

A historic-comparative analysis of the structure of the basque language

INTRODUCTORY

If *comparative linguistics*, in its currently accepted sense, may prove that the termination of Greek *híppos* or Latin *equus* is historically identifiable with the final *-s* of Gothic *dags* or *-r* of Old Norse *dagr* ('day') or that the termination of Greek *pódes* has the same origin as the final *-kb* of Armenian *otkb* ('feet'), then *comparative typology*, or 'comparative (typological) structure',¹ in the sense given it by the present author, pretends to show that the morphological categories expressed by, for instance, Latin *scribens* and *scribentes* are historically identifiable with those expressed by respectively Arabic *kâtibu(n)* and *kâtibû(na)*, of the same meanings, although the corresponding morphological elements (*-s*, *-es* and *-u*, *-û*) are formally quite different and unconnected. Conversely, while comparative linguistics may disprove the historical connection of the Armenian «demonstrative article» *-s* ('this, the') and the Gothic *sa* ('this, that, the') or the final 's' of English 'this', for instance, comparative typology may make evident that the morphological functions expressed by Basque *gizonek* ('man, men') and *gizonak* ('the men') do not cover those of Latin *homo* and *homines* (as in *homo fecit*, *homines fecerunt*). The conclusions arrived at by this method are, however, not entirely based on a semantic argumentation, but depend in a large measure on formal considerations also, for it is reasonable to assume (with Brockelmann) that the Semitic nominative *-u* (*-û*) is originally a form of a third person pronoun (cf. Arabic *huwa* 'he') just as it is plausible to hold (with Specht) that the Indo-European nominative *-s* is a form of the demonstrative **so* ('this, that, he'). Comparative linguistics thus analyzes and compares concrete linguistic forms, while comparative typology analyzes and compares grammatical categories, or linguistic structures in general, whether it be within the phonology or morphology, syntax or semantics. Both branches of linguistics, however, take into consideration the notion of an evolution, assuming that concrete linguistic

1 Cf. HOLMER, 1963, p. 15.

forms as well as linguistic structures, in a number of cases, proceed from earlier prototypes.

In the following sections the author intends to study and analyze the structure of the Basque language while trying to trace the evolution of its various phases, taking into account its relation to other linguistic structures, in the first place through comparison with Indo-European languages, but further also with particular regard to typologically related Caucasian languages². The latter, as well as Basque, belong to the author's linguistic Type I, which is one showing a characteristically marginal occurrence, dominating among the American Indian languages³. Since the author, however, believes that linguistic types are not permanent but in a state of constant evolution, by analogy with other phases of language (albeit at a slower rate), there is reason to assume changes in the structure of a language along with a gradual passing from one type into another.

The treatment of the various aspects of the structure of Basque will be done in eight main sections, according to whether they fall within the phonology, formation of «roots», derivation of word stems, morphology, etc.

I: GENERAL PHONOLOGICAL STRUCTURE

The historic phonology of the Basque language has been dealt with at length and in almost all its phases in a great number of shorter and longer treatises by Luis Michelena, culminating in his fundamental *Fonética histórica vasca*⁴. Very little need therefore be said of the historical evolution of Basque phonology as such. The phonetic system reveals marked analogies with those of Spanish and French, naturally corresponding in main to the respective areas where varieties of Spanish and French Basque are spoken. But in addition to this one will find features which do not pertain to either of these neighboring languages. In the first place, Basque phonology is definitely archaizing: the fricatives *tx* and *ts*, for instance, are no more found as phonemes in either Spanish or French (although older forms of these languages appear to have had similar sounds). The distinction of the sibilants *z* and *s* has reflexes in Spanish, the one of *z* and *x* (rather than *s*), in

² The author does not uphold the theory of a fundamental difference between the so-called "genetic" and "typological" relationship. When concrete forms are related we have cases of a concrete relationship, whereas when morphological categories are related we have cases of a typological relationship. Both may be "genetic" if we prefer to stick to this inadequate terminology.

³ While the author's map, in four colors, of Principal Linguistic Types, with explanatory notes and comments, is still unpublished, reference will have to be made to an earlier work, *The General Structure of Language* (HOLMER, 1966, pp. 54-56), where a simplified map sketch is also found.

⁴ A thesis for the doctorate, published by the Diputación de Guipúzcoa, San Sebastián, in 1961.

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French, but neither of these languages possesses a threefold series of sibilants and affricates as in Basque (*z-s-x; tz-ts-tx*). Nasal vowels are found in French Basque and to a larger extent than in standard Modern French (the dialect of Soule, for instance, has six nasal vowels, *ã, ê, î, õ, û, ÿ*, against the four, *an, in, on, un*, of standard French); in this respect French Basque recalls Old French or the Celtic Breton. The aspirate (*h*) occurring in especially French Basque was a phoneme of Old French as well as of Old Spanish (as still in Andalusian). Regarding the contrasting phonemes *z* (*tz*) and *s* (*ts*) in Basque, the author has counted on the possibility of an opposition of dental and apical sibilants (as in Basque *z* and *s*) in the early Celtic of Gaul⁵.

Phonetic systems are not seldom similar in adjacent languages, or languages in contact, which is a matter of environmental influence. Is there nothing then in Basque phonology which is as primitively Basque as its morphology and vocabulary? Several of those phonemes which were shown to be shared between Basque and the contiguous Romance languages have quite a different value from a historical-comparative point of view. The *tz* sound, for instance, of Old Spanish and French is a secondary product, either the result of a palatalization (as in Spanish *ciento*, French *cent*, from Latin *centum*) or else due to other factors (as in the Old French *anz* for **ans*, from Latin *annus*, or Anglo-Norman *filtz*, for *filz*, from Latin *filius*; cf. 'Fitz-' in surnames of the type 'Fitzgerald', etc.). This is not the case—as far as we are able to ascertain—of Basque *tz* or *ts*⁶ which appear to be basic phonemes (similar ones are extremely common in Caucasian languages). The triple series of plosives typical of French Basque (*kh, k, g*, etc.) is mirrored in many Caucasian languages (cf. Georgain *k', k, g*) and as in the latter languages the opposition *k : g* is not primarily one of voiceless and voiced⁷.

A phonetic system may evolve not merely due to the mechanical process of sound shifts governed by phonetic laws, but further due to a process of growth, far less easily determined. If one compares the phonological system of primitive Basque as reconstructed by Martinet and Michelena⁸ with those of the present-day Basque dialects, it will be found that the latter are richer in phonemes. According to the opinion of Michelena, both the aspirate *h* (along with aspirated consonant phonemes) of the French Basque dialects and the common Basque *m* phoneme (as distinct from *b*)

5 See HOLMER, 1949, p. 15, Note 41; 1958, a, p. 251.

6 We shall not consider *tz* here, as it may possibly be a palatalization product, as also *x* (cf. Biscayan *gixon* for *gizon*, in which *x* arises mechanically after *i*).

7 MICHELENA, 1961, pp. 238-39 (§ 12.11), p. 374 (§ 19.3); HOLMER, 1952, pp. 121-23.

8 See MICHELENA, 1961, pp. 373-74 (§ 19.3).

depend on a secondary evolution⁹. Of course, the rather simple phonetic system reconstructed for early Basque as referred to above does not necessarily represent a rock-bottom stage; it suffices to consider it as representing the earliest reconstructible phase. If one should wish to search for concrete parallels within the Caucasian languages, it might prove necessary to propose a still earlier (perhaps less simple) system. But here again the danger of operating with a mechanical evolution only becomes evident, because it is clear that if an enrichment of the phonetic system is possible in Basque it is equally possible in the Caucasian languages (which today are abundant in consonantal phonemes). In other words, in order to make comparisons between Basque and Caucasian it is an imperative condition to analyze the phonetic system (or systems) of the latter languages in the first place, not neglecting the role eventually played by the spontaneous growth of a basic repertory of phonemes.

The Basque vowel system (which at the present time resembles that of Spanish in the parts where Spanish Basque is spoken and that of French in the areas of French Basque) is from a historical point of view characterized by a primitive non-distinction of long and short vowels and by the absence of vowel alternation (or anything similar to the Indo-European apophony—incidentally, both these features seem characteristic of the author's Type I, for which cf. the Introductory section). Cases such as *zein* - *zoin* ('which') are quite exceptional and certainly not to be considered as instances of *ablaut* alternation¹⁰. The origin of *ablaut* in the Indo-European languages is not known, although various theories have been advanced since the beginning of Indo-European comparative linguistics, usually assuming a connection with accentuation in the proto-language, but its evolution and growing into a system (or rather systems) may be found to be largely due to analogy. As such it may be said to have survived until historic times, or in some languages even until today, as when from the English verb 'to dive' a preterit 'dove' may be formed (on the analogy of 'drive' - 'drove', 'ride' - 'rode' etc.) or when 'shrove' (cf. 'Shrovetide', etc.) is formed as a preterit of 'shrive', which is from Latin *scribere*; according to the same tendencies Spanish *nieve*, *pliegue* may rather be said to be «*ablaut forms*» of *nevar*, *plegar* (on the analogy of, e.g., *diente* - *dentar*) than continuations of Latin

⁹ See MICHELENA, 1961, pp. 203-24 (§§ 11.1-16) and pp. 267-77 (§§ 13.5-10), respectively. —In Iranian (Persian) *l* is a new phoneme, which did not exist either in Old Persian or Avestan. In Tagalog both *e*, *o* and *r*, are recently evolved phonemes, as seen in numerous native and borrowed words (cf. the older loan *bandila*, from Spanish *bandera*, and the more recent one *karitela*, from Spanish *carretela*).

¹⁰ Regarding such cases, see MICHELENA, 1961, pp. 81-82 (§ 3.6), where an explanation is suggested. In any case, we have here instances of *hybrid formations* (cross products, due to the mutual influence of words and forms), for which see further in section III.

nive(m), *plic-* (which should have led to other Hispanic forms). Of this there is nothing in Basque (neither, as a rule, in languages of Type I).

What Basque however has, or rather has had at a certain time, is what the present author has referred to as vowel leveling¹¹. This consists in a correspondence between narrow (or 'high') and wide (or 'low') vowels in the same word; among the former are *i* and *u* and among the latter *e* and *o* (*a* and *ə* being generally neutral). According to this tendency are shaped the parallel forms *ortze* and *urtzi* (originally designations of 'the sky' or 'heavenly God'). The sporadic occurrence of vowel leveling in Basque —for it is by no means a sound law— was first pointed out to the author by Luis Michelena¹². This phonological feature is clearly connected with the establishment of a phonemic differentiation of *e* and *i*, on the one hand, and *o* and *u*, on the other, on all levels, and is hence a sign of a vowel system in evolution. In the example quoted above it appears that the final *-e* and *-i* have been perceived as expressions of different morphological functions, but that the medial *-o-* and *-u-* are still semantically undifferentiated. For a distinctive *e* and *i*, see further in section VIII (in dealing with the «prefix vowels»).

II: THE SYSTEM OF STRESS

For general observations on the accentuation of Basque, see for instance the author's *El idioma vasco hablado* and Luis Michelena's *Fonética histórica vasca*¹³. It seems that both authors share in main the same opinion as to the historical evolution of the accent systems, as found in present-day Basque¹⁴. It may thus be stated that Basque originally follows the pattern of so many languages pertaining to Type I¹⁵, e.g., in America, in having the second syllable from the beginning of a word (or phonetic unit) stressed, a tendency which may possibly have a connection with the *prefix character* of these languages (cf. below). Whether this stress system, which is now limited to certain central areas (in particular Navarre), has at any time been general or not is for obvious reasons unknown; in surrounding areas the stress system is different, but with a general tendency to stress the penultimate syllable of words or phonetic units, which the present author has tried to associate with Celtic contacts¹⁶.

11 Cf. HOLMER, 1960, pp. 14-23.

12 See also MICHELENA, 1961, p. 130 (§ 6.3) and 1956, p. 21. It is, of course, possible that the tendency survives in Basque dialects.

13 HOLMER, 1964, pp. 20-21, 26-28, 36-41 (§§ 15, 24, 40-49); MICHELENA, 1961, pp. 379-424 (§§ 20.1-17; 21.1-12).

14 Cf. also MICHELENA, 1957-58, pp. 203-33.

15 Cf. the Introductory section to this study.

16 See HOLMER, 1964, pp. 36-37 (§ 40), with references.

The interesting thing in this connection is really the origin of the accentuation type which we have assumed to be the older or more primitive one of those actually found. As indicated above, it is rather typical of languages of «prefix type» (the author's Type I) and appears a logical consequence of the linguistic structure. It is clear, for instance, that while in languages of the «agglutinative» type (the author's Type II), in which the concrete nucleus or «root» of the word is the *first syllable*, which occurs provided with a number of derivational and flectional suffixes (as in Finnish *suomalais-sanakirjassa* 'in a Finnish dictionary'), this first syllable should be stressed (which also is the characteristic stress pattern of Type II languages), this would be different in languages of Type I. In the latter, a great number of cases must arise in which the nucleus or «root» is the second syllable of an inflected complex (as in Dakota *maphá* 'my head', Iroquoian (Seneca) *haksá'* '(he) a boy', Basque *nagó* 'am', *dagó* 'is', etc.), which syllable would then in the same way logically require the main stress. If the number of such cases was sufficiently large (or of sufficient importance from the point of view of the structure of the language), it is possible that this kind of word stress is perceived as typical and that it affects cases as well in which the «root» syllable is *not* the second from the beginning (Basque *a(u)ndí, zaldí, egún*, etc. — in the last word so much the more easily as its structure strongly recalls such forms as *egín, emán, izán*, etc., in which *e-, i-* are actually prefixes) ¹⁷.

