.) *Tsian zin to eul siao ti*, the workmen cut

and little them, i.e., make them little.⁶ (8.) *K'i tao ti pu* he precept demon. not practise

yon, his precept is not practised;⁷ *ti* merely connects the subject with the verb. (9.) *Tao ti pu hin ye no k'i ti i*, the way which is not trodden I know it. I know demon. final

love revolt against prince (10.) *Hao fan san*

¹ Julien, p. 29.

² Ibid. p. 31.

³ Endlicher, sect. 132.

⁴ Julien, p. 35.

⁵ Endlicher, p. 271.

⁶ Julien, p. 75.

⁷ Ibid. p. 74.

and love excite trouble demon. not yet demon. have

eul hao tso loen te wei ti yeu, who loves to revolt against the prince and loves to excite trouble (we) have not him
though order five foot gen.

yet; ¹ *te* is qualified by what precedes. (11.) *Sui se u t'i ti*
boy go to market not demon. perhaps deceive

t'on si si mo ti hoe k'i, though you sent a boy of five feet to the market perhaps no one would deceive him.¹ So Julien translates it, but the Chinese sentence is remarkable for having no
north country gen. study demon. not yet can perhaps demon.

subject. (12.) *Pe fan ti hio te wei nen hoe ti*
excel

sen, the students of the north country cannot yet perhaps excel him.¹

(13.) *T'ien ti so fei*, whom heaven overthrows; ² *ti* is con-
man demon. make rule

nective of subject. ³ (14.) *zin ti vei tao*, the rule which men
some work mind

make; ³ here *tao* is qualified by, men make it. (15.) *Huo lao sin*;
some work body work mind demon. rule man work body demon. rule by man rule

huo lao li; *lao sin te, t'i zin*; *lao li te, t'i yu zin*; *t'i*
by man demon. feed man rule man demon. feed by man

yu zin te, se zin; *t'i zin te, se yu zin*, some work the mind, some work the body; they who work the mind rule men, they who work the body are ruled by men; they who are ruled by men feed men; they who rule men are fed by men; ⁴ the verb becomes passive from its collocation; *te* is qualified by what precedes it. (16.)
master what instr. know he will see kill

Futse ho i t'i k'i tsian hian sa, the master, how know (you) he
when he employ man fin. par. capacity demon. obj.

will be killed.⁵ (17.) *Ki k'i se zin ye, k'i ti*, when he employs men he capacities them, *i.e.*, he employs them according
have hear not yet demon. can use make

to their capacity.⁶ (18.) *Tselu yeu wen, wei ti nen hin, vei*
care again hear

kun yeu wen, what Tselu had heard he was not yet able to use, (he) took care to hear it again.⁷

SIAMESE.

15. The Siamese consonants are : *k, k', t, t', t', d, p, p', b, f, h, y, s, w, r, l, n, n, m.*

Its vowels are : *a, o, e, i, o, u, u*; its diphthongs *ai, ei, au*.⁸

It admits *k, p, t*, and the nasals as finals.⁹

The colloquial language contains 1861 distinct monosyllables, which

¹ Julien, p. 81.

² Ibid. p. 96.

³ Endlicher, p. 273.

⁴ Ibid. p. 290.

⁵ Julien, p. 44.

⁶ Ibid. p. 46.

⁷ Endlicher, sect. 244.

⁸ Low's Siamese Grammar, pp. 2, 3.

⁹ Ibid. p. 4.

are further diversified by intonation.¹ There are five tones: the natural tone, two higher tones, and two lower.²

16. There is no distinction of grammatical gender,³ nor any proper element of number belonging to the noun. There are many numeral auxiliaries used, as in Chinese, in counting.⁴ The cases are expressed by particles put before them. The genitive case follows the noun which governs it, and only sometimes has a particle before it. The particle before a possessive is *k'oi*, which also means thing, and seems to be an abstract connective element representing what is possessed. The particle *t'i* is sometimes used before the genitive, and sometimes before the dative. It also, as in Chinese, expresses the agent by being connected with the verb. The direct object follows the verb without a preposition.

The prepositive particles also serve as other parts of speech under other circumstances.⁵

17. There seems to be no proper pronoun of the first person, for *k'a*, which is used as such, means slave;⁶ *en* seems to be the pronoun of second singular, and *mān* of third singular; *rau* is first plural, and *so* second plural. A demonstrative *ka* gives emphasis, and is also used for the third person singular.⁷

The demonstratives are: *ni*, this; *nan* or *inan*, that; *inōn*, that yonder; *k'ru*, that and which; *yañ* is also a demonstrative as well as verb substantive.

The interrogatives are: *k'rai*, who? *dai* or *rai*, what? *t'au*, how? *k'i*, how many? *ru* is an interrogative particle at the end of a question.⁸

18. "In a strictly grammatical sense the Siamese language has but few verbs. Those words which are generally treated as verbs are merely names of actions, passions, or sufferings. They derive their force as verbs chiefly from juxtaposition or combination with particles and auxiliaries. Many nouns assume a verbal form (meaning?) by their position in a sentence. Siamese verbs have neither moods nor tenses."⁹

There is a verbal particle of the past which is subjoined to verbs, and is translated was or did;¹⁰ yet it is separated from the verb to the end of the sentence like an adverb.¹¹ The auxiliary of the perfect is have;¹² that of the future is will, the word being *t'a* or *dai*, the latter implying more ability.¹³

The active verb is sometimes, but not often, used in a passive sense.¹⁴

The subject precedes the verb, the object, and generally also the conditions, follow it. The qualifying word follows the qualified, and the genitive its governor; the adverb, however, sometimes precedes the verb or adjective which it affects. With numerals the noun comes first, then the numeral, then the numeral auxiliary.¹⁵

19. The Siamese monosyllables show a tendency to coalesce into a kind of imperfect compounds.¹⁶ This tendency is due doubtless to the

¹ Low, p. 11.

⁴ Ibid. p. 21.

⁸ Ibid. p. 41-44.

¹¹ Ibid. p. 63.

¹⁵ Ibid. p. 62-67.

⁵ Ibid. pp. 28-35.

⁹ Ibid. p. 46.

¹² Ibid. p. 49.

² Ibid. p. 14.

⁶ Ibid. p. 37.

¹⁰ Ibid. pp. 48, 51, 77.

¹³ Ibid. p. 50.

¹⁵ Ibid. p. 67-71.

³ Ibid. p. 22.

⁷ Ibid. pp. 38, 39.

¹⁴ Ibid. p. 53.

fact that objects are thought, not with analysis of ideas, but by whole ideas, which being defined when necessary by apposition or correlation with other whole ideas, coalesce with these from frequent concurrence.

BURMESE.

20. The Burmese consonants are the tenuis, tenuis aspirate, medial, medial aspirate, and nasal of the post-palatal, cerebral, ante-palatal, dental, and labial orders, together with a , θ' , h , γ , w , r , l , and \sim .

The ante-palatals and θ' are uttered with a sibilation. The cerebrals only begin Pali words; r is uttered indistinctly, often as γ . The mute consonant a is formed "by the constriction of the throat deeply down."¹ Double consonants often occur, and combinations of two consonants. When aspirates are doubled the first one loses its aspiration. The nasals as a rule combine with no other mutes but those of their own order; n when initial is pronounced gn . There seems to be a tendency to aspiration by sending additional breath through the utterance,² and the aspirates are to be regarded as having more force of breath rather than less force of closure.

The Burmese vowels are: a , e , ϵ , i , o , o , u , and the diphthongs au , ai .³

In words of more than one syllable, if the first syllable begin with a tenuis or tenuis aspirate, or in some cases if it begin with l , θ' , or a , a tenuis or tenuis aspirate beginning any subsequent syllable becomes a medial.⁴

The following finals as written are changed in pronunciation: $\check{a}k$ to $\check{e}t$, t being nearly quiescent; $\check{a}t$ to $\bar{i}t$, $\check{a}n$ to \bar{i} or \bar{i} , $\check{a}p$ to $\check{a}t$ (p final preceded by any other vowel is pronounced k), $\check{a}m$ to \check{a} ; m or n preceded by i or u is pronounced n . The aspirates and the medial of each order when final are changed with the vowel preceding to the same pronunciation as the tenuis.⁵

There are, besides the natural utterance of a vowel, two accents which shorten or lengthen it, (1) the short or acute, (2) the heavy or grave. The former (1) is used with e , ϵ , o , and o , also with \check{a} and i when followed by a nasal; the latter (2) is used with \bar{a} , \bar{i} , \bar{u} , and e , also with ai , \check{a} , or i before a nasal, and is considered inherent in ϵ unless superseded by accent 1. Neither of these accents is received by the remaining vowels.⁶ They may be indicated by the numbers 1 and 2.

