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8. Non-Finite Verbal Morphology

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8.1. Introduction*

work.

Basque speakers can use verbs in two different ways: synthetic conjugation, consisting of a single word (e.g. dakart 'I am bringing it'), and analytic conjugation, also called periphrastic (e.g. mintzatzen naiz 'I speak', ikusiko ditugu 'we will see them'). Virtually, all verbs can be analytically conjugated, but only a limited number of them accept synthetic inflection. In fact, this number has been decreasing throughout historical Basque: from 68 verbs in the 16th century (Mounole 2011) to nearly a dozen in current Standard Basque, or even fewer in some varieties. However, it should not be inferred from this recessive evolution that synthetic conjugation is of greater antiquity.

Since Lafon's essential work (1980 [1944]) and the more recent contributions of Trask, this field has benefited in recent years from research into verbal grammaticalization (Aldai 2003), Proto-Basque reconstruction (Lakarra 1995 and subsequent works, Martínez-Areta 2006), the history of the gerund (Urgell 2006) and the general history of the verbal system (Mounole 2011). Such studies have greatly improved our knowledge of non-finite verbal forms. In this chapter we shall focus our attention on the history of Basque analytic verbs, their different parts and how they are combined. Each section will take present-day data as a starting point to describe the historical evolution of the elements studied and also, where possible, their prehistory.

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8.2. Verbal periphrases in Basque

A Basque periphrastic verb consists of a non-finite form (main verb, henceforth referred to as MV) and an auxiliary verb (henceforth, AV), regardless of the eventual insertion of further elements such as modal particles. MV expresses aspectual information, while AV carries information about argument structure, tense and mood. In Basque periphrases, MV always appears in one of these forms: radical or participle (perfective, imperfective or future). The combination of any participle with a given AV always produces an indicative form, while the use of the radical is reserved for the non-indicative moods.

Standard Basque or *euskara batua* has four auxiliaries, according to which periphrastic constructions can be classified. These are *izan* 'be' (indicative, intransitive), **edun* 'have' (indicative, transitive), **edin* 'become' (non-indicative, intransitive) and **ezan* 'obtain (?)' (non-indicative, transitive). To put it differently, there is one pair for the indicative and the other for marked moods: subjunctive, imperative, potential and conditional. This symmetrical division is the modern result of both diachronic evolution and geographical variation:

- (1) Ibil-tzen da

 walk-IPFV AUX.PRS

 '(S)he is walking' or '(s)he walks'
- (2) Ibil dadin

 walk(RAD) AUX(IRR).PRS

 'So that (s)he walks'
- (3) Ikus-ten dugu
 see-IPFV AUX.PRS
 'We are seeing it' or 'we see it'
- (4) Ikus-i ditut
 see-PFV AUX.PRS
 'I have seen them'

In this work, I employ the terminology used in Trask (1995b) with reference to non-finite verbal forms. For morphological reasons, however, Basque grammatical tradition uses *aditzoin* 'verbal base' instead of *radical*; *partizipio* 'participle' for only the perfective and future, and prefers *aditzizen* 'verbal noun' to *imperfective participle* or even *gerund*. I shall return to this terminological issue later.

(5) Ikus genezan
see(RAD) AUX(IRR).PST
'So that we might see it'

In addition, Biscayan and some varieties of Guipuscoan have *egin* 'do'—used as MV in all dialects and periods—instead of **ezan*,² and eastern varieties can show **iron*—perhaps the causative of an unknown verb (Gómez & Sainz 1995: 240)— but only for transitive verbs in the potential mood:³

- (6) Amai-tu da(g)izun
 finish-PFV AUX(IRR).PRS
 'So that you may finish it'
- (7) Ikus giniro
 see(RAD) AUX(POT).HYP
 'We would be able to see it'

The Basque verb can take three arguments: absolutive, dative and ergative. For tri-personal constructions of the indicative —that is, when the dative appears with transitive verbs— there is a set of forms which show significant dialectal variation. Eastern varieties exhibit forms like *derauko* '(s)he has it to him/her', of *eradun, a causative of *edun, whilst central and Standard Basque use forms like *dio*, where it is not certain if there is the presence of an auxiliary different from *edun. In these forms, western Basque uses the dative flag -ts-: deutso (same gloss).

