

Historical implications of the Western Basque Tonal Accent [1975]¹

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Luis Michelena has recently given us a most useful survey of the types and histories of accentual systems in the Basque-speaking area. Of the five types that he discusses, the most widespread one, and the only one whose history has not been in principle understood, is his type I, a tonal accent found in the western part of the area. This occupies the greater part of the Basque-speaking area within Spain, in Vizcaya, Guipúzcoa, and adjacent parts of Navarra. The present paper represents an attempt to rise to the challenge inherent in Michelena's remark that, «type I, as it stands, is, to say the least, a historical enigma».

The amount of accentual diversity found is not completely indicated by this specification of five types. We must not forget that there is an additional, negatively characterized, sixth type, in which (much as in French) there seems to be no distinctive accent that is a property of individual words. This is now found in most of the Labourdin and Low Navarrese areas, and perhaps also in part of the Western area. Furthermore, some of these types have subtypes showing subsidiary differences. This is true of type II as between the Souletin and the Roncales dialects. And it is especially true of the type I accent that primarily concerns us, where differences between dialects belonging to this general type encompass such things as the location of the accented syllable within the word, whether monosyllabic stems are necessarily

¹ The original typescript of this 1975 article by the late William H. Jacobsen is kept at the Jon Bilbao Basque Library, University of Nevada, Reno, together with other papers by the same author, including a shorter version of this paper, for oral delivery at a conference, and a handout with examples and maps (William H. Jacobsen Papers, BAQ090, Box: BSQAP0449. University of Nevada, Reno. Jon Bilbao Basque Library). The editorial team of *ASJU* is grateful to the Jacobsen family for granting us permission to publish this paper in the pages of this journal and to the Jon Bilbao Basque Library librarian, Iñaki Arrieta Baro, for handling the process with efficiency and professionalism.



accented, and whether accentual distinctions apply to nouns, to demonstratives, or to both.

The properties of the other accentual systems, all of them seemingly involving more of a stress than a tonal accent, may be briefly summarized. Type II pertains to the easternmost Souletin and Roncalese dialects, and seems to be attested, in part from earlier times, from certain northern Labourdin and Low Navarrese locations. It seems that at an earlier period here, words were uniformly stressed on their penultimate syllables. But certain contractions of the last two vowels of a word introduced a contrastive locating of the stress on their final syllables. Contrast the ergative case singular and plural forms of a noun whose stem ends in a consonant; in the latter form an intervocalic **g* has been lost: (erg. sg.) *-V́Cak* vs. (erg. pl.) **-VCágek* > *-VCék*. Other exceptions to the penultimate stress occur in loan words and in some compounds. In Roncalese the non-final stress tends to slip back from the original penult to an earlier syllable of the word, and to remain on this syllable throughout the singular cases and in the nominative plural, even when endings containing more than one syllable are present.

The rather similar type III accent is found in the southern High Navarrese area, including apparently also the Spanish Low Navarrese dialect of the Salazar Valley, and something like it seems to be attested in the accented texts of Lizarraga de Elcano of the late 18th century. Here the stress generally falls on the present-day penult. This is in spite of the fact that some of these penults continue former antepenults of words containing vowel-final stems, the former penult vowels having become non-syllabic before the vowels of the endings. Thus we have what Michelena aptly characterizes as «a stress system with a very short-lived memory».

In these two accentual systems the location of the accent in typical forms is determined by counting syllables back from the end of the word or phonological phrase. In the remaining two types, on the other hand, the accent is located primarily with reference to the beginning of the word. The type IV accent occurs along the lower reaches of the Bidasoa (Fuenterrabía, Irún, etc.). Here the stress falls on the second syllable of polysyllabic stems, but monosyllabic ones require it to stay on their first syllable. Some exceptional polysyllabic stems also require stress on the first syllable; some of these are loan words.

The type V system is attested only in texts in Labourdin of Saint-Jean-de-Luz written around 1700 by Pierre d'Urte. Michelena has insightfully demonstrated that this is basically a type IV system to which has been added a rule (comparable to that of Greek) that limits the location of the accent to the last three syllables of the word (or phonological phrase). In this type, therefore, both the beginning and the end of a word come into account in determining accent placement.

Turning now to the Western type I or tonal accent that is our primary concern, it seems clear, in the first place, that there was no hope of elucidating its history until its phonological status had been clarified. Accentual differences distinguish, for example, between certain otherwise homophonous forms ending in *-ak*: ergative singular is opposed to nominative and ergative plural. Among the published sources that take note of this difference at all, many have handled it orthographically in the model of Spanish, with a single kind of accent mark that is associated with one or another syllable (as would in fact be appropriate for the other types). Thus the different forms

for the above-mentioned categories in the word for 'man' would typically be shown, depending on the dialect, as (erg. sg.) *gizonák* vs. (nom.-erg. pl.) *gizónak*, or else as (erg. sg.) *gizónak* vs. (nom.-erg. pl.) *gizonak*. If looked at this way, however, the reason for the difference would inevitably remain a historical puzzle. Considering the ergative case forms, as noted above in connection with the type II accent pattern, the earlier forms would have been (sg.) **gizonak* and (pl.) **gizonagek*. These forms would have differed by the presence of an extra suffixal syllable in the plural, yet a normal process of accent placement with reference to syllables counted from the end of the word, as in the types II, III, and V accent systems, would fail as an explanation, since the longer form is the one that has its accent located earlier in the word.

I have suggested, however, that the appropriate way of regarding such contrasts is as between *unmarked* words, which bear no accent at all, and *marked* words, which bear a tonal falling accent on a predetermined syllable. This marking would occur in the nominative-ergative plural forms. The previously mentioned forms would then be regarded as (erg. sg.) *gizonak* opposed to (nom.-erg. pl.) *gizónak* or *gizonak*.

Descriptions are few and incomplete, but it is clear that the correlation of accentual marking with morphological categories or as a property of stems varies dialectally within the Western area. This must be due, on the one hand, to analogical extension and restriction of accent placements after the accent itself had first arisen by regular sound change, and on the other, to phonological differences between forms already existing at the time of its first appearance. Thus to get a toe hold on the conditions leading to the emergence of this accent we must start out from the clearer cases, the ones for which there is most agreement among the dialects. Nominal forms seem to agree better than finite verb forms, and in particular most of these dialects agree in having the accentual marking on all the (definite) plural case forms of nouns, in contrast to the unmarked (definite) singular and indeterminate forms. Thus a comparison of forms such as the ergative singular and plural that we have already met should give us a key to the matter: the accent arose on the form formerly ending in **agek* but not on that ending in **ak* (and remember that this same difference was important for the type II accent also, the only other type that correlates with difference of number).

The other key is afforded by the realization that a tonal accent can arise as a result of the shortening of a long vowel or diphthong. My perception of this possibility has been sharpened by a recent article by Alice Wyland Grundt discussing the development of tonal accents in dialects of Low German, Frisian, Danish, Norwegian and Swedish. For example, in East Norwegian and Central Swedish dialects tonal contrasts are thought to have developed in response to the loss of length in the second syllable of a heavy disyllabic sequence.

This must be just what has given rise to the Basque tonal accent also. In general in the Western area, a vowel sequence **ae*, usually if not always arising from the loss of an intervening consonant, contracts to *a*. This is probably via an intermediate stage in which the second vowel has assimilated to the first, **aa*. Such clusters are attested in some areas, although more widely as the result of *a + a*; they seem, however, not to be attested in the particular case endings that we are considering.

Thus the ergative plural ending **agek* would have become **aek* upon loss of the intervocalic **g*, a loss which is abundantly paralleled. Then this would have

assimilated to **-aak*. When it shortened to *-ak*, a compensatory fall in pitch would have arisen.

At first this would have been localized on the last syllable, or as between the last two, which is still the situation in some dialects, such as the Vizcayan described by Azkue. But in many dialects the position of the pitch drop has drifted forward in the word. This doubtless started with a tendency to keep the accentual stigmatum in a fixed position with reference to the stem (cf. the forward drift of non-final stress in the Roncalese version of the type II system). In some dialects, such as the Vizcayan of the older generation at Guernica or the Guipúzcoan of Ormaiztegui, the accent has drifted toward the beginning of the word, so that the fall in pitch is usually located between the last two syllables of a noun stem, regardless of the number of suffixal syllables. At the early stage the location of the pitch fall within words would have been non-distinctive, although due to subsequent developments this has certainly become distinctive in some dialects.