A stop is sometimes used to divide off the word or words "qualifying the rest of the sentence, or on which the sentence turns."⁷

21. The primitive words of the Burmese language may be divided into those which are used as verbs and adjectives, of which almost all are monosyllabic, but some disyllabic; those which are used only as substantives, and those which are used as particles of relation or as

¹ Latter's Burmese Grammar, p. 6-14; Schleiermacher, sect. 10.

² Latter, p. 15; Schleiermacher, sect. 14.

³ Latter, p. 3-5.

⁴ Ibid. p. 16.

⁵ Ibid. p. 17-20; Introd. p. 335.

⁶ Ibid. p. 20, 21.

⁷ Ibid. p. 21.

adverbs. Many of the latter class belong also to the first class, while others have become restricted to the use of postposition or adverb.¹ And very often a word of the first class is used also as a substantive.²

One of the most striking features of the language is its tendency to composition, which is in truth a tendency to supplement imperfect ideas of the objects of thought by other thoughts of those objects, which, being merely supplementary to the first idea, tend to have less concrete fulness than it. The successive thoughts mingle partially, because the mind passes to the following one before it has completed the preceding.

As verbs and adjectives, the words of the first class are never used singly, but always in composition, or with an affix. And it is a peculiarity of the language that the adjective is always compounded with its noun.³ Such composition of adjective and noun shows how the components mingle in the kind of composition which takes place in Burmese; for when the adjective precedes the noun in the compound, it takes a pronominal⁴ element *θ'i* or *θ'o* to connect it with the noun. This element is used because the adjective and noun do not coalesce in thought; and it indicates, therefore, that the mind passes from the one to think the other. In passing from the adjective the mind directs attention to the substantive, by means of a pronominal element referring to it, in order to think the adjective as inhering in it, and thus passes to the thought of the substantive; the thought of the adjective mingling as the mind leaves it with that of the pronominal element, and this mingling as the mind leaves it with the thought of the substantive.

When the adjective follows the noun, thought passes to it immediately from the noun without completing distinctly the idea of the noun, but with partial mingling of the latter with the adjective; and a compound is formed without any pronominal connective between them.⁵

The adjective in Burmese is thought not properly in an act of comparison of the particular substantive object with the general substantive idea, and distinct from both (II. 24), but as a supplementary thought of the particular substantive object without clearly thinking the general. And when the substantive is thought more generally, so as to need to be limited by the adjective in expressing the thought of the object, the adjective has so weak a sense of the substantive that it needs a pronominal element to connect it with the latter. As a supplementary element, it follows the substantive coalescing with it. As determining a substantive which is more generally thought, it precedes the substantive (Def. 23) with a pronominal element between them.

Words of the first class are also compounded together to express a thought of a verb or adjective, which they constitute as parts of it, as, *hī*, turn; *θ'wa*, go; *hīθ'wa*, wander; *uk*, cover; *ra*, obtain; *ukra*,

¹ Schleiermacher, sect. 38.

² Humboldt, *Verschiedenheit*, p. 338.

³ *Ibid.* p. 344; Judson, *Burmese Grammar*, p. 26; Schleiermacher, sect. 62.

⁴ Humboldt, pp. 345, 353; Schleiermacher, sect. 62.

⁵ Schleiermacher, sect. 62.

catch, as in a net ; *hluk*, shake ; *θ'an*, sound ; *hlukθan*, ring (a bell).¹ Sometimes the first or second component is no longer found separate ; sometimes neither of them.² In compound verbs the first component is either in apposition to or the object of the second, and in either case defines it by a particular application of it ; and the second component is sometimes very abstract ; thus *t'a*, to put or place, is subjoined to many verbs and scarcely alters their meaning ; *hma*, to order, *hmat'a*, to order, *kway*, to conceal, *kwayt'a*, to conceal. The verbal stem also compounds with adverbs, especially of time, subjoining them as the substantive does the adjective. Verbal components are sometimes combined by the connective element *rwε*, which seems to carry on the thought of the first to the second.³

The Burmese compounds generally have a loose and open texture, their parts being imperfectly combined.⁴ But such as the above are not, like the Chinese so-called compounds, mere coalitions of words originally separate and constructed in apposition or correlation with each other. They are combinations, in whose first formation the thought of one component mingled partially with that of the other.

In truth, the first class of words are not properly called words, but approach in their nature towards Indo-European roots, at least those of them which are used only as verbs or adjectives, for they are never more than parts of words. And, moreover, whenever they are used they express only part of the idea of the verb or adjective, though a part which is nearly the whole, the remainder of the idea, namely, the inherence in a subject or substance mingling always with another element. There is not, therefore, in Burmese that unbroken integrity of idea which characterises Chinese. The mind is ready to pass from an idea when it has only partly thought it, and to complete it in beginning to think another element ; and such parts of ideas largely supply the materials of the language, for composition is one of its most remarkable characteristics.

When the quality or state denoted by a word of the first class is thought substantively, an affix is needed, and a derivative is formed in order to express the substantive idea. Thus, *kawñ*, good ; *a-kawñ*, goodness, or the good ;⁵ and this affix is often dropped when the substantive thus formed enters into a compound.⁶ Here the substantive idea goodness is broken into two parts, an attributive part and a substance (Def. 4), the latter being thought relatively to the former as its substance, with a simultaneous sense of the former as inhering in it ; and it is naturally dropped when merged in another substance. Being taken in its utmost generality as a substance in the abstract, it is not in any way determined or particularised by the inherent, and holds its natural position before the latter (Def. 23).

But it is only the most abstract substance that can thus be taken up by a Burmese inherent. In thinking a substantive part less fine, such as those which are expressed by the derivative elements of

¹ Latter, p. 125.

³ Latter, pp. 124, 128, 134, 135, 153-157.

⁵ Ibid. sect. 62.

² Humboldt, p. 339-341.

⁴ Schleiermacher, sect. 38.

⁶ Latter, p. 33.

derivative substantives in other languages, the Burmese mind does not subordinate it as merely relative to the other part of the idea, because there is not sufficient habit of generalisation to think the substantive as a modified instance of a general. The substantive part, therefore, is thought, not as a subordinate, but as a co-ordinate element. And the Burmese mind, not being able to concentrate itself on a fine element, must think it as little less than a full substantive idea, so that a compound rather than a derivative is formed. The substantive part, however, is thought as determined by the other part, and therefore following it in expression, on account of the interest which the race habitually takes in the nature of objects. One monosyllable, *k'yèñ*, thus used to form abstract substantives of act or fact, does not at present occur separately,¹ so that it is in strictness a derivative element.

Thus the structure of Burmese words shows a tendency in the thought of the race to take a smaller object for its individual acts than what suits Chinese thought. Yet the individual thoughts are only a little less than the natural units of thought, and the compounds have little fusion of their parts together. Such as it is, this tendency corresponds to a somewhat greater readiness of excitability in the character of the race (see p. 81).

There are other compounds in Burmese which are coalitions of words in construction, but in which in the original construction the parts mingle in a compound, as *atw'k'aun'ba'k'yèñ*, famine.² And whenever one of the components is a noun with the prefix *a-*, and which drops that prefix in the compound, there is a partial mingling of the components in the first formation of the compound.

There are also synonymous compounds, in which the second part gives more fulness to the idea. And in these the second part tends to be more abstract than the first, a less concrete idea being sufficient to complete the thought.³ Thus the names of birds are followed by the general word for bird, the names of beasts by the word for beast.⁴ Such fulness of expression indicates a concreteness of thought (III. 73), and the multiplication of words compounded together to express comparatively simple thoughts exhibits the same character, as well as an inaptitude for generalisation. Where thought is general, objects are apt to be thought as species of a genus, and ideas are apt to be expressed by general elements with particular modifications. But in this group of languages thought is too particular for such predominance of a general element. The tendency is to think the object with particularity, and to supplement the first thought of it, if need be, not with a modification of that first thought, but with a supplementary thought of the object. The need for such supplementary thought indicates that the mind has at first failed to embrace the whole object with due fulness, and the magnitude of the second thought shows that the mind tends in each act almost to embrace a full integer.

¹ Humboldt, p. 344.

² Latter, p. 37.

³ Humboldt, p. 339; Schleiermacher, sect. 177.

⁴ Latter, p. 32; Schleiermacher, sect. 177.

Such is the nature of those verbs mentioned above consisting of two components, in which may be seen an approach to those disyllabic roots which characterise the Polynesian, Malay, and Australian of Adelaide. In those verbs may be seen not only the absence of a particulariser of a general, but also a concreteness of idea which naturally accompanies thought which is not disposed to generalise. So that as in the Burmese idea of verbs and adjectives an approach may be seen to the Indo-European root, in accordance with the quickening of thought, so in its binary compounds may be seen something like the disyllabic roots as thought quickens and remains concrete and particular (Book I., chap. i., 7).