We have already seen how Basque periphrases are constructed with one of these forms: participle or radical. In the following section, I shall examine the morphology of non-finite verbal forms, as well as their diachronic evolution.

A complementary distribution of *ezan (bi-personal conjugation) and egin (tri-personal conjugation) auxiliaries is also possible. Such a distribution was indeed present in Old Biscayan, Guipuscoan and Alavese, until the so-called literary dialects made their choices in favor of egin (Biscayan) or *ezan (Guipuscoan) as transitive auxiliaries for marked moods.

^{*}Iron shows a recessive evolution in historical Basque. Thus, in early eastern texts (especially in Souletin, Roncalese and Salazarese) *iron can occur as the only auxiliary verb for potential values in a whole range of possibilities, but at a given moment it is found in co-occurrence with *ezan. Hence, in present-day Souletin *iron remains only as a very defective verb in some forms like diro '(s)he can it' or liro '(s)he would be able to (do it)', *ezan being the normal AV for all marked moods, as occurs in Standard Basque (Padilla-Moyano 2012).

8.3. Tense and Aspect suffixes of non-finite verb forms: origins and variation

Note that what we call the *imperfective participle* is formed from a gerund with the inessive marker -n; this gerund is likewise formed by adding a suffix to the verbal radical: RAD *ikus* 'see' \rightarrow GER *ikuste* \rightarrow IPFV PTCP *ikusten* 'seeing'. So, when dealing with non-finite verb forms in Basque, we must bear in mind the following tripartite plan: RADICAL - PARTICIPLE - GERUND. Such a limited set may at first sight appear to be too simple, but from a diachronic perspective it holds a remarkable richness, as I attempt to expound below.

8.3.1. About the verbal radical (-Ø) and participle⁴

8.3.1.1. A relative chronology of non-finite verbal forms

The verbal radical is undoubtedly the oldest form among non-finite verbs in Basque. While both the participle and gerund exhibit (both morphologically and functionally) clearly defined markers, the only affix which the radical is thought to take, *e-, has an unknown function, even if some proposals treat it as a nounderiving prefix (see Trask 1995b: 213), following the suggestion of Michelena (FHV: 423), for whom radicals were merely verbal nouns. Whatever its function might have been, the prefix *e- is present in the most ancient verbs in Basque, although it has undergone different phonological evolutions: eduki 'have', ekusi (modern ikusi 'see', well recorded in Archaic Basque), Souletin ebili (common ibili 'walk'), ekarri 'bring', jakin 'know' (< *e-da-khin). The mere presence of a prefix would be a sign of an ancient stage of the language, since typologically Basque is strongly suffixing, as SOV languages usually are.⁵

Without exhibiting remarkable dialectal variation in terms of its form or uses, the radical would have come, at least from the times before dialectal split, from what is called Common Basque (CB), as opposed to the modern unified Basque or *batua*. But it must be older than the participle suffix -*i*, and Bascologists widely accept that, from a morphological perspective, the verbal radical

⁴ In the absence of any specification, here *participle* will always mean 'perfective participle'. Otherwise, I shall use *imperfective participle* or *prospective participle*.

Indeed, such an *e- was not the only prefix in Proto-Basque. Considering typological issues, the SOV word order is supposed to be one of the structural characteristics of Basque and, as Lakarra remarks (2006a: 564-5), this widely accepted idea has been too often uncritically assumed in PB comparison. Only Trask (1977), Gómez (1994), Gómez & Sainz (1995) and Lakarra have proposed a model for PB which differs from the canonical structure of Basque (see §10.4).

—and also -i participles — date from Pre-Proto-Basque. According to the CVC monosyllabic root theory (Lakarra 1995), which has enabled the recent advances in PB reconstruction, the most simple and ancient [*e-CVC] structure is still clear in many verbs: e-kar 'bring', e-tor 'come', e-bil, e-kus... As Martínez-Areta has realized (2006), there is no trace of [*e-hVC] structures in Basque verbs. Lakarra (2006a: 608) explains this absence by resorting to a relative chronology: for the beginning of the well-known evolution *th-, *kh- > h- —i.e. for the earliest centuries of our era— the [*e-CVC] rule would no longer have been productive; otherwise Basque would lack [*e-ThVC] structures like ekhar 'bring' or ethor 'come'. Consequently, ever since the change * T^h - > h- occurred, the language has not created any new verb using the prefix *e.