That changes have taken place in the position of the accent can hardly be doubted, since we see such differences between closely similar dialects today. For example, the younger generation at Guernica localizes the pitch drop, in the case of the common disyllabic noun stems, between the last syllable of the stem and the first suffixal syllable.

In Grundt's discussion of the Low German tonal accents, she advances the hypothesis that the fall in pitch results from the phonologization of redundant tonal transitions inherent in the changing vowel quality of centering diphthongs, when such diphthongs monophthongize. This Basque case does not clearly support this suggestion, however, as the vowel sequences that shorten to give rise to the pitch change are mostly monophthongal; these include not only the **aa*, but also, as we shall see, **ee* and **ii*. The only apparently relevant earlier vowel sequence with a fall in tongue position is **ie*. However, Gavel's description of the pronunciation of double *aa* and *ee* in some dialects, with the first vowel much stronger than the second, is reminiscent of some of the Germanic data considered by Grundt.

Nor would the pitch change result from the monophthongization of the originally rising tongue position in **ae*. It is in the Eastern area, the location of accent types II, III, V, and VI, that the second part of the sequence must have risen to give **ai*, which went on to assimilate to *e*. Thus it seems that the pitch fall has arisen more as a compensation for redistributed or lost durations of vowel segments than from the qualities of the vowels in question.

Even the idea that accentual differences in Basque may correspond to former differences between single and double or long vowels is not new. Such differences have been known to distinguish in some localities between pairs of words such as *ari* 'thread' / *ari* (< *aari*) 'ram' and *ate* 'door' / *ate* (< *aate*) 'duck'. Also the suggestion has been made by Altube that the accented demonstrative plurals *ónek* 'these', *órrek*, *árek* 'those' have arisen from the old trisyllabic formations *oneek*, *orreek*, *areek*. But this has apparently been regarded as a marginal phenomenon. I am rather suggesting that it is the original source of this tonal accent, so that other factors affecting it (imitation of donor language stress in loan words, accenting of monosyllabic stems, accent patterns of compound words) are secondary and later accretions.

In what follows, taking the hint from Azkue and Michelena, we will symbolize with a grave accent on their final syllable those suffixes that condition an accentual marking on words bearing them. This is to be understood in the present discussion as a cover symbol (or morphophoneme) subsuming the different localizations of the pitch drop in the word in different Western dialects.

The original **-agek* for the ergative plural is analyzable into *-a*, the mark of definiteness, **-g-* 'plural', *-e-*, an automatic «buffer» vowel that occurs when a consonant-initial suffix follows a stem or suffix ending in a consonant, and *-k*, the marker of the ergative case.

The explanation that we have given for the accenting of the ergative plural *-àk* would seem to apply at best to only a minority of the plural case endings, as most of these are not usually thought to have undergone a simplification of former diphthongs or double vowels, and even those that are, such as genitive plural *-èn*, present problems concerning the vowel quality. To account for the accentual marking running through all plural forms we will take up the other endings in five groups: the dative plural, the plural local cases (marked by *-età-*), the other plural cases showing initial *-e-*, the partitive, and the nominative plural.

Michelena has newly discussed the problem of the dative plural ending, which is usually thought to have been **-agi*. In the area of the tonal accent we find reflexes *-àì* and *-arì*, to some extent also *-èì*. This reconstructed shape **-agi* would suffice to give a type II accented ending, but unfortunately the ending in that area is not **-àì* or **-èì*, but rather *-ér*. Michelena points out the additional difficulty that expected *-ai* from **-agi* occurs only in the Western part of the area, whereas elsewhere (in Labourdin and Low Navarrese) we find *-ei*, which is to say that the geographical distribution of the *-a/-e-* difference is approximately the same as that of the parallel vowel difference in the ergative plural forms *-akl/-ek*. We can now see another difficulty with **-agi*: unless we want to appeal to analogy, we have no explanation for the type I accentual marking of this form, as no vowel shortening would have taken place. The trouble with this reconstruction is not the **-ag-*, but the shape of the dative marker. Instead of **-i*, there is good evidence for postulating a shape **-ri*; preceding this there would occur the buffer vowel *-e-* to give the complete ending **-ageri*. A regular development from this leads to Western **-aari* and then *-arì*, and further, with loss of intervocalic *-r-*, to *-àì*. Moreover, the Eastern form *-ei* shows the regular outcome of **-age-* in that area. As an additional bonus, the Souletin ending *-ér* would derive from this same prototype. Depending on the relative chronology of stress development and loss of final **-i*, this would go back to **-agéri* or to **-áger*. We need not concern ourselves in this context with whether the absolutely original form of the dative suffix was **-i* or **-ri*; both are well attested, and we find such alternative forms as demonstrative *oniloneri* 'to this'. What has probably led investigators to assume **-agi* (which I have myself previously cited) is the northern High Navarrese ending *-aki*. It had been realized that the *-k-* here was an analogical replacement, but it was assumed that it pointed to an earlier **-g-* in the same position. We now see that the *-a-* in this ending comes from **-age-*, so that the *-k-* must have been introduced only after it had already become **-ari* or **-ai*. Of the several variant reflexes of this ending, the most conservative may be the localized Western form *-airi*.

Several of the other plural cases are of the «local» set, with plural marker *-età*. These belong to a different pattern from the preceding with respect to the marking of number and definiteness. The definite singular forms do not take *-a-*, but add the case endings directly to the stem, with intervening buffer vowel *-e-* on consonant-final stems. The definite plural forms, also not taking *-a-*, are marked by *-età-* before the same endings; here the initial *-e-* is present even after vowels. Thus with the allative suffix *-ra* on the noun *mendi* ‘mountain’ we find these forms: singular *mendira*, indeterminate *menditara*, plural *mendietàra*. The corresponding forms on the consonant-final stem *aran* ‘valley’ are *aranera*, *aranetara*, *aranetàra*; because of the buffer vowel the last two forms are identical in segmental phonemes, but they differ in accentual marking.

According to our hypothesis, one of the vowels in *-età-* must go back to a double vowel as the source of the accent. Since the *-ta-* part seems to be common to the accentually unmarked sign of the indeterminate, the former double vowel must be the *-e-*; hence this suffix comes from **-eeta-*. We have seen, further, that such double vowels may point to a lost intervening consonant. And what else would this consonant have been but the same **-g-* marker of the plural that we have already met? Thus the ending would have been **-egeta-*, and **-g-* is seen as an indispensable marker of the plural. Contrast the two types of reconstructed patterns, as seen in the ergative and the allative of *aran*:

indeterminate	aran-e-k	aran-e-ta-ra
singular	aran-a-k	aran-e-ra
plural	*aran-a-g-e-k	*aran-e-g-e-ta-ra

From this we can additionally see the origin of the *-e-* that differentiates *-età-* from *-ta-*: it is just the automatic buffer vowel *-e-* separating **-g-* from *-ta-*, plus, in the case of consonant-final stems, the parallel vowel separating **-g-* from the preceding consonant. This latter vowel would have been lacking on vowel-final stems, so that the comparable forms of *mendi* would have been:

indeterminate	mendi-k	mendi-ta-ra
singular	mendi-a-k	mendi-ra
plural	*mendi-a-g-e-k	*mendi-g-e-ta-ra

The vowel-final stems would also have generated the *-e-* of *-età-*, but since there would not have been a double vowel in this case, the accentual marking must have spread by analogy from the more numerous consonant-final stems. Thus we have explained the odd situation where, aside from accent, the plural marker *-età-* looks like the postconsonantal form of the indeterminate marker, *-eta-*, yet keeps its initial vowel even after another vowel.

