Linguistic relationship on three levels

(The Position of Basque Within the Structure Type I)

What is meant by linguistic relationship? The question may seem irrelevant and needless in view of its connection with the long history of Comparative Linguistics, while recently the degree of kinship between any languages is being calculated with mathematical exactness. The term relationship evidently suggests similarity of a certain kind, but even this term is a rather vague one. If two languages are mutually understandable, they may be rightly considered as similar and hence related. In linguistics, however, several kinds of relationship have been accepted according to various basic principles, of which the two most notable----and certainly in many respects most irreconcilable-ones are those of historic relationship (based on historic identity of words and largely adopted by the classical comparative linguistics) and the kind of relationship which in want of a better term may be referred to as lexicostatistic (based on mere similarity of words). Either conception of linguistic relationship is however, as will be seen, quite insufficient, as neither covers all aspects of mutual affinity existing between given languages or even gives an adequate picture of its true nature. Restricting ourselves to the type of relationship generally considered in comparative linguistics, we first of all notice that the term "relationship" is from the beginning based on facts arrived at in a strictly mechanical way, by application of mechanical laws, whereby not mere similarity, but a historical identity of forms is secured, under the control of phonetic laws 1. The operation of these laws is conditioned by the assumed existence of underlying earlier linguistic forms, whence comparative linguistics also becomes historic linguistics. In this way linguistic affinity is conceived as of some standing in the history of a language and therefore assumes a more concrete and demonstrable reality. However, the affinity of two languages is still merely conceived as one of integrant words, in disregard of the entire structure of the languages.

¹ The present writer regards the validity of "phonetic laws", as usually acepted in comparative linguistics, in a slightly different light, which is however immaterial for the purpose of the present paper.

The degree of historic relationship of languages, which is based on the historic affinity of the word and form material ---whether estimated by a method of calculation or realized intuitively- has characteristically become the guiding principle in the establishment of a genealogical classification of languages. The notion of a genealogical relationship as existing between any languages is, however, much older than the science of comparative linguistics. The fact is often overlooked that every science and every theory have their own history, which may go far beyond the stages where their principles are molded by logical reasoning. The various historic-comparative methods, as well as those of lexicostatistics, have made a late appearance in linguistics; the idea of a genealogical relationship of languages, on the other hand, goes back to a period in which linguistics as a science was not as yet thought of. It is quite evident that our universally accepted way of depicting linguistic affinity —although admittedly a mere graphic representation of facts— is nothing but the ancient idea of a people or nation (with its personified ancestor) being descended from another (or its personified ancestor) according to the relation of "father" and "son" (compare still "mother" and "daughter" languages), as described for instance in Genesis². Strangely, it is this Babylonian, and hence near-antediluvian, conception of linguistic relationship which has prevailed until recently, being particularly adhered to by modern linguists (presumably owing to its being more easily handled as a basis for mathematical operations) in preference to the far more realistic theories of diffusion of linguistic elements from a culturally dominant center toward a periphery.

Whether because it is realized or not that the genealogical theory is merely schematic, linguistic relationship in modern times is traced still along another line. In this way various theories of a *typological* relationship have arisen. The most general among these are the more or less abstractly created theories of a congeniality in the morphological-syntactical structure, hence a species of structural kinship observable on different levels, or from different points of view, as for instance those of Friedrich von Schlegel and W. von Humboldt (involving such concepts as an "isolating", "agglutinative" or-"inflectional" type)³ or the still more abstract theories of Ernvst Lewy (involving such concepts as "Atlantic", "Central", "Balkan", "Eastern" or "Arctic" languages)⁴. Incidentally, both theories (the one based on more abstract structural similaries) still coexist insofar as there are those who may

 $2\,$ "These are the sons of Ham, after their families, after their tongues, in their lands in their nations" (Gen. x: 20).

4 See LEWY, 1942, with a map on p. 17.

³ See Humboldt, 1836-40.

maintain that English is not to be classed as an Indo-European language in the same sense as for instance German, owing to having a widely different type of sentence structure and a simpler type of morphology (in which respects German approaches the classical Indo-European languages and Sanskrit).

Common to the various perspectives under which linguistic relationship and subsequent classification of the languages is viewed, according to the mentioned theories, one principle will be found to prevail more or less implicitly, namely that any language forms a solid unit, determined in space and time. This fundamental idea is, of course, perpetuated in the theories of "glottochronology", in which the "age" of a language is looked upon, at least indirectly, as a concrete reality (incidentally, a language may quite naturally "die", of which there are numerous instances, to be dated at least approximately, whereas it would be a preciaryous undertaking to determine —except conventionally, as by tracing the history of the current use of a particular name of a language— the date on which its birth may have taken place). As a matter of fact, a language is not in any sense a unit, but in all its aspects it comes forth and grows gradually and, above all, not at a uniform rate, some words and forms being considerably older than others having a merely ephemeral character, which together would make any notion of the age of a language plainly visionary.

Looking more realistically at the matter and in spite of some of the theories just mentioned, it appears entirely out of question to consider language as a homogeneous structure and so much the more so if we take into account the numerous so-called "loan words" occurring in practically all languages of the world. In order not to be forced to abandon the theory of linguistic unity altogether, the loan words (whenever identifiable) are made to constitute a group of alien elements in a language, wivthout a proper right of citizenship, so as to speak, and much by analogy with the occurrence of alien matter in a living organism. The problem of loan words (or loans rather, since it is not exclusively a matter of borrowed words) is, however, a most complicated one. Whenever a word is found in a language which does not reveal a structure or type of derivation current in that language, whereas it agrees on any of these points with another language, there is good reason to assume that such a word is genuine in the latter language, but not in the former, and that it has, as a matter of fact, been taken over from the latter by the former. It has hence been borrowed and is a loan. But does this mean that whenever it is impossible to see any such relation between words in any two languages, one has to assume that the words in question are indigenous? Evidently not. In the first place, a word may be of such a type that no indication is shown of its provenience. It may appear subject to native phonetic patterns or even native morphological patterns and yet not be a native for-