On the other hand, both participle and gerund are clearly derived from the radical: $ikus \rightarrow ikusi$, ikuste; $ibil \rightarrow ibili$, ibiltze; $eman \rightarrow eman$, emate. Note that the Basque perfective participle is the enunciation form for Basque verbs and, as mentioned above, modern speakers can easily deduce the radical as well as the derivation stem by simply removing the participle-forming suffix (except for the participles lacking any suffix, which are identical in form to the radical).

Finally, the gerund is the newest among the non-finite verbal forms in Basque, whereas both the radical and the participle date from PB. Its heterogeneous polymorphism, as well as its neatly described evolution, prompt us to place the origins of the gerund in a time after CB. More specifically —and following Urgell (2006: 927)—, it could be a medieval innovation, closely related to the development of the modern periphrastic conjugation and the consolidation of new ways of expressing verbal aspect.

8.3.1.2. Classification of Basque verbs

The participle has an interesting variety of endings, which yield the following classification of verbs, as proposed by Trask (1995b: 208).

When Lakarra considers this phonological change an *ante quem* element in order to date the verbal noun, he obviously deals with the PB forms of [*e-CVC] structure and derivates, which in the subsequent evolution of Basque have remained fossilized as verbal radicals.

Actually, a few new verbs with the prefix *e- have appeared as a result of subsequent evolutions. Therefore, they do not involve any new root.

8.3.1.2.1. The -i class

There are several hundred verbs which take the suffix -i in the perfective participle. Virtually all of these verbs use the prefix *e-. Therefore, -i is the most ancient among the participle markers, dating from PB. The radical of such a verb is precisely the form without the suffix: $erori \rightarrow eror$; $ikusi \rightarrow ikus$; $igorri \rightarrow igor$ 'send'; etc. Note that, at the eastern limit of Basque geography, Souletin has created what can be termed a "new -i class of verbs" with members such as ezkhapi, konserbi or akhabi from Gasc. escapa 'escape', conserba 'preserve' and acaba 'finish', in co-occurrence with ezkhapatii, konserbatii, akhabatii. Obviously, these forms are entirely unrelated to the ancient participle suffix -i, 8 and their new -i cannot be removed, so that both the radical and the participle remain identical in form.

8.3.1.2.2. The -n class

Nearly one hundred verbs have the perfective participle with an apparent suffix -n: izan 'be', egon 'remain', eman 'give'. This -n is not removed when forming the radical. Again, all these verbs exhibit the prefix *e-, which proves their antiquity. Trask (1990) argues that the verbs in this class were originally members of the -i class, the roots of which happened to end in -n. The regular loss of intervocalic -n- (FHV: 299-310) would have produced forms like izai, egoi, emai (attested in historical Basque) with the radicals izan, egon, eman. A further reorganization of these exceptional forms would be the origin of the modern -n class. This is a very suggestive hypothesis but, as Oyharçabal remarks (1998: 326), it leaves some loose ends, the most evident among them being the absence of such an -i- in the derived forms of some verbs of this class: jan 'eat' \rightarrow **jaite, edan 'drink' \rightarrow **edaite. However, Lakarra (2008a) proposes the evolution *-nin- $\rightarrow -i$.

⁸ This new -i would have its origin in Gascon verbal inflection, more specifically in the 1st person singular of the indicative present: *canti* 'I sing', *coneishi* 'I know', *sorteishi* 'I go out' from infinitives such as *cantar*, *conéisher*, *sortir*. Gascon largely influenced northern dialects of Basque until the presence of French became more evident, especially after the Revolution. For the whole Occitan area, this substitution process met its strongest resistance in Bearn (Brun 1923), and it is precisely the vigor of the Bearnese varieties which explains, by means of their vicinity, the fact that the influence of Gascon is especially relevant in Souletin.