22. There is no proper element of plurality, for that which is given as such, namely, $d\bar{o}$, is used also after a succession of proper names to sum them up as a plurality. This shows that the identical unit which is thought as multiplied is involved in $d\bar{o}^1$ instead of being the noun to which $d\bar{o}$ is attached. The same may be said sometimes of *mya*, many, for it is used not only with a noun to qualify it as many, but also with a succession of substantives to sum them up as a plurality; *mya* as an adjective coalesces with the noun, and may be followed by $d\bar{o}$; thus, *lū*, man; *lū d\bar{o}, men; *lū mya d\bar{o}, many men; *k'auñ let k'ye myet* ^{head hand foot eye} *mya*, the head, hands, feet, eyes.¹ It is to be observed that in Chinese a plurality is often expressed by *to* preceding the noun with the signification many;² and in Burmese there is a verb $d\bar{o}^2$, to increase, multiply.³ It is evident from the above uses of $d\bar{o}$ and *mya* as expressive of mere plurality, that the plural element is not thought as part of the idea of the noun, but in a distinct thought referring to it. If the substantive is compounded with an adjective following it, the element of plurality and that of relation follow the adjective.⁴**

23. And because of the concrete particularity of the substantive idea, substantive objects in being counted require numeral auxiliaries, as in Chinese, to furnish a substantive idea which will be light enough to serve as a unit (6), being less concrete than the idea of the object. These numeral auxiliaries express the substantive idea of some quality or property, or other inherent or part, which belongs to the object counted,⁵ and they are formed with the prefix *a-*. But when they enter into composition with a number not exceeding ten they give up the prefix, their substance being merged in the number. The substantive which is counted goes first, then the number, then the numeral auxiliary, and the three together form a compound⁵ owing to the effort to count the object through its auxiliary; thus *dīna* a dollar, *le* four, *bya* the auxiliary for flat things, *dīna'le'bya* four dollars; here *dīna* is genitive, governed by *le bya*, four-flat of dollars, but coalesces, partially mingling with it in counting the dollars. When the number exceeds ten, the ten is counted as a unit, and the multiple of it is preceded by the auxiliary with its prefix *a-*, and this again by

¹ Latter, pp. 41, 42.² Endlicher, Chin. Gram., sect. 152.³ Latter, Introd. p. xix.⁴ Ibid. p. 80.⁵ Ibid. p. 98.

the substantive, and if there be units remaining their number follows with the auxiliary subjoined; thus *dīna* ^{dollar} *abya* ^{four} *lē* ^{ten} *ṭay* ^{five} *ṇa* *bya*, forty-five dollars.¹ It appears from the prefix *a-* that *abya* is thought as a substantive, and as such it must be a genitive governed by *lē ṭay*, but in the act of counting it mingles partially with the numerals so as to coalesce with them into a compound; *dīna* also must be a genitive, four tens of flats and five-flat, of dollars; and from the effort to count the dollars *dīna* mingles with the numeration of its auxiliary into a compound.

When the number is thought with emphasis the numeration may precede the substantive and be connected with it like an adjective by ^{one} *θ'o*; as *ta* ^{ten} *ṭay* ^{five} *ṇa* ^{flat} *bya* ^{dollar} *θ'o* *dīna*, the fifteen dollars. In this construction the noun may take *dō*, the sense of plurality being strengthened by the emphasis of the numeration.²

If the substantive which is counted be qualified by an adjective connected with it by *θ'o*, the numeral with its auxiliary may precede it without any connective element, as ^{two} *hñit* ^{person} *yauk* ^{good} *kaun* ^{men} *θ'o* *lū*, the two good men. There is less combination here between the numeration and what is counted, by reason of the complex idea of the latter; *hñit* *yauk* is rather in apposition with *kaun* *θ'o* *lū* than actually inherent in it.²

If the substantive be qualified by its numeral auxiliary, or if it be itself a numeral auxiliary, then no auxiliary is needed in its numeration. Substantives also which denote measures of weight, capacity, time, &c., may be counted without auxiliaries.³

"The choice of words to form these affixes is very arbitrary, even a fancied resemblance to any subject being sufficient to warrant such word being chosen and used as a numeral generic affix."⁴

24. There is no distinction of grammatical gender.⁵ Nor is there a definite article;⁶ but there are pronominal particles of emphasis, *ga*, *mū*, *mūga*,² *raga*,² used after the substantive to mark it off for special attention.⁷ And there is a copious expression of relations by means of postpositional suffixes, which follow the element of plurality when this is used.⁸

The nominative case is distinguished by the pronominal suffix *θ'ī*,⁹ which is of an arthritic significance (see II. 33, IV. 11, 71), referring to the substantive as subject; but in colloquial discourse, this affix is generally omitted.

The possessive takes the pronominal suffix *ī*, which represents in connection with it the object possessed; but this also is generally omitted unless when strengthened by an emphasis.¹⁰ The genitive is known by preceding the noun which governs it.¹¹

¹ Latter, pp. 99, 100.² Ibid. p. 101.³ Ibid. pp. 101, 102.⁴ Ibid. p. 99.⁵ Ibid. p. 42.⁶ Schleiermacher, sect. 43.⁷ Latter, pp. 44, 45.⁸ Ibid. p. 41.⁹ Ibid. p. 44.¹⁰ Ibid. p. 43.¹¹ Schleiermacher, sect. 45.

The following postpositions seem to be used only as elements of relation: *gō*, to, at, or the accusative relation; *θ^oō* towards, according to; *gǎ*, from; *ga* also separates as absolute or as emphatic; *ā t^oō* dative; *ñha*, for; *gyauñ*, on account of; *hneñ*, with; *p^oyeñ*, by means of; *hnaít*, locative; *dweñ*, among, during; *way*, in; *hma*, in presence of; *hmá*, out of.¹ Many substantives also with postpositions, and words without postpositions, are used to express relations;² and these all follow the noun which they govern.

25. The personal pronouns are: *ñá*, *θeñ*, *θ^oū*, besides the ceremonious expression of them by various substantives; *kōh* expresses self.³ The plurals are expressed by *dō*. There are no personal affixes.

The demonstrative pronouns are: *ī* or *θ^oī*, this; *htō*, that; *yeñ*, that same; *hawk*, *hō*, *hu*, *āñī*, *ō*, that, used in conversation when the object is pointed at, *āñī* being somewhat exclamatory; *θ^oeñ*, this or that, chiefly used substantively.

The interrogative pronouns are: *āli*, what? *ā^oay* or *ā^oay*, what?

The indefinite are: *mī* and *āk^oyeñ*.⁴

26. There is no proper adjectival expression of degrees of comparison; but there are compound adjectives (21) which express extreme degrees of a quality;⁵ and a small degree of a quality may be expressed by doubling the word, as *k^oyo k^oyo*, sweetish⁶ (III. 79).

27. The verb has no element of person; yet whatever be the person it takes the pronominal suffix *θ^oī*, which refers to its subject, and which is taken also by the subject (24); but it is only in the present that it takes the suffix. In the past, which subjoins to the stem the verbal element *byī*, signifying done, and in the future, which subjoins the verbal element *nū* or *ān*, or *ān mī*, the inherence is not thought strongly enough to require *θ^oī*.⁷ And it is to be observed that this element *θ^oī* does not express the subjective realisation, being often used for participial inherence.⁸ The weaker pronominal element *ī* is used instead of *θ^oī* at the close of a sentence, because its inherence in the subject is there partly expressed by its position, and it is used for the inherence of a past present which is less strongly felt; it occurs often in narrations told in the present tense.⁹ The future elements are also used for the infinitive.¹⁰

A neuter verb can be made active or causative by aspirating with full breath its initial consonant.¹¹ But causatives are also formed by subjoining to the verb *t^oe*, to cause or order.¹¹

Passives are formed by subjoining *p^oyīt*, to be, become, or *sī* to be, which make the verbal stem if active to be thought passively.¹² *Ra* to obtain, find, has sometimes, when subjoined to a verb, a future significance, or that of being in the act. A potential is expressed by subjoining *hnoiñ*, can, to the verbal stem.¹³

¹ Latter, p. 45-56.

⁴ Ibid. p. 70-72.

⁷ Ibid. pp. 133, 134.

¹⁰ Ibid. p. 142.

² Ibid. p. 57-65.

⁵ Ibid. p. 86-88.

⁸ Ibid. p. 130.

¹¹ Ibid. p. 127.

¹³ Ibid. pp. 137, 140.

³ Ibid. p. 66-69.

⁶ Ibid. p. 82.

⁹ Ibid. p. 134.

¹² Ibid. pp. 129, 130.