[3]

mation, having been brought into the language from somewhere else at such an early epoch as to have become entirely assimilated in structure, having its identity and origin absolutely hidden. A borrowed word may even show apparent connections with the native vocabulary, to give a still stronger impression of being part and parcel of the language in which it is found. It is by no means unlikely that we have such a case in the English verb 'to have' (found in the other Teutonic languages as well, e.g. in German haben). This verb reveals a notable similarity to the Latin verb of the same meaning, namely *habere*; even inflected forms of this verb singularly approach corresponding inflected forms in some of the other languages (a speaker of the Old High German of the eighth century, for instance, would use the same form for '(thou) hast', that is Old High German habes, as the Romans of the classical period). The English 'have' shows all the signs of being a native Saxon word: it is one of the commonest in the language (often serving as an auxiliary), it has an irregular conjugation (*has, had,* etc., *much by analogy* with *leave*, *left* or *feel*, *felt*) and may finally (althoungh with some phonetic and semantic difficulties) be brought into etymological connection with other Teutonic word stems (notably that of 'heave', related to Latin capere). On the other hand, it must be considered that the idea of 'having' does not seem to be a very old one in the Indo-European languages: the Latin habere has several concrete meanings (such as 'wear', 'hold', etc.)^s, while the more abstract 'have' (expressing ownership) is more generally expressed by the construction mihi est ('I have', etc.), which is the only possible one in Gaelic (tha agam) and Russian (u men'a jest')). There is, in short, rather good reason for thinking that Teutonic (Gothic) haban is both formally and semantically borrowed from Latin. In the same way probably hundreds of other words of almost all word classes may in reality be borrowed from some other language (naturally one more advanced culturally). In these circumstances it becomes evident that it is rather meaningless to divide the word inaterial, as well as the entirety of morphological elements, into native and borrowed; as pointed out by the author in an earlier connection 6, from a certain point of view everything in language may be considered as loan, that is that no language is exempt from the influence of the surrounding ones.

The preceding introductory remarks have been made in order to obtain a more true picture of the structure of language by and large, which is necessary to an elucidation of the import of the term relationship. It is in the first place true that if relationship is based on the mutual agreement of vocabulary, borrowed elements must be considered as well, since it is impossible

188

⁵ Cf. the Spanish tener, Portuguese ter 'have', from Latin tenere 'hold'.

⁶ In HOLMER, 1949, p. 10.

to draw definite limits between these and supposed native elements, as far as early stages of the language are concerned. If, as in the case of for instance English and French, the number of morphological analogies are in no proportion to the number of vocables common to both languages, a discrepancy arises which may prove inconvenient in case a classification of the languages is desired, or else one would have to speak of two kinds of relationship: a lexical and a morphological (or grammatical) one. Instead of this, the present writer would suggest to speak of relationship *on different levels*, according to a long upheld theory to be resumed in the following sections.

Returning to the assumption of a heterogeneity in language, appearing in a diversified phonetic, morphological, lexical and syntactical structure, it is necessary to keep two particular points in mind: (1) in the first place, the form material or alternatively the concrete (phonetic, morphological and lexical) elements and the abstract (syntactic) elements are of various age and provenience, whereby the heterogeneous structure of any language may be established; (2) secondly, all of these elements are subject to change during the historic evolution of any language. Both of these postulates require further elucidation and illustration by means of examples in order to be accepted.

As for the heterogeneity (which includes relative age) of the various elements constituting a language, anyone would probably agree to accept a different age and provenience of the concrete word material, which would be substantiated and justified in consideration of evident loan words (demonstrably derived from any particular language) and possibly also a reasonable number of less evident cases of loans (of which neither the loan word character nor the origin may be proved). But what about phonetic and morphological elements? There can hardly be any doubt as to the comparatively late acquisition of certain phonemes in one or several languages, although this point is not to be directly proven for any particular case. By indirect evidence, however, one may arrive at the conclusion that certain phonemes in a number of Indo-European languages have a late origin, namely certain palatalized sibilants, fricatives or affricates of the type (English) sh, ch, j (also represented in Italian and partly in the Scandinavian languages), (Frisian) ts, (French and Portuguese) ch, j, (Spanish) ch, etc., seeing that no safe indication of their existence is found in earlier stages (Old Teutonic, Latin). However, it is not only presumable that these sounds have a secondary and consequently later origin than the majority of phonemes in these languages, but a theory might even be ventured regarding their Oriental origin: since so much in Indo-European seems to have a connection with and be derivable from the Semitic and Hamitic languages (Arabic and Hebrew, etc.) it is hardly farfetched to suspect a phonetic influence from this source,

where different kinds of phonemes of this type are long established ⁷. As for the secondary, and hence later, origin of morphemes, or grammatical elements, examples are hardly necessary: the English conjugational termination in the third person singular -s (has, does, etc.), the French first and second person singular -s (suis, fais), the Spanish first person singular -y (soy, doy, etc.) are clearly new morphological elements, more or less readily derivable from older elements in Teutonic, Romance or Latin. Although the syntax of a language is hardly more than an evolution of the morphology (or a morphology on a higher level), it night be worth while to mention such innovations in Modern English as I am saying, thinking, writing, etc. (for a plain present form in Anglo-Saxon) or French je vais partir (for je partirai, itself an innovation in the Romance languages), il vient de partir (for a passé défini or other past tense form).

The circumstance that everything in language changes, undergoing an evolution, has never been questioned and is directly observable on every level, but especially within the phonology, where the changes are so regular that it is possible to establish phonetic laws (or preferably: tendencies). The sound laws are conceived as mechanical. The change undergone by the sounds of a language is, however, directly based on the change of speech habits, which ultimately depend on imitation. The regularity of the changes modifying the phonetic system of a language is due to the force of analogy, which may be observed in a concrete way in cases of more or less conscious imitation: if anyone should pronounce (consciously) the word 'girl' as 'goil', he would be almost sure to pronounce the word 'curl' as 'coil', and so on. The limit between conscious and unconscious is, however, not a very clear one; most changes in speech habits are no doubt unconscious, but we still cannot exclude the element of an analogical evolution. The substitution of -s for older -th in English (as in 'has' for 'hath') is an independent occurrence, while the spreading of -s to all third person singular forms is due precisely to analogy. The evolution of the "strong" conjugation in English and other Teutonic languages is in most stages due to an analogical evolution, which goes on until our days. This means that morphological changes either by the evolving of a characteristic formative (often in cases where the original form is no longer perspicuous; cf. English 'her', 'ours' for less clear 'her', 'our'-notice the difference between 'take her' and 'take hers') or by generalizing a more frequent one (English 'cows' for older 'kine' or 'kye') are not necessarily connected with a general trand in phonetic change, while the momentum of analogical formation is ever present.

⁷ In Coptic, sibilants and affricates partly evolve from k or g sounds (that is as in French and many other European languages), cf. TILL, 1961, pp. 5-6.