The change in the stress system which seems to have taken place in areas outside of Navarre and according to which a tendency prevails to stress the penultimate syllable of words or phonetic units, may be connected with a prevailing tendency in early Celtic. No sure documentation may be derived from extant sources regarding the accentuation of Gaulish ¹⁸, but indirect evidence may be gained from the state of things in the other P-Celtic languages (Breton and Welsh), as well as from the normal accentuation pattern of French (early Celtic penultima stress accounts for loss or reduction of original ultimas, accompanied by main or secondary stress on what has actually become the last syllable of the modern form of the words). There is no great number of Celtic loanwords in Basque ¹⁹, while the number of Latin and Romance elements is considerable. Within the latter languages a certain tendency obtains to stress the penultimate —whether due to Celtic influence or not (cf. above)— as is seen in cases where the Romance stress

17 The same might be said of any "agglutinative" language of Type II: Finnish, of course, stresses foreign words in the same way as the native agglutinations (hence *káhví* (French *café*), *kápteini* (French *capitaine* or ultima-stressed German *Kapitán*), *kápitaali, kápitalisti*, etc.

18 For references, see HOLMER, 1938, pp. 81-82 (with footnote).

19 Cf. HOLMER, 1950, pp. 399-415.

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differs from the Latin one: Spanish *creemos*, *creéis* (cf. Latin *credimus*, *creditis*), *agito* (cf. Latin *ágito*), *acedo* (cf. Latin *ácidus*), *oceano* (beside *océano*; cf. Latin *océanus*, etc.); this tendency is felt to be normal to the extent that in Spanish and Portuguese orthography stress is generally marked only when it does not fall on the penult.

III: THE STRUCTURE OF «ROOTS» OR «ROOT» WORDS

It is necessary to begin this section with an analysis of the terms «root» and «stem» together with various others, as used in this study. By «root» we shall mean the largest element had in common by words or linguistic forms which we shall consider as «related»²⁰ according to a *regular pattern*²¹. 'Root', thus, is the basis of *related* words (e.g. *etxe*, *etxa*-) and 'stem' the basis of *inflected* words (e.g. *etxera*, *etxetik*). In simple and perspicuous cases no difficulty whatsoever arises as regards finding the «root» element; if the following Basque words are related (as we are evidently bound to assume), *egin*, *dagit*, *negian*. (that is inflected forms of the verb stem meaning 'to do'), *egile*, *egintz* or *egintza*, the «root» is apparently, according to the above definition, the syllable *-gi*-²². But the difficulties do not tarry in appearing. First of all the problem quite naturally arises as to what exactly is meant by «related» forms. Is, for instance, the English 'break' related not only to 'broke', 'broken' or 'breach', but also to 'brick', 'brittle' or 'burst'?²³ In the case of Basque, the «root» becomes different if we consider that *urte* ('year') is related to such forms only as *urtaro* ('harvest'), *urtarril* ('January'), in which case it would naturally

20 This employment of the term "root" is entirely different from the usage in early works on Indo-European comparative linguistics or, sporadically, in works of the Brugmann school, where the Indo-European "root" elements are reconstructed on the basis of evermore complicated and abstract linguistic theories. As used here, the "root" is obtained, as is seen, through a synchronic analysis.

21 This is important, because even though *bat* ('one') and *bakar* ('only, sole') be considered as related, the "root" would still not be **ba*-, as the derivation would have no typical parallels (as in the case of *maite* - *maitatu*, *bete* - *betatu*, etc.).

22 This kind of analysis is usually much simpler in Basque than in Indo-European languages; if we should want to apply the same principle (cf. Note 20) to Modern English, we might (in favorable cases) get something like this (considering the forms 'bind', 'bound', 'band' as related): *b-n-d* (which are the written symbols common to the three forms), but in any case *not* any such thing as **bind*, **bandh*- or **bhendh*- (as accepted at different times).

23 These forms are chosen without consideration of proposed etymologies, for in dealing with many languages (among which is Basque) historic documents are not available, as for most Indo-European languages. Actually, some of the above English words might be derived from one Indo-European root (in the modern sense), by having recourse to "root determinatives" (for which see below).

be *urt-*, or to the words *ur* ('water'), *euri* ('rain') also, in which case it would be merely *ur-*²⁴. Here subjective points of view are inevitable.

In Indo-European linguistics the term «root determinative» is often met with, referring to an element which is a mere «increase» to the «root» without having any ascertainable semantic function (as, for instance, in the case of Latin *tendere*, if related to Greek *teínō* of the same meaning, of which the root would then be **ten-* and the root determinative **-d-*). Without entering even summarily on existing theories regarding this kind of linguistic formative, it should merely be called to mind that the (traditionally accepted) theory alluded to immediately clashes with the (so far unaccepted) theory of the author's that linguistic forms (whether roots, stems, derivation formatives or words) may arise due to mutual influence and attraction by other forms and that it is meaningless to try to attribute a logical function to *all* elements in the formation of a language. In any case, it seems impossible to draw a limit between cases of «root determinatives» or other similar increases, derivative suffixes or even, perhaps, one or another apparent flecional element, on the one hand, and elements appearing in *hybrid* forms or forms due to plain analogy, on the other. (How can we know, for instance, whether English 'whiten' or 'blacken' do go back to reputable Indo-European forms or are simply created on the analogy of a great number of verbs in English derived by means of the suffix '-en'?) In certain languages, such as the Austronesian, in which metathesized stems (or «roots») are characteristic of the linguistic type (cf. Tagalog *sulok* and *sukol* 'corner', Tagalog *madilim*, Ilocano *nalidem* or *nalimed* 'dark'), it seems many times impossible to know what is actually «primitive». (How can we, for instance, know whether the Tagalog *matamis* or the Ilocano *nasam-it* 'sweet' represents the original and unmetathesized form, when the root word meaning 'sweet', as occurring in Malay or Javanese, is neither **tamis* nor **samit*, but *manis*?) Which form is more original in Basque, *burpil* or *gurpil* ('wheel') or which is to be considered as primitive out of the forms *burdi* and *gurdi* ('car or cart') or *urki*, *burki* and *turki* ('birch tree')? ²⁵.

In describing Basque «root» forms, we shall of necessity have to limit ourselves to evident cases. According to the principle explained earlier in this section, the «root» of *etxe* (*etse*) 'a house' becomes *etx-* or *ets-* (in view

24 The inclusion of the latter words is not unwarranted either formally or semantically; the syllable *-te* is a common nominal derivative suffix (as in *egite*, *ekarte*) and in Sanskrit *varṣa* means either 'rain' or 'year'.

25 For these forms, cf. MICHELENA, 1961, pp. 259-60 (§§ 12.20-21). The initial alternation of phonemes is typical of both Basque and Caucasian; one may compare the eorgian *nepe* - *mepe* 'king', *lagami* - *nagami* ('a braid'), *bangali* - *mangali* ('scythe'; cf. DIRR, p. 8); with the latter may be compared the numerous Basque words in which initial *b-* and *m-* alternate.

of derivations in *etxa-*), that of *gizon* 'a man' becomes *giz-* (in view of derivations or compounds with *giza-*) and of *etorri* 'to come' it must be *-tor-* (in view of *dator*, etc.). This leaves the elements *-e* (*-a*), *-on*, *e-* and *-i* as affixes, even though their precise function or meaning (if rendered in another language) remains unaccounted for. This is looking at the matter mechanically: one may say of, for instance, *zaldi* 'horse' (in view of such compounds as *zaldale* or *zaldare*, *zaldun*)²⁶ that the «root» is *zald-* and that *-i* is a formative suffix, but it might be alternatively conjectured that this word has been early modeled after the same pattern (animal names?) as, for instance, *be(h)i*, *idi*, *ardi*, *txerri*, *erbi*²⁷. It is reasonable to think that groups or classes of words are constituted during the evolution of a language according to the aspect of the concrete stem, for instance in respect of a final vowel (as when Romance words in *-o* and *-a* tend to become respectively masculines and feminines in spite of their original gender: Spanish *eco*, *halo*, *coma*, *fantasma*, *cometa*, in special senses); in Basque a number of common adjectives end in *-e*: *asarre*, *ase*, *beste* (*bertze*), *bete*, *erne*, *erre*, *gazte*, *gorde*, *gose*, *luze*, *maite*,²⁸ *obe*, along with the possessive adjectives *nere*, *bere*, *gure*, etc. (certain color adjectives end in *-i*: *zuri*, *gorri*, *ori*).

Typologically, the final vowels dealt with in the preceding paragraph are quite analogous to the stem-final *-o*, *-ā*, *-ē*, *-i* and *-u* of Indo-European nominal words, which are basic of the various *-o*, *-ā*, *-i* and *-u* stems of the classical languages (Latin *mensā-*, *equo-*, *diē-*, *mari-*, *cornu-*) and of Sanskrit and which like the Basque vowels in question have no ascertainable function. It is also significant that one of these vowels (*-a*) in Basque seems to have the same function as the Indo-European *-o-* in compounds (which is used independently of the nature of the stem of the first component, as in Greek *glōtto-* from the stem *glōttā-*, etc., reflected still in modern terms 'glottology', 'technology', or the Latin *homicida* from the stem *homin-*); from *etxe* (*etse*) one therefore makes *etxa-* (*etsa-*), from *gizon*, *giza-* and from *eme* 'female', *ema-* (as in *emakume*, *emazte*), independently of the form of the first component²⁹.

26 MICHELENA (1961, pp. 125 sqq. (§ 6.1), 418 (§ 21.9)) holds such compounds as *zaldun*, *artalde* ('flock of sheep'), *artegi* ('sheepfold') to have lost the final vowel (*-i*) of the first component due to a certain accent law in early Basque (in *zaldun* one might, of course, consider haplogy, from **zaldidun*).

27 If *zaldi* is actually related to the early Hispanic *thieldo*, there must have been (dialectal ?) variants of this word in Roman times; cf. also *txerri* and *txarri* 'pig'.

28 If *maite* is from Celtic (**mati-*; Old Irish *maith*), it must have adapted itself to other adjectives in *-e* or *-te*.

29 A change of the stem-final vowel in derivations and compounds is not unknown in other languages: Finnish *Suomi* (*Suome-*) 'Finland', *suomalainen* 'Finnish'; Japanese *sake* 'rice wine', *sakazuki* 'sake cup', *kane* 'metal', *kanamono* 'hardware', etc. The fact

The structure of the «root» word in Basque has, as in any other language or linguistic family, its individual and characteristic appearance. The languages of Type I are characterized by short root complexes; especially the verbal roots have a typically simple structure, often C-V; cf. the Basque roots *-gi-*, *-go-*, *-ki-*, *-ma-*, *-sa-*, *-za-*, *-tza-*, as in: *egin*, *egon*, *jakin*, *eman*, *esan*, *izan*, *etzan* (with these may be compared the Georgian *-γ-* 'take', 'open', *-qo-* (*-qav*) 'be', *-x-* 'tear', *-r-* 'win over', *-k-* 'praise', *-le-* 'drink', *-c-* 'pull', etc.). Further, the sequence of the phonemes or the structure of phonemic groups is as characteristic of a language or linguistic family as is the inventory of sounds, which explains various peculiarities (or apparent irregularities) in the phonetic evolution of a language³⁰.

The structure of the root word varies in Basque between cases of roots of two to five phonemes³¹. Two-phoneme roots are, for instance, (a) *su*, *-gi-*, *-go-*, *-ma-*, *-sa-*, *-za-*, *-ga-*, *-ki-*, *-tsi-* (cf. above) —these are typical of many primitive verbs— or (b) *atz*, *on*, *ots*, *otz*, (b)*ar-*, (b)*el-*, etc. Three-phoneme roots are of various kinds: (a) *ate*, *etxe* (*etse*), *ota*, etc., which may better be held to be «stems» (cf. above); (b) *artz*, *ertz*, *ortz*; (c) *gain*, *gaitz*³², *gal-*, *sal-*, *sar-*. Roots of more than three phonemes are often dissyllabic³³: *aritz*, *arotz*, *eder*, *begi*³⁴, *berri*, *buru*, *baratz* (vowel-ending forms may rather be «stems»), in which no consonant cluster arises; in the following dissyllables simple (two-phoneme) clusters are found: *albo*, *a(u)ndi*, *ardan* (*arno*), *argal*, *argi*, *arnas*, *alper*, *asper*, *azken*, *erle*, *erna-* (*esna-*), *esker*, *exker*, *galde*, initial clusters being typically absent (notice, however, the root *-ntzu-* 'to hear').