The honorific *dō* excellent, which is subjoined to nouns, is also subjoined to verbal stems, and followed by *mū*, do, the stem being thought as governed by *mū*.¹

Interrogation is expressed by an interrogative particle after the verb; of these there are several.²

Negation is expressed by prefixing to the verb the negative *mā*. It lowers the sense of inherence in the subject, so that *θī* is often omitted.³

Prohibition is expressed by *hneñ* or *leñ*, subjoined to the verb.⁴ If a verb is compounded of two verbal stems in apposition to each other, it is negated by prefixing *mā* to each component.⁵

There are also subjoined elements which give emphasis to what has been said, or mark it off by directing attention to it.⁶

But what is most remarkable in the Burmese verb is its strangely nominal nature. Not only is there no difference between the assertive verb and the participle, but even with the element of inherence *θī* it takes the postpositions like a noun;⁷ and plurality affects not only its subject, but itself. The element, however, which expresses plurality of the verb is different from that which expresses it for the noun, and is often omitted.⁸ The former is *kyā*, which probably expresses separation,⁹ or *gun*, which is probably the same as the numeral auxiliary *gun*, which denotes concatenation;¹⁰ sometimes the two are used together—*kyā gun*. And at the same time the subject has its plural *dō*. Even when the verbal stem is a component of a noun it may take its own plural quite independently of the number of the noun; thus, *θwa*, to go; *θwa·k'yeñ*, the going; *θwa·kyā·k'yeñ*, the going of several; *θwa·k'yeñ·dō*, the goings of one; *θwa·kyā·k'yeñ·dō*, the goings of several.¹¹

28. Some of the particles subjoined to the verb are conjunctive.¹²

Adverbs are formed either by doubling an attributive word or by subjoining *twa* to an attributive word, or by prefixing *ta*.¹³ The suffix *-twa* is used also with adjectives to denote a very high degree of the quality,¹⁴ but it does not seem to have this intensive signification in forming adverbs. The prefix *ta* is the numeral for one, and in forming adverbs it is either prefixed to a single attributive word or it comes between two of similar signification, or it is prefixed to a doubled word, or it is repeated as a prefix with each member of a double. In the last construction it evidently expresses succession, *ta gāi*, *ta gāi*, by degrees from *gāi*, progressive;¹⁵ and probably in the two preceding constructions also it has a similar significance, conveying a sense of the succession in the verb which it qualifies. In the first construction the attributive word takes the emphatic suffix

¹ Latter, p. 146.

⁴ Ibid. p. 150.

⁷ Ibid. p. 143.

⁹ Latter, Introd. p. xiii.

¹² Ibid. p. 158-161.

² Ibid. p. 147.

⁵ Ibid. p. 151.

⁸ Ibid. p. 131; Schleiermacher, sect. 126.

¹⁰ Ibid. p. 111.

¹³ Ibid. pp. 163, 164.

¹⁵ Ibid. p. 164.

³ Ibid. p. 149.

⁶ Ibid. pp. 156, 157, 161.

¹¹ Ibid. p. 34.

¹⁴ Ibid. p. 87;

tī, and the verb is probably qualified in one moment of its succession, on which attention is strongly fixed.

Adverbs are also formed by prefixing *pa* or *ga* to each of two words of similar meaning, as *pa run pa reñ*, confusedly, riotously; *ga rauk ga ret*, heedlessly.¹ Now *pā* and *ga* both express separation,² and perhaps *pa* and *ga* signify parts of a succession, so as to break up the attribute into the quality of a verbal succession.

29. The subject precedes the verb, the governed word the governing, and the attribute its substantive, unless when most closely compounded with it.³

“The final word of each phrase is prolonged by an harmonious cadence, which marks the period to the ear of one who does not at all understand the meaning.”⁴

title of revce. Lord nom. earth accus. arrange accumulate

30. Examples: (1.) *B'ura*² · *θ'a*² · *k'ēn*² · *θ'ī* *mye* · *go* *tī* · *reñ* · fashion set right honorific do

ban · *dēn* · *dō* · *mu*² · *le*² · *i*, the Lord God created the earth; ⁵ *ū*² *ura*² is pronounced *p'ra*; ⁶ *θ'a* is pronominal connective; ⁷ *k'ēn*, master; create is expressed with four components, and followed by the honorific verbal element (27); *le* is a slightly emphatic or persistive element; ⁸ *i* is the element of inherence which is used at the end of a sentence (27).

female pl. now city person city offspring pl. isola. part. house

(2.) *A*¹ *pey* *mi* · *ū*² · *ura*² · *dō* *ya* · *k'u* *pyi* · *θ'ū* · *pyi* · *θ'a* · *dō* · *ka* *eim* · front palace succession entreat actually me loc. give bit thing not be yet

se · *nahn* · *lya* *tau*² · *hñ* · *k'ye* · *θ'ī* *ñ'a* · *hnoit* *pe* · *ta* · *ra* *ma* · *si* · *θ'e*²; weight abundance 2d pers. pl. self custom 2d pers. be measure accus. 2d pers.

*a*² · *le* *a*² · *myat* *θ'eñ* · *dō* *kōh* · *rō* · *kūey* *rō*² · *si* · *adoin* · *gō* *kūey* humble low 21 instr. palace branch palace succession desire for offspring blessing

kyo · *nū* · *k'yeñ* · *p'yeñ* *nahn* · *nūn* · *nahn* · *lya* · *alō* · *nha* *θ'ā* *t'u* entreat pl. persistive dem. measure place royal sound give

*tau*² · *hñ* · *k'ya* · *le* *hu* *k'an* · *t'a* *ra*² · *da* · *θ'ā* *pe*² · *i*. O queens, the citizens of the city now actually entreat for an heir of the throne, which I have not yet to give them; with excess of urgency after the fashion of your rites that are customary with each of you do ye entreat with humility and submission the blessing of a son for the purpose of the royal succession of royal issue. Thus he gave the royal word of command.⁹ *Apey* is a particle of address used by husbands to their wives when speaking in an obliging manner; ¹⁰ its meaning does not appear; *mi* is a female prefix from *ami*, mother; ⁹ *ū*² *ura*, king or lord, is compound, for *bureñ* means chief; ¹¹ *rā* perhaps is of Pali origin as well as *ra*² · *da*, royal; *ya*² · *k'u* means now, *ya*² · *k'ēn* formerly; *θ'u* is a prefix and therefore belongs to what follows it; ¹² *ka* signalises and isolates with emphasis; the crown prince is called the foremost royal issue; *ta*² · *ra*

¹ Latter, p. 164.

² Ibid. pp. 46, 116.

³ Schleiermacher, sect. 260, &c.

⁴ Ibid. sect. 25.

⁵ Ibid. sect. 126.

⁶ Latter, Introd. p. xxxiv.

⁷ Schleiermacher, sect. 239.

⁸ Latter, p. 160; Judson, p. 54.

⁹ Schleiermacher, sect. 168.

¹⁰ Ibid. sect. 48.

¹¹ Ibid. sect. 233.

¹² Latter, p. 41.

forms nouns like *pe²tara*, thing to be given; verbal nouns in *a* are used as adverbs, being perhaps genitives; *kaw²ta* means to impose an appointed task; *kuey²rō²si* seems to qualify *kōh²rō²*, *kōh* being genitive.

now even great dat. worthy proper conn. son blessing accus. give

(3.) *Yw²ku²peñ² mi²ḅura²gyi² · a² t²aik · tan · θ²o · θ²a² t²u · gō² pe² ·*
fut. dem. think done from great dat. proper suitable connec. son accus.

an hu kyā · byi²hmā² mi²ḅura²gyi² · a² lyauk · pat · θ²o · θ²a² · gō²
god city in be 27 interrog. neg. be dem. pierce grope look

Tawatiinsa nat · pyi²hnaik² si² · i² · lau ma²si²lau hu tu² · tahm²kyi² ·
see embryo god son accus. see Ex. 1, 27

su²lat²hlyeñ² ḅura²lauhi² nat²θ²a² · gō² mreñ² · le · i². Even now I will give the blessing of a worthy son to the queen, after having thought thus, while searching whether or not there was a suitable son for the queen in Tawatiinsa, the city of the gods, he saw the embryo lord, the son of God;¹ *peñ* is an affix of emphasis; for

yak²u see Example 2, also for *mi²ḅura²*; there is no expression whatever of the subject of *pe²an*; *byi²* is the verb *pyi²*, to be done, *pyi²* is to do; *Tawatiinsa* is Pali, these passages being translations from Pali; *hlyeñ* is an affix which connects a fact with a larger fact as part of the latter; it is perhaps akin to *a²hlya*, a part;² it is generally preceded by *lat*, which has a similar significance; *hu* preceding this formation connects with it as its object the accusative in *gō²* by referring to it or representing it after it has been co-ordinated or qualified
slave little pl. brother

by the participial clause which intervenes. (4.) *Kyūn²not²dō² mauñ² ·*
sister disease sick from not be connec. become pl. accus. bear connec.