The changes in vocabulary in the first place follow the phonetic evolution (Anglo-Saxon hús becomes English 'house' because a long u becomes ou and Latin factum passes into French fait because Latin ct becomes French it), but these simple facts do not account for every change in the vocabulary. The word for 'tongue' in the Indo-European languages shows widely different forms in which the middle element (palatal) *-gh(u)- forms a nucleus: compare Latin lingua, Anglo-Saxon tunge, Russian jazyk, Sanskrit jihvā, Old Irish teng(a)e, all of which show different initial sounds (*l-, *d-, *g-, *tor a nasal element); if all these words have an identical origin, one must assume that the original form has changed considerably in the different languages and quite independently of respective phonetic trends. There can hardly be any doubt as to the part played by various kinds of analogy in the history of the formation of the mentioned words⁸.

With these facts in mind, we are prepared to analyze the meaning of linguistic relationship. The term evidently refers to similarity, due to contact between languages (or peoples), existing during various periods. According to the closeness of the contacts, various degrees of relationship naturally arise. The term relationship (or kinship) still does not refer to biological relationship between the speakers of the languages, as both linguists and anthropologists will aver that genetic or racial contacts have nothing to do with linguistic or cultural contacts. A language is "descended" from another only in the sense that a number of constituent elements "go back" to corresponding ones in an earlier form of the language, appearing different in consequence of those mechanical changes of which the principles are partly explained in the preceding section. As these changes take place in different sections of a heterogeneous linguistic structure, they occur on different levels (the phonetic, morphological, lexical, etc.). The present author at one time proposed a rough cross section of functions in relation to age strata in a morphology ⁹; whether or not his rather intuitively framed theory is correct or reasonable, it would still not be valid if taken in an unrestricted sense, as too many exceptions would be liable to appear. In the present treatise of the problem we shall exclude the aspects of phonology and lexicon and restrict ourselves to the morphological aspect: facts in phonology, which indubitably represent a low stratum in language (a basic phonology often has an important geographical extension, affecting the structure of various languages and linguistic

8 It has been thought, for instance, that Latin lingua owes its initial l- to an association with the verb lingere 'to lick' possibly supported by the occasional interchange of -d- and -l- in the Italic languages (Latin odor, olere); a similar relation exists between latin labium, labrum 'lip' and the verb lambere 'to lick'.

⁹ In Holmer, 1949, pp. 11-12.

groups) ¹⁰, cannot be co-ordinated with morphological facts and, on the other hand, the vocabulary (representing the latest and most changeable stratum in a language) merely serves as a material on which the various morphological principles are brought to operate; reasons have already been given for disregarding the aspect of syntax. Our analysis is consequently an exclusively morphological one.

One central problem related to stratification within a linguistic structure ought to be more particularly elucidated. When we speak of levels or strata we actually refer to different things: (1) chronology (that is older or recent parts of a language) and (2) functional type (the parts according to their morphological function). This is because it is natural to think that certain sections in the grammar of a lenguage, for instance the system of personal pronouns, are more elementary than certain others or --outside the morphology- a system of kinship terms. By "elementary" we connote a greater relative age, less variability (for instance between related languages) and a wider expansion (also within related groups of languages). According to this we obtain a direct and immediate interrelation of the concepts of (1) chronological stratum, (2) variability or resistance to material change and (3) territorial expansion. Let us simplify these statements by the following typical examples (we shall choose three representative Indo-European languages, or linguistic groups, viz. Latin, Greek and Gothic, the phases to be considered being (1) the system of personal pronouns and (2) the tense and mode system in the conjugation of the verb).

We notice that the forms of the 1st and 2nd person singular of the personal pronoun in the nominative and oblique cases all reflect primitive forms to be reconstructed as respectively *ego (nominative), *me- (oblique forms), *tu (nominative), *te- (oblique forms), corresponding to English 'I', 'me', 'thou', 'thee', and the same holds for certain reflexive forms (not found in English), based on a stem *se- (Latin se, sibi, Greek he-, Gothic sik, sis), while the remaining forms (1st and 2nd persons plural) deviate considerably in all of the mentioned languages. Turning to the conjugation, we shall find that the tense system in Latin and Gothic is entirely different: past time (perfect and imperfect) is expressed in Latin either by old (perfective) formations in -s-, -k- or zero (dixi, feci, vidi), partly corresponding to analogous

192

¹⁰ e. g. non-distinction of the l and r sounds in the Pacific area, passing of original *p into h in Japanese and Hawaiian, etc., loss of pre-plosive nasals in the same area, often with voicing of the plosive (as in Japanese), etc. (cf. Note 27)—it ought perhaps once more to be made clear to those who are unfamiliar with the author's point of view that we are not concerned with sounds, but with a phonetic system and evolutionary tendencies. For the interrelation of territorial expansion and chronology, see in a further context in this paper.

forms in Greek¹¹, or by secondary (imperfective) formations, probably with an auxiliary *fuam* (in an originally imperfective sense: *amabam*, etc.) or, finally, an imperfective form in $-\bar{a}$ - (eram and perhaps the mentioned fuam). In Greek the corresponding tense forms are expressed by either the mentioned (aorist or perfective) formatives (-s, -k- or zero) or an (imperfective -e/o-) formative, also used in present forms ¹². In Gothic past tense is expressed either by a zero formative, analogous to the one in Latin vidi, Greek oida (cf. above; hence Gothic wait 'I know' = oida) or by a secondary formation, probably by forms continued in English 'do', 'did', used as an auxiliary verb (Gothic habaida, habaides = Latin habebam, habebas). One will notice in the conjugation system of the mentioned languages at the same time a generally greater diversity, implying a later and secondary origin of several of the forms quoted, along with a lesser degree of resistence of older forms and a reduced areal extension of current forms ¹³. (As we shall see in a later context, the same observations can be made within quite a different linguistic area, namely that of Torres Strait and Cape York in Australia.)

While in the cases mentioned the system of personal pronouns consequently represents one (lower) level within the morphology of three Indo-European languages and the system of tense and mode formation another (and higher) level ("lower" being used in the sense of 'more basic or fundamental' and "higher" in the sense of 'later or secondary'), no special criterion of 'basic' and 'secondary' can be found, serving for a general establishment of stratification. There is no generally valid rule or tendency to be discovered according to which personal pronouns represent the basic part of a morphology rather than certain aspects of the conjugation. As a matter of fact. we inted to deal with problem from a different angle. We shall regard the individual morphological forms as they exist as belonging to the highest level (that is the final result in the building up of the morphology). which means that in the cases mentioned above, both Latin ego and amabam (as they stand) belong to this level, signifying that both pertain to the same period in the history of the language. (However, without denving that ego may have an earlier origin than *amabam*, as this seems quite evident.)

11 Latin feci does not appear to have an expressed characteristic of the perfect tense (as the -c- goes through the paradigm: facio, facere), but a comparison with Greek justifies the assumption that the norpheme -c- has perfective character.