It will be observed from the above and many other instances that certain sequences are favored and current, while others are practically impossible. Basque does not, for instance, any more than Indo-European admit

that the same form of the first component is used in derivations as well in Basque (*aldata*, from *alde*, *gizatu*, *gizagin*, *gizakoi*, *gizamen*, from *gizon*) proves that the last component is held equivalent to a derivation suffix.

30 The present author has tried to account for the occurrence of *infixes* in various languages as due to tendencies of this nature (HOLMER, 1966, pp. 73-75 [§§ 15.3-5]). While in Semitic a sequence of "radicals" such as *qbr* ('to bury') is quite normal, a sequence such as **ghebhr-* would be impossible in an Indo-European "root" (that is, unless *-r-* be a suffix), whereas a sequence **ghrebh-* is perfectly normal (hence Arabic *qabr(un)* 'tomb' is typically Semitic and English 'grave' typically Indo-European).

31 Nominal and verbal stems consisting of a single vowel or consonant are with certainty not found in Basque.

32 Counting the diphthong *ai* as one phoneme.

33 Of monosyllabic words may be mentioned: *giltz* 'key', *bortz* or *bost* 'five', *bart* 'last night', the latter along with *barda* (cf. MICHELENA, 1961, p. 235).

34 Possibly with a prefix *b-* (cf. Note 42).

of the sequences **bl-*,³⁵ **dn-*, **txn-*, **dr-*,³⁶ **gr-*,³⁷ **lr-* or **nr-* in «roots» (whereas *lb-*, *ld-*, *ltz-*, *nd-*, *ntz-*, *rd-*, *rg-*, *rl-*, *rn-* are found and often frequently). In clusters with *s* or *z*, these usually precede (as typically in Indo-European also), **pz-*, **kz-*, **ks-*, etc., being impossible³⁸. A comparison with Indo-European will show that Basque reveal the same preferences as Indo-European medial sequences or initial clusters: *azpil*, *expal*, *expain*, *azken*, *esker*, *exten*, *extul*, *ustel*, *esne*, *gazna*,³⁹ etc., recall such Familiar Indo-European «roots» as: **spel-*, **spl-*, **sken-*, **sker-*, **skr-*, **stel-*, **sn-*, etc. (cf. the English words 'spill', 'split', 'shin', 'shore', 'shrub', 'still', 'snow', etc.)⁴⁰. Final sequences are in theory the same as in the medial position; in practice they are very much reduced in number⁴¹. In the final position voiceless plosives (or affricates) are the rule in most dialects.

Longer words (those of more than five phonemes) are almost exclusively compounds, derivations or other enlargements of simpler forms. Thus *arkaitz* ('rock') is from *ar(r)-* 'stone' and *-(k)aitz* 'rock' (from the same *ar(r)-* is possibly *arrau(l)tz* 'egg'), *mingain* ('tongue') is from *min-* (= *mibi*, idem) and *gain* 'top, point' and *naspil* ('tangle'). probably from *nabas* (idem) and *-pil*, *-bil* (as in *txirbil* or *bildu*, the latter in the sense of 'amass, heap'). Among the longer words, some should possibly be explained as original «hybrid» formations, in the sense that they either represent a mixture of two distinct primitive words or that they have been attracted by or assimilated to other words or parts of words of current type (more or less as English 'gizzard', for earlier *giser* —the French *gésier*—, arisen through the influence of numerous words in 'ard', or 'blizzard' which has been supposed to be a cross of either the German *Blitz* 'lightning', or

35 Hence *elbi* < **ebli* < **euli* ('a fly'); cf. MICHELENA, 1961, p. 90 (§ 4.2). This evolution finds a parallel in Armenian: *etbayr* 'brother' < **blayr* < **brayr* < IE **bhrātēr*; one would think of the influence of Caucasian phonetics in such cases in Armenian, although Georgian does not especially favor the sequence *lb-* (it occurs, e. g., in *lbili*, also *rbili*, 'weak'). A comparison with the word structure in Caucasian is difficult, since modern forms (e. g. in Georgian) have to a great extent suffered vowel elision (matched in the Indo-European Armenian).

36 The form *andre* represents an original *andere* (cf. Aquitanian ANDERE).

37 Notice that Indo-European **gr-* (as in Greek *agrós*) does not occur in the "root" of this word, which is a derivation by means of a suffix **-ro-*.

38 Notice that *ts*, *tz* are single phonemes; as clusters they would be impossible.

39 For *esne* < **esē* < **esene*, cf. MICHELENA, 1961, p. 163 (a phonetic parallel exists in Scottish Gaelic dialect *sneagan* < *seangan* 'ant', the vowel sound written *ea* being nasalized); similarly *gazna* < **gaxtā* < **gaxtana* ('cheese').

40 The fact that root forms occur which are actually the same in Basque and Indo-European need not be ascribed to coincidence, as the possibility of linguistic contacts should not be overlooked. The Basque *eseri* may depend on a root **sed-*, *eten* on a root **ten-*, *eduki* on a root **duk-*, easily identifiable in Indo-European languages (Latin *sedere*, *tendere*, *ducere*; cf. HOLMER, 1950, pp. 399-414).

41 Cf. MICHELENA, 1961, pp. 235-36 (§ 12.10).

some «onomatopoeic» form not specified and the mentioned suffix '-ard'). Thus many Basque words terminate in *-ar* or *-er* (often environmentally determined): *baldar* (perhaps connected with Spanish *baldado*), *muskar*, *baxter* (or *-ar*), *bizkar*,⁴² with the same common termination as in the shorter *bider*, *eder*, *esker*, *ezker*, *alper*, etc.; the words *bildur*, *txilbor* end in the same way as the shorter *aitzur*, *enbor*, etc.

In root complexes, the basic vowel and consonant phonemes are preferably all different,⁴³ since in the opposite case the impression would arise that the root word has reduplication character. Cases of two identical phonemes do, however, occur and may be explained in various ways. In the verbal root *-ror-* (in *erori* 'fall') one of the *r*'s may possibly represent an intervocalic **d* (cf. also *irudi*, *iduri*, occasionally pronounced *iruri*). In *gogo*, *gogor* the initial *g-* may represent an original **k-* (cf. *gorputz* < Latin *corpus*). Finally, the identical sibilants in *zazpi*, *zezen*, etc., are quite normal according to a general phonetic tendency, which also accounts for the form *sinetsi* (for expected **zinetsi*, from *zin* and *-etsi*)⁴⁴.

IV: NOMINAL STEMS, DERIVATION AND COMPOUNDS

In the preceding section certain linguistic elements were dealt with of which the precise function cannot be ascertained and which then were compared to the so-called «root determinatives» in the Indo-European languages. There is thus a marked difference between the import of the final vowels or syllables of *etxe*, *etxa-*, *maite*, *maita-*, *oso*, *osa-*, *gizon*, *giza-* and the final syllable *-ko* of, for instance, *etxeko* or *-tsu* of *gizontsu*, which may be directly translated into another language (e.g., by 'of', as in 'of a house, man', or by 'ly', as in 'manly', etc.)⁴⁵. Derivations are of many kinds, but it is convenient for the purpose of this study to distinguish between four main types: (1) denominative nominal derivation, (2) deverbative nominal derivation, (3) denominative verbal derivation and (4) deverbative verbal derivation; these four types are most easily described by examples: (1) 'manhood' (a noun) or 'manly' (an adjective), 'reddish' (an adjective), from 'man', 'red' (nominal stems); (2) 'hunter' (a noun) or 'hunting' (a noun or adjective), from 'to hunt' (a verb); (3) 'to glaze', 'to redden' (verbs), from 'glass', 'red' (nominal words); (4) 'to prattle'

42 Possibly with a petrified prefix *b-* (as in *begi*, *beso*, *bizar*, *bular*, *biotz* and other words for body parts; cf. Note 34).

43 There is no reason to consider consonant phonemes more basic than vowel phonemes in Basque root complexes (as is the case in Indo-European and Semitic).

44 See MICHELENA, 1961, pp. 283-84 (§ 14.3).

45 Of the former order is the final *-r* of *lur* (in view of *lupe* 'subterranean') or the *-r-* of *eguraldi* (in view of *egun*, *iguzki*, etc.); cf., regarding such words, MICHELENA, 1961, pp. 309, 337.

(a verb), from 'to prate' (a verb)⁴⁶. In this section we shall deal with the types (1) and (2) only, which comprise nominal words (nouns and adjectives).

As in the Indo-European languages (cf. the examples from modern English in the preceding paragraph), the derivative formatives of the groups (1) and (2) in Basque are normally all *suffixes*. To mention a few, the following pertain to group (1): *-ago*, *-ar*, *-egi*, *-era*, *-eta*, *-garren*, *-garri*, *-gin*, *-ide*, *-keri*, *-keta*, *-kide*, *-ko* (*-go*), *-koi*, *-tar* (*-dar*), *-tasun* (*-dasun*), *-ti* (*-di*), *-tsu*, *-txo*, (*-txu*), *-tzar*, *-zko*, while the following fall in group (2): *-era* (e.g. *ibilera*), *-kizun* (e.g. *etorkizun*), *-le* (*-ile*, *-lle*; e.g. *ikasle*, *emaile*), *-men* (e.g. *adimen*), *-pen* (e.g. *oroipen*), *-te*, *-tze* (e.g. *egite*, *ekartzte*), *-tza* (e.g. *egintza*)⁴⁷; many times, however, a clear limit between (1) and (2) is not to be drawn. It is easy to see that these, not in regard to placement only, but in regard to general semantic function also, correspond closely to such Latin formatives as: *-ior*, *-ius* (Basque *-ago*), *-tus* (Basque *-garren*; cf. *sextus* and *seigarren*), *-anus*, *-ensis* (Basque *-tar*, *-dar*, *-ar*), *-estris*, *-esticus*, *-alis*, *-eus*, *-ilis* (Basque *-ko*, *-zko*, *-tsu*), *-ulus*, *-ellus* (Basque *-txo*, *-txu*), *-tas*, *-tudo* (Basque *-tasun*, *-dasun*), etc., which fall under (1), and *-tio* (Basque *-era*, *-te*, *-tze*, *-tza*), *-bilis* (Basque *-garri*; cf. *amabilis* and *maitagarri*), *-tus*, *-tura* (Basque *-kizun*), *-tor* (Basque *-le*, *-ile*), etc., which fall under (2). As a matter of fact, this kind of morphological formatives are generally suffixes in languages of Type I at large⁴⁸.

Formatives of this order may, however, exceptionally be prefixes in Basque. Apart from the *e-* or *i-* of *etorri*, *ikasi* (roots *-tor(r)-*, *-kas-*), etc., which will be termed «prefix vowels» (cf. in section VIII)⁴⁹, one may notice the *m-* (or *ma-*) of *malda* (in view of *alde* 'side', *aldapa* 'slope'; cf. the relation between Spanish *lado* and *ladera*), *makal*, *makaldu* (in view of *kalte*, *galdu*), *makur* (in view of *gurtu* 'incline' and perhaps also

46 The author does not mean that these derivations are actually felt as such in Modern English (ultimately rather destitute of derived forms); the instances are chosen for the mere purpose of illustrating the semantic relation between the single and derived word.

47 Among the latter formatives must be included the *-i* and the *-n* of the infinitives (see section VII, Note 66), as in *etorri* (root *-tor(r)-*), *egin* (root *-gi-*), etc., for these suffixes are clearly nominal, corresponding to the *-s-* or *-r-* of Latin *esse*, *amare*, etc., or the *-tu-* of Sanskrit *kartum* 'to do'.

48 The following examples might be quoted from Georgian: *k'acoba* 'humanity', *k'acuna* 'mannikin', *k'acuri* 'human' (from *k'aci* 'man'), *k'višet'i*, 'sandy land' (from *k'viša* 'sand'), *muxnari* 'oak wood' (from *muxa* 'oak'), which belong to type (1), and *bmuli* 'binding' (from *bma* 'to bind'), *debuli* 'lying down' (from *deba* 'to lie'), which belong to type (2).

49 The question is whether *e-* may actually occur in other words than infinitives of the type *egin*, *eman*, etc. (*euli*, *huri*? cf. HOLMER, 1950, pp. 403, 409, Note 33, and YRIZAR, 1951, p. 356). *Etxe* (beside a questionable **txa-*; cf. the surname Javier or *txabola*, Spanish *chabola*) might be safely by-passed.

gurpil 'wheel')⁵⁰. In Georgian prefixes of this kind (and especially such as begin with *m-*) occur frequently, sometimes combined with suffixes (cf. Tschenkéli, 1958, pp. 532-64).