8.3.1.2.3. The -tu class

This is the only productive class in historical Basque: every new verb entering the language falls within this class, with the only exceptions being a very small number of neologisms. It is commonly accepted that the -tu suffix is of Latin origin —although Trask (1995b: 212) suggested a PB. origin—, as shown by early loans such as begiratu 'look at, look after' < Lat. vigilatu(m). Later, Basque borrowed Romance verbs in the same way, until -tu had replaced the ancient -i suffix. With the exception of a few verbs which seem to have been transferred into this class from other classes, no verb in this group takes the prefix *e-. The suffix is -tu, which is absent from both the derivation stem and radical form.

8.3.1.2.4. The rest of the verbs

Finally, there are many verbs which cannot be included in any of the previous groups. For them, Trask created the "zero class": all of those verbs for which the perfective participle contains no removable suffix at all, so that the participle is identical in form to the stem and to the radical. This is a very heterogeneous group, with several identifiable subclasses of distinct origin. For these subclasses I shall follow Urgell (2006):

- a) Verbs ending in -ki such as ebaki 'cut', ireki 'open' or jaiki 'stand up' or ausiki 'bite'. These verbs would have had an ancient suffix *-gi, which very often appears —but not exclusively— in Biscayan forms: ebagi, edegi 'open', jagi 'stand up', ausigi 'bite'. According to Trask (1995b: 227), who agrees with Azkue, Schuchardt and Lafon in this respect, the morph -ki would be related to the dative flag -ki- that finite forms take in central dialects (e.g. daramakio '(s)he brings it to him/her'). Lakarra (2006b) suggests that the morph -ki present in these verbs is the historical adverbializer -ki, but de Rijk (1998 [1995b]: 400-403) examined its origin without noticing such a connection. Most of these verbs take the prefix *e, and none of them have any participle suffix, so that both the radical and perfective participle are identical in form.
- b) The -o verbs, sometimes in alternation with -an forms: igo 'go up', igaro 'pass', jaso 'take' (also igan, igaran, jasan). All verbs in this subgroup have the prefix *e-, and some of them present anomalies comparable to those exhibited by the -n class verbs. In fact, Trask proposes that these are "probably -n class verbs which have undergone some additional phonological development, now unrecoverable" (ibid.: 210).

- c) Verbs ending in a vowel, without any participle suffix, and identical in form to their related adjectives: *busti* 'moisten', *bizi* 'live', *bete* 'full'. None of these verbs take the prefix *e-, except *erre* 'burn'.
- d) Verbs ending in a consonant, without any participle suffix. There is only one verb in this subclass: *hil* 'die'.
- e) Verbs deriving from the allative case without any participle suffix. Thus, these verbs are identical in form to the allative case forms of the nouns: *atera* 'go out' (etymologically 'to the door'). No verb in this group exhibits the prefix **e*-. Note that any allative can be converted to a verb of the *-tu* class, but that only a handful of allatives form verbs of this subclass.
- f) Some ancient loans which lack any participle suffix: *gorde*, *bota* and a few others. These verbs do not take the prefix *e-. It is not always clear whether a verb should be best regarded as a member of this subclass or the adjective subclass.

Table 8.1. Classes of verbs

Verb ending	Examples	*e- prefix	Ptcp. suffix
-i	eror-i, ikus-i	all	-i
-n	egon, eman	all	*- <i>i</i> ?
-tu	pentsa-tu, maita-tu	none	-tu
-ki	idoki, jaiki	most of them	-
-0	igo, jaso	all	-
-V adjectives	erre, busti	none	-
-C adjectives	hil	none	-
allatives	atera	none	-
loans without suffix	gorde, bota	none	_

Concerning the participle suffixes, it can be argued that -i is the marker that the most ancient verbs took, regardless of whether the present-day -n class verbs were originally among them or not. As has been stated, these ancient verbs show the prefix *e- and many of them also exhibit the canonical PB. root structure CVC: e-kar, e-kus, e-gor, e-bil... Lakarra (2006a) has explained a plethora of differing root structures in ancient verbs with the CVC theory by means of two reconstructed prefixes (*da-, *ra-) and certain phonological processes. These phonological processes may appear strange at first sight, but they have parallels in Bantu languages. Table 8.2 shows samples of these evolutions (since our aim is simply to illustrate phonological and word derivation processes, the meanings of the verbs are omitted).