¹² Certain of these formatives are admittedly old, but are late as expressions of a specific temporal function; notice especially that of $-\bar{a}$ - in Latin *eram*, *fuam*, dealt with by the present autor (HOLMER, 1959 a, especially Note 15, on p. 12).

¹³ One might conclude from the preceding analysis that the evolution of the tense and mode systems in the Indo-European languages is secondary and later in comparison to that of the personal pronouns (cf. especially the reduced conjugation system in Hittite), but this actually falls outside the problems dealt with here.

Now to go further down the series of levels, we leave the individual concrete forms and look at the system in which they enter: *ego* represents the nominative form of a first person singular pronoun—the singular number is perhaps irrelevant, as the corresponding plural form, *nos*, has nothing to do with it formally—in a system comprising theree persons and a set of cases (more or less defined in number and function). In the same way *amabam* represents the first person singular imperfect indicative in a conjugation system having six persons —not necessarily to be divided into singular and plural— and a certain number of tenses and modes, etc. (the systems can be defined as much in detail as is desirable). It will be found that on this level Latin and Greek morphology approach where they disagree on the higher level: the number and types of personal pronouns, as well as conjugational categories, are in the main the same even where corresponding concrete forms, expressive of the same categories, go widely apart.

Continuing a step lower down the scale of structural levels we reach the one where the basic morphological categories are reduced to (1) a concrete or determined part and (2) an abstract or determining part, joined together to express certain relations (not to be specified here)¹⁴. It might be possible to illustrate this by attempting an analysis of the words mentioned in the preceding section, in such a way that Latin ego is assumed to have a concrete part eg- (recurring as such in Greek and Gothic) and an abstract part -o (analogous to, but different from, the termination of the Greek forms $eg\bar{o}$, $eg\bar{o}n$) and it might in the same way be possible to analyze the Latin amabam into a concrete element am-, combined first with an abstract element $-\bar{a}$ and secondly with a concrete -bam (to be analyzed further into a concrete and abstract part). This kind of combination of concrete (determined) and abstract (determining) elements further appear in the Greek verbal forms elelukein, hestekein, in which we find the concrete elements -lu-, -ste- in the same position as the Latin am- in regard to the elements -k- and -ein (which -on this level- answer to the Latin -ā- and -bam, respectively, although not functionally or in the quality of parallel categories). By using a method of «comparative structure», on will find that such formations in the verbal system have a still wider areal extension, appearing for instance in Armenian *sirei* (= *amabam*), to be analyzed as (concrete) sir- (= am(a)) and (concrete) -ei (= -bam or *-fuam), the latter functio-

¹⁴ The use of 'determined' and 'determining' here does not quite agree with the author's analysis in 1966 a, where what we here call 'determining' corresponds to the subject part (hence the determined part) and what we call 'determined' here, to the predicate part (hence the determining part). The usage in this paper is more in agreement with grammatical usage in general.

nally answering to (and probably formally identical with) the Greek -ein quoted above.

It must not be understood that meaning and function of the elements analyzed in this way are altogether without significance: the division into concrete (determined) and abstract (determining), parts would in the first place be impossible without any kind of semantic considerations. The real difference between the analysis on this level and on the immediately superior level is that no complete system of further specified categories are involved: the Armenian -ei is certainly the Greek -ein (as they both mean 'was', latin eram) and is further built up (although not visibly) in the same way by combining a concrete element (-ei = -ei-) with an abstract element (zero = -n), but they enter into different systems within the conjugation, in Armenian making an imperfect (by analogy with Old Slavonic)¹⁵ and in Greek a pluperfect (not existing in Armenian). In order that a comparison should be valid the character of the elements must be reasonably identical and not merely showing a mechanically visualized similarity.

The importance of this segmentation of the morphological system into different levels, whether established chronologically or structurally, may be seen in a typological classification. It is evident, for instance, that two languages in which the integrant parts (whether a word stem, that is a lexical unit, or a morphological element) are formally identical or evidence an identical origin show a *close relationship* (as seen for instance in Latin *amabam*, Spanish amaba, Portuguese amava), established on the highest level. On this level two languages may be mutually intelligible. It is also evident that two languages having the same or analogous categories within any section of the morphology are in a sense related (as for instance Latin and Arabic, in respect of the existance of a nominative, genitive and accusative case: Arabic baitu(n), baiti(n), baita(n), answering to Latin domus, $dom\overline{u}s$, domum)¹⁶. On this level we may say that the forms are mutually translatable. The definite article in some European languages forms a special morphological category, since in spite of incongruent usage on many points it is generally translatable from one language to another, showing besides historic

15 Cf. Old Slavonic neseach \breve{u} (= ferebam) and beach \breve{u} (= eram), where the initial b- is probably inorganic (being taken over from the aorist form bych \breve{u} = fui), from nesti (= ferre); cf. HOLMER, 1959 a, p. 9.

¹⁶ The analogies are, as is to be expected, never complete; in this case, ho=ever, sufficiently so to justify a traditionally accepted identical terminology. It should, perhaps, be mentioned in this connection that cases of coincident morphological categories are not seldom paralleled by coincident formatives: in the above case the Arabic -n reflects a Semitis *-m, which when added to the accusative form (baita) results in a form having an Indo-European aspect, which may or may not be coincidental. (The use of the same -m in the nominative and possesive is hardly more remarkable than the use of IE -m in the nominative of neuter stems.)

NILS M. HOLMER

connections as derived from demonstrative pronouns. The European article may further, for the same reasons, be ranged with the Semitic and Hamitic articles, as of the same category, while particles, often referred to as "articles", in the Pacific languages form a category or their own. The latter, having no connection, either functionally or historically, with demonstrative pronouns, are basically classifiers, determining the type of word, but not its definitude in the European sense¹⁷. The use of a verb 'to have' as an auxiliary forming a perfect tense in several modern European languages is reflected, as marking a special grammatical category, in later Greek (where it may actually have originated). Relationship on this level, which we consider as typological, may for the same reason be more or less close, according to the number of cases in which agreement of morphological categories may be observed.