hna²ma a²na · rau · ga ma²si² · θ²o · a² · p²yit² · dō² · gō² mūē² · θ²i² ·
mother love accus. speak remark approach pl. imper.

mi · k²eñ² · gō² t²ō² · rīt · pa² · kon · lau, tell the mother that bore us that we, brother and sister, are free from sickness and disease;³ *kyun²not* or *kyun²nop* is a usual expression for first person in addressing equals;⁴ *mauñ* denotes the brother of a woman;⁵ *mu* is a female suffix; the meaning of *hna* is not given; *rauga* is translated sickness, but there is no such disyllable in the vocabulary, nor is *rau* to be found there, but *rauñ* is, to trouble, torment, perhaps *ga* is ablative; *ap²yit* is verbal noun, *mik²eñ* is used for mother; *rīt* is

not in the vocabulary, but *rī* has the above meaning. (5.) *dinapūttar² ·*
Madras
city to 3d pers. go fut. accus. I hear get 27

myo²θ²ō² θ²ū θ²ā²mi² · gō² na kyā²ra²θ²i², I hear that he will go to
I give with thou not take desire

the city of Madras.⁶ (6.) *na pe²lyek² · hneñ² meñ² ma² · yu · lō²,* if I gave, you would not take;⁷ *lyek* has the same meaning as *hlyeñ*,

¹ Schleiermacher, sect. 168, ii.

³ Schleiermacher, sect. 168, xvi.

⁶ Ibid. sect. 262.

² Latter, p. 57.

⁴ Ibid. sect. 76.

⁵ Ibid. sect. 80.

⁷ Ibid. sect. 263.

see Example 3; *mei*² is used as familiar,¹ yet it seems to mean governor, for *mei*² *gyi*² means the chief governor or king.²

TIBETAN.

31. The language of Tibet has a strongly marked monosyllabic character, and is much more consonantal than vocalic. It has the five vowels, *a*, *i*, *u*, *e*, and *o*; but these are not distinguished as long or short, nor do they form diphthongs.³

The consonants are the tenuis, tenuis aspirate, and medial of the post-palatal, palatal, ante-palatal, dental, and labial orders, the nasals post-palatal, ante-palatal, dental, and labial, *h*, *h'*, *y*, *s*, *z*, *s*, *z*, *w*, *r*, *l*.

There is considerable want of versatility of utterance, and the consonants are very subject to euphonic change. The palatal mutes are almost ante-palatal, *k'* being uttered softly like English *ch*; and the ante-palatals are almost dental, being uttered with a sibilant *ʃ* like *ts*.⁴

No pure Tibetan word, except it be an interjection, begins with a vowel,⁵ but many words end with a vowel. There are only ten consonants which can occur at the end of a syllable, *g*, *ni*, *d*, *n*, *b*, *m*, *s*, *h*, *r*, and *l*,⁶ and five which can be used as prefixes concurrent with an initial consonant, *g*, *d*, *b*, *m*, and *h*.⁷

32. The substantive, when it needs to be distinguished as such, subjoins *pa*, *ba*, or *ma*, to single it out as an entire object of thought (Def. 4); *pa* and *ba* are merely euphonic varieties, but *ma* has probably a weaker significance. There is also a female subjoined particle *ma* or *mo*, like the Burmese *ma* or *mi*, and a male particle *pa* or *po*, like Burmese *hpo*; *po*, *bo*, and *mo*, are emphatic; the element of sex may follow the singling element. In Burmese *pa* is used as a singling element;⁸ but *ga* is the stronger and more usual singling particle.

In Tibetan also *ka* and its euphonic varieties *k'a* and *ga* are used as singling particles which define the substantive almost like a definite article; and *na*, *ne*, *ge*, and *ni* single, but with less force, being like *pa* and *ma*, translated either as a or the.

The particles *gu*, *nu*, *bu*, and *hu* are diminutive; and many diminutives are formed by changing *a* or *o* of the primitive to *e*, and adding *hu*.

The first numeral, *k'ig*, *k''ig*, *g'ig*, is subjoined for an indefinite article.

There are many monosyllabic nouns, but also many compound nouns, some containing many syllables,⁹ each element mingling slightly with the next.

¹ Schleiermacher, sect. 80.

³ Csoma de Körös, Tibetan Grammar, sect. 2.

⁵ Ibid. sect. 3.

⁸ Latter, p. 103.

⁶ Ibid. sect. 6.

⁹ Körös, sects. 66-75.

² Ibid. sect. 238.

⁴ Ibid. sect. 9.

⁷ Ibid. sect. 8.

There is no grammatical gender. But there are particles used for the relations of case.

The nominative takes no case particle, nor the accusative; the genitive has *-kyi*, the instrumental *-kyis*, the dative *-du* or *-la*, the locative *-na* or *-la*, the ablative *-nas* or *-las*. The element *s* seems to express from, *du* motion to, *la*, on, into, in respect to; and *kyi* is probably pronominal, referring arthritically (Def. 7) to the substantive to which it is subjoined. The initials of the case endings are subject to euphonic variation, owing to the final of the noun.

There are many monosyllables, as in Chinese, whose meanings, though not given, doubtless imply plurality; but probably none of them are proper plural elements, or there would not be so many. They follow the noun as the adjectives generally do, but they are distinct monosyllables, though closely connected with the noun. They are followed by the particles of case.¹

33. The adjective almost always follows its substantive, and is followed by the syllables of number and case; but if it precedes it is apt to take *-hi* (21).² The adjective is often taken substantively with a singling element subjoined; but to express the abstract noun of quality, *nid* (see below) follows the singling element. Various adjectives are formed from substantives by adding derivative particles.³ There is no adjectival expression of degrees of comparison.⁴

34. There are no numeral auxiliaries used in counting, though words expressive of a collective or integral are often used after the tens, sometimes after a smaller number.⁵ A large number requires the noun to be singular.⁶

35. The personal pronouns are: ¹ *na*, ² *k'yod*, ³ *k'o*, but besides these there are various respectful terms used for the personal pronouns.⁷ And it may be here observed that the Tibetans employ different words from those in common use, especially for denoting the several parts of the body, meat, drink, clothes, furniture, equipage, and various actions of men, when speaking respectfully to, of, or before superiors.⁸

The personal pronouns are followed by syllables of number and case like nouns; and their genitives supply the personal possessives.

The demonstrative pronouns are: *hdi*, this; *de*, that (which are emphasised by being followed by a singling particle); *hu*, this; *ho*, that; *pa bi* or *pa gi*, that there.

The interrogatives are: *su*, who? *gan*, which? (also used as relatives); and *ki*, what?

The reflexives are: *ran*, *bdag*, *nid*, signifying self.⁹ In Burmese *hnit* means heart.¹⁰ The difference of the words seems to show that they are all nouns, not the mere abstract self.

36. The monosyllabic character of the Tibetan language appears most clearly in the structure of the verb, in the way in which it distinguishes the present, the past, the future, and the imperative.

¹ Kōrōs, sects. 76-86.

² Ibid. sect. 94.

³ Ibid. sects. 95, 98.

⁴ Ibid. sect. 104.

⁵ Ibid. sect. 107.

⁶ Ibid. sect. 204.

⁷ Ibid. sects. 112, 114.

⁸ Ibid. sect. 63.

⁹ Ibid. sects. 112-125.

¹⁰ Latter, Intro. p. xxvii.

The present, indeed, in some verbs is denoted by an additional syllable, formed of the reduplicated final consonant and the vowel *o* after it, which expresses present process or continuance;¹ and the future participle may be formed by adding *bya*,² which seems to be a future form of a verb which corresponds to Burmese *hpyu* or *hpyi*, to do. And by these additions, or by subjoined auxiliaries, some verbs distinguish tense and mood without experiencing any change in their radical syllable. But the greatest part of the verbs do experience such change, and distinguish the present, past, future, and imperative only by variation of the one syllable.³

The principles of such variation seem to be as follows: An *a* or *e* in the present tends to become *o* in the imperative, the *e* tending to become *a* in the past and future; but *i* and *u* have probably more radical significance, and are less liable to change.

The present tends to prefix *h* and to aspirate an initial tenuis, the tenuis re-appearing in the past and future, but being aspirated in the imperative, though the *h* is dropped. A medial after *h* in the present becomes tenuis in the past and tenuis aspirate in the imperative, and remains medial in the future, the prefixed *h* being confined to the present. But *p'* seems to be preferred to *p*, and *d* in the present becomes *z* in the other parts.