The suffix *-età* is also found, with no following case suffix, in a large number of place names that seem to express an idea of plurality or of abundance. These words are also accentually marked. An important confirmation of our hypothesis comes from the fact that after sibilants this suffix appears often in the form *-ketà* in these

toponyms, as in *Arizketà* 'place of oaks', from *aritz* 'oak'. Apparently in earlier times the buffer vowel was not required between a sibilant and following velar stop; thus here the **-g-* morphophoneme of the plural survives in the assimilated voiceless form *-k-*.

Since Schuchardt it has been generally assumed that *-età* is a borrowing from Latin *-eta*, plural of collective *-etum*. The present hypothesis militates against this assumption, which has probably hindered thinking about the source of the plural-marking *-e-*. Contemplation of the above paradigms suggest that the meaning of *-ta-* was indefiniteness, especially as to quantity, much like the meaning of English mass nouns. The additional occurrence of **-g-* was necessary to show a reference to a plurality of entities rather than to an undifferentiated mass or collectivity.

A few other plural case endings, such as genitive *-èn*, present a problem which is somewhat the reverse of the one we encountered with the dative plural. There we observed a geographical split between *-a-* and *-e-* when just *-a-* might have been expected. In the case of *-èn-* the generally preferred reconstruction **-a-g-en* would lead us to expect *-àn* in the area of the tonal accent. Although this does occur in some localities, the form in the greater part of this area is *-èn*. It is probably for this reason that Gavel and Lafon have suggested the possibility of a former plural suffix **-e-*, here preceding the genitive marker *-en* to give **-e-en*. The ending would not have been *-en* alone, as the accentual marking shows, and correspondingly in the area of the type II accent it is stressed, *-én*, pointing to a vowel contraction. Since our preceding discussion of the local cases has shown us the possibility of the plural marker **-g-* occurring on nouns without preceding *-a-*, we can now realize that exactly the same thing is true of these other *e*-initial plural endings. Thus the genitive plural would have been **-e-g-en* on consonant-final stems and **-g-en* on vowel-final stems, with analogical spread of the accentual marking from the former to the latter. The form *-àn* must owe its vowel quality to the analogy of other non-local cases, and so also the Old Vizcayan *-aen*, beside conservative *-een*. The same pattern would apply to the instrumental *-èz* (insofar as this may occur in the plural in the Western dialects), whose type II counterpart is also stressed *-éz*: the marker of this case is *-z*, so the plural form would have been postconsonantal **-e-g-e-z*, postvocalic **-g-e-z*. Sociative *-èkin*, whose original form will be discussed below, also would have followed this pattern.

The partitive in *-(r)ik* is typically described as occurring only in the indeterminate category, with no associated distinction either of number or definiteness. But Azkue has described a contrast of accentuation for nouns in this form. They are unmarked when this represents the «abstract article», as in *gizonik eztago* 'there aren't any men', *urik etedaukät?* 'will I have water?', but marked *-(r)ik* when it represents the «partitive», as in *gizonik ederrenà* 'the most handsome of the men', *urik otzenà* 'the coldest of the waters'. These marked forms are quite clearly plural in meaning, which implies that the plural marker **-g-* formerly occurred with this case ending also, giving **-e-g-ik* after consonants and **-g-ik* after vowels. The lack of variant forms comparable to those of the dative plural shows that the case marker did not have the shape **-rik* here, which would have given a longer form **(-e)-g-e-rik*. It is true that we apparently do not find a stressing of this ending in the type II area, but it is easy to see that this might have been lost earlier, just as it has in some modern dialects

from dative plural *-er* and instrumental *-ez*. The feeling of plurality would have been lost because of the lack of an initial *-e-*, present in all the plural case endings with final stress in this area, since **ei* seemingly contracted to *i*, and also because of the clear lack of an association of this ending with the definite suffix *-a*, as plurality gradually came to be felt as a subdivision of the definite category.

Thus we find that the distribution of definite marker *-a-* among the cases is narrower in the plural than in the singular; it occurs only in the syntactically most important cases, nominative, ergative, and dative—those that are cross-referenced in finite verb forms.

A partial paradigm may be given to illustrate the different reconstructed patterns of plural formation on consonant and vowel-final stems:

nominative	*haran-a-k	*mendi-a-k
ergative	*haran-a-g-e-k	*mendi-a-g-e-k
dative	*haran-a-g-e-ri	*mendi-a-g-e-ri
genitive	*haran-e-g-en	*mendi-g-en
instrumental	*haran-e-g-e-z	*mendi-g-e-z
allative	*haran-e-g-e-ta-ra	*mendi-g-e-ta-ra
partitive	*haran-e-g-ik	*mendi-g-ik

We have been led to reconstruct a former pattern of declension much like that found in, say, Turkish, Armenian, or Georgian, in which the same plural marker runs through all cases and is followed by the case endings, these being the same as in the singular.

The plural marker also occurs without preceding *-a-* on demonstrative and pronoun forms. The plural forms mentioned by Altube, such as *oneek* ‘these’, must be original ergatives, for this **onegek*; the formation may have spread analogically to the nominative. In much of the Eastern area the ergative plural of demonstratives ends in *-ek* (< **-egek*) as opposed to a *-k* of the nominative plural; for example, Labourdin ergative plural *hauiek* (archaic from *haukiek*), as opposed to nominative plural *hawk* ‘these’.

On personal pronouns, it is striking to observe Basterrechea’s report that, for example, the possessive pronouns *nire*, *ene* ‘my’, *zure* ‘your (sg.)’, *aren*, *bere* ‘his, her’, *gure* ‘our’ are accentually unmarked, whereas *zuèn* ‘your (pl.)’, *aièn*, *eurèn* ‘their’ have falling intonation. The nominatives corresponding to the former set are *ni*, *zu*, *ura*, *a*, *bera*, *gu*, and those for the latter are *zuek*, *aièk*, *eurak*—which is to say that it is exactly the marked possessives that have corresponding nominatives in *-k*. Since *gure* is as much plural as *zuèn*, it is not semantic plurality that is the relevant factor, but this particular formation. Thus *zuèn*, for example, must go back to **zuegen* (via **zueen*). Here again we get confirmation from Souletin, which has *zièn* (< **züèn* < **zuén* < **züéén* < **züégen*) beside nominative *ziék* (< **züéék* < **züéek*) (but also ergative *ziék*). At least the dative forms also show a parallel difference in accentuation, such as *guri* ‘to us’ vs. *zuèi* ‘to you (pl.)’ (< **zuèri* < **zueeri* < **zuegeri*).

We have now given evidence of former double vowels in all the plural cases of the noun except the nominative, which in turn supports our hypothesis as to the phonological source of the marked accent. But although the nominative plural

is also accentually marked, there were no double vowels in its ending. I prefer to think of an analogical spread of the accent to this category, so that the marking became consistently associated with the noun plural. It is true that in the area of the type II accent such an analogical spread has not taken place, so that the nominative plural has penultimate stress, just like the singular cases. But there are two different conditions in the Western area that would have lent impetus to this spread: the vowel of the ending was the same in the nominative and ergative, and the accentual marking applied to the plural local cases as well as to the others. The hypothesis is attractive that the ending of the nominative plural was originally **-aga*, which became *-ak* by loss of the final **-a* and automatic unvoicing of the final stop. This suggests the possibility that the accent developed directly in this form as a concomitant of the loss of final vowel. This seems unlikely, however, and the type II accentuation shows that the final vowel, if indeed once present, was lost too early to affect the stress placement in that area (i.e., **-ága* would have given **-ák*).

We can see from the plural local cases, as well as from individual lexical items (such as *àri* 'ram' < *aari*), that the type I accent has a potentially broader range of usefulness for reconstruction than type II, because it is sensitive, not only to those vowel contractions that lie behind the ultimate vowel of a word, but also to those leading to penultimate vowels, and perhaps to earlier ones. Although I see no clear evidence that in an absolute chronological sense this type goes back in its origins to an older period than the other, it does seem likely that it will tend to be more retentive of an earlier state of affairs. This is because in type II the basically penultimate location of stress remains apparent, so that analogical forces may move the stress back from the ultima. This has happened, for example, in part of the Souletin area, to dative plural *-ér* and instrumental plural *-éz*. Since the phonological origin of the type I accent is synchronically completely obscure, it is unlikely to be subject to phonologically based plays of analogy. The rather special case of the spread of the accent to the nominative plural was based on the association of the accent with the morphological category of plurality, as well as the complete identity of the nominative and ergative plural endings. But by the same token that the type I accent arises from vowel contractions at more than one location in a word, it would not pinpoint the location of the contracted vowel, in case of doubt, in the way that the type II pattern would.