In cases where analogies of linguistic structure are reduced to a general relation between determined and determining elements, yet in the absence of congruent morphological categories, we may speak of a typological relationship on a still lower level. In the Semitic languages (e.g. Arabic) a concrete morpheme (which may be nominal or verbal) is usually clearly identifiable through its structure (having three basic consonantal elements, with intercalated vowels, often alternating according to rule), while the abstract or determining elements are monosyllabic, one-consonant morphemes; the determining elements may either precede or follow the concrete stem. The same basic structure is found in Austronesian. The Arabic manzil 'stopping place' (from the root $\sqrt{n-z-l}$, cf. nazala 'descended') is consequently built up as the Tagalog magaling 'good' (from galing 'excellence'), the Arabic sûdân (Sûdân) 'Negroes, blacks, Sudan' (cf. 'aswad 'black') is built up as the Tagalog pasukan 'time for entering' (from pasok 'enter') and, finally, Arabic mutakabbir or istakbar 'haughty' (cf. kabira 'has grown (old)') like the Tagalog makaupô 'to sit' (from upô 'sit'), etc. 18. The difference in structure is evidently greater on this level in general; the degree of affinity ---if relevant at all- will depend on the degree of congruence of formative elements. On this level we may merely speak of morphemes being comparable.

Otherwise, no hierarchic relation exists between these levels, as may be seen from various of the examples quoted (especially for our two lower, or typological, levels). Without taking into account mechanical changes,

¹⁷ Cf. HOLMER, 1966 b, pp. 15-16; CAPELL, 1962, pp. 12-13; 53-54. The function of Spanish el and la is classificatory in, for instance, el amante, la amante, but this fact does not preclude its being essentially definitive and analogous to the English 'the', which never classifies.

¹⁸ For occasional *formal* agreement of determining elements in otherwise unrelated languages, cf. in Note 16.

which may have altered the aspect of the morphologies, formal agreement or analogies may be found in individual cases between two languages, quite independent of their general structure on a lower level. In two Australian languages (studied by the present writer), which must certainly be considered as mutually unintelligible and hence akin on the middle level, the simple phrase 'drink water' is rendered equally by *gali dala*, the integrant words further to be analyzed into identical morphemes (proving etymological identity), which indeed outdoes the often quoted Persian-English parallels: *-am* 'am', *bad* 'bad', *dokhtar* 'daughter'.

In this connection the etymology of the morphemes (as far as it can be determined) has a certain importance: the Tagalog kaalaman 'wisdom', kalipunan 'association' (from alam 'knowledge', lipon 'group'), in which the prefixed determining element ka- undoubtedly expresses an idea near to that of Latin con- (cum), Gothic ga- and the final determining element -an is decidedly nominal or nominalizing, is still not, as a historic analysis will prove, structurally comparable to Latin consociatio or German Gewissen, for the mere reason that the Tagalog ka- (as a preposition) belongs to the following stem (alam, lipon), while the Latin (original postposition) conrefers to something preceding: *(me)cum sociatio or the like (and probably similarly in Gothic)¹⁹.

It is consequently understood that a consideration of meaning and function is not disregarded in the structural analysis on this level —unlike what used to be emphasized by a certain group of linguists some decades ago 20 . It is further understood that an analysis on the lowest level does not consist in a mechanical comparison of assonant words and forms in the most diversified languages, as might perhaps be concluded from some of the examples quoted above. In the first place, our analysis is based on a distinction of concrete (determined) and abstract (determining) morphemes (cf. above): this excludes a structural comparison of for instance Arabic *manzil* and Latin *mansio* (English 'mansion') of the same meaning, since in Arabic the concrete part is *-nzil* and in Latin *man-* (the abstract elements *ma-* and *-sio*, respectively, playing a similar part in the derivation), or Arabic jins 'kind, gender' and Latin genus, since in the former *-s* is part of the root

¹⁹ The Tagalog compound would hence denote something like (in)to a group-ship' (if it could be said), while the Latin one would denote '(someone)-with pantner-ship'. For the analysis of such compounds containing a postposition or preposition, cf. HOLMER, 1966 a, 14.2 (p. 67), with the Note 63.

²⁰ Although, for evident reasons, "meaning" was accepted tacitly, as when on one occasion the present writer ventured the question "How do you know that *duchess* is derived from *duke* and not from *duck*?".

and in the latter a derivative suffix ²¹. Furthermore, in addition to the above distinction of determined and determining morphemes at large, the latter may be divided into two subordinate categories, namely (1) morphemes indicating *person* (pronominal elements) and morphemes indicating *locality* (adverbial or, using the author's preferred term, adnominal elements) ²². Other categories may equally be discerned, although generally limited to a certain group of languages ²³.

The difference between morphemes referring to person and to locality, which actually involves some complicated points, has been dealt with variously by the present author and the reader may most conveniently be referred to a paper printed in Fontes Linguæ Vasconum, vol IV (1970), páginas 41-47. On this division of determining morphemes into two main categories the present author has based his classification of linguistic structures into four types²⁴. We shall not enter here on a characterization of these types, but limit ourselves to some remarks on the first of these types (Type I). which is supposed by the author ---whether correctly or not--- to be the earliest one to appear among the linguistic types found represented today (of extinct types we have, of course, nothing to say). Our Type I is certainly interesting owing to its particular distribution, being mostly represented outside Europe and adjacent parts of Asia and Africa or, in brief, outside the domain of the Old (or classical) World, where it is found typically isolated, chiefly in the Caucasus (for instance Georgian) and the Pyrenees (Basque), but in many other parts of the world also its appearance is scattering. It is in fact its widely scattered appearance on the map that suggests an ancient complex type on the point of disappearing in most areas, being ousted by later (and usually simpler) linguistic types. A brief look at the map affixed to the author's paper referred to above (and in Note 24) will show the isolated appearance of Type I in Europe and the Caucasus, whereas the main representation of the type is on the American continent, whence anyone will probably doubt the reality of an affinity on any level between these widely separated languages. It is true that Basque missionaries, having lived among American Indian tribes and made a study of their languages, have been aware of similarities with Basque ---unfortunately not always in an entirely scientific manner as when a native word puru (alter-

²¹ We are not concerned here with the problem whether any primitive relationship exists between Semitic $\sqrt{g-n-s}$ and Indo-European *gen.

²² Cf. HOLMER, 1966 a, § 4.5 (with references in Note 23).

²³ One of these categories would be the so-called "prefix vowels", which show a wide distribution throughout the world in languages belonging to a certain type, among them in Basque also (see HOLMER, 1970 a, p. 29 [24], with the Note 85).

²⁴ Cf. HOLMER, 1970 b, pp. 41-47 [1-7], with a map on p. 46.

natively actualized as *buru*) meaning 'head' is identified with the corresponding Basque word; as a matter of fact similarity of vocabulary would not count at all in a structural analysis on our lowest level. It remains now to see on what principles the inclusion of Basque and Georgian in this peripheral type of language, represented in America and parts of Oceania, is based.