What has been said regarding nominal derivation may be said of nominal compounds. Like the early Indo-European languages (but unlike many of the modern western European languages), Basque admits of binomial nominal compounds, in which the former component determines the latter (as in English 'seaman', that is 'a man of the sea' or 'a sailor'). Thus one finds *etxajaun* 'master of the house', *gizaseme* 'son of man' (i.e. 'a man, a male being'), *katakume* 'kitten', etc. (As for the change of the final vowel of the first component, see in the preceding section.) Such compounds are admitted and common in languages of Type I in general; in Georgian one finds *k'aciçamia* ('man eater', 'cannibal'), *k'acnak'lavi* ('man killer'), from *k'aci* 'man', and in the American Indian languages compounds of the type (Aztecan) *ixteotl* 'pupil of the eye' (*ixtli*), *tecomatl* 'stone pot' (American Spanish *tecomal*, from *tetl* 'stone'), Xochimilco ('at the flower field'), Xochitepec ('at the flower mountain'), etc., are quite common.

A word should be said about reduplicated forms. These are not a typical feature of Basque word structure, but do occur. A good example of a reduplicated form is *biribil* (along with *borobil*) 'round' (probably from **bilibil*; cf. the stem *pil-* *bil-* in *bildu* 'gather', 'involve', *bilgin* 'spinning wheel', 'lathe', *gurpil* 'wheel')⁵¹. Of the same appearance is *garagar* 'barley', which might be for **galagal* (cf. *gari*, *gal-* 'wheat'), with the termination assimilated to that of *galar*, *galbar*, *landar*, etc. (cf. regarding the formation of root words in section III). *Gogo* 'mind' is not necessarily reduplicated, as it may proceed from **kogo* (cf. section III).

V: DECLENSION

Nominal words (which include nouns, adjectives and numerals) are inflected in the Indo-European way by means of *case suffixes*. But there are typological differences to be observed. First of all, which is perhaps most important, Basque makes no distinction of a singular and plural inflection in plain nominal forms, implying that no distinction of meaning is possible. The plain nominal stem in Basque is *indefinite*, not only in the sense of 'man' or 'men' as opposed to 'the man, the men', but also in so far as it is indeterminate as to number (Basque *gizon* hence means either

50 For these prefixes, cf. HOLMER, 1956 a, p. 389. Such forms as *ikasi-mikasi*, etc., are to be judged differently.

51 Cf. MICHELENA, 1969, p. 22.

'man' or 'men')⁵². Secondly, Basque lacks a nominative as well as an accusative case⁵³. Thirdly, the case suffixes in Basque are not used in quite the same way with words denoting persons and words denoting things; this is particularly noticed in personal names and in place names, which normally appear in the plain form (that is without the definite article).

As in the early Indo-European languages, case suffixes are not always to be distinguished from postpositions, at least as far as their function goes (as one knows, even in Latin and Greek certain case forms have to be translated by a preposition in English; cf. *Romam* 'to Rome', *Romae* 'at or in Rome'). In Basque a differentiation may appear arbitrary, but the occurrence or absence of the elements in question after a possessive form (or a possessive pronoun) might serve as a criterion. According to this, the ablative *-tik* ('from') would be a case suffix, as one must say *Iruina'tik* 'from Pamplona', whereas *-tzat* ('for, for the sake of'), *-kin* or *-gaz* ('with') would be postpositions, in view of the construction *gizonentzat* 'for the men', *guretzat* 'for us', *nirekin*, *neregaz* 'with me', and similarly *-gan*, *-gana*, *-gandik*, in view of *niregan* (beside *nigan*), etc.⁵⁴. The case suffixes proper are consequently the following eight: *-k* (ergative or active; cf. below), *-en* (possessive), *-i* (dative), *-n* (locative), *-ra* (with certain variants; allative), *-tik* (*-tikan*; ablative), *-z* (instrumental) and *-ik* (partitive)⁵⁵. As is seen, the cases are largely the same as in the classical languages, with the important exception that the latter have nothing corresponding to the Basque ergative (or active) and partitive cases. As mentioned above, Basque has no nominative or accusative case.

The Indo-European nominative expresses the subject of any finite verb. The Basque ergative, on the other hand, expresses the agent, that is the subject of a transitive verb only⁵⁶. The subject of an intransitive verb, as well as the direct object of a transitive verb, is expressed by the stem

52 Perhaps more often the latter ('men') than the former; cf. HOLMER, 1964, p. 43 (§ 50).

53 The term "nominative" has been used by the author in dealing with languages of this type when referring to the simplest (or stem) form of a nominal word, as this form (by analogy with the Indo-European nominative) so to speak "names" or announces the word. This may be justified and may even simplify matters from a practical point of view, but would merely cause confusion when dealing with typological structure.

54 Basque grammars usually do not distinguish between case suffixes and postpositions.

55 The forms of these suffixes vary somewhat according to whether the nominal stem ends in a vowel or a consonant, for which see HOLMER, 1964, p. 45 (§ 52). The local cases (locative, allative and ablative) have, besides, alternative forms with the infix *-ta-* (cf. the demonstrative pronouns in section VI): *etxetan*, *etxetara*, *etxetatik*. These are used in special functions, for instance after interrogative words (e. g. *zein etxetan?* 'in which house(s)?'); otherwise *etxetan*, *etxetara* may rather be said to correspond to Spanish *en casas*, *a casas* (while *etxean*, *etxera*, equal *en casa*, *a casa*).

56 There are some intransitive verbs in the Biscayan dialects which —for unknown reasons— require the ergative (e. g. *urten* 'go out', *igon* or *igan* 'rise, climb').

form (the stem without any suffix). For this reason the Basque finite verb, if transitive, has sometimes been considered to have a passive sense (since the direct object of a transitive verb becomes the subject when the verb is made passive), but this idea must be abandoned at the same time as the idea of a nominative case in Basque. (The terminology as such does, of course, not matter, as long as it is recognized that the morphological structure is different in Basque and Indo-European on this point.)

Finally, certain case suffixes are personal, others are local, while the rest are common to all kinds of nominal words. Thus the possessive (in *-en*) is primarily used of personal or personalized nouns or names, while the locative (in *-n*), the allative (in *-ra*) and the ablative (in *-tik*) are used of non-personal nouns and place names, while the remaining ones would theoretically be used of either, although in practice they are very much restricted. The instrumental (in *-z*) is usually, and the partitive (in *-ik*) always, limited to indefinite nouns (the former often in an adverbial function). The possessive case of non-personal words is often preferably expressed by a special suffix (*-ko*), which might be classed either as a derivative suffix (cf. section III), a case suffix or a postposition (although never construed with the possessive case, according to the above definition of a postposition); the local cases of personal words must be expressed by true postpositions, governing the possessive case (for instance *-gan*, *-gana*, *-gandik*; cf. above).

The declension of the definite noun in the singular and plural (*gizona* 'the man', *gizonak* 'the men', etc.) is by means of suffixed (and usually abbreviated and contracted) forms of demonstrative pronouns, with which will be dealt in the following section (VI).

VI: PRONOUNS

With regard to their inflection pronouns belong basically to the class of nominal words (along with nouns, adjectives and numerals), but they deviate on some points and are hence entitled to a place of their own in the morphology. As in so many other languages, the Basque pronouns are richer in forms than the other words of the nominal kind, as they often have a plural inflection as well. One may distinguish between three main classes of pronouns: (1) *personal* (which are used of persons or personalized words only), (2) *demonstrative* (which are used of all kinds of words) and (3) *interrogative* (which being indefinite in character have no proper plural forms). According to this definition, some words which are generally included among pronouns in the grammars of European languages will

be excluded: possessive pronouns⁵⁷, reflexive pronouns, reciprocal pronouns, relative pronouns (inexistent as such in Basque), certain interrogative pronouns (*zein* 'which?') and indefinite pronouns; these will be reckoned among common nominal words (whether nouns or adjectives). The definite article (or articles) will be included among demonstrative pronouns (according to its origin in Basque as well as in other European languages); the indefinite article (*bat*) is historically a numeral (and hence a common nominal word).

The personal pronouns are morphologically singulars, the number distinction being purely on the semantic level (*ni* 'I' and *i* 'thou' require a singular predicate verb, *gu* 'we' and *zu* 'you', a plural predicate)⁵⁸. Since these pronouns are *personal*, they lack those local cases which are not used in declension of personal nouns or names (that is the locative, allative and ablative; see section V). However, they also lack a possessive form (instead of it possessive pronouns are used; cf. above). For semantic reasons the partitive form (which would mean '(nothing) of me, you' etc.) is also missing, while the instrumental forms (*nitax*, *itax*, *gutax*, *zutax*) are sparingly used. In conformance with this characterization of personal pronouns, it is evident that Basque has no third person personal pronoun (like English 'he, she, it'). Some Basque grammars include the demonstrative pronoun *ura* (or *a*), which properly means 'that (one)' (Spanish *aqué*) or the reflexive pronoun *bera* '(he) himself', '(she) herself', 'the same one' (Spanish *el mismo*, *la misma*), as substitutes for the missing third person pronoun, but formally they are really demonstratives (or reflexives) in Basque (having both plural forms and local case forms), although from the semantic point of view they may answer fairly well to English or Spanish personal pronouns.

The personal pronouns are especially interesting from the historic point of view, since forms of these are evidently the basis of the conjugation forms for the different persons. We shall return to this in dealing with the morphology of the verb.

The demonstrative pronouns in Basque are the three basic ones closely answering to the Spanish *éste*, *ése* and *aqué*; in Basque the forms are the same whether they are used as pronouns or adjectives (in the latter case

57 From a semantic point of view, these might be considered as possessive forms of the personal pronouns ('my, mine' = 'of me'), but since this study basically depends on a *formal* analysis (cf. the Introductory section), this alternative is excluded, as the possessive pronouns (in Basque as well as in English) do not show the characteristic declension form of the possessive case (-*re* is possibly the -*le* of *egile*, etc.; cf. Note 89 and MICHELENA, 1969, p. 10).

58 We shall disregard here entirely the fact that *zu* is now (like English 'you') used of one person and that a plural form has been created secondarily (*zuek*), which deviates formally and flectionally from the personal pronouns proper (much as the Spanish *vosotros*, *vosotras*, in respect of the older *vos*).

usually following the nominal word determined). They differ from nominal words in various respects. First of all, they have plural forms, namely a stem form (ending in *-k*)⁵⁹ and an «oblique» stem (ending in *-e-*); hence *auék* or *onek* 'these', *onei* 'to these', *onetan* 'in, at these' (from *au*, *on-* 'this'). Further they have a special singular stem form, which is different from the stem used in «oblique» cases (in the singular)⁶⁰. Finally, demonstrative pronouns have an infixed element *-ta-* in certain *local* cases (the locative, allative and ablative). The system then is strikingly similar to that of the early Indo-European languages: cf. Sanskrit *te*, *teṣām*, *teṣu*, etc., Greek *toί*, *tôn*, *toίς*, etc. (with a special nominative plural ending and a plural stem equal to a general oblique stem), Sanskrit *sa*, Greek *ho* (singular nominatives different from the oblique stem form), Sanskrit *tasmin*, *tasmāt*, etc. (with an infix *-sm-* in certain local cases). But the analogy holds on many points with Georgian also: cf. *es* 'this' (stem form: hence Basque *au*), *eseni* (plural stem form; hence Basque *auék*), *am(a)-* (oblique form; hence Basque *on-*); Georgian further has concrete points in common with Basque: the element *-e-* (marking a plural nominative, as in *eseni* 'these') and the element *-ta-* (in plural oblique cases)⁶¹.

The demonstrative pronouns in Basque are: *au* (general oblique form *on-*) 'this' (Latin *hic*, Spanish *éste*), *ori* (general oblique form *orr-*) 'that' (Latin *iste*, Spanish *ése*) and *ura* (in Biscayan *a*; general oblique form *ar-*) 'that, yonder' (Latin *ille*, Spanish *aquél*). Certain ones of these forms are used enclitically as a kind of «demonstrative article» (cf. Armenian), of which those of *a*, *ar-* are most frequent. In this way a definite article (*-a*, *-a-*, *-ar-*) has risen in Basque by analogy with those of Spanish or French (which represent unstressed forms of Latin *ille*). The Basque article thus falls historically in the same category as the definite article in Spanish and French. In practice, however, it is used rather differently, its occurrence being much more frequent and, as it appears, ever increasing.

59 In some dialects the plural stem form becomes a general stem: (Navarre) *auéken* (possessive), *auekeri* (dative), etc.

60 We shall choose this term from the grammars of the (older) Indo-European languages, for historic-comparative reasons. The latter languages distinguish between a *nominative* form and *oblique* forms (since the former—not least in the pronouns—many times differs fundamentally from the latter: Latin *homo-hominis*, *ego-mei*, Sanskrit *sa-ta-*, etc.). In Basque, which has no nominative, the stem form may in the same way differ from the other case forms. It is important to note that the ergative is in this sense an "oblique" form in Basque. As in Latin (cf. *homines*), the plural stem form is normally based on the (singular) oblique form; in central dialects, however, *au* 'this' has the general plural stem form *aué-* (instead of *one-*), whence 'these' is *auék* (also used as ergative).