Another difference from the type II pattern concerns the general lack of accentual marking of definite forms in *a*-final stems. In the eastern area we find differences such as Souletin indeterminate *alhába* 'daughter' vs. definite *alhabá* 'the daughter' (< **alhabáa*). These contractions must be more recent in origin than those obtaining within the endings themselves; note that in the above mentioned Souletin dialects where the dative and instrumental plural suffixes *-er*, *-ez* have lost their former stress, these nevertheless contract with stem-final *-a* and *-e* to give stressed endings, as in *alhabér* 'to the daughters' (< **alhabáer*), *semér* 'to the sons' (< **seméer*). Contractions of the definite suffix *-a* with stem-final *-a* have been avoided within the western part of the type I area. Older Vizcayan has *alabea* 'the daughter' leading to later forms *alabia*, *alabie*. Where the contraction **-aa* > *-a* has taken place, accentual marking was also probably resisted by the developed morphological correlation with plurality, but not with definiteness.

In the nominal paradigm, accentual marking is not only a property of the plural category, but also of certain case endings, regardless of the number and definiteness category. One such is the ablative *-tik*. Because of the occurrence of the shorter form *-ti* in some localities, it had been suggested that this might have been formed from two suffixes, derivational *-ti* plus partitive *-ik*, giving former **-tiik*. However, Gavel has pointed out that this ending is not stressed in Souletin, as would be expected if a vowel contraction had taken place. Consequently Lafon has thought of this ending as being from *-ti* with addition merely of *-k* (analogical from partitive *-(r)ik*). Now we see that the type I accentual marking may point to two earlier contiguous vowels. This evidence is weak, however, in that adjective-forming *-ti* is itself accentually marked. The lack of final stress in the type II area might nevertheless be due to the contraction of two identical vowels not separated by a consonant having taken place earlier than that of vowels where a consonant formerly intervened, or else to the formation being different in that area, if not merely to analogical shift of stress to the penult. In this connection one notes the longer ending *-tika* in some earlier Eastern texts, parallel to the accentually unmarked partitive in *-(r)ika*; as with **-aga* we find no accentual trace of the final *-a*, which probably implies a relatively late addition of *-ka*.

Another marked case suffix is the sociative *-èkin*. I would prefer to explain this as a former plural form extended to the singular, so that, as we have seen, the *-è-* comes from earlier **-ege-*, rather than being a former genitive ending, as has been thought. Note that in some Vizcayan dialects the use of this suffix is still limited to the plural, the corresponding singular being furnished by *-gàz*. Those rejecting this explanation might prefer to think that the accentual marking confirms the theory that this is a contraction from *-kien*, from earlier **-kiden*, the inessive of the former noun that occurs as the latter part of *adiskidè* 'friend'. But against this would be the lack of final stress in the type II area.

The accentual marking of the Vizcayan sociative suffix *-gàz* points to a contraction from **-gaaz*. I would suggest that this is from earlier **-gæz*, in turn from **-gaiez*, the instrumental form of the noun *gai* 'matter' that is also seen in *-gati(k)*, Vizcayan *-gaiti(k)* 'because of'. It is clear that the meaning of the instrumental is sometimes close to that of the sociative. A parallel phonological development is seen in *gora* < **goora* < **goera* < **goiera* (allative of *goi* 'on high'). Azkue reports an accentual marking (*gorà*) correlating with the meaning 'praise', but not with the more perspicuous meaning 'upwards'.

In derivation also, the former presence of double vowels is either attested or can be made probable in several accentually marked suffixes that derive nouns or adjectives. One good example is the productive suffix *-tzà* which derive nouns expressing a large quantity of the item in question, as *aritzà* 'mass of thread' (*ari* 'thread'), *garitzà* 'wheat-field' (*gari* 'wheat'), *zuritzà* 'wood-pile' (*zur* 'wood'), and also occupations, as *arrantzà* 'fishing' (*arrain* 'fish'). This suffix is frequently found written with two vowels, *-ça(h)a*, *-za(h)a*, in documents of the 11th to 13th centuries, especially pertaining to Alava. There is also evidence of the double vowels in eastern Vizcayan, either directly as *-tzaa* or by the shape of the definite form *-tzaia* (< **-tzaea*), reflecting the general Vizcayan raising of *a* to *e* before *-a*. This suffix has the shape *-tze* in more easterly dialects, and is also probably to be connected

etymologically with the suffix *-tzè* deriving verbal nouns, such as *iltzè* 'dying', *eltzè* 'grasping'. We have seen in the case of the ergative and dative plural endings that such a difference between dialects tends to point to a former vowel cluster **ae*, hence this ending might have been **-tzae*. But the cluster could probably have been reversed, hence **-tzea*. Taking note, on the one hand, of the collective meaning of *-tzà*, that makes its derivatives, as Azkue points out, roughly synonymous with those in *-keta*, and on the other hand, the fact that in forming verbal nouns *-tzè* is replaced by *-keta* in certain Vizcayan dialects (*bialduten*, *bialtzen*, *bialketan* 'sending'), one is tempted by the thought that this ending might have contained the plural ending **-ga*, as in **-aga*, hence have been **-tze-ga* (or **tz-e-ga*). But there are obvious phonological difficulties with this: why was the **-a* not lost to give **-tzek*, or, if this vowel was protected by following case endings, why does it not survive in other nouns? The verbal nouns *-tzè* (and in *-tè*) are also described as accentually marked in the western area, and there is evidence of a double vowel in an older Vizcayan definite form in *-tzeia* < **-tzeea*. Similarly, the common inessive form *-tzèn* (and *-tèn*) used in progressive verb phrases is accentually marked, and there is evidence from eastern Vizcayan for both *-tzeen* and *-tzean*, the latter perhaps pointing to a locative ending **-an*.

The productive suffix *-dùn* 'having, characterized by' as in *bizardùn* 'having a beard', *euskaldùn* 'Basque', lit. 'possessing the Basque language (*euskara*)', has been widely recognized as being from the suffixed relative verb form *duen* 'he who has it' (earlier forms of which are discussed below). The accent implies earlier **-duun*, assimilated from **-duen*. Further evidence of the former double vowels come from the stressing of the suffix in Roncalese *-dún* (< **-dúun*), as in *uskaldún* 'Basque', although not in the case of Souletin *-dün*.

For derivatives like these, that must hark back to fairly transparent compounds, we have the problem of discounting the general accentual marking of compounds of this type. Such would be the case, for example, with the suffix *-nài* listed by Azkue. This means 'desirous of', as in *askonài* 'insatiable' (*asko* 'much'), and is clearly to be equated with the verb-like noun *nai/nahi* 'want, desire'. The suffix *-kàitz/-kàtx*, *-gàitz/-gàtx*, also listed by Azkue, constitutes a similar case. This means 'difficult, next to impossible', as in *osagàitz* 'incurable' (*osatu* 'to cure, heal') or 'lacking', as in *izukàitz* 'intrepid' (*izu* 'fear'). It comes from the adjective *gàitz/gatx* 'enormous', which also enters into compounds in this meaning.

Another example of accentual marking correlating with former double vowel will present itself if we accept Schuchardt's derivation of the suffix *-ti*, that we have mentioned in connection with ablative *-tik*, from *tegi* 'place of', common as the second member of compounds. Not all meanings of *-ti* would seem to be compatible with this etymology, but Schuchardt has in mind examples where *-ti* seems to have locational or spatial reference, as *mahasti* 'vineyard' (*mahats* 'grape'), *goiti* 'upwards', which would also fit place names such as *Loiti*. This would be phonologically quite parallel to the partitive plural suffix **-egik* > *ik*.