Let us consider an almost antipodal (from the Basque point of view) member of the type, mamely a language spoken in Torres Strait (between Australia and New Guinea), called by the inhabitants meriam mir or the Murray Island (mer) language 25, which was briefly studied by the author while some years ago in Australia. The Torres Strait area is interesting linguistically, being situated in the border area of Australia and New Guinea. The latter is predominantly "Papuan" (by this vaguely defined term we mean a group of languages of the author's "red type" (Type I) and hence different both from the majority of Australian languages and surrounding Melanesian languages in the coastal areas of New Guinea). Murray Island is at the northern end of the Great Barrier Reef, about equally distant from Australia and New Guinea. Other islands, as for instance Saibai, are linguistically of the precailing Australian ("blue") type (Type II), even though quite close to the New Guinea coast ²⁶. Although geographically neighbors, the Torres Strait islanders are hence divided linguistically into two groups, whose languages are mutually unintelligible. Closely related phonetically, both languages show a phonetic structure quite different from the Australian one: differentiation of voiced and voiceless plosives (e.g. Saibai gub 'wind', Murray Island ged 'land, home, island'; Murray Island mut 'noise' is hence different from mud 'shadow') 27 . The phonemes s and z (which are missing in Australia) exist in Torres Strait (Saibai and Murray Island sager 'southeast', Saibai za (dza) 'thing') and the typical Australian η is missing on Murray Island; Saibai has (apart from the five basic vowels: a, e, i, o, u) an additional vowel sound not unlike French eu (which we represent here by ö): köi 'great, big'. Stress is not distinctive, but a slight tendency prevails to stress second initial syllables: Murray Island wagéde 'the wind' (ergative), metáge 'in the house', ikáda 'took', darásmerare 'look at them' (cf. Basque,

25 CAPELL (1969, pp. 14-15, 76, 157) calls it miriam (perhaps after S. H. Ray), but the form heard by the present writer is definitely meriam.

 $26\,$ It was said by the natives of Saibai that the island is so close to New Guinea that the drums could be heard across the water when feasts were held in the latter place.

27 In some—perhaps all—New Guinea languages the voiced plosives evolve from a nasal followed by a homorganic (undifferentiated) plosive; cf. Holmer, 1971, p. 9. A similar evolution takes place in some Melanesian languages and also in Japanese (cf. HASHIMOTO, 1948, pp. 5-6; the nasal is still conserved in northern Japanese, in some parts giving rise to a nasal vowel before the voiced plosive).

NILS M. HOLMER

in parts of Navarre). In point of grammar, Saibai approaches the Australian Cape York languages: the following forms of the personal pronouns could almost be Australian (affinity on the highest level): *nai* 'I' (nominative, *nat* 'I' (ergative), *nana* 'me', *naika* 'for me', etc. (notice that both Saibai and Murray Island have ergative forms of the nouns: Saibai guban, Murray Island wagede '(by) the wind', from respectively gub, wag 'wind'). The conjugation system is, however, very different from that of the Cape York languages known to the author ²⁸.

The morphology of the Murray Island language (Type I) is more interesting and far more complicated than that of Saibai (Type II). While nominal and pronominal declension is as on Saibai, that is by suffixed elements: *narge* 'in the boat' (*nar*), *kari* 'me', *kara* 'my, mine' (from *ka* 'I'; cf. Basque *nire* (*nere*) from *ni*), the conjugation of the verb constitutes the intricate part of the morphology ²⁹. Apart from possible derivation formatives (cf. *-kuei-*'stand', *-kueili-* 'raise' ?), the Murray Island conjugation system comprises (1) modal (rather than tense) suffixes, (2) personal (and analogous) prefixes and (3) vowel elements (*-a-*, *-e-*, *-i-*) usually intervening between the personal prefixes (mostly a single consonant) and the verb stem; the latter (as customarily in Type I languages) is often monosyllabic and of simple structure ³⁰.

Among the first category of formatives we find the suffix -*i* expressing perfective (or past) action: compare *natagri* 'have told you' and *natager* 'tell me', *natagre* 'will tell you'; *irwi* 'ate (before)' and *ero* 'eat' (imperative), *eroe* 'will eat', *eroli* 'eating'; *nargi* '(a snake) bit me', *irgi* 'bit him' and *nareg*, *wereg* 'will bite me, him'; *nakuari* 'gave you' and *nakuar*, *ikuar* 'give me, him' (imperative), etc. Parallel to the perfective form in -*i* we find imperfective (present or future) forms in -*e* (as seen in some of the verb forms quoted above). In some verbs an imperfective -*li* alternates with a perfective -*i* or -*rer* (the imperative being in -*r*) ³¹, as in: *nasoli* 'I hear you' or 'you hear me' (cf. *nasor* 'listen to me'); *ereli* or *irili* 'drinking' (cf. *ere*, *eri* or *iri* 'drink', *iri* 'drank') ³².

31 One might suspect that this -li is a form of the verb stem -li 'to be' (cf. nali 'I am, you are'), of which the perfective or past form is in -er: nawer 'I was, you were', dawer 'he was, we two were', etc.

²⁸ In this respect the situation is very much analogous to what we have found in the Indo-European languages, in dealing with Latin, Greek and Gothic.

²⁹ The author must, however, admit that he has not entirely penetrated this part of the Murray Island morphology. Some further information on the subject may be gathered from S. H. Ray's material in *Report of the Cambridge Anthropological Expedition to Torres Strait* (Cambridge 1931-35), vol. III, also quoted in CAPELL, 1969, pp. 14-15, 73-77.

³⁰ See Holmer, 1970 a, p. 14.

In the personal conjugation (that is where grammatical person is expressed by bound elements in the conjugation forms) two points are to be observed: (1) there is no formal (or etymological) connection between the stems of the independent personal pronouns (ka 'I', ma 'you' (singular), ki 'we' (exclusive), mi 'we' (inclusive), wa 'you' (plural), etc.) and the elements expressing person in the conjugation (n-, d-, etc.) and (2) the latter elements do not answer semantically or functionally to the former ³³. From our point of view (or from the point of view of Basque) these personal morphemes in the conjugation appear rudimentary. In the New Guinea Kiwai language (on the Fly River and supposedly related to *meriam mir*) two basic forms only are used: a 1st person one (in n-) and a common 2nd and 3rd person one $(in r-)^{34}$. This is not quite so —according to the author's material— in the Murray Island language. There are certainly two basic prefixes (on Murray Island these express either the subject of an intransitive verb or the object of a transitive verb), but they seem to refer on the one hand to either a 1st or 2nd person singular (n-) or, on the other hand, to various other persons in the singular, dual or plural $(d_{-})^{35}$, as is seen in the following examples: nali 'am, are (art)', dali 'is, are'; nasmili 'can see me or you (thee)', dasmili 'can see him', etc. 36. According to this one will notice that subject forms of transitive verbs are not expressed by a bound morpheme (it may be expressed by an independent personal pronoun; cf. aboce-incidentally pronouns may be used with any inflected verb form: ka nali, ma nali = Latin ego sum, tu cs, Basque ni naiz, i aiz). By analogy with Basque (e.g. dagit, dagik, dagigu, dagizu) Murray Island also uses suffixes; the latter, however, seem to have a somewhat different function, referring to number rather than to person (that is like the Basque -e, -te, -de, -z) ³⁷. As in Basque, these appear to refer either to subject, object or agent of the verbal action, as in the case of Murray Island -are (plural), -ei (dual): darasmerare 'look at them' (cf. dasmer 'look at him'; the import of -ra- is