The past tends to prefix *b*, sometimes *d*, the future *b*, *d*, or *g*, the choice of the prefix being determined in part, at least by euphony.⁴ The past also often subjoins *s*, which naturally denotes it by signifying from (32). Thus:

indic. pres.	past.	future.	imperative.	
<i>hgel</i>	<i>mkał</i>	<i>dgal</i>	<i>k'ol</i>	load
<i>hk"ag</i>	<i>mk'ags</i>	<i>mk'ag</i>	<i>k'oŋ</i>	keep
<i>ht'ig</i>	<i>mtigs</i>	<i>mtig</i>	<i>t'ig</i>	drop
<i>hdul</i>	<i>mtul</i>	<i>gdul</i>	<i>t'ul</i>	subdue. ⁵

The verb has no element of person, being, according to De Kőrös, properly a participle.⁶ The imperative is sometimes strengthened by subjoined precativè syllables.⁷

The participle present, whether taken adjectively or substantively, subjoins to the verbal stem the singling participle *pa*, *ba*.

The noun of the agent sometimes subjoins to the verbal stem, *byed* to do, or *mgan* of similar meaning, with or without the article *pa*.⁸

Active verbs are formed from neuter by changes in the radical syllable. The active seems often to prefer *s* or *g* as prefix of the present to *h*, and sometimes the tenuis to the medial as initial of the radical syllable.⁹

The substantive verb in the present may be expressed with any noun by subjoining the final consonant of the latter reduplicated with *o* after it.¹⁰ The verb to have is expressed by *t'od*, to be there, with the dative or locative.¹¹

¹ Kőrös, sect. 130.

² Ibid. sect. 133.

³ Ibid. sect. 138.

⁴ Ibid. sects. 19-23.

⁵ Ibid. sects. 138-153.

⁶ Ibid. sect. 160.

⁷ Ibid. sect. 135.

⁸ Ibid. sect. 128.

⁹ Ibid. sect. 155.

¹⁰ Ibid. sect. 157.

¹¹ Ibid. sect. 160.

There is no passive form, but an active verb, with its subject in the stem form, expresses the passive.¹ Frequentatives are expressed by repeating the verb.²

The auxiliary verbs most frequently used are *byed* to do, and *hgyur* to grow.³

37. It is a remarkable feature in Tibetan that an active or causal verb requires before it the instrumental case instead of the nominative without itself taking any passive element, as *rygal 'po's gsuñ'no*,⁴ the king commands; *pos* is instrumental of the emphatic article *po*; *gsuñ'no* is indicative present of *gsuñ* to command; by the king command takes place.

A neuter or intransitive verb takes the nominative (*i.e.*, the stem of the noun); and the nominative is used when the verb governs the dative in *-la*.⁵

The only pure elements of relation are the postpositions of case and a few conjunctions.⁶

The substantive in general precedes the adjective, and the verb stands for the most part at the end of the sentence.⁷

The article or singling particle is expressed sometimes when speaking definitely both after the substantive and after the adjective, sometimes it is dropped after both.⁸

The genitive precedes its governor, the article being generally expressed after the latter; but when the two combine in one word, as is very usual by dropping the genitive element, the article also is dropped.⁹

When several words are connected in a sentence they seldom require more than one case element, and that comes last.¹⁰

38. On comparing Tibetan with Burmese it will be observed, that whereas there is in Burmese a certain approach to the existence of roots such as belong to the Indo-European languages, this is not found in Tibetan. The Burmese verb or adjective never occurs except in combination with other elements; it expresses of itself only part of an idea. The elements of tense and mood are external additions to which the mind passes in completing the radical idea of the verb; and they are almost independent thoughts, because only a light fragment of the radical idea is present along with them to the mind. But in Tibetan the one mental act can comprehend not only the whole radical idea, but also the element of the past, of the future, and of the imperative. This shows that the verbal stem involves in the idea which it expresses a sense of the being or doing, which differs in the past, the future, and the imperative, and which is not involved in the stem of the Chinese verb. Yet the mind does not so spread into this element as to be conscious of adding it to the radical idea while this is still retained in the consciousness, but embraces it in the one act of thinking that idea, so as to preserve the characteristic singleness of thought.

¹ Köros, sects. 163, 164.

⁴ Ibid. sects. 170, 222.

⁷ Ibid. sect. 193.

² Ibid. sect. 166.

⁵ Ibid. sect. 170.

⁸ Ibid. sect. 196.

¹⁰ Ibid. sect. 200.

³ Ibid. sect. 171.

⁶ Ibid. sects. 184-188.

⁹ Ibid. sects. 197, 199.

Such being the fulness of single acts of conception of the integers of thought, the combination of added elements with verbal and nominal stems cannot be taken as due to the mind leaving the latter before they are fully thought and completing them in a second act in which it thinks the added element. It must arise, on the contrary, from the mind passing to some extent into the latter without leaving the former, and indicates somewhat greater largeness in the acts of thought than belongs to the Chinese.

And thus the structure of Burmese and Tibetan, while marked with the Chinese singleness, deviates from Chinese on the one side, and on the other, Burmese restricting, Tibetan enlarging, the elements thought by the mind in its single acts; as if, according to the theory of Book I., chapter i., the Burmese had somewhat more quickness of mental excitability than the Chinese, and the Tibetan somewhat less; and this seems quite to agree with the fact (see p. 81).

JAPANESE.

39. In the Japanese language thought seems to spread still more widely than in Tibetan, so as to have a still larger object present, all at the same time to the mind. And the language consequently loses that singleness in its words which in so great a degree characterises the languages of this section.

40. The Japanese consonants are : *k, g, t, d* (which latter become *t', d'*, before *i* and *u*), *t', d', f* (which in some dialects has become *h*, and in the middle or end of a word changes to *v* or *w*), *p, b, y, s, z, s, z, n, r*; the Yedo dialect nasalises and palatalises the utterance. The vowels are *a, e, i, o, u*; and the diphthongs *au, ou, eu*; ¹ *i* and *u* are weakly sounded,² and *t'* is assimilated to *k, s, t, or p* following it.³

When two vowels meet, one is apt to be dropped to avoid hiatus. There is a tendency to assimilate the vowels of successive syllables in whole or in part. When a word beginning with a tenuis follows another word in a compound noun, the tenuis generally becomes medial; but this does not take place in a compound verb. There is a dislike to have successive syllables beginning with the same consonant. *M* and *b* are interchanged; and *n* is occasionally vocalised into *u*.⁴

41. Compound substantives and adjectives are frequent, the defining or the governed component going first.⁵

There is no grammatical gender; but there are prefixes of sex, *o-* for the male, and *me-* for the female, or the attributive genitives of these *ono-*, *meno-*, sometimes reduced to *on-*, *men-*. The ideas of sex are sometimes transferred to objects without sex, characterising one as big, strong, rough, the other as little, weak, mild.⁶

¹ Hoffmann's Japanese Grammar, p. 12-18.

² Ibid. p. 20.

³ Ibid. p. 18.

⁴ Aston's Japanese Grammar, p. 14-16.

⁵ Hoffmann, pp. 49, 50.

⁶ Ibid. p. 51-53.

There is no proper element of plurality ; it is expressed by nouns denoting class, company, series, subjoined to the stem as defined by it.¹

Great use is made of singling particles. "Every one who for the first time hears a Japanese harangue, is struck by the continual repetition of the little word *wa*, which, pronounced in a sharp and high tone, and followed by a pause, breaks off the equable flow of words, in which the speaker then proceeds in his ordinary tone of speaking. It makes the impression that the speaker would emphasise what he has just said, and separate it from what follows ; and that impression is correct. We do the same when we raise the voice at some word, and after a pause continue speaking in our ordinary tone."² This particle *wa*, *va*, *ba* is equivalent to the English expression, as to, with regard to ; and it is sometimes necessary in order to hinder a noun from coalescing in a compound with the next word.²

The particle *ga*, which singles out with emphasis in Burmese and Tibetan, has a similar significance in Japanese, in which, however, it is more connective or arthritic (Def. 7) than *wa*. Hoffmann indeed takes *ga* as expressive of a genitive relation, but the account which he gives of it shows plainly that it is pronominal, referring to the noun which it follows to connect that noun with its correlative. He says : "It is in pronunciation sharp-toned, sets forth the object as something taken in a definite sense, and has the effect of, of the."³ Moreover, it is used with the nominative, as in Burmese, though Hoffmann endeavours unsuccessfully to reduce such nominatives to the genitive.⁴ It is more emphatically definitive than *wa*.⁵

An attributive genitive, which gives the noun the character of an adjective, is expressed by subjoining *no* or *na*, which Hoffmann considers to be cognate with *ni*, to be.⁵

The other case suffixes are elements of relation. The accusative, if definite, has after it *wo*,⁶ which is sometimes used with the indirect object when the direct object precedes the verb without any particle of case ;⁷ *ni* signifies in, in relation to, to, with ; *nite* or *de*, the instrumental and the locative ; *ye* or *ve*, *gari*, towards ; *made*, as far as ; *gori*, *kara*, from ; *to*, to. All other expressions of relation except these and one or two simple conjunctions are nouns or verbs.⁸

42. There are no proper personal pronouns, nouns implying different degrees of respect having taken their place. Other pronouns are formed from the following elements : *wa*, demonstrative of the centre of space, and therefore of self ; *a*, anywhere else ; *ka*, there ; *ko*, here ; *yo*, yonder, beyond ; *so*, a place already mentioned or thought.