Several other accentually marked suffixes have alternative shapes, one beginning with a voiceless stop *t* or *k*, the other lacking an initial consonant. It has been suggested that for such cases the voiceless stop may have been original, and the vowel-initial variant may have arisen from the use of the suffix as a separate word,

illustrating loss of such consonants in initial position. It now seems more likely that, analogously to the plural marker **-g-*, the original consonant was a voiced stop, **d* or **g*. This became voiceless in clusters after sibilants, and also after stops, as these inner-layer constructions did not employ the intervening *-e-*, and it was lost after vowels. Some of these suffixes exhibit an additional variant with initial voiced stop, especially after nasals; this would then represent the retention of the original consonant, rather than resulting from secondary voicing.

Be this as it may, there is no evidence of former double vowels within these suffixes themselves. Rather, it seems that the accentual marking has arisen from the contraction of the vowel-initial allomorph with preceding final vowels of stems, followed in some cases by analogical spread, either of the accentuation to the consonant-initial allomorphs, or of the consonant to previously vowel-initial allomorphs. Some monosyllabic suffixes of this type have developed a stress accent in similar fashion in the type II area.

A good example of this is the suffix *-tar*, *-ar*, *-dar* ‘native of, inhabitant of’ (< **-dar*). This suffix seems to be attested in Aquitanian materials as *-tar* (genitive *-tarris*), where the fact that it is never written with *tt* may be further evidence of a former **d*. This is accentually marked in the area of the tonal accent, as attested already by Larramendi, and likewise is stressed in the type II area, including Leizarraga’s texts. We have attestation of double vowels from eastern Vizcayan in forms like *arabaar* ‘native of Álava (*Araba*)’. Thus it seems that the tonal accent arose first in forms like *durangàr* ‘native of Durango’ (< **durangaar*), and subsequently spread to forms where the hiatus was retained or restored, like *azkoitiàr* ‘native of Azcoitia (*Azkoiti*)’ (or was this **azkoitiaar?*), or where a consonant-initial allomorph was used, like *bermeotàr* ‘native of Bermeo’. In parallel fashion in the type II area, to cite Roncalese forms, the stress would have arisen on forms like *izabàr* ‘native of Isaba (*Izába*)’ (< **izabàar*) and *gardàr* ‘native of Garde (*Gárde*)’ (< **gardàar*), and spread to forms like *erronkariàr* ‘native of Roncal (*Erronkàri*)’ and *uztarroztàr* ‘native of Uztárrroz (*Uztarróze*)’.

An interesting correlation of accentuation can be observed for the suffix *-kari*, *-ari* (**-gari*) which derives nouns, partly from verbs, many of which label foodstuffs and also meals. Azkue states that most of these are accentually marked, including among the meals *gosari* ‘breakfast’, *bazkari* ‘lunch’ and *askari* ‘afternoon snack’, but that the marking is lacking in *apari* ‘dinner’. For *gosari*, which must be derived from *gose* ‘hunger, hungry’, we have attestation in Vizcayan of the form with double vowels, *gosaari*. These are similarly attested in other words formed with this suffix, such as *edaari*, general *edari* ‘drink’ (from *edan* ‘to drink’) and *escaari*, general *eskari* ‘request’ (from *eskatu* ‘to ask, request’). But in the case of *apari* ‘dinner’, which is apt to be related to *gau* ‘night’, there is no reason to expect double vowels, nor any attestation of them in variant forms, which include Western *afari*, *abari*, Labourdin *aphari*, Low Navarrese *auhari*, Souletin *aihá(r)i*, Roncalese *aigàri*. This occurrence of *-b-* (< **g?*) after a monosyllabic stem is matched in older Eastern *janhari*, besides general *janari* ‘food’ (from *jan* ‘to eat’). However, the accentuation may be analogical in the case of the *k*-initial variant in *bazkari* ‘lunch’, variant *barazkari*, and *askari* ‘afternoon snack’, probably from *arrats* ‘evening’, as no double vowels would have been present here either.

Another suffix of this type is *-kor*, *-or* (< **-gor*), added to verbal themes as well as nouns, indicating a propensity or tendency toward something, as in *lotsòr* 'fearful, cowardly, bashful'. There is again attestation of double vowels in eastern Vizcayan *lotsoor* (< **lotsaor*). This suffix being monosyllabic, a final stress occurs in Souletin *lotsór*. Again here, the accentual marking of the consonant-initial variant must be analogical, as in *auskòr*, Souletin *hauskór* 'fragile' (*autsilhautsi* 'to break').

Yet another similar case is that of *-koi*, *-oi*, *-goi* (< **-gohi*), whose meaning similarly indicates propensity or inclination towards something, as in *elizkòì*, *elizòì* 'devout' (*eliza* 'church'), *ardankòì*, Souletin *ardanói* 'fond of wine', *errikòì* 'patriot' (*erri* 'country'). There seems to be no attestations of double vowels, but some cases have clearly resulted from contractions. Thus *elizòì* would be from **elizaoi* (< **elizagohi*). This suffix, as compared with *-kor*, *-or*, shows a greater proportion of examples of *-k-* elsewhere than after originally final sibilants. The variant *elizkòì* would exemplify the analogical spread of this consonant. Similarly, *ardankòì* must be formed on **ardanòì*, from **ardanooi* (< **ardanogohi*), from which comes Souletin *ardanói*. *Errikòì* would attest to analogical spread of both the consonant and the accent. This suffix is stressed in Souletin, but this would have resulted in any case from its disyllabic original form. It has been thought to be etymologically identical with the particle *oilohi* expressing the habitual or customary character of an action.

Having seen these examples of apparent analogical spread of accentual marking from forms with vowel-initial suffixes to other related forms, we are led to suggest that perhaps the general accentual marking of compound words itself may have arisen from those cases where two vowels came together at the joint and contracted to one short vowel, after which the accentuation would have been spread analogically to the numerous forms where two vowels were not in contact, or where there no longer is contraction. This would have arisen especially where the two vowels were identical, of the type *udàzken* 'autumn', lit. 'summer-end' < **udaazken* and *itxasòntzi* 'ship, boat', lit. 'sea-vessel' < **itxasoontzi*. This would apply also to cases showing the regular lowering to *a* of final *e* and *o* of the first member, such as *itsasàntzar* 'sea-goose' < **itsasaantzar* (*itsaso* 'sea') and *eznàrri* 'stone with which milk is cooked', lit. 'milk-stone' < **eznaarri* (*ezne* 'milk'). As with the preceding cases of derivation, examples of this type with double vowels are attested from eastern Vizcayan, and likewise they were probably formerly more numerous due to the loss of certain consonants at the beginning of the second member when they came to be intervocalic. Analogical spread of the accentuation is suggested also by the apparent analogical spread of the sandhi phenomena of compounds. It is now regular for the first *o* the two vowels brought together in compounds to be lost, regardless of the historically expected result of their contraction; commonly also they are now both retained unchanged. The lowering of *e o* to *a* in disyllabic stems, which probably arose from assimilation to a following initial *a* of the second member, is now regular before other vowels and even before consonants. And the loss of final vowels also takes place before consonants in stems of more than two syllables, and commonly of final *i u* in disyllabic stems.

Let us now turn to finite verb forms, of which the majority of affixes do not entail accentual marking. But plurals formed with *-è* and *-tè* are said to have the marked accent, such as *dakiè*, *dakitè* 'they know it' as opposed to *daki* 'he knows it',

dakizue, *dakizutè* ‘you (pl.) know it’ vs. *dakizu* ‘you (sg.) know it’, and *zagozè* ‘you (pl.) are’ vs. *zagoz* ‘you (sg.) are’. These endings should be from **-ee*, **-tee*, which are probably from earlier **-dee*.

Although the original distribution of alternative shapes of this ending has been thoroughly disturbed, especially because of its extension from the third person to form a plural polite second person form, based on forms that were themselves originally plural, it seems likely that its form originally began with **-d-*, hence **-dee*. There seems to be direct evidence from the dialect variants for the former double vowel. Azkue lists an ending *-dee*, but more widespread are forms showing *-ie* < **-ee*. In forms for ‘they have it’, from **daudee*, we find variants *deudie*, *daurie*, *dubie*, *dabie*, *daubie* besides variants with final *-e*, as *deude*, *daure*, *dube*, *dabe*. It is true that in evaluating this evidence for a double vowel, we must discount the possible influence of forms where this ending has been added after a vowel, as in *zaree*, *zarie*, *ziraie* ‘you (pl.) are’. The postvocalic form with *-d-* is seen after a diphthong, as in Vizcayan *deude*, *deudie* ‘they have it’, with a further development to *-r-* in variants *deure*, *daure*, *daurie*, and also the alternative form *zagoz* ‘you (sg.) are’, *zaude* < **zaode* < **zagodee* (and similar first and third persons plural, *gaude*, *daude*), using this plural marker instead of *-z*.