32 In forms where the vowel -e- alternates with -i-, we possibly have cases of "vowel leveling" (cf. HOLMER, 1960). In the same way, the prefix vowel (cf. below) may be either -e- or -i-, depending on the quality of the stem vowel (much according to the same principles as in Basque *ikusi* for *ekusi*).

34 CAPELL (1969, p. 74) refers to these as respectively "inclusive person (i. e. speaker)" and "exclusive person (i. e. person addressed or referred to)".

35 Since initial r- does not occur on Murray Island (any more than in Basque), it might be suspected that the forms in n- and d- actually correspond to the Kiwai n- and r-, respectively (the latter being changed to d- in the initial position).

36 The analogy with Basque is intriguing: nali = Basque naiz, dali = Basque da, nasmili = Basque nakus, dasmili = Basque dakus(t), etc. The principles are evidently the same; as for formal similarities, cf. Note 16. One may compare S. H. Ray's account (quoted in CAPELL, 1969, pp. 76-77), but on the whole the data do not answer quite to ours.

37 Cf. Holmer, 1970 a, pp. 26-27 [22-23].

[17]

³³ Cf. CAPELL, 1969, p. 74.

NILS M. HOLMER

not clear to the writer), *dirsirare* 'you all will make' (cf. *dirsir* 'you (singular) make it', *nole nariare* 'don't you (plural) drink plenty' (cf. *iri* 'drink one cup', *nari* 'drink plenty') ³⁸, *iezweyei* 'they two are crying' (cf. *nole iezo* 'don't cry').

The presence of «prefix vowels» (cf. Basque and Georgian) ³⁹ in the Murray Island language is observable in two ways, formally and semantically. The appearance of alternating prefixes of the type da-, de-, di- reveals the characteristic structure of Basque and Georgian (cf. Note 39). Compare: dardare 'will see him' and derdari 'saw us two', nasoli 'hears me' and desoli 'hears us', darsire 'will make' and dirsir 'make' imperative), dirsirda 'you (plural) made', dakuarda 'will give us' and dikuarda 'gave us', dagre 'will chase him' and digri 'chased him'. In all these cases (with allowance for possible misunderstandings or minor inaccuracies) the functional character of the vowels -a-, -e-, -i- is clear. Looking at the same morphemes from the semantic point of view, the following conclusions may be drawn, especially regarding the occurence of the vowel -i-, of which various functions are perceptible: (1) a causative, (2) a perfective and (3) a dative-purposive (or causal) function. The most clear one is causative: compare imri 'set, put' and emri 'sit', ikuei- 'stand, raise something up' and ekuei 'stand'; further irdi 'make him lie down' (without a corresponding intransitive form). The perfective (past) sense is seen in: irwi 'ate' (cf. eroli 'eating', erweda 'are eating'), irgi 'bit him' (stem -reg-), iri 'drank' (cf. eri 'drink' and some of the examples quoted above). It is possible that a semantic relation exists between the causative and perfective sense, to which parallels are found in the American Indian languages ⁴⁰. The dative or purposive function may be found in: ikuar 'give to me', ikuali 'is feeding him', dirsirara '(you all) are going to make (a boat) for (me), (stem -rsir-), dikepwoli 'thinking about him or her', iezoli 'crying for'. A relation between this sense and the causative sense may also exist 4^{1} . In any case, the prefix vowel -i is common in the New Guinea languages to express an indirect object 42.

Although the main points in the above discussions are clear enough, much confusion arises through the intermingling of various mutually unrelated functions (action, time, person, number, etc.). Further, the personal prefix *n*- always requires the prefix vowel *-a-: nasoli* 'hear me, you' as

³⁸ The prefix na-, used to indicate 'plenty, more than one', seems different from the person-expressing na-, also cf. naisa 'he took all' (ais 'take it').

³⁹ For this term, cf. Holmer, 1970 ə, pp. 29, 35 [25, 31], with the Notes 85, 99, 100, where references will be found.

⁴⁰ Cf. Holmer, 1947, pp. 121-22; 1951, § 13 (p. 52), with the Note 37.

⁴¹ See HOLMER, 1970 a, p. 25 [21], with the Note 68; 1959 b, pp. 404-408.

⁴² Cf. HOLMER, 1971, p. 35 and Note 107.

against esoli 'hear him', desoli 'hear us two', naroe 'eat me or you' as against ero 'eat', eroe 'will eat', nargi 'bit me' as against irgi 'bit him', nami 'I, you sit' as against imi 'he sits', dimi 'we two sit', etc. With this may be compared itimed 'push (the boat) out' and atimedlu 'I will push it' (the connotation of a st person is rather in the hortative -lu). Examples of this kind of irregularities have been quoted above.

It is often maintained --- and not least among the Basques themselves--that the Basque language has no relatives. After having perused the preceding pages one will realize that this statement made regarding the affinity of Basque to other languages is true in a sense only. It is perfectly correct to say that no relationship exists on our *highest* level between Basque and any other language-an exception may be made for the extinct Aquitanian, which may have been intelligible to speakers of Basque, although unfortunately we have no means of checking to what extent a modern Euskaldun would have managed in a conversation with an Aquitanian of Caesar's days 43. In his preious article in *Fontes*, the present writer has pointed to a considerable number of analogies between Basque and Georgian⁴⁴. If those observations are reasonable, one might assume a degree of affinity between these two languages which would be referred to our *middle* level, implying that many points in the morphologies of these languages are translatable 45. Considering the Murray Island language, the situation is, however, again different and it is quite beyond doubt that the intelligibility and translatability (still in the above sense) between the two languages is limited. The comparability of the morphology is, however, undeniable. Both languages are in many details precisely pictured representatives of the present author's Type I. We can look at the matter in still another way: if Basque has no linguistic neighbors on the immediately comprehensible level, the Basque speaker should find no insurmountable difficulty in acquiring the complicated grammar of Georgian and, further, should find the equally complicated Murray Island language at least reasonable from a morphological point of view.