61 The *-e-* is probably the same as in the plural suffix in Georgian *-eb-*, Mingrelian *-ep-*, Laz *-(e)p*; the *-ni* added to this *-e-* is that of the so-called "old plurals" (*k'acni* 'men'). The suffix *-ta* is used in oblique cases of the old plural (*k'acta*). Cf. Note 55.

The forms of the definite article in the singular are basically similar to those of the demonstrative pronoun *a* (= *ura*), namely the stem form (in *gizona*), the ergative (in *gizonak*; cf. the pronoun *ar(e)k*), the possessive (*gizonaren*) and dative (*gizonari*; cf. the respective demonstratives *aren*, *ari*). In the remaining cases⁶² of the singular, forms with a definite article are missing and the common declension forms of the noun are used (*etxera*, *etxetik*; cf. Spanish *a casa*, *de casa*) or else other forms (*etxean* 'in the house'; cf. the demonstrative adverb *an* 'there' and Biscayan *an etxean* 'in that house'). (This curtailed system does not lack analogies in other languages; cf. Tagalog *ang bahay* 'the house', *la casa*, but *sa bahay* 'in the house', *en (la) casa*.) By the employment of suffixed plural forms of the demonstrative pronouns a plural declension arises, characterized by a stem form in *-ak* (from a demonstrative *arek* or **ak*; cf. the Biscayan singular *a* 'that') and a general oblique stem in *-e-* (from a demonstrative *are-*, *ae-*; cf. Guipuzcoan *aen*, *aei*, *aetan*, etc.). Of this suffixed demonstrative the plural stem form and ergative coincide in most dialects (being contracted to *-ak*)⁶². In some French Basque dialects, however, they remain different, the ergative being in *-ék* (< **aek*) and the stem form in *-ak*⁶³. In the other oblique forms, however, **-ae-* is everywhere contracted to *-e-*: *gizonen*, *gizonei*; *etxeetan*, *etxeetara*, etc.

Of the interrogative pronouns very little is to be said. The stems are *no(r)-* and *ze(r)-*, which occur as bases of certain interrogative adjectives and adverbs also; as pronouns the stem forms are *nor* 'who?' and *zer* 'what?'. The former is used (like English 'who?' or Spanish ¿*quién?*) of persons, the latter of things (however, probably in imitation of Spanish, *zer* may be used in such phrases as *zer gizon?* Spanish ¿*qué hombre?* English 'what man?'). *Nor* consequently has a possessive form (*noren* 'whose?'), but no locative, allative or ablative (cf. in section V); *zer* does have a possessive form (*zeren*, used adverbially in the sense of 'why?' and equivalent to the more common form *zertako*; cf. section V), while the locative, allative and ablative forms are regularly found: *zertan* ('in what?'), *zertara* ('to what?'), *zertarik* (for *zertatik* 'from what?').

VII: VERBAL STEM AND VERBAL DERIVATION

In dealing with the formation of the verb in Basque it is important to lay down the general principles for a distinction of nominal and verbal stems. In Indo-European and Semitic languages, nouns and verbs have a fundamentally different inflection, which determines the nominal or verbal

62 Cf. van Eys, 1897, p. 83.

63 Cf. MICHELENA, 1961, p. 117 (§ 5.6); van Eys, 1897, p. 51 (§ 6).

character of any word. In languages of the author's Types I and II, however, it is many times quite apparent that the verbal inflection (conjugation) is related to (and possibly based on) the nominal inflection (declension; cf. further in section VIII). In the Ural-Altaiic and Eskimo languages, for instance, the relation between the possessive inflection of nouns and the personal inflection of verbs is evident and has been observed by several linguists⁶⁴. If we assume that the possessive inflection of the noun is the prototype of conjugation, we naturally have to assume that nominal inflection is previous to verbal inflection and that the noun is older than the verb. This conclusion may seem logical from still another point of view, namely if it is considered that the verbal inflection in many languages makes the impression of being typologically more conservative (or «synthetic» in a higher degree) than the nominal inflection and, as it were, a picture of what the declension and possessive inflection of the noun may be supposed to have been in an earlier period. If Basque *nago*, for instance, were to be judged as Yurak Samoyed *madāu* 'I cut' (originally 'my cutting'; cf. the reference in Note 64), it would originally mean 'my being', which would now be expressed «analytically» *nere egotea* (that is, the «Proto-Basque» **nago* 'my being' would survive as a verb form *nago* 'I am'), just as the Latin supines *factum*, *factu* or the Sankrit infinitive *kartum* ('to make') or gerund *krtvā* ('having made') originally mean '(un)to, by or, along with the act of making', which would have to be expressed «analytically» in Latin or Sanskrit by something like *ad factionem* or *de factione* and *â kahaṇât* or *saha karanena*, respectively⁶⁵.

If verbal inflection does seem based on, or connected with, the possessive inflection of nouns, it is however hardly anywhere identical with the former. In Australian languages of Type II, where certain morphological elements are common to the nominal and verbal inflection, the latter is far richer, expressing several shades or aspects which are not expressed in the nominal inflection. The difference is, however, often on a semantic level. In the Austronesian languages (the author's Type IV), in which the difference between noun and verb is often fluctuant, certain stems are definitely nominal and others verbal. An illustrative example of this is found in Tagalog, where reduplication has a morphological function, both in nominal and verbal forms. For instance, in this language *matandâ*, which means 'old', is a singular form, while *matatandâ* is the corresponding plural ('old ones'); on the other hand, *matuwà* 'to rejoice' changes its forms according to the

64 Cf. A. SAUVAGEOT (*Les langues du monde*, 1924, pp. 168-69; 1952, p. 293) and FINCK, 1923, pp. 36-37, 79.

65 For the primitive equivalence of 'my being' (an attributive phrase) and 'I am' (a predicative sentence), cf. HOLMER, 1966, pp. 37-40 (§§ 1-2).

following paradigm: *matutuwà* 'will rejoice' (future), *natuwà* 'rejoiced' (preterit) and *natutuwà* 'rejoices or rejoiced' (durative present or imperfect); that is, reduplication, which is a formal extension of the word stem, marks «extension» semantically, namely (a) in *space* (that is plurality) or (b) in *time* (that is duration). The verb then is a «time word» (German *Zeitwort*) in Tagalog —unless «aspect word» be preferred, as time is a secondary concept— and this probably holds for a great number of languages.

In comparison with nominal stems, verbal stems are rarely derived from shorter bases in Basque. A so-called infinitive⁶⁶ of many verbs may be obtained by adding the suffix *-tu* or *-du*, the latter after *l* and *n*) to either a nominal or verbal stem (in the latter case sometimes pleonastically: *izandu* = *izan* 'be', *egondu* = *egon* 'stay, be'), while in other cases it alternates with other suffixes: *ageri-agertu* ('appear' or 'show'), *egan-egatu* ('fly'). Such elements are from the typological point of view *nominal* derivative suffixes: when added to a verbal stem (as in *artu* 'take' from *ar-*)⁶⁷, a «deverbative nominal derivative» is obtained (cf. in section IV); otherwise (as in *ondu* from *on*, *gizendu* from *gizen*, *gizondu* from *gizon*, *gorritu* from *gorri*, *berotu* from *bero*), the typological result is a «denominative nominal derivative», even though these words are semantically verbs. Such cases as *maitatu* (from *maita*) or *osatu* (from *oso*) should probably be viewed in the same way, as *maita-*, *osa-* are regular variants of *maita*, *oso* in derivations and compounds (cf. in sections III and IV). Derivations having the stem-final *-a-* are analogous to verbs of the first Latin conjugation (such as *clamare*, from the same «root» as in *clamor*), which in Latin comprise the majority of derived verbs. The types of Basque verbs now enumerated have no finite forms.

Of quite a different kind is the derivative by means of the «causative» infix *-ra-*, that is in verbs of the type *irakasi* 'teach', from *ikasi* 'learn'⁶⁸. Such verbs usually, and originally, have finite forms (e. g. *daramat* 'I carry', from the infinitive *eraman*, which is the «causative» corresponding to *eman* 'give') and are «deverbative verbal derivatives». These are formations which pertain to the particular linguistic type to which Basque belongs and no formal parallel may be found in Indo-European languages. For this see further below.

66 Or *participle*; it corresponds either to the Spanish infinitive or participle (in compound verb forms). Cf. HOLMER, 1964, p. 73, with the Note 125. It is typologically a *nominal* form.

67 The "radical" (*h*)*ar* is used in French Basque in special senses, where Spanish Basque commonly uses the "infinitive" (*artu*).

68 The sense is not causative only, neither perhaps originally so, for which cf. HOLMER, 1959, pp. 404-408.

Of the same order, from the semantic point of view, are the following suffixed elements, which express a *dative relation* (cf. references in Note 68): *-i* (e.g., *zait* 'is for me'; cf. the root *-za-* 'be'), *-ki* (e.g., *zazkit* 'are for me')⁶⁹, *-o-* (e.g., *dagio(t)* 'do(es) for him'; Biscayan *deutso* 'has for him', *eutson* 'had for him', beside *deutsa(t)*, etc., from *eutsi*, cf. van Eys, 1897, p. 253, Axular *demola, demogula*, v. Azkue, 1905-06, vol. I, p. 238); the latter (*-o-*) is often combined with *-i-* or *-ki-* (e.g., *zaio* 'is for him', *zazkio* 'are for him', *damaiot* 'I give him'; see Azkue, *op.cit.*, p. 237)⁷⁰. Neither have these elements formal counterparts in the Indo-European languages⁷¹.

Morphological counterparts may however be found in Indo-European to the potential *-ke* and the preterit *-an*, also to be ranged, from the point of view of a typological analysis, among deverbative verbal derivation elements. Both are of the same order as the «optative» (in some Indo-European languages, imperfect)⁷² *-iē-*, *-ī-*, *-ē-*, *-ā-* (Latin *siet, simus, legemus, legamus*), the «aorist» or «future» *-s-* (Latin *dixi, faxo*) or the «aorist» or «perfect» *-k-* (Greek *éthēka, téthēka*, Latin *feci*). Such elements occur combined with the various personal prefixes or suffixes and often in various tenses and modes, in Basque as well as in Indo-European. The Basque *-ke* is a primitive formative, which evades further analysis. The preterit, or imperfect: *-an* (alternatively and positionally *-en*), on the other hand, might represent the adverb *an* 'there'⁷³. Normally, elements of the kind described in the last two paragraphs do not occur in the infinitive or gerund (cf., however, *emon, emoten*, beside *eman, ematen*).

Finally, the Basque verb is provided—in contrast to Indo-European—with *pluralizers*, which mark a plural subject or direct or indirect object. These

69 Quite different from *-ki* or *-gi* in such verbs as *artuki, elduki* (cf. HOLMER, 1964, p. 74 (§ 76); MICHELENA, 1961, p. 232 (§ 12.7)).

70 The *-o* appears limited to the third person singular, although occasionally occurring in other persons (Biscayan *deutsozut*) or in the infinitive (*emon*). In the third person plural no other suffix appears than the pluralizing *-e-* (cf. below): *deutse(t)*; occasionally, however, *deutsoe, eutsoen* occurs in Biscayan.

71 In Georgian the same morphological categories are expressed by *prefix vowels* (see section VIII), viz. *i-* and *u-* (see TSCHENKÉLI, 1958, pp. 384-87); but there is no reason to assume any historical connection between these and the Basque suffixes *-i* and *-o*.

72 Cf. HOLMER, 1951, pp. 19-27 and 1958 b, pp. 5-9.

73 This, at any rate, would be the case of the homophonous relative suffix *-an*, which is added to finite verb forms (never however to the imperfect suffix *-an*); cf. HOLMER, 1959, pp. 411-13. To the relative form of the verb postpositional elements may be added, corresponding to subordinate conjunctions, among which the most important one is *-la* ('that', Spanish *que*). Etymologically, this suffix may be the allative *-ra* (in French Basque dialects *-lat, -rat*) 'to' (Spanish *a*) combined with the final *-n* of the relative form, so that *dagiala* would be analyzed as Spanish *a que lo hace*; the derived suffix *-lako* ('because') would then be the alternative derived case form *-rako* ('for').

are *-e*, *-te*, *-it-* and *-z*⁷⁴. Of these pluralizers, *-it-* and *-z* refer to a plural subject of an intransitive verb or a plural direct object of a transitive verb, while *-e* and *-te* (of which the former is more general, the latter more restricted in its usage) refer to a plural agent or to an indirect (that is dative) object⁷⁵. As in several other cases (for which see in section VIII), there is thus a close connection between the construction with an agent and an indirect object. Regarding *-it-*, this element is used in a limited number of verb forms: *-ite-* (as in *ditezen*, *gaitezen*, *zaitezen*; cf. singular *dedin*, *nadin*, etc.), *-itu-* (as in *ditu*, *gaitu*, *zaitu*; cf. singular *du*, *nau*, *au*, *genuen*, etc.), *-itza-* (as in *ditzadan*, *ditzaket*, *gaitza*; cf. singular *dezadan*, *dezaket*, *naza*, etc.).