When this **-dee* occurred after a vowel which remained syllabic, the **-d-* was generally lost, as in *dakiè* < **dakiee* (or **dakidè*) < **dakidee*, *dakizue* < **dakizuee* (or **dakizudè*) < **dakizudee*, and also in variants like *deue*, *due*, *dui*, *dei*, *die*, *dai* ‘they have it’ (< **daudee*), with further development of intervocalic **u* to *b* [β] in *dabe*, *dabie*, *dube*, *dubie*, *daubie*. Forms with postconsonantal *-è*, then, probably reflect an analogical spread of this originally postvocalic variant, as in *zagozè* < **zagozee* (of course, the ending may already have become *-è* before this analogical extension took place).

Just as with plural **-g-* and the previously discussed derivational suffixes beginning with **-d-* and **-g-*, the allomorph **-tee*, with initial voiceless stop, would have arisen after sibilants, as in *zagoztè* < **zagoztee*. Note that in parallel fashion the suffix *-gu* ‘we’ has an alternant *-ku* in forms such as *dakuskun*, beside *dakusgun* ‘let’s see it’. In a large central area, comprising most of Guipúzcoan, Northern High Navarrese, Labourdin, and Low Navarrese, the form for ‘they have it’ is *dute*, with postvocalic *-t-*. It is striking to observe a close geographical correlation with the occurrence of forms for plural object that have preceding pleonastic plural marker *-z-*, mostly *dituzte* ‘they have them’. There must have been analogical spread of **-tee* from this and comparable forms. Where the *-t-* is not present, a preceding *-z-* is also not used. The *-z* may follow this ending, as in Vizcayan *dabez*, *ditubez* (sg. obj. *due*, *debe*, *doe*) or Souletin *dütie* < *ditüie* (sg. obj. *die* < **düe*). Many other forms show postvocalic occurrence of this ending *-te*, such as *dakitè*, *dakizutè*, *zaudete* (parallel to *zagoztè*), *zerate* ‘you (pl.) are’.

The idea of an additional variant with postconsonantal buffer vowel **-e-*, parallel to that of plural **-g-*, has also been entertained. This could mean that **-ee* comes from **-ede* instead of **-dee*, or that we had a longer variant **-edee*. This seems highly unlikely, however, as there is otherwise no evidence of such a vowel having developed before the pronominal suffixes. For example, with *-gu*, we find forms such as *dakargu* ‘we are bringing it’, with immediately preceding consonant. But

if future dialectological investigation should show that accentual marking tends to be associated with *-e* rather than with *-te* within the area of the tonal accent, the hypothesis of earlier **-ede* would become more attractive.

The following additional reconstructions may explain the origin of **-dee*. It is clear that this plural marker originated in the third person, since it is redundant, on intransitive verbs, with the prefixal difference in the first and second persons (sg. *n-*, *h-l/Ø-* : pl. *g-*, *z-*), but not in the third (sg. and pl. *d-*), e.g., first person *nago* : *gaude*, third person *dago* : *daude*, and similarly, on transitive verbs, it was originally limited to the third person (sg. *-Ø* : pl. *-de* (*-te*, *-e*)), whereas the other two persons show other affixal contrasts (sg. *-tl-da-*, *-kl-a-*, *-n(a)l-ana-* : pl. *-gu*, *zu*), e.g. from *jakin* 'to know', first person *dakit* : *dakigu*, third person *daki* : *dakiè*, *dakitè*. From here it spread to other persons in two waves, first to all the plural persons of intransitives, and considerably later to the second person plural, in all its case relationships. Furthermore, it seems likely that this arose first on the transitive verb, within the series of pronominal suffixes, in part from a resegmentation of an earlier third person marker.

Consider first some verb forms with the relative suffix. Accentual evidence discussed below shows that this had the shape **-en* (rather than **-n*). We generally find a contraction of this with the preceding vowel. Thus beside *da* 'he is' we have relative *dan/den* < **daen* 'he who is', and beside *dugu* 'we have it', relative *dugun* < **duguen* 'which we have, we who have it'. But third person singular transitive forms resist such contractions. Beside *du* 'he has it' we find relative *duen* 'which he has, he who has it', beside *daki* 'he knows it', relative *dakien* 'which he knows, he who knows it'. Such cases of hiatus, as we have seen, tend to point to a lost consonant. Thus *duen* would be from **duCen*.

To identify this consonant, we can observe that there tends to be an identity of the consonant as between the prefix and the suffix for the same person-number category: 1 pl. *g-* : *-gu*, 2 pl. *z-* : *-zu*; even where there is a difference, the consonant was probably originally the same: 1 sg. *n-* : *-tl/da* (probably with **n*), 2 sg. (masc.) *h-l/Ø-* : *-kl-a-* (probably with **g*). Thus since the third person prefix is *d-*, this might have been the intervening consonant, hence **duden*, and hence former third person suffix **-d* (the stem here was **-au-* from **-adu-*, so the older forms would have been **dadud* > *du* (*dau*, *deu*), relative **daduden*). Of course, at the time the third person suffix was **-d*, perhaps unvoiced finally to **-t*, the first person suffix, now *-t* finally, would still have had the shape **-da* (or even **-na*; cf. prefix *n-*). As a first approximation we can therefore say that the suffix **-dee* arose from the addition of a plural marker **-ee* to this **-d*. After this consonant had been lost in final position, the shape of the plural marker came to be regarded as **-dee*. That is, an earlier opposition **-d* : **-d-ee* (or **-t* : **-d-ee*) gave way to later **-Ø* : **-dee*.

Note that in an analogous fashion a separate plural marker is added to the prefix *d-* in its function as object, as in *ditu* 'he has them' beside *du* 'he has it', and *dizkio* 'he has them for him' beside *dio* 'he has it for him'. This marker is sometimes suffixed to the whole word instead of directly following the prefix, as in Vizcayan *deuz* 'he has them' beside *deu* 'he has it', or Guipúzcoan (Motrico) *dioz* 'he has them for him'. The marker, like that for plural subject, has spread to forms with first and second persons plural prefixes *g-*, *z-* as objects, as *gaitu* 'he has us' formed with *-it-* from **gau* (cf. *nau* 'he has me').

This still leaves the double vowel **ee* to be explained, a sequence which must be secondary in origin. We may next note that the dative form of the third person suffix is *-o-*, in forms like *diot* ‘I have it for him’. This may be interpreted on the analogy of the second person singular masculine suffix, originally apparently **-ga*, which retains only its consonant in final position, in forms like *duk*, *dek* (< **duga*, **dega*) ‘you (masc.) have it’, *dik* (< **diga*) ‘he has it for you (masc.)’, and, on the other hand, due to loss of intervocalic **g*, retains only its vowel in non-final position, in forms like *diat* (< **digada*) ‘I have it for you (masc.)’ and relative *duan* (< **dugaen*) ‘which you (masc.) have’, although there also occur non-final variants with *-k-*, presumably by analogical restoration, such as relative forms Low Navarrese *dukan*, Guipúzcoan *dekan* (note the parallelism to the outcomes of plural **-g-*). Going by this model, we can think that the *-o-* was formerly part of the third person suffix, so it was not just **-d*, but **-do*. Thus a form like *diot* would come from **didoda*, quite parallel to *diat* < **digada*. Relative *duen* would ultimately be from **dadudoen*. We may conceivably have a testimonial of this former **-o-* in the Roncalese relative form *dion* (< **düon*), beside *dien*, if this does not merely exhibit an assimilation of **e* to the rounding of the former **ü*, i.e., if the form was earlier *duon* rather than *duen*. The additional dialect variant with *-a-*, *duan*, certainly owes this vowel to analogical spread from the other singular forms, where it is regular (*duan*, feminine *dunan*, first person *dudan* < **dudaen*). Furthermore, we may be seeing a palatalized or weakened reflex of the **d* of medial **-do-* in Guipúzcoan forms like *diđo*, *didxo*, *dero*, beside more standard *dio* ‘he has it for him’ < **didodo*.