The interrogative element is *ta*, *to*, *it'u*, *du*, *do*, *id'u*.

The above elements compound with certain nouns, which they precede as defining them, especially with an abstract noun of existence *re* from *ari*, to be. And they become attributive by taking the genitive particle *no*. There are also interrogative pronouns, *nani*,

¹ Hoffmann, p. 53-58.

² Ibid. p. 60.

³ Ibid. p. 63.

⁴ Ibid. pp. 64, 65.

⁵ Ibid. p. 66.

⁶ Ibid. p. 62.

⁷ Aston, p. 48.

⁸ Ibid. p. 46-50 ; Hoffmann, p. 67-72, 185, 327, &c.

what, and *ika*, how? And *mono*, which means thing or being, is used as an indefinite.

The reflexive element is *onore*, individuality, from *ono*, single; or *mi*, body, person.

There are no relative pronouns.¹

43. If the quality expressed by an adjective is thought as present in the substantive object from the beginning, then the adjective in its radical form precedes the substantive, compounded with it in one word.²

But if the quality is attributed to the object as not present in it from the beginning, the adjective is thought more participially, and takes a formative termination which seems generally to involve in its meaning a sense of verbal process. Such a termination is *-ki*, which, according to Hoffmann, means being so as the radical part denotes.³

The adjectives in *-ki* may be used substantively, and are then declinable. If an adjective of this class is used as an adverb, the termination becomes *-ku*. Singled out by the particle *va*, the adverb acquires more emphasis.³

The adjective as predicate takes *-si*, which expresses the copula in the present tense. If other parts of the verb be needed, the continuative verb *ari*, *aru*, to exist, is subjoined to the adverbial *-ku*, which drops its *u*.⁴ From these adjective verbs in *-si*, a noun is formed by the use, as in Tibetan, of the singling particle *va*, and then *-si va* is contracted to *-sa*.⁴ In the spoken language the *k* and *s* of these terminations are dropped.⁵ Adjectives are also formed with *-karü*, *-garü*, a fusion of the adverbial *-ku*, with *arü*, being; *-karü* is a predicative form, *-karü* an attributive. To nominal stems also, and to the cases of nouns, *-arü* may be subjoined. The adjective termination *-ka* denotes the quality in a large degree, *-yaka* having the appearance of it, *-keki* very, *-siki* like or *-ly*, *-beki* what may or must be.

The negative *na*, prefixed to a substantive or adjective, changes its meaning to the contrary. Degrees of comparison are expressed by adverbs.⁶

44. The numeral in counting precedes what is counted, and numeral auxiliaries are used, as in Chinese, which may either precede or follow the noun.⁷

45. Every verbal stem terminates in *e* or *i*, *i* changing to *a* or *o* in certain cases in which *e* remains unchanged, so that verbs are classed by the grammarians as deflecting or non-deflecting. To the latter class belongs also a group of about forty verbs which are formed by a non-deflecting element *i*.

When different propositions are co-ordinated together all in the same mood and tense, all the verbs except the last are used in the stem form. The verbal stem also may take the case suffixes as a substantive.⁸ With the locative suffix *ni* it expresses a contemporaneous condition, and is singled out by *va*, the deflecting *-i* changing

¹ Hoffmann, p. 72-104.

² Ibid. p. 105.

³ Ibid. p. 106.

⁴ Ibid. p. 107.

⁵ Ibid. p. 112.

⁶ Ibid. p. 113-136. †

⁷ Aston, p. 28.

⁸ Hoffmann, pp. 198, 199.

to *e*. A gerund is also formed by subjoining to the stem the local modal instrumental *te* or *de*.¹

The imperative ends in accented *e*, into which deflecting *-i* is changed; non-deflecting *i* subjoins *yo* or *sai*. When followed by *kasi* or *gana* it has the force of an optative.²

If a verb closes the sentence, as the verb of the sentence, the final *e* or *i* becomes *ū*.³ There is no element of person.

Used substantively as infinitive or attributively as participle, the deflecting verbs change *i* to *u*, the non-deflecting subjoin *-ru*, which has a continuative significance.⁴

A future is formed by adding *-me* or *-mu* to the stem, or *-n*, which is vocalised to *-u*, the *i* of deflecting verbs being changed to *a* or *o*; *-mi* also forms denominative verbs of becoming, and the defective *-mi* changed to non-deflective *-me* expresses the causative of these.⁵

Auxiliary verbs also are used to express the future;⁶ and the future in *-n* is strengthened by adding *-su do*, the *s* taking up *n* and becoming *z*.⁷

The use of *-ru* in the infinitive and attributive of non-deflecting verbs as equivalent to *-u* of deflecting, shows that *u*, like *-ru* (43), is an element of process; the deflecting verbs are those which involve more sense of process in the idea of them, the non-deflecting those which involve less; the latter, therefore, when it has to be expressed, take it as an added element. The final *e* or *i* of all verbal stems which Hoffmann calls the proper verbal element⁸ is expressive of process.

And the many derivative verbs ending in the continuative verb *-ari*, as Hoffmann calls it,⁹ show the tense of process pervading the language.

There is one past tense in *-ki*, and a past infinitive or participle in *-si*, both subjoined to the stem. And there are also derivative verbs of completion; as *-tari*, contracted from *-teari*, *te* expressing completion, akin to *t'uru*, finish;¹⁰ also *-ri* attached to deflecting verbs, their *i* being changed to *e*. Indeed, the past formation in *-ki* is treated as a verbal stem and forms a future, *-ken*; *ki* means to come and *si* to go.¹¹

The element *-si* suffixed to the verbal stem, the *-i* of deflecting verbs being changed to *-a*, forms a causative verb; *-sime* forms verbs of progress of causation, as of order or inducement; thus *ni*, to be; *nasi*, to produce; *nasasi*, make to produce; *nasasime*, order to have made.¹²

Verbs are also formed by subjoining *-ki* or *-si* to *-tari*.¹³

The verb *ni*, to pass away, may be subjoined to a verb, and may itself take the continuative *-ri*, making a future, *-nan*, shall pass away, and *-nuran*, shall be passing away; or the completive *-ki*, whose future will be *-niken*, shall have passed away.¹⁴

The verb *ari* means to be, *ori* to dwell, *i* to be in.¹⁵

The so-called passive may be thought either as an impersonal state of being affecting an object, or as a state of passion inhering in a

¹ Hoffmann, pp. 202, 206.

² Ibid. pp. 199, 200, 265.

³ Ibid. p. 200.

⁴ Ibid. p. 201.

⁵ Ibid. pp. 208, 210.

⁶ Ibid. p. 212.

⁷ Ibid. p. 213.

⁸ Ibid. p. 198.

⁹ Ibid. pp. 107, 217.

¹⁰ Aston, pp. 66, 98.

¹¹ Hoffmann, p. 220-225.

¹² Ibid. p. 234-239.

¹³ Ibid. p. 228.

¹⁴ Ibid. p. 229.

¹⁵ Ibid. p. 260-264.

subject.¹ It is most usually formed in deflecting verbs by changing *-i* to *-are*, and in non-deflecting verbs by adding *-rare* to the verbal stem.

But deflecting transitive verbs can also become passive by changing *-i* to *-e*, and the non-deflecting transitive verbs in *-i* by adding *-e* with or without *y* before it. Some deflecting verbs in *-i*, change *i* to *a* or *o*, and add *-ye*; this termination *e* is a non-deflecting verb which means to get.²

The Japanese negative is *n*; but in affecting a verbal stem it takes up *si* and becomes *zi*; thus *ake*, to open; *akezi*, not to open; *akezari*, to be not opening; *akemazi*, will not open. The *-i* of deflective verbs becomes *-a* before the negative. The prohibitive is expressed by the substantive form of the affirmative verb, followed by *na*.³

Ni is equivalent to our copula; its gerund is *nite*, future *nan*.⁴

O or *on* is an honorary prefix much in use; and there is great development of respectful words.⁵

The verb readily coalesces in composition with what precedes it as object or as subordinate qualifying definition. And it is to be observed that the direction of an action, which is expressed in Latin and Greek by a preposition in composition, is thought in Japanese as the principal verb, and is preceded by the action as a subordinate definition.⁶

46. It is important in connection with the subject of this chapter to inquire how far the above formations of derivative and compound verbs indicate a spreading massive character of thought. Now even the causative verb combines the element *-si* so loosely with the radical part, that if more causative verbs than one occur together, the causative element goes only with the last,⁷ and is therefore only partially combined with the last, as it refers also to the others. The radical stems are all fully thought before the mind leaves them; but it does not leave the last till it has partially thought along with it the causative element. Into this thought spreads while still retaining the radical stem; but it spreads into it only to a very partial extent. The same may be inferred as to the other formations. So that the mind with the verbal idea present to it spreads, so as to include with the verbal idea a notice of the added element, joining it on and then passing to it.