Table 8.2.	Etymology	of several	verbs dating	back to PB
1 00000 0.2.	El ymolog y	0,1 50,000	TOTOB CICITING	Octor to I D

> j(a)an > jarein o) > jaio ki) > jaiki o) > jario > jaitsi > jaritsi ii > jaulki	*e-ra-dan *e-ra-din-ki *e-ra-dits	> edan > eraiki > eraitsi
o) > jaio ki) > jaiki o) > jario > jaitsi > jaritsi		
ki) >jaiki >) > jario > jaitsi > jaritsi		
) > jario > jaitsi > jaritsi	*e-ra-dits	> eraitsi
> jaritsi	*e-ra-dits	> eraitsi
v		- ciansi
i \ jaulli		
i > jaulki	*e-ra-dul	> irauli
> jaun	*e-ra-dun	> iraun
> ja(u)ntz	*e-ra-duntzi	> era(u)ntzi
> jautsi	*e-ra-duts	> erausi
> jauzi	*e-ra-dutz	> erauzi
> jagon	*e-ra-gon	> eragon
	*e-ra-gotz	> eragotzi
> jakin	*e-ra-kin	> irakin
> joan	*e-ra-oan	> eroan eraman
> jasan jaso	*e-ra-san	> erasan eraso
> jasarri		
> jazarri		
	 jagon jakin joan jasan jaso jasarri 	> jagon *e-ra-gon *e-ra-gotz > jakin *e-ra-kin > joan *e-ra-oan > jasan

Apart from its use in participles, the suffix -i could also have given rise to adjectives such as gazi 'salted', zuri 'white', gorri 'red' or hori 'yellow', all of which are surviving forms in present-day Basque related to nouns or stems: gatz 'salt', zur 'wood', gor-din, (h)or 'dog'. Considering that radicals were PB. verbal nouns, a plausible hypothesis is that the suffix -i was productive for deriving participles from nouns, and that it consequently formed participles from radicals because radicals were nouns (Trask 1995b: 218).

Therefore, this suffix -i would have been productive over a long period of time, until the new participle marker -tu, entering from Latin-Romance, progressively excluded it. In addition to the Latin (such as begiratu 'look' < vigilātum) and Romance (such as pentsatu 'think' < pensatu) loans with which it entered, from a given moment long before the historical period of the language, the -tu suffix began to be combined with Basque roots too: ajutu (11th century), aiçurtu (1099). In historical Basque, -tu is already the only productive participle suffix:

in 1545, the suffix -i appears to be completely fossilized, and -tu verbs do not show the ancient prefix *e-, which can easily be interpreted if we take the function of *e- to be pre-Latin. The strength of the new participle suffix is evident not only from its productivity, but also from the fact that many -i verbs have joined the -tu class.

Nonetheless, in some western varieties, Spanish participles with -ado are regularly borrowed with the morph -au (from -adu): hence Spanish bajado, the participle of bajar 'go down', is borrowed as bajau. Spanish verbs in -ido are borrowed with -idu: hence Spanish corrompido, the participle of corromper 'corrupt' is borrowed as corrompidu. Landucci's dictionary and the recently discovered Lazarraga manuscript, both written in Alavese dialect, systematically attest this 16th century model for borrowing. This is a relatively recent development in western Basque, since earlier loans into Biscayan show the expected -tu—as in the other dialects— which offers, in fact, a valuable criterion for establishing a relative chronology of such Latin and Romance loans.