So the singular : plural opposition in the third person would have been **-do* : **-dee*, the previously-mentioned **-d* (**-t*) : **-dee* having arisen later by loss of final **-o*. But **-dee* itself was probably formed by the addition of a plural marker, apparently just **-e*, to **-do*, giving **-doe*, with subsequent assimilation of the first vowel to the second. The consciousness of this morphemic analysis must have stayed alive until relatively late in the dative form, where the vowel cluster *-oe-*, with further developments *-ue-*, *-obe-*, beside the assimilated form *-e-* < **-ee-*, is widely attested. In the dative, then, there is a singular : plural contrast *-o-* : *-e-* or *-o-* : *-oe-*. In addition to this, several dialects have inserted a *-t-*, on the analogy of the original final form *-te* in the series where final **-do* has been lost. Hence the *-t-* was inserted after, rather than before, the *-o-*, giving the new singular : plural contrast *-o-* : *-ote-*.

These reconstructions impose some strict requirements of relative chronology. Final **-o* must have been lost well before final **-a*, and the loss of the **-d* thereby made final must also have preceded the loss of **-a*. It is not phonetically implausible that **-a* should be retained while higher vowels are lost: cf. the earlier history of French. A difficulty comes, though, from the retention of the final *-u* in the plural endings *-gu*, *-zu*. These may have been long at that time (but if so the shortening was too early to leave an accentual trace), or may have been preserved by the analogy of the independent pronouns *gu*, *zu* (whereas the vowels, as well as the consonants, of the singular pronouns *ni*, *hi/i* differ from those of the corresponding endings **-da*, **-ga*). Although synchronically in Basque final *-o* and *-e* (of the dative forms) seem more stable than *-a*, we must remember that these have only come into final position secondarily, from the loss of following **-d* in the case of *-o*, and from a contraction from **-ee* in the case of *-e*. Since, unlike *-a*, final *-o* occurs only in dative,

not in ergative, function, it is subject to considerable analogical support from the common occurrences non-finally, before overt pronominal suffixes. The loss of final **-a* brought with it more or less simultaneously the unvoicing of the preceding stops thereby brought into final position.

Later there must have been a loss of intervocalic **g*'s, as in **digat* > *diat* 'I have it for you (masc.)', and, of course, in the plural noun forms. Forms like *zaude* (< **zagode*) may indicate that this preceded the loss of intervocalic **d*'s that were not analogically supported, as in **dadu* > *dau*, *du* 'he has it', **dido* > *dio* 'he has it for him', but not in *didak* 'you (masc.) have it for me', because of support from the *-t* of forms such as *dit* 'he has it for me', *dioṭ* 'I have it for him'.

The other accentually marked verb inflectional suffix, according to Azkue, is the second person feminine singular (now familiar) suffix, in those Vizcayan dialects in which it has finally the form *-nà*, as in *dakiṇà* 'you (fem.) know it', instead of the now more widespread *-n*. The accentuation of course points to a former double vowel, **-naa*, as would in any case be implied by the retention of the final vowel in contradistinction to those of the other singular suffixes, first person *-t* (< **-da*) and second person masculine (familiar) *-k* (< **-ga*). A plausible explanation can, I think, be found if we take into account the asymmetry of the pattern, in that only one pronominal prefix, *h-l-Ø-*, occurs corresponding to the two gender-differentiated suffixes, that this prefix is probably to be equated on phonological grounds with the masculine suffix *-kl-ga-*, and also that in the plural (now polite) there is only one affix (*-z-*, *-zu*) subsuming the two genders. There was probably originally a feminine-gender-marker **-na-*, which was not a pronominal suffix but was necessarily followed by the second person singular suffix **-ga*. Thus **-naa* comes from older **-na-ga*. The present-day gender contrast *-k* : *-n(à)* is seen to stem from previous **-ga* : **-na-ga*, so in this case, as in other European languages, it is the feminine that is the marked form.

Azkue also describes an accentual marking, for the dative function, not only for the feminine *-nà-* (*-n*), but also for the masculine *-à-* (*-k*) (< **-ga*), and moreover for verb forms containing the second person prefix, *Ø-* in this western area. The only explanation I can think of for this is analogical spread within the second person singular, first from feminine to masculine, and then even to forms with this second person singular category indicated by a prefix. Analogical spread seems the more likely when it is noted that the prefix *Ø-* and the final masculine variant *-k* (occurring before the third person singular suffix *-Ø*) have no vowel at all (but the accentuation spread only to the dative, not the ergative, function of *-k*).

The following reconstructed present tense verb paradigms will help to summarize the conclusions we have reached about an early stage of Basque, although they necessarily embody assumptions about the simultaneous occurrence of forms that may not be warranted. The intransitive verb *egon* 'to remain, be' takes pronominal prefixes to show the category of subject (nominative) reference. I have assumed that the same plural subject marker **-e* as on the transitive verb was present in the third person. There is no direct evidence for this, but after it spread to the other plural persons (**gagoe*, **zagoe*), and perhaps assimilated with the preceding vowel (**dagee* or **dagoo*, etc.), it would have provided a basis for analogical strengthening by **-dee* or *-z* (*daude*, *dagoz*, etc.). The prefixes do not differ from the present-day ones (in dialects retaining *h-*):

	singular	plural
first person	n-ago	*g-ago
second person	h-ago	*z-ago
third person	d-ago	*d-ago-e

The transitive verb *jakin* ‘to know’ takes suffixes to indicate the category of subject (ergative) reference. The forms shown contain the third person nominative prefix *d-*. Presumably any of the pronominal prefixes could be added to show categories of object (nominative) reference (although not necessarily with this particular verb). It seems possible that a separate marker of plural object might not yet have been developed at this time, so that the meaning of plurality of **-e* might have applied ambiguously to either subject or object, **dakidoe* meaning ‘they know it/them’ and ‘he knows them’:

	singular	plural
first person	*d-aki-da	d-aki-gu
second person masculine	*d-aki-ga	d-aki-zu
second person feminine	*d-aki-na-ga	
third person	*d-aki-do	*d-aki-do-e

A possible additional correlation of accentual marking is suggested by de Rijk’s description for some Guipúzcoan speakers of a difference in stress between past tense forms such as (in his notation) *zúten* ‘they had it’, *zetórren* ‘he was coming’, and the corresponding relative forms *zutén*, *zetorrén*. This may well be an intonational phenomenon that has no implication for the phonological histories of the individual words (it seems to be reflected by Altube but not by Azkue). In any case the Souletin accentuation shows that the relative suffix has the vowel-initial shape *-en*, because present tense forms like *gía* (< **gíra*) ‘we are’ vs. the relative *gíen* (< **gíraen*) show a shift of the stress to the last syllable of the relative. In the past tense both forms are identical, with final stress, such as *ginén* ‘we (who) are’. It will have been noted that the accentually marked forms are morphologically more complex than comparable unmarked ones, so if there is a tonal difference in the Western area between such forms, it is the relative that should be the marked one. De Rijk’s notation does not clearly imply this, but if it should turn out to be the case, then I would assume that the relative was formed historically by the addition of **-en* to the past tense forms, followed by the well-established loss of intervocalic **n*, as in **zutenen* > **zuteen* > **zutèn* ‘which they had, they who had it’. This would be compatible with the Souletin situation: past relative *ginén* ‘we who were’ could come from **gínaénen*, beside past *ginén* (< **gíndén*) ‘we were’. If, however, the suggested type I accentual difference is not in fact present, then a possible alternative would be to assume that the past tense suffix is morphologically identical with the relative suffix, i.e., that the past tense and past relative forms are identical, which I take to be the import of Ayre’s discussion.