47. The nominative stands at the beginning of the sentence, and the verb at the end; the qualifying word precedes the qualified, and the governed the governing; dependent clauses precede principal clauses; definition of time precedes that of place.

A suffix or inflection common to two or more inflected words is put with the last only.

A particle emphasising the subject or an interrogative particle reduces the closing verb to its attributive form; and if the emphatic particle be still stronger the closing verb will end in *e*.⁸

Examples: (1.) *Ame no iwa-kura wo oši hanat'i ame no iwa*
 heaven gen. firm seat accus. thrust remove heaven gen. firm
 door thrust open heaven gen. eight-fold cloud accus. issue from might gen. way
oši-hiraki ame no ya · e · kumo wo id'u id'u no t'i
 cleave in thousand cleave ger. heaven descend approach caus. upright wait past
waki ni t'i · waki · te ama · kudari yosa · se · tate · mat'uri · ki,

¹ Hoffmann, p. 245.

² Ibid. p. 240-242.

³ Ibid. p. 247-251.

⁴ Ibid. p. 269.

⁵ Ibid. p. 311, &c.

⁶ Ibid. pp. 309, 310.

⁷ Aston, p. 78.

⁸ Ibid. p. 76-78.

they caused him to thrust from him heaven's eternal throne, to fling open heaven's eternal doors, to come down from heaven, having cleft a thousand-fold in cleaving mightily his way from out of (them) heaven's eight-fold clouds; ¹ the causative element *se* affects the verbs *osi hanat'i* and *osi hiraki* as well as *yosa*, the former being stem forms, the latter being *yori* with its *i* changed to *a* before the causative, and *r* euphonicly to *s*; *kudari* is a stem form qualifying *yosa* as *osi* qualifies *hanat'i* and *hiraki*; the first *il'u* is participial (45); the second seems to be a different word, and though given above for clearness, is omitted in the original, such omission of a repeated word which has to be supplied being considered an ornament of speech (Aston compares Thackeray's *devoteapot* for devotee-teapot, meaning teapot presented by devotees); *tatema'turi* is a reverential verb, the object being a

male old hon. child to speak manner how? being place in interrog. god. (2.) *O · kina mi · ko ni mōsu yō*; *ika naru tokoro ni ka*
 this attr. tree singl. be past fut. interj. -ly grace -ful love -ly indef. pron.
ko · no ki wa sorai'ke · n; *aya · siku uruwa'siku mede'taki mono*
 is thus speak hon. child answer ger. order

ni moto mōsu; *ni · ko kotaye · te notamawaku*. The old man's manner of speaking to the prince. In what manner of place was this tree? wonderful, graceful, lovely thing it is, he said. The prince said in reply; ² *mōsu* is infinitive, in a how being place? *kono* is an attributive or adjective pronoun (42); *sorai'ken*, shall have been, the future expresses without asserting; *mōsū* is closing form (45); *notamaku* is the honorific for say; *kotayete* is gerund (see 45), *te* cannot here signify before last year gen. second month gen. ten day time on completion. (3.) *Sa · oto'dosi no kisaragi no tō · ka'goro ni*

from ship in go ger. ocean midst in go out ger. go fut. direction
Naniwa yori fune ni nori'te umi · naka ni ide · te yukan kata
 even know not think be so to fixed plan be neg. ger. world gen. midst into go
mo sira'zu oboye'sika'do omou koto nara · de yo no naka ni iki
 indef. pron. isol. do fut. to think be so isol. only vain wind to trust ger.
nani'ga wa se · n to omoi'sika · ba tada muna'siki kaze ni makase'te
 go on

arikū, on the tenth day of the second month of the year before last embarking in ship from Naniwa, going out into mid-ocean, resolved to do *something*, to go out into the midst of the world without fixed plan, though perhaps to feel ignorant even of the direction to go, (we) go on trusting only to the vain winds.² This example is in continuation of the preceding one. It forms a complete sentence, yet there is no subject. The definition of time comes first; *goro* seems to be an abstract noun of time, it occurs in the adverb *t'ikagoro*, lately; ³ for the gerund in *te* see 45; *yukan* is from the verb *yuki*, go; *n* expresses the action thought prospectively, *i* being changed to *a* (45); *sirazu* is from *siri*, know, whence *sirazi*, not know, and of this *sirazu* is the attributive form (45); *oboye* is the passive or inactive form of *obo*, think; *narade* is negative gerund, the *te* of the gerund being changed by taking up the negative *n*; *sen* is future formation of *si*, being irregular, for *i* is changed to *e* instead of to *a*; the future element *n* belongs to *iki* also, but is expressed only with *sen*; *wa* emphasises *nani'ga*; *sika* is taken by Hoffmann as an abbreviation of *sikari*, be so, the continua-

¹ Aston, p. 97.² Ibid. p. 99.³ Hoffmann, p. 179.

tive formed from the adjective termination *-siki*, like, *-siki'ari*;¹ *muna*, empty = *mi* kernel + *na* without; ² *ariki* is closing form of *ariki* (45).

gen. country from come compl. man forehead on horn be ship
 (4.) *Amana nō kuni yōri ki taru fitō fitai ni t'ano ari funé*
 in go ger. gen. to go away compl. cause for this place
ni nōri-té Yetzizen no Finoürá ni t'uki tari, yūe ni kono tokoro
 to call

T'unoka to nad'ükü, horns were on the forehead of men come from the country of Amana, 'going in a ship (they) reached Finoura of Yetzizen, consequently (people) call that place T'unoka; ³ *kitaru* is the participial form of *kitari* completive verb from *ki* (45); *to* points to what they call the place; *nad'ükü* closing form of *nad'uki*. (5.)

I this goods accus. that price at isol. sell be habit. neg.

Wataküsi kono siná wo sono nedan de wa uri mase nū, I do not sell these goods at that price; ⁴ *watakusi* is explained by Hoffmann ⁵ as formed of *wa*, self (42), and *takusi*, desire; *masi* means to dwell. this way much in practise pass. part. to seem compl.

(6.) *Kono mi'ti sakan ni okonav are ru to mi'ye tari*, it seems that this way is much practised; ⁶ *to* points to what seems; *miyetari* is the completive form of *miye*, which is a passive of *mi*, to see (45).

water isol. east towards throw pass.

(7.) *Mid'u vá figásí yé nag ar-ü*, the water flows eastward; ⁷ *nagarü* is the closing form of *nagare* the passive of *nagi*,

but its meaning is rather neuter than passive. (8.) *Mid'ü ügōka*
 water move
 caus. pass.

s ar-ü, the water is disturbed. This may also be expressed
 accus.

thus, *mid'u wō ügōka's ar-ü*, there is disturbance affecting the water.⁷

man accus. seat country to send pass.

(9.) *Fitō wo moto kuni ye t'ukava's aru*, the man is sent to his own country; ⁸ *moto* means seat, domicile; ⁹ *t'u* means go away, ¹⁰ *t'uki* in Example 4 has a similar meaning, *t'ukavi* is used for ambassador; ¹¹ *t'ukavasi* is causative send, *t'ukavaruru* the closing form of the passive; the passive subject is in the accusative, there is a being sent

to his own country affecting the man. (10.) *Kono fitō kanarazu*
 greatness attrib. gen. fire by err caus. pass. fut. to say be

oni no tamé ni madova s are n to iwa'ku, it is said that this man will certainly be misled by the devil; ¹² *kanarazu* thus divided by Hoffmann, ¹³ seems to consist of the demonstrative *ka*, there, and *naran*, the strong future of *nari*, be, with *su*, to do, suffixed to it (45); *to* points to what is said; *ku* seems to be the closing form of a verb of being *ki* (43).

¹ Hoffmann, p. 345.

² Ibid. p. 121.

³ Ibid. p. 221.

⁴ Ibid. p. 246.

⁵ Ibid. p. 80.

⁶ Ibid. p. 246.

⁷ Ibid. p. 245.

⁸ Ibid. p. 246.

⁹ Ibid. p. 84.

¹⁰ Ibid. p. 231.

¹¹ Ibid. p. 238.

¹² Ibid. p. 247.

¹³ Ibid. p. 181.

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