To put it simply, the extension of -tu is detrimental to -i. Different groups of examples related to this replacement process have been described in Urgell (2008: 7):

- a) In addition to the loans with which -tu entered, certain CVC canonical Basque structure roots also began to take the new suffix: bildu 'collect', galdu 'lose', hartu 'take', heldu 'arrive', kendu 'remove', lortu 'obtain', piztu 'light', saldu 'sell', sartu 'enter', sortu 'born'... Several of them can be related to -i forms: saldu ~ sari (< *sal-i), piztu ~ bizi (< *biz-i), galdu ~ gari (< *gal-i), hartu ~ har-i-tu (1545).
- b) -*i* forms remaining as a noun or adjective: *neurri* 'measure' (used as a verb in 16th century texts) or *bihurri* 'windy, curving'.
- c) The -*i* form being lost, but with some historical attestations: *aberatsi* 'become rich' (modern *aberastu*).
- d) Pleonastic forms with an ancient -i base: haritu, hotzitu, beltzitu (SB. hartu 'take', hoztu 'cool' and belztu 'blacken').
- e) Alternating pairs, depending on the variety and historical period, such as *ahantzi | ahaztu* 'forget', *irakurri | irakurtu* 'read', *bereizi | bereiztu* 'distinguish'.
- f) -n class verbs which started to take -tu in central varieties, either replacing or not replacing the -n: izandu / izatu 'be', egondu / egotu 'stay', iraundu 'endure'.

8.3.1.3. Expansion of the participle in western Basque

As I have previously mentioned, in Standard Basque the verbal radical is used in periphrases with non-indicative moods, i.e. with the auxiliary *edin for intransitive verbs and *ezan for transitive ones. But in spoken language the radical, formerly common, remains only in the eastern dialects (Labourdin, both High and Low Navarrese, and Souletin), so that when an eastern Basque speaker says erori da '(s)he has fallen' but eror daiteke '(s)he can fall down', a western speaker makes no such distinction in MV: erori da and erori daiteke (same gloss). For a detailed list of the uses of the verbal radical, see Trask (1995b: 214).

The loss of opposition between the radical and the participle in western Basque has taken place in the last centuries, since some fossilized idioms still attest a previous stage where the radical was in use, such as *or konpon!* ('sort it out as best you can!', where (h)or is 'there', and konpon the radical of konpondu 'arrange'). To a large extent, this neutralization process can be perfectly described by examining historical texts, following Lakarra (1996a: 185-8):

- 1) Verbs with participles which take the -i suffix would have lost their radical form in pre-historical Basque. This earliest loss occurred not only in western varieties, but would also have begun in northern Basque for one-syllable stems like utz(i) 'leave', even though the verbal radical has more recently undergone a reinforcement process in these varieties.
- 2) In Old Biscayan songs collected in the 16th century (but dating back to the 15th century), the opposition between radical and participle always occurs: *ezkon bekio* ('that (s)he marry him/her [jussive]', where *ezkon* is the radical of *ezkondu* 'marry'), *sar gaitezan* ('let's get in', where *sar* is the radical of *sartu* 'get in').
- 3) Participles did not appear in non-indicative moods until the 16th century, which could be an Alavese innovation.
- 4) From the 17th century onwards, the participle becomes the main form in non-indicative moods and starts to replace the radical, which will remain as an archaism. This process spread from Biscay to Guipuscoa and some areas of High Navarre.
- 5) The opposition has survived in word derivation, since the verbal radical is the normal derivation stem to which any suffix is regularly added: so, from *konpon* (participle *konpondu* 'solve') *konponketa* 'repair' (noun), *konponbide* 'solution, arrangement'. One-syllable verbs forming their participle with -i are the exception to this rule: hasiera 'beginning' ← has(i)

In Biscayan and Guipuscoan, however, it is possible to derive gerunds from participles in -tu instead of deriving them from radicals, as in $agertute \leftarrow agertu$ 'appear', and in some

'begin', heziketa 'education' $\leftarrow hez(i)$ 'educate' or utzikeria 'negligence' $\leftarrow utz(i)$ 'leave, abandon'.

Thus, if the participle is the current citation form of the Basque verb, it must be concluded that, at a previous stage, the verbal radical was the most evident reference to the verb, on the basis of three arguments: i) going back to the 16th century the verbal radical was a feature for all Basque dialects; ii) the radical is the form from which other non-finite verbal forms are derived; iii) ancient participles borrowed from Latin or Romance also created their own radical, unveiling an evident need.