There are additional accentually marked derivational suffixes, as well as noun and verb stems. It is hoped that the attempted explanation I have given for

the development of this kind of tonal accent will furnish a starting point for further historical analyses of such forms. For such research a desideratum is fuller descriptions, including lists of accentually marked lexical items, from other dialects, especially Guipúzcoan and Northern High Navarrese. The two descriptions on which I have had to largely rely, by Azkue and Basterrechea, are both of Vizcayan dialects, and only the former gives much information on accent as correlated with derivation and composition. It is clear, though, that the number of accentually marked lexical items without straightforward explanation is fairly low. The valuable lists of marked vocabulary items in these sources may be somewhat incomplete, Azkue's because it is limited to words entering into minimal pairs, Basterrechea's because it is limited to forms occurring in a specific vocabulary of about 2,600 items. In Azkue's list of 180 minimal pairs, many of the accentually marked items reflect the occurrence of derivational or inflectional affixes that have been discussed above, and over a quarter of the pairs oppose an accentually marked proper noun, mostly a surname, to an unmarked common noun. Basterrechea gives separate lists of transcriptions of personal given names and place names, not all of which are accentually marked. His list of accentually marked common nouns contains only 64 items, of which about three-fourths are relatively late loan words from Spanish. Thus the potential yield in terms of etymological clarification of basic vocabulary items seems disappointingly limited.

In summarizing these results, it is perhaps worthwhile to point out that although many of the reconstructions put forth are new and unorthodox, and of course depend on an acceptance of the hypothesis of the origin of the tonal accent from double vowels, they are otherwise rooted in a conservative view of established sound changes. No appeal has been made to a presumed process of voicing of intervocalic voiceless stops, that was thought of in earlier days on the analogy of the western Romance languages. Nor has any reliance been placed on the somewhat controversial possibility of the loss of former initial voiceless stops. Cases of alternation of consonant and zero have been connected with the well attested loss of intervocalic **d*, **g*, **n*, and **r*, while cases of alternation of voiced and voiceless stops have been attributed to an originally voiced stop that was unvoiced in final position or after sibilants and stops. Apparent cases of alternation of voiceless stop and zero, then, have been attributed to a combination of these two factors, pointing to an original voiced stop, for example **d* in the verb plural marker (**-dee*), rather than the **t* (in **-te*) that had been casually assumed. I have taken more seriously certain anomalies heretofore brushed aside, including the vocalism of the genitive and dative plural, the widespread presence of *-r-* in the latter, the *-k-* in the variant *-kèta*, the hiatus in the third person relative forms, and certain dialectal variants of the auxiliary verb forms, not to mention the distribution of the accent itself. Although analogy has been appealed to where it seemed indicated, preference has been given to explanation by regular sound change from appropriate reconstructions, in contrast, for example, to some previous treatments of *-r-* in the dative plural and *-k-* in *-kèta*.

Although the concept of the stage of the proto-language is fuzzy in its application to a case like that of Basque, where the dialects have remained in contact, it is clear that the double vowels were either present in Proto-Basque, or came into existence at a later stage, since they have different outcomes in different areas, including

entering into the origin of accent types I and II. But in reconstructing many of the consonants formerly between the vowels, such as **g* in the noun plural or in the second person singular feminine verb ending, together with the implications for earlier inflectional formations, we are clearly doing largely internal reconstruction to look back to pre-Proto-Basque, for the simple reason that the dialects all agree in the loss of these consonants.

As I have already intimated, there is little reason to assume that the tonal type I accent was formerly more widespread than it is now. Certainly accent types I and II are mutually incompatible, the former having developed in the area where **ae* became **a*, the latter in the area where this became *e*. In this easternmost area, there must have developed a strong stress accent on the penult of words already before the heterosyllabic sequence **ae* had become a diphthong **ai*, counting as one syllable with respect to rules for accent placement, and similarly before the period of the contraction of sequences of identical vowels, so there was no chance for a tonal accent to develop either in connection with this shortening or with the subsequent monophthongization to *e*. The area of the type III accent must represent either a later southward spread of this penultimate stress, or else a part of the same original area in which the rule of penultimate stress placement has been a persistent one. It is true that in a more westerly area (that of type IV), where such a stress accent has not arisen, these contractions and monophthongizations did not give rise to a tonal accent either. Here one can think of a possibly relevant functional factor concerning the noun paradigm. The ergative plural would still have differed in vocalism from the nominative plural and ergative singular after the period of contraction (originally **-aikl-ak*, later *-ekl-ak*, although it is conceivable that **ae* might have first assimilated to **ee*, so that the contraction would have led directly to the latter contrast). In contradistinction to the western area, where these endings are all *-ak*, the amount of syncretism in the paradigm would have been small enough that further accentually-signalled discriminations would not have been required.

Michelena's discussion brings forth a couple of cases where one accentual type has succeeded another: the type V of Pierre d'Urte may have arisen out of a version of the type IV Bidasoan pattern, but it has itself been lost (thus becoming type VI) in the western Labourdin area. There also seems to be a version of type I, near the border of type IV (the only other type of the **ae* > *a* area), which although still tonal, has added to the formerly unmarked forms the requirement of a tonal marking of monosyllabic stems.

Leizarraga's accented Bible translation and other works of 1571, representing his dialect of Briscous in northern Labourd, now in the type VI area, have been thought to represent the type II system. However this can not be the case, as he often writes an accent on the penult, most notably on inessive plural *-étan* (< **-eetan*). The accent marks in his works must either, as Oihenart suggests, represent long vowels, or they must stand for an accentual system largely isomorphic with the type I system.

Bibliographic note

Reference is made to Luis Michelena, «A Note on Old Labourdin Accentuation», *Anuario del Seminario de Filología Vasca «Julio de Urquijo»* 6 (1972), pp. 110-

120 (published 1974). This represents a continuing concern with the Basque accent, for which the most important earlier publications are «À propos de l'accent basque», *Bulletin de la Société de Linguistique de Paris* 53 (1957-58), pp. 204-233, and Chap. 20, pp. 379-403 of *Fonética histórica vasca*, San Sebastián, 1961. On the analysis of the Western Basque tonal accent, see sec. 7, pp. 76-87 of my paper «Nominative-Ergative Syncretism in Basque», *Anuario del Seminario de Filología Vasca «Julio de Urquijo»* 6 (1972), pp. 67-109 (published 1974). The most detailed earlier description of this type is Resurrección María de Azkue, «Del acento tónico vasco en algunos de sus dialectos», *Euskera* 11 (1930), pp. 282-297, 12 (1931), pp. 3-50; also published separately, Bilbao, 1931. There has now reached me the first installment of an important new description of this type, J. Basterrechea, «Estudios sobre entonación vasca según el habla de Guernica», *Fontes Linguae Vasconum* 6 (1974), pp. 353-393. I have also utilized teaching materials by this author in Spanish and English versions, which comprehensively indicate tonal patterns. For the historical implications of the type II accent in several varieties, see René Lafon, «Observations sur la place de l'accent dans quelques formes basques des parlers souletins», pp. 635-643 in *Mélanges de littérature, d'histoire et de philologie offerts à Paul Laumonier*, Paris, 1935. The Grundt article referred to is: Alice Wyland Grundt, «Tonal Accents in Low German», in *Proceedings of the First Annual Meeting of the Berkeley Linguistics Society*, 1975. On the formation of *-tik*, see René Lafon, «Sur les suffixes casuels *-ti* et *-tik*», *Eusko-Jakintza* 2 (1948), pp. 141-150. For the etymology of *-ekin*, see René Lafon, «Sur le suffixe casuel *-ekien*, *-ekin* 'avec'», *Revue Internationale des Etudes Basques* 27 (1936), pp. 65-68, and P. Lafitte, «Le suffixe 'ekin'», *Gure Herria* 16 (1936), 261-264. For accentuation of the relative, reference is made to pp. 20-23 of Rudolf P. G. De Rijk, *Studies in Basque Syntax: Relative Clauses*, Ph.D. Dissertation, M.I.T., 1972. Most of the dialectal variants of auxiliary verb forms are taken from Pedro de Yrizar, «Desarrollo y formación del verbo auxiliar vasco. II», *Boletín de la Real Sociedad Vascongada de Amigos del País* 4 (1948), pp. 407-491.