Nils M. Holmer

- 43 Cf. MICHELENA, 1961, pp. 50-51.
- 44 See Holmer, 1970 a, pp. 5-40 [1-36].

45 Translation can, of course, always be made from one language to another, albeit with different degrees of difficulty and accuracy. What is meant here by 'translatable' refers to items of morphology: the Basque egin dut nik answers very closely to Spanish lo he hecho yo, although nik does not cover the meaning of yo (which may also be ni in Basque). As a category, the ergative has no counterpart in any other European language (whereas, as we have seen, it reappears in Torres Strait).

RESUMEN EN ESPAÑOL

Tratando el concepto de parentesco lingüístico sobre tres niveles, el autor inicia su análisis dando un resumen de varias teorías de afinidad genealógica, por un lado, y por otro lado de métodos para clasificar las lenguas según tipos lingüísticos, empezando con las teorías de W. von Humboldt, expuestas en su famoso tratado sobre el kawi de la isla Java (1836-40). Pasa enseguida a la concepción de la lengua como unidad homogénea enfrente de la concepción de la lengua como un sistema heterogéneo, en que los elementos integrantes son de edad y procedencia diversas, quedando justificada esta última concepción en primer lugar por la existencia en todas partes de préstamos lingüísticos, entre los cuales algunos, siendo de antigüedad remota, aparecen velados y bien disimulados dentro del conjunto de componentes vernáculos de un sistema lingüístico (se propone una conexión del inglés have, alemán haben con el latín habere, como préstamo primario). Sigue una referencia a un análisis presentado hace años por el autor, según el que determinadas secciones del sistema de una lengua corresponderían a distintas capas cronológicas en la estructura de la lengua, colocándose, por ejemplo, elementos de carácter fonético entre los más remotos y elementos lexicales entre los más recientes. En vista de ciertas complicaciones que surgen al comparar elementos fonéticos y lexicales con elementos morfológicos, se propone aquí un nuevo modo de analizar la estructura lingüística, desde otro punto de vista y limitado solamente a aspectos de morfología, todavía contándose con distintos niveles.

En concreto, hacemos el análisis sobre un nivel *supremo*, limitándonos a considerar las formas actuales dentro de una morfología, según el método de la lingüística comparada (aunque no presuponiendo necesariamente un origen genealógico de las analogías que existan). En este nivel, se supone que formas análogas son mutuamente *inteligibles*: latín *amabam*, español *amaba*, portugués *amava*. Se hace el análisis sobre un nivel *mediano* cuando se limitan las comparaciones a categorías morfológicas, sin respecto a formas concretas (comparación tipológica). En este nivel, formas análogas son —hasta en sus partes integrantes— *traducibles*: inglés *I have made*, francés *j'ai fait*, español yo he hecho. Se hace, por fin, el análisis sobre el nivel *infimo* cuando se limitan las dichas categorías morfológicas a dos clases elementales: parte determinada (concreta) y parte determinante (abstracta), tratándose de cualquier forma morfológica. En este nivel, formas análogas son mera-

204

mente *comparables*: árabe Sûdân 'Sudán' (de 'aswad 'negro'), tagalo pasukán 'entrada' (de pasok 'entrar').

Añadiéndose a esta segmentación morfológica una diferenciación dentro de las partes determinantes, de morfemas relacionados con la designación de *persona* (en primer lugar los pronombres personales) y de morfemas relacionados con la designación de *lugar* (en primer lugar casos, tiempos y modos), se obtiene una base para la clasificación tipológica de las lenguas, integrando los cuatro tipos estructurales que quiere ver el autor dentro del conjunto de las lenguas; véase, por ejemplo, en FLV, núm. 4 (1970), páginas 41-47.

Se finaliza este estudio, haciéndose una comparación, sobre nuestro nivel ínfimo, del vascuence con otro idioma perteneciente al mismo tipo estructural (el tipo I del autor), a saber el *meriam mir* (idioma de Murray Island), hablado en una isla del estrecho de Torres, por supuesto emparentado a un grupo de lenguas del Fly River, en la Nueva Guinea, y brevemente estudiado por el autor durante su estadía en Australia. No siendo él partidario de las teorías genealógicas en general, no será preciso convencer al lector de estas páginas de que las analogías estructurales que cree ver entre los dichos idiomas, no sean indicio de algún parentesco genealógico entre los dos pueblos, sino que se limitan al plano tipológico, indicando un tipo lingüístico que tiene sus raíces en una remotísima antigüedad.

WORKS REFERRED TO

CAPELL, A.

- 1962 The Polynesian Language of Mae (Emae), New Hebrides (Linguistic Society of New Zealand). Auckland.
- 1969 A Survey of New Guinea Languages. Sydney.

HASHIMOTO, S.

1948 Koku-go on-in no ken-kyu. Tokyo.

HOLMER, Nils M.

- 1947 Critical and Comparative Grammar of the Cuna Language (Etnologiska Studier, vol 14). Göteborg.
- 1949 Lexical and Morphological Contacts Between Siouan and Algonquian (Lund Universitets Arsskrift, N. F., section 1, vol. 45, No. 4). Lund.
- 1951 Cuna Chrestomathy (Etnologiska Studier, vol. 18). Göteborg.
- 1959 a On the Indo-European Optative (Contributions from the Linguistic Seminars, vol. 3, No. 13). Lund.
- 1959 b Sobre algunos problemas de lingüística histórica vasca (BRSVAP, vol. 15, No. 4). San Sebastián.
- 1960 On Vowel Leveling in Chukchi and Austronesian (Contributions from the Linguistic Seminars, vol. 3, No. 14). Lund.
- 1966 a The General Structure of Language (Contributions from the Linguistic Seminars, vol. 5, No. 23). Lund.
- 1966 b Oceanic Semantics (Australian Essays and Studies, vol. 5). Lund.
- 1970 a A Historic-Comparative Analysis of the Structure of the Basque Language (FLV, No. 4). Pamplona.
- 1970 b The Principal Linguistic Types (FLV, No. 4). Pamplona.
- 1971 A Comparative Typological Analysis of a New Guinea Language (Australian Essays and Studies, vol. 7). Lund.

HUMBOLDT, W. VON

1836-40 Ueber die Kawisprache auf der Insel Java. Berlin.

LEWY, Ernst

1942 Der Bau der europäischen Sprachen (Proceedings of the Royal Irish Academy, vol. 47, section C, No. 2). Dublin.

MICHELENA, Luis

1961 Fonética histórica vasca. San Sebastián.

TILL, Walter

1961 Koptische Dialektgrammatik. Munich.