In connection with verbal derivation it might be mentioned in passing that Basque verbal stems admit of compounding with another verbal or nominal stem (more or less according to the principles of Latin *calefacere*, etc.). The verbal components which are used in this way are *erazi* (with the alternative forms *arazi*, *erazo*, *arazo*)⁷⁶, which has the appearance of a «causative» stem to the simple verb *azi* 'grow' (without finite forms; that is from a «root» *az-*) and which is generally added to the infinitive of the main verb (as in *egin-arazi* 'let (someone) make or do'), and *etsi* 'leave, let', which is added to nominal stems (as in *onetsi* 'approve'). Such formations (along with the instances of derived verbs in *-tu*) tend to show that the difference between a nominal and verbal stem in Basque is in many cases fluctuant. To this we shall return in the following paragraphs, dealing with the inflection of verbal stems in Basque.

VIII: CONJUGATION

In languages of the author's Type I (to which Basque and most Caucasian languages belong; cf. the Introductory section) two features are characteristic and essential: (1) finite verb forms may be expressed by means of *prefixes* (partly corresponding to the Latin suffixes *-o* (*-m*), *-s*, *-t*, *-mus*, *-tis*, *-nt*, etc.), which are identical or related to possessive prefixes (taking the place of possessive pronouns in most European languages) and

74 According to the author's theory of linguistic structure, these elements must be considered as derivative formatives. This is also seen in their placement, since they may occur infixes in the original dative stem in *-ki* (e. g. *dagizkit*) or in the plain verb stem (e. g. *dauzkat*, from singular *daukat*), so that real plural stems arise (also cf. the plural stem *-toz-*, of *etorri*). These formatives pluralize the verb stem in respect of either its subject, agent or objects. Although generally foreign to Indo-European, a corresponding plural form is found in English 'are', in relation to 'is'.

75 An exception is the evidently secondary use of *-e* or *-te* to distinguish a second person plural used of several persons (Spanish *vosotros*) from one used of one person (Spanish *vos*), as in *zauzkatet*, *zakustet* (cf. ECHAIDE, 1944, p. 323).

76 The forms *arazi*, *arazo* appear to be the only ones having the prefix vowel *a-* in the infinitive. The simple verb is, however, hardly in use.

(2) gerundial, or subordinate, forms are expressed by original postpositions (or declension suffixes). If Basque then were built up in strict conformity with these principles, 'in my house' would have been **netxean* (instead of *nere etxean*) and 'when I am' would have been **nagoan* (literally 'in my being', instead of *nagonean*; cf. Note 73). Since, however, Basque does possess a conjugation which is clearly based on principles of its own, hardly showing anything in common with the declension of nominal stems or anything which could be directly interpreted according to the principles of a nominal inflection, it only remains for us to look into these principles from a historic-comparative point of view.

An analysis of the verbal inflection, or conjugation, in the early Indo-European languages will reveal four orders of flectional formatives, which are more or less clearly perceptible in the classical languages: (1) the characteristic final of the verbal stem, on which, for instance, the various Latin conjugations are based (-*ā*-, -*ē*-, -*e*-/*o*-, -*ī*- or zero in Latin grammar)⁷⁷; (2) the characteristic vowel (or other element), forming tense or mode bases -*ā*-, -*ē*-, -*ī*- in Latin grammar)⁷⁸; (3) the personal suffixes (-*ō*-, -*m*-, -*s*-, -*t*-, etc. in Latin); and (4) certain elements following the personal suffixes (in Latin -*r* or -*ur* of deponent and passive forms seem the only ones surviving)⁷⁹. If we should look at Basque and try to find what morphological elements in the latter language might be functionally or typologically comparable, the result would probably be that the formatives according to (1) would be, for instance, the -*a*- of *maitatu*, the -*i*- of *gorritu* (verbs of which no finite forms would be found; cf. in section VII)⁸⁰ or the zero element of *ar(tu)*, *egin* (with *dagi*, etc.), *etorri* (with *dator*, etc.), *ekarri* (with *dakar*, etc.), while a formative according to (2) would be the -*ke* of, for instance, *neuke*, *leuke*, *leike*, etc.⁸¹, and those according to (3) would be the personal prefixes *n*-, *d*-, *g*-, *z*-, etc., along with the suffixes -*t*-, -*k*-, -*gu*-, -*zu*-, etc. For the fourth category of formatives in Indo-European, no evident analogies would be found in Basque⁸². The categories (1) and (2) have

77 As in *clamare*, *docere*, *legere*, *finire*, *esse*.

78 As in *dicas*, *dices* (or *ames*), *sis*. Looking at the matter synchronically, -*ba*- of the imperfect and -*bi*- / -*bo*- (-*bu*-) of the future might be included (although these may be original compounds with *fuam*, *fuō*).

79 In Greek they are found as -*i*-, -*ai*-, -*o* or zero (as in -*mi*-, -*mai*-, -*to*-, -*n* (from *-*m*)), in Sanskrit as -*i*-, -*e*-, -*a* or zero (as in -*mi*-, -*te*-, -*ta*-, -*m*).

80 It does not matter that the vowels -*a*- and -*i*- are those of the primitive stems (cf. *maitasun* 'love', *gorri* 'red'), as this may be the case in Latin also (cf. *corona* and *coronare*, *finis* and *finire*, etc.).

81 Synchronically, the preterit -*an* would be as valid as the Latin -*ba*- (cf. Note 78), although the former might possibly be the adverb *an* 'there'.

82 The present author has tentatively suggested that the Basque prefix vowels might be analogous to the Indo-European formatives under (4); see HOLMER, 1966, pp. 88-89 (§ 17.5). This might hold from a certain semantic point of view; formally the Basque prefix vowels have clear counterparts elsewhere.

been dealt with in the preceding section (VII); it remains now to deal with the category (3).

Basque conjugation, however different from that of Indo-European, shows one significant *formal* analogy with that of the early Indo-European languages. As is well known, both Greek and Hittite possess a double conjugation, in Greek referred to as the *-ō* and *-mi* conjugations, in Hittite as the *-mi* and *-xi* (*-hi*) conjugations. The origin and connections of these two types of verbal inflection, as well as the semantic function of either, altogether eludes an objective analysis⁸³. In Basque the two fundamental conjugations are represented by the intransitive and the transitive paradigms (*nago*, *ago*, *dago* and *dagit*, *dagik*, *dagi*, respectively). The analogy is, as mentioned, purely formal: there is no semantic relation whatsoever between the Basque transitive or intransitive conjugation and either of the two conjugations in Greek and Hittite, which occur of transitive as well as of intransitive verbs alike. Systems of a double conjugation are not seldom found in languages of the most different type (cf., for instance, the two kinds of conjugations in Hungarian and other Uralic languages, known as the subjective and objective conjugations)⁸⁴; usually there is some connection with a transitive and intransitive construction or with the expression of pronominal subject and object forms.

The two types of conjugation in Basque are characterized (1) by different personal formatives and (2) sometimes by different prefix vowels⁸⁵; cf. *nago* 'I am', *nengoan* 'I was', *dagit* 'I do, make', *zegikat* 'I do, make (for thee)', *negian* 'did, made', *dirudit* 'I appear'. As regards personal affixes, there exists (as occasionally in Indo-European) a certain connection with forms of corresponding personal pronouns: cf. *n-* (of *nago* 'I am') and *ni* 'I', zero (of *ago* 'thou art') and *i* 'thou', *g-* (of *gaude* or *gagoz* 'we are') or *-gu* (of *dagigu* 'we do, make') and *gu* 'we', *z-* (of *zaude* or *zagoz* 'you are') or *-zu* (of *dagizu* 'you do, make') and *zu* 'you'. On a couple of points, however, a divergence is observed, namely in the first and second persons singular, where the transitive verb ends in *-t* in the first person and in

83 It is noteworthy that Greek and Hittite do not agree mutually as regards the choice of conjugation; cf. Greek *tithēmi* and Hittite *texxi* (*tehhi*) 'I put' (not *temi*, which means 'I say'). It appears that the two types of conjugation represent the shattered fragments of some earlier system.

84 Some languages have a still larger number of flexion types; cf. HOLMER, 1956 b, p. 16, Note 37.

85 So termed by the author (1947, p. 27, Note 40); TSCHENKÉLI (1958, pp. 243, 382) speaks of *Versionsvokale*; DEETERS (1930, p. 70) has *Charaktervokale*; DIRR (p. 29), *Richtungsanzeiger*; VOGT (1936, p. 118) uses *préfixe vocalique* and YRIZAR (1951, p. 353) speaks of *vocal prerradical* and *prevocales*.

a *-k* (or, in the feminine, an *-n*) in the second person⁸⁶, which are without analogies among the personal pronouns. If we suppose that the conjugation formatives are everywhere actual forms of the personal pronouns, we should get an alternative first person singular pronoun **da* (cf. Note 86). This would be in a way a parallel to what is found in Indo-European, where two different stems actually occur of the first person singular pronoun (cf. Latin *ego*, Hittite *uk(ka)*, on the one hand, and *me, meus; amm-, -miš*, etc., on the other), that is a special subject or nominative form (*ego*, etc.) and objective or oblique forms (*me, mei, mihi*, etc., along with the possessive *meus*), which might be associated with a primitive differentiation of a subjective and an objective conjugation⁸⁷. In Basque, the direct object form *ni* 'I' (along with the inflected forms *nik, niri*, etc., and the possessive pronoun *nere, nire*) represents a group associated with the notion of objective function and an objective conjugation, while *-t* (or **da*) remains isolated and evidently associated with the idea of a subjective conjugation (cf. below).

To understand the function of the different types of personal formatives in Basque, it is appropriate to compare in the first place the difference between the use of *n-*, etc. (the intransitive-objective formatives) in intransitive verb forms (such as *nago* 'I am') and in transitive verb forms (such as *nagi* 'he makes me'). If we start from the possessive sense of *n-* (as in *nere* 'my'), *nago* would naturally mean 'my being' and *nagi* 'my doing or making'. Of these, however, the latter is ambiguous, for while 'my being' could never be anything but 'I am', 'my doing' might be either 'I do' or 'I am done'⁸⁸, owing to the fact that 'do' is transitive and capable of being construed with an object as well as with a subject (or agent). In Basque it is the latter sense which is rendered by the intransitive-objective prefixes, since 'my doing' in the active sense would correspond to *dagit* ('I do it'). Assuming further that *n-* is analogous to 'my' (*nere*; as the Latin objective *me* is of the same stem as *meus*), the conclusion must be drawn that *-t* (of *dagit*), as a subjective suffix, is analogous rather to 'I' (Latin *ego*) than to 'me' or 'my' and by analogy that the second person suffixes *-k* and *-n*

86 For the original forms of these, cf. MICHELENA, 1961, pp. 235-36 (§ 12.10), with the Note 23; in the third person there are further the elements *d-*, *z-*, *l-*, *b-* (for which cf. Note 94).

87 The reconstructed form **da* for the first person singular would have to be considered a *nominative* in the Indo-European sense (= Latin *ego*), although differently used. The stem form is *ni* (= IE **me*, Latin *me*), on which the ergative (*nik*) is based by analogy with other oblique forms (as also in Latin). It is noteworthy that a nominative 'I' (Latin *ego*) has disappeared both in Basque and Celtic, which actually use "stem forms" (Basque *ni*, Celtic *me, mi*) of the first person singular pronoun.

88 This is more apparent in other verbs, for whereas 'I am gone' is equivalent to 'I have gone' in English, there is an essential difference between 'I am struck' and 'I have struck'.

equal 'thou' (Latin *tu*) rather than 'thee' and 'thy' (cf. above and Note 87). Such a form as *nagik* (or *nagin*) 'thou makest me' would consequently have to be analyzed as 'thou (art) my making' or, still better, 'my maker'. In any case, the verbal stem *-agi-* would assume a definitely *active* sense ('active doing or making' or 'maker').

This is important in view of the manner in which transitive preterits (or imperfects) are formed in Basque. Here the subjective suffixes (*-t*, *-da-*, *-k-*, *-n-*, etc.) disappear in the plain objective conjugation and the past form corresponding to *dagit* 'I do it' is converted into *negian* ('I did it'). Leaving apart the past suffix (*-an*; cf. in section VII, with the Note 73), a verbal stem *-egi-* remains, provided with an intransitive-objective *n-*. If the latter still be taken in its possessive sense (= *nere*; cf. above), the analysis of the complex *negi-* renders us the translation 'my doing', where 'doing' however is taken in a *passive* sense. The contrasting of an active stem *-agi-* and a passive stem *-egi-*, although not easily grasped in Indo-European terminology⁸⁹, is essential for the understanding of the structure of Basque conjugation. The active verb stem (*-agi-*) is (like Latin *faciens*; cf. Note 89) associated with *present*-time action and the passive (like Latin *factum*) with *past*-time action and this accords with the occurrence of Basque *-a-* forms (*-ago-*, as in *nago* 'I am') in the present and *-e-* forms (*-e(n)go-*, as in *ne(n)goan* 'I was') in the imperfect of the intransitive conjugation also, where a difference between active and passive is irrelevant⁹⁰. As will be seen further ahead, the same system of marking present and past tense is adopted for two other types of transitive conjugation as well.