8.3.1.4. Reinforcement of the radical in eastern Basque

If the radical has disappeared from western Basque, there is some evidence of an opposite tendency in eastern varieties. In effect, in eastern Basque, we can see a kind of reinforcement of the radical as a verbal form apart from the participle, and the more eastwards we go, the more the radical becomes marked.

It has been pointed out that in the -tu class verbs, the participle is obtained by adding the suffix -tu to the radical, and vice versa: in verbs borrowed as participles, the radical is formed by removing -tu. Nevertheless, eastern varieties usually form unmistakable radicals with -t: lagunt 'go with' (ptcp. lagundu) zuzent 'to direct' (ptcp. zuzendu), deit 'to call' (ptcp. deitu). Such verbal radicals, well-attested from 16th century texts, happen to be different in form not only with respect to the participle, but in many cases they also avoid homonymy with words of other categories (see Table 8.3).

Michelena (FHV: 423) noticed the addition of -t after certain radicals and, due to the de-nominal nature of some verbs involved in this phenomenon, suggested that the origin of such a -t could be related to well-known medieval phonological rules of word composition. This hypothesis implies great antiquity for radicals such as hant 'inflate' $\leftarrow handi$ 'big' (ptcp. hantu), ixilt 'be quiet' $\leftarrow ixil$ 'quiet' (ptcp. isildu) or zilhet 'permit' $\leftarrow zilegi$ 'lawful' (ptcp. zilhetu). However it originated, -t would have become useful for distinguishing radicals from their correspondent nominal forms. Hence, we could propose an analogical extension of the -t ending forms to other verbs where the ancient word-formation rules would not explain radicals such as xahat 'purify' (ptcp. xahatu) or $deinat \leftarrow deinatu$ 'condescend', and also to non-denominal verbs such as $irakurt \leftarrow irakurtu$ 'read' and $sort \leftarrow sortu$ 'create'.

varieties even derivation suffixes can do this: *apurtutzaile* 'that who breaks' ← *apurtu* 'break'. Every instance of derivation from the participle instead of from the radical is obviously an innovation, due to the neutralization process described above.

A confluent —but radically different!— phenomenon occurs with verbs in the -ki subgroup of the zero class, since eastern varieties show a tendency to construct radicals different from the participle by deleting the -i of -ki: $ideki \rightarrow$ idek, $ebaki \rightarrow ebak$, $jaiki \rightarrow jaik$. This procedure is a clear reinterpretation of such verbal forms being identified with the perfective participle suffix -i, which in eastern varieties —and also in Standard Basque— is regularly removed to obtain the radical: ikusi, ikus \rightarrow ideki, idek. Lafitte (1979 [1944]: 203) gives a list of such forms: aurdik, ausik, ebak, edek, edok, etxek, iradok, igurik, idek, *jarraik*, and *atxik*, with the following seven verbs being exceptions to this rule: eraiki, hunki, ilki, iraki, iraungi, jaiki and aurizki. 10 But Lafitte misinterprets it when he says that forms such as *ebak* are original, since it is evident that verbs in this class are etymologically formed as [STEM + -ki], and not [STEM + -k + -i], so that the radicals of verbs in this group lacking -i must necessarily be an innovation; in fact, many of these forms appear around the 18th century, and the frequency of the phenomenon has been increasing throughout the last three centuries.

In a similar way, I should mention the reinterpretation of the causative *erazi* as having the suffix -i. In effect, a new radical *eraz* spreads from the 18th century, replacing the ancient radical *erazi*. Note that the old radical form also withdrew in peninsular dialects (necessarily before the process described in §8.3.1.3). This general loss of the ancient forms of the radical *arazi* / *erazi* explains why the modern standard language has chosen *araz*.

Finally, a few vowel-ending verbs with identical forms in the standard for the radical and participle exhibit different radicals in Souletin and Low Navarrese. Thus, for *busti* 'moisten', *bete* 'fulfill' and *gorde* 'hide' there exist the standard radicals *busti*, *bete* and *gorde* as well as the eastern radicals *busta*, *betha* and *gorda*. Such forms could also be linked to the need for differentiated radicals, as historically experienced by eastern Basque speakers.¹¹

¹⁰ To my knowledge, *jaik* and its ancient causative *eraik* are both well attested in Souletin from the 18th century.