The past forms with the prefix vowel *-e-* and objective-intransitive personal prefixes also express a personal object; in such forms, however, an infix *-n-* occurs in the forms incorporating a first person ('me' or 'us') and a second person plural ('you'): *nengian* 'he made me', *gengian* 'he

89 One might—as long as transitive verbs are concerned—attempt to render the stem *-agi-* by Latin *faciens* or *factor* and the stem *-egi-* by *factum*, although *faciens* has no existence in Basque and *factor* is a derivation of *egin* (*egile*, from **eginle*), while the stem *-egi-* (as in *egin* 'do') comes as close to Latin *factum* as could be desired. Intransitive verbs, owing to their meaning, have often no agent nouns: while English has 'doer', 'maker', 'giver', 'seer', 'hearer', 'striker', etc., such forms as 'beer', 'becomer', 'stander', 'liver', 'goer' are either impossible (cf. 'beer') or little used. A comparison with Basque shows that while *egile*, *emaile*, *esale*, *ikusle*, *entzule* are quite common, there is no **eserle* (from *eseri*), **etzale* (from *etzan*), **etorle* (from *etorri*); *egoile* and *joale* ('a bell') are used in specialized or quite unrelated senses (cf. English 'beer', 'liver'). It is notable, also, that Basque has no **iza(i)le* (from *izan*), as English also lacks agent nouns derived from 'to be' or 'to have'.

90 The prefix vowel *-e-* is occasionally connected with a dative relation, as in the familiar conjugation (*zegik*, etc.; but otherwise *dagizu*, etc.); also cf. Axular *demola*, *demogula* (see in section VII) and possibly the Biscayan *deutso*, etc. (cf. Note 70 and van Eys, 1897, pp. 255, 261-62).

made us', *zengian* 'he made you' (see Echaide, 1944, pp. 215-17); before an *-r-* (in *-ra-* derivations; cf. section VII and below) this *-n-* is absent, so that corresponding forms become ambiguous: *neraman* 'I carried him' or 'he carried me' (see Echaide, *op.cit.*, pp. 249, 260). For *ninduan*, *ginduan*, etc., cf. below. In intransitive verbs the *-n-* is optional (perhaps according to dialects), so that *nentorren* exists beside *netorren* 'I came' ⁹¹.

In the last paragraphs such conjugation forms only have been treated which formally incorporate a single personal pronoun, either of intransitive verbs, which express a subject pronoun only, or of transitive verbs, which express either a subject (agent) or direct object (recipient) in the first and second persons (a third person agent or recipient being understood, although unexpressed). When, however, first and second person pronouns are formally present in the same verb form, functioning as respectively agent or recipient, the former is, in the present tense, expressed by suffixes and the latter by prefixes (cf. above). In the past tense, probably by analogy with intransitive verbs ⁹², the personal formative (of the first or second person) expressing a direct object becomes a prefix, provided the agent is an (unexpressed) third person, and the prefix vowel (*-a-*) of the present is changed into *-e-* (followed by the infix *-n-* as in the intransitive verb); when, on the other hand, first and second person formatives are combined (one expressing the agent, the other the recipient) the order and nature of the formative elements is the same as in the present, so that the difference consists in (1) the use of the prefix vowel *-e-* (instead of *-a-*), (2) the occurrence of the infix *-n-* (see above) and (3) the use of the past suffix *-an* (or *-n*); thus: *zengidan* 'I made you' (present *zagit*), *nengizun* 'you made me' (present *nagizu*; cf. Echaide, 1944, pp. 215-16).

Basque is further capable of expressing the indirect object of a verbal action, both in intransitive and transitive verbs (in the latter case quite naturally combined with a direct object, which, however, is always in the third person and hence not expressed). When the indirect object is expressed, a special verbal stem indicating a dative relation is used (for its formation, cf. above in section VII). The personal formatives referring to the indirect (or dative) object are always placed last in the complex. The principles for the conjugation with dative forms are consequently quite the same as those applying to the transitive conjugation with expressed agent and object formatives, the structural relation between both being quite

⁹¹ In forms expressing a first or second person plural agent, an infix *-en-* occurs (*genegian*, *zenegian*, *generaman*, *zeneraman*), for which cf. van Eys, 1897, p. 268, and YRIZAR, 1951, pp. 380-82.

⁹² That is that *nengian* is to *nentorren* as *nagi* is to *nator*; similarly (with the exceptional prefix vowel *-i-*): *ninduan* : *nintzan* :: *nau* : *naiz*, etc. In this way *ginduan* 'had us' becomes different from *genduan* 'we had (it)'.

evident. As a matter of fact, an intransitive verb form incorporating a dative object is semantically analogous to a transitive verb incorporating agent and direct object formatives, whence the dative formatives are identical with those expressing the agent: *zait* '(it) is for me' is built up as, or equals, *dut* 'I have (it)'; further: *zatzait* 'you are for me', as *zaitut* 'I have you', *natzaizu* 'I am for you', as *nauzu* 'you have me', etc.

In transitive verbs, in which the agent is an (unexpressed or expressed) third person, a first or second person dative —and other cases are not possible— is expressed as in the intransitive verb (cf. *dagit* 'he does (it) for me', as *datorkit* '(it) comes to me', *zegidan* 'he did (it) for me', as *zetorkidan* '(it) came to me'). If, however, the agent is a first or second person, a probably secondary arrangement of the personal formatives is resorted to, according to which both are suffixed to the dative stem of the verb in the present tense, the dative formative preceding the agent formative, while in the imperfect agent prefixes are used, as in the plain objective conjugation (see above); hence *dagidazu* 'you make it for me' (imperfect *zenegidan*), *dagizut* 'I make it for you' (imperfect *negizun*; cf. Echaide, 1944, pp. 205-07).

The above analysis of Basque conjugation forms gains a strong support through a comparison with the morphologically and structurally much more closely related Georgian. The latter language has no personal conjugation suffixes analogous to those described in the preceding paragraphs⁹³. The two types of conjugation are, however, present, although according to somewhat different principles. To limit ourselves to the first and second persons in the singular and plural only, we find that corresponding to the Basque subjective suffixes (*-t*, *-k*, *-n*, *-gu*, *-zu*) Georgian uses a plain set of prefixes (*v-* for the first person and *zero* for the second person, the plural being in either case marked by an additional *-t*; cf. Note 93). Corresponding to the Basque intransitive-objective prefixes, Georgian uses a different and more varied set of prefixes, viz. *m-* for the first person singular, *g-* for the second person singular (the plural being marked by the same *-t*) and *gv-* for the first person plural⁹⁴. In this way Georgian *vak'eteb* means 'I make

93 The termination *-t'* in the Georgian paradigm marks plural forms and would hence correspond to Basque *-e* or *-te* (has in *dakie*, *dakite*, *dagizu(te)*), the latter (*-te-*) possibly formally also. The third person suffixes *-s* (singular) *-en*, *-es* (plural) have no structural counterpart in Basque.

94 Except in the first person singular (*m-*; cf. *me* 'I') there is no formal connection between Georgian personal formatives and personal pronouns. Caucasian prefixes sometimes correspond formally to Basque personal formatives: Georgian *gv-* and Basque *g-*, *-gu*: Georgian *zero* (*ant'eb* 'thou kindlest') and Basque *zero* (*ago*); Abkhaz *š'w* —a kind of labialized *s*— (second person plural) and Basque *z-*, *-zu*; Abkhaz *d-* and Basque *d-* (see

it', *aket'eb* 'thou makest it' (Basque *dagit, dagik*), while *maket'eb*s means 'he makes me', *gak'eteb*s 'he makes thee' and *gvak'eteb*s 'he makes us, (Basque *nagi, agi, gagiz*). In the so-called pluperfect, the prefix vowel (in the above examples *-a-*) is changed into *-e-* at the same time as the subjective set of prefixes is replaced by the objective set⁹⁵, so that we get (*ga*)*mek'etebia* 'I had made him' (Basque *negian*, imperfect)⁹⁶. As in Basque, the above forms are to be analyzed as follows: *vak'eteb* 'I (am) maker', *mak'eteb*s 'he (is) my maker' and *mek'etebia* 'he is my made thing'. The function of the prefix vowels in Basque and Georgian are consequently identical.

This impression is strengthened if we consider the use of a third prefix vowel in Basque and Georgian, viz. *-i-*. In Basque it is used in a small number of verbs, of which the most common is *irudi* 'appear'⁹⁷. Although an intransitive verb in English, its finite forms are according to the transitive paradigm; hence *dirudit* 'I appear'. In Georgian, verbs with the prefix vowel *-i-* are passives (e.g. *viçrebi* 'I am written'), although (like the Basque verbs in *-i-*) conjugated according to the subjective paradigm (cf. above)⁹⁸. Notice that the prefix vowel *-i-* is unchanged in the paradigm, both in Basque and Georgian (cf. the examples in Note 97).

The "prefix vowels" (cf. Note 85) are, as we have seen, typical of the Southern Caucasian languages (Georgian, etc.), where their function strongly recalls that of the corresponding morphological elements in Basque, but they are found (in divers functions) in many other languages of Type I as well (cf. Holmer, 1947, pp. 27-31; 1953, pp. 166-67, 172, 175-76). Georgian uses *-a-* (originally in the sense of 'on', but then also in a general active sense), *-e-* (in certain perfect or pluperfect tenses), *-i-* (in the double

YRIZAR, 1951, p. 155); further Abkhaz and Lesghian *b-* and *l-* and Basque *b-*, *l-* (*bego, leuke*; YRIZAR, *op. cit.*, pp. 135-45, 155). Regarding the Basque *l-*, see also LAFON, 1956, pp. 3-20.

95 The term "objective" will be used for the Georgian verb instead of "intransitive-objective" (as in Basque), as this set of prefixes has no connection with intransitive verbs in Georgian.

96 This form is actually considered to be a subjunctive, but for a general comparison with the structure of Basque this seems inessential.

97 The remaining verbs which in the language of today have finite forms are: *ikuzi* 'wash' (*dikuzke*; AZKUE, 1905-06, vol. I, p. 404); *imotsi* 'flow' (*zinotson*), *irakin* 'boil' (*diraki(t)*, *zirakian*, Biscayan *irakion*), *iraun* 'last' ((*ba*)*dirau(t)*, *ziraun*, Biscayan *iraun*), *izeki* 'burn' (*dizekat*, *zizekan*), that is nearly all semantic intransitives (cf. van EYS, 1897, pp. 131-32, 142; ECHAIDE, 1944, pp. 419-49; AZKUE, 1905-06, vol. I, and LHANDÉ, 1926). Of the same kind are originally *jardun* 'be occupied' and *jardetsi* 'reply'.

98 Originally such verbs are reflexive (*vic'erebi* as if 'I write myself', *vik'eteb* 'I make myself'); this explanation would come in handy for the Basque *i-*verbs also, supposing that *dirudit* would mean 'I show myself', *dirakit* 'I boil myself', etc., the transitive inflection in both languages depending on the element 'self' being conceived as the direct object.

sense of 'for' and 'self', i.e. in a reflexive sense), which all are found in Basque also, and *-u-* (which does not occur in the Basque conjugation) ⁹⁹.

Now it is evident that although the Georgian *-a-* may in many verbs express the idea of 'on', e.g. *vaçer* 'I write on', *maçers* 'writes on me' (cf. Tschenkéli, 1958, p. 396), the prefix vowel *-a-* cannot be translated by 'on', or understood to be analogous to a postposition with a possessive prefix (**ma-* 'on me', like Nahuatl *noca* 'for or by me', *notech* 'at me', etc.), for this would render the prefix *va-* ('I ... on') inexplicable. The prefix vowels evidently do not belong syntactically—in either Basque or Georgian—to the characteristic consonant expressing person, although it appears to join the latter to the verbal stem (which normally begins with a consonant); it may be said to be part of the verbal stem or else, in its origin, analogous to an independent local or directional adverb. From the point of view of a comparative analysis of linguistic structure, however, this latter "glottogonic" assumption is quite unnecessary ¹⁰⁰. It is sufficient to state that Basque *-agi-*, Georgian *-ak'et-* are active stems, Basque *-egi-*, Georgian *-ek'et-* are passive stems and that Basque *-irudi-*, Georgian *-ik'et-* are reflexive stems.

The prefix vowels may occur independently without a preceding consonant (cf. Biscayan *ekarren* = Guipuzcoan *zekarren* 'he carried (it)', along with *ekarri* and other Basque infinitives, Georgian *ak'eteb*, etc., for which see above, and Eastern Caucasian *a-*, *i-*, *u-*; cf. Holmer, 1953, p. 167). This fact also naturally excludes the theory of a postpositional character of the prefix vowels (cf. above), as in that case they would be postfixed to nothing. In several American Indian languages (as well as in Gilyak and Ainu) a prefixed *i-* (unprovided with a consonantal element indicative of person) signifies an indefinite object (or none at all); that is to say, it appears to express the idea of 'something' (cf. 'to drink or smoke it', definite, and 'to drink or smoke (something)', indefinite). But this *i-* is unlikely to translate 'something', which is probably a secondary shade of meaning. In point of fact, it is easily explained from the reflexive function of *i-*, to which parallels may be found elsewhere (cf. the Australian Bandjalang *adjuma-* 'to smoke it' and the reflexive *djuma-li-* 'to smoke' or 'to smoke something').

99 The same vowels *e-*, *i-* and *a-* also serve as prefix vowels in Sumerian, where they are difficult to define as to their exact function. Cf. HOLMER, 1947, pp. 30-31.

100 Theoretically, there are three possible ways of analyzing the meaning and function of the prefix vowels: (1) they belong to the personal prefix (*n-i-*, *m-i-* = '(doing) to or for me'); (2) they belong to the verb stem (*n-i-*, *m-i-* = 'to or for my (doing)'—this would involve a preposition *-i-*); and (3) they belong to the whole complex (*n-i-*, *m-i-* = 'my (doing) to or for'), the latter being the more likely analysis.

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The Basque verb *ikasi* 'learn' (without finite forms, but with the causative *iraka(t)si*) could be of this type (= 'teach oneself' ?), but *ikusi* 'to see' (with *dakust*, *nekusan*, the alternative infinitive *ekusi* and the causative *erakutsi*), *ibili* 'to go' (with *nabil*, *ne(n)bilen*, *ebili*, *erabili*) and some others rather owe their initial *i-* to "vowel leveling" (see in section I, with the Note 12). However, in the causative infinitives, *era-* and *ira-* are found to alternate rather frequently.

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En las páginas que preceden se propone un análisis histórico-comparativo de la estructura fonética y morfológica del vascuence, en lo posible de un modo bien objetivo. Esto quiere decir que nada se explica partiendo de ideas preconcebidas de que ciertos elementos de la lengua sean reflejos de un modo natural de pensar o de una lógica universal, al mismo tiempo que se supone que tanto fonemas (o sonidos) como formas y categorías morfológicas, desde un principio y durante todas las épocas de la historia de una lengua, se han ido conformando y adaptando a modelos existentes en lenguas que en tal momento hayan dominado culturalmente, continuando tales tendencias hasta nuestros días. Las estructuras fonológica y morfológica de lenguas en contacto se asemejan espontáneamente y es ésta (y no ninguna lógica universal) la verdadera causa de que las lenguas europeas, por ejemplo, se parezcan lo bastante estructuralmente para hacer posible el establecer conceptos gramaticales y lógicos más o menos congruentes. Al mismo tiempo, las divergencias de estructura entre las lenguas muchas veces dependen de un «marginalismo» (o si se quiere un atavismo) que ha sobrevivido en ciertas lenguas, o en ciertas partes, donde muy anteriormente había operado una influencia regularizadora, debida a contactos lingüísticos luego, durante siglos y milenios, interrumpidos.

Así el vasco se destaca claramente como un producto de varios contactos: por un lado unos bien marcados con las lenguas románicas de Francia y la península Ibérica y por otro rasgos de contactos que ya no se pueden identificar, manifestándose en un conjunto de fonemas y morfemas que por lo visto conviene señalar como genuinamente vasco. El autor cree sin embargo ver analogías caucásicas en algunos de éstos.

Entre estas últimas el autor cuenta la existencia de *tz* y *ts* como fonemas primitivos (fonemas análogos existieron —o existen— en lenguas románicas, aunque de orden secundario); posiblemente también la existencia de plosivas aspiradas, vivas en vasco francés. Más evidentes son las analogías fónicas con los romances, por supuesto de origen más reciente; se justifican como tales por las semejanzas particulares que existen en la fonología de los dos tipos de vasco, hablados en ambos lados de los Pirineos, en comparación con la de las respectivas lenguas románicas. También la tendencia de acentuar la penúltima que prevalece en muchas hablas del vascuence, tanto en España como en Francia, debe de tener relación con un tipo de acentuación de origen románico (o bien prerrománico, ¿celta o galo?); nótese que la supresión de las últimas latinas y el acento de la que es la presente última en francés moderno debe de indicar una acentuación de la penúltima en cierta época anterior dentro de los confines del actual dominio de habla francesa.

El autor considera asimismo la estructura de las palabras, que es muy diferente en idiomas diferentes. Se observa, v.gr., que el vasco favorece las secuencias *-lb-*, *-ld-*, *-lg-*, *-rb-*, *-rd-*, *-rg-*, mientras que desfavorece decididamente las inversas de *-bl-*, *-dl-*, *-gl-*, etc. (se cita un paralelo del armenio; otro sería el oseta —centro del Cáucaso— (*æ*)*rvad* 'hermano, pariente', del iranio *brātā*); la estructura fónica del vasco acepta, v.gr. *-sk-*, *-sp-*, *-st-*, *-zk-*, *-zp-*, *-zt-*, pero rechaza *-ks-*, *-ps-*, *-kz-*, *-pz-*, (mientras que *-ts-*, *-tz-* no son secuencias de fonemas sino fonemas simples).

En la morfología nominal (sustantivos y adjetivos) se nota por un lado la existencia de un caso ergativo (expresión del agente de un verbo transitivo) así como la ausencia de casos nominativo (en el sentido indoeuropeo) y acusativo, y por otro lado la falta de formas de plural; es de advertir que formas de la declinación determinada (como *gizonak* 'los hombres', etc.) pertenecen a la declinación del artículo definido y por lo tanto a la morfología pronominal. Esta, como bien se sabe, difiere en la mayoría de las lenguas, y a veces radicalmente, de la de los sustantivos.

El capítulo más importante y al mismo tiempo más difícil lo constituye el análisis de la conjugación, que tanto con respecto a las formas como a los principios básicos para la expresión de la acción verbal, se distingue fundamentalmente de la conjugación indoeuropea. El análisis se centra aquí en el problema de la función de las llamadas *vocales prefijas* (o elementos vocálicos intercalados entre la consonante que sirve de exponente de las varias personas y la raíz misma del verbo, como, por ejemplo, la *-a-* de *dakar*, *nakar*, *dagi*, etc., la *-e-* de *nekarren*, *negien*, o la *-i-* de *dirudi*, *zurudin*). El autor señala paralelos en vocales análogas de lenguas caucásicas, ante todo en georgiano, donde se pueden demostrar analogías tanto formales

como funcionales —y alguna vez muy exactas— con el vascuence. En conexión con esto se trata de determinar el sentido concreto que deben de haber tenido las bases *-agi-*, *-egi-*, *-irudi-*, etc., concluyendo que el primero es inherentemente *activo* (equivalente a latín *factor* or *faciens*), el segundo *pasivo* (como el latín *factum*; compárese el vasco *egin*), mientras que el tercero posiblemente es *reflexivo* (*irudi* sería pues algo así como 'mostrarse'). No todos los verbos cuyo infinitivo empieza con *i-* pertenecen al tercer grupo: *ikusi* (con la variante *ekusi*), por ejemplo, debe su *i-* inicial a factores de orden fonético (por lo que el presente es *dakus* y no **dikus*, por analogía con *dirudi*).

En varias partes se hace referencia a la tipología de las lenguas que ha propuesto el autor y para cuya ilustración se ha preparado también un mapa tipológico. Este mapa (después de terminada la redacción de este artículo) ha salido en una publicación de los Seminarios Lingüísticos de Lund, junto con breves comentarios, bajo el título *The Principal Linguistic Types* (Annual Report 1967-68 del Seminario de Lenguas Eslavas, Lund, 1970).

WORKS REFERRED TO

- | | |
|-------------------------------------|---|
| AZKUE, Resurrección Ma. 1905-06 ... | <i>Diccionario vasco-español-francés</i> , vols. I, II. Bilbao. |
| DEETERS, G. 1930 ... | <i>Das khartwelische Verbum</i> . Leipzig |
| DIRR, A. ... | <i>Grammatik der modernen georgischen (gruzinischen) Sprache</i> . Vienna and Leipzig. |
| ECHAIDE, Ignacio Ma. 1944 ... | <i>Desarrollo de las conjugaciones euskaras</i> . San Sebastián. |
| FINCK, F. N. 1923 ... | <i>Die Haupttypen des Sprachbaus</i> (2d ed). Leipzig. |
| HOLMER, Nils M. 1938 ... | "Remarque sur le passage e, o > a dans les langues celtiques". <i>Etudes celtiques</i> , vol. III (pp. 71-85). Paris. |
| 1947 ... | "Ibero-Caucasian as a Linguistic Type". <i>Studia Linguistica</i> , vol. I, No. 1. Lund. |
| 1949 ... | "A Proto-European Consonant System". <i>Studia Linguistica</i> , vol. III, No. 1. Lund. |
| 1950 ... | "Las relaciones vasco-celtas desde el punto de vista lingüístico". <i>BRSVAP</i> , vol. VI, No. 4 (pp. 399-415). San Sebastián. |
| 1951 ... | "On the Indo-European Optative". <i>Contributions from the Linguistic Seminars</i> , vol. III, No. 13 (pp. 5-13). Lund. |
| 1952 ... | "A propósito de la sonorización de oclusivas iniciales en vascuence". <i>BRSVAP</i> , vol. VIII, No. 1 (pp. 121-23). |
| 1953 ... | "Further Traces of Paleo-Eurasian". <i>International Anthropological and Linguistic Review</i> , vol. I: 2-3 (pp. 160-78). Miami. |
| 1956 a ... | "Semántica y etimología". <i>BRSVAP</i> , vol. XII, No. 4. San Sebastián. |
| 1956 b ... | "Amerindian Structure Types". <i>Contributions from the Linguistic Seminars</i> , vol. II, No. 6 (pp. 5-29). Lund. |
| 1958 a ... | "Some Further Analogies with the Evolution of Postvocalic s in Celtic". <i>Celtica</i> , vol. IV. Dublin. |
| 1958 b ... | "Additional Remarks to the Problem of the Indo-European Optative". <i>Contributions from the Linguistic Seminars</i> , vol. III, No. 11. Lund. |
| 1959 ... | "Sobre algunos problemas de lingüística histórica vasca". <i>BRSVAP</i> , vol. XV, No. 4 (pp. 402-16). San Sebastián. |
| 1960 ... | "On Vowel Leveling in Chukchi and Austronesian". <i>Contributions from the Linguistic Seminars</i> , vol. III, No. 14 (pp. 14-23). Lund |
| 1963 ... | "The Comparative Method as Applied to Non-Indo-European Languages". <i>Linguistic Comparison in South East Asia and the Pacific</i> (ed. H. L. Shorto). London. |
| 1964 ... | <i>El idioma vasco hablado</i> . San Sebastián. |

| | | |
|------------------------------|---------|--|
| 1966 | ... | "The General Structure of Language". <i>Contributions from the Linguistic Seminars</i> , vol. V, No. 23. Lund. |
| LAFON, René | ... | "Les formes verbales de prétérit à préfixe l- dans les textes du XVI ^e siècle". <i>BRSVAP</i> , vol. XII, No. 1. San Sebastián. |
| <i>Les langues du monde.</i> | 1924 | (Ed. A. Meillet and Marcel Cohen). Paris. |
| | 1952 | (Ed. A. Meillet and Marcel Cohen). Paris. |
| LHANDE, Pierre. | 1926 | <i>Dictionnaire basque-français</i> . Paris. |
| MICHELENA, Luis. | 1956 | "Echaenne". <i>Euskera</i> , vol. I. Bilbao |
| | 1957-58 | "A propos de l'accent basque". <i>BSLP</i> , vol. LIII (pp. 204-33). Paris. |
| | 1961 | <i>Fonética histórica vasca</i> . Sas Sebastián. |
| | 1969 | "Notas lingüísticas". <i>Fontes linguae Vasconum</i> , vol. I, Not. 1 (pp. 1-59). Pamplona. |
| TSCHENKÉLI, Kita. | 1958 | <i>Einführung in die georgische Sprache, Part I</i> . Zurich. |
| Van EYS, W. J. | 1897 | <i>Grammaire comparée des dialectes basques</i> . Paris. |
| VOGT, Hans. | 1936 | <i>Esquisse d'une grammaire du géorgien moderne</i> . Oslo. |
| YRIZAR, Pedro, | 1951 | "Sobre el carácter pasivo del verbo transitivo o del verbo de acción en el vascuence y en algunas lenguas del Norte de América". <i>BRSVAP</i> , vol. VII, No. 3. San Sebastián. |