¹¹ The same is applicable to *erre* 'burn', but the fact that the radical *erra* is also attested in an archaic Biscayan sentence (given in (23)) makes this issue more complicated. Lakarra has remarked to me that some old Biscayan texts also attest the participle *betatu*.

Table 8.3. Eastern radicals

	Participle	Common radical	Homonymous	Eastern radical
-tu class	zuzendu 'direct' lagundu 'go with' berdindu 'make equal' izutu 'frighten' bihurtu 'give back' sortu 'create' irakurtu 'read'	zuzen lagun berdin izu bihur sor irakur	zuzen (adj.) lagun (noun) berdin (adj.) izu (noun) bihur (adj.)	zuzent, xuxent lagunt bardint izit bihurt, bühürt sort irakurt
-ki subclass	ideki 'open' ebaki 'cut' idoki 'take out' iradoki 'force out' jaiki 'get up' eraiki 'erect' atxeki 'hold'	= = = = = = = = = = = = = = = = = = =	- - - - -	idek ebak idok iradok jaik eraik atxek
vowel end	bete 'fulfill' busti 'moisture' gorde 'hide' erre 'burn' arazi (causative)	$= \\ = \\ = \\ = \\ arazi \rightarrow araz$	bete (adj.) busti (adj.) gorde (adj.) erre (adj.)	betha busta gorda erra eraz

8.3.2. The third non-finite verbal form: the gerund

8.3.2.1. On the Basque gerund

The gerund is the most frequently used non-finite verbal form in present-day Basque, being present in a wide range of nominalized verb phrases with all the functions that nouns can perform. This is more evident in peninsular dialects, where subjunctive periphrases with the auxiliaries *edin or *ezan are regularly replaced by nominalized clauses. These nominalized clauses can fulfill every function characteristic of nouns, hence their high level of occurrence in subordination; in fact, it can be argued that the subjunctive conjugation with *edin or *ezan auxiliaries is disappearing from spoken peninsular Basque:

^{&#}x27;I want Miren to walk'

(9) Nahi dut Miren ibil-tze-a want AUX(PRS) p.n. walk-NOMNL-ABS.SG 'I want Miren to walk'

The gerund is also present in the imperfective participle, as this form is the historical result of adding the archaic inessive suffix -n to the gerund. At this point, I should refer to a terminological difficulty, since in Basque grammar tradition the term *aditz izen* 'verbal noun' is widely used, but could lead to confusion. In effect, what gerund-deriving suffixes actually nominalize is not the verb, but the whole sentence (de Rijk 2006); besides, such a nominalized verbal form can be identical in form to a mere de-verbal noun deriving from the same verb. Hence, I shall prefer the term *gerund*, the form from which the *imperfective participle* will be derived.

Let us now deal with the formation of the Basque gerund, which is obtained by adding a suffix to the verbal radical. Standard Basque —here I emphasize standard, since, as explained below, matters are very different in dialectal and historical Basque—has two allomorphs in complementary distribution for the formation of the gerund: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant: -te for verbs with radicals ending in -te or a sibilant end in -te for verbs with radicals ending in -te or a sibilant end in -te for verbs with radicals ending in -te or a sibilant end in -te for verbs with radicals ending in -te or a sibilant end in -te for verbs with radicals ending in -te or a sibilant end in -te for verbs with radicals ending in -te for verbs with radicals ending in -te or a sibilant end in -te for verbs with radicals ending in -te for verbs with radicals endi

The distribution of -te and -tze is very different from western to central or eastern Basque, and it also reflects a diachronic process whereby the co-occurrence of these allomorphs —historically two different suffixes— has been resolved in detriment of the older -te. Facts can be summarized as follows (Urgell 2006: 924-6):

a) In central dialects (Guipuscoan, High Navarrese and, to a lesser extent, also Labourdin), -te is clearly a fossil which only remains in verbs ending in

While the archaic inessive suffix -n joins directly to the word, the modern inessive has incorporated the article -a. For etxe 'house', modern etxe-an contrasts with the archaic etxe-n, still used in Souletin. The fact that the imperfective participle takes an archaic suffix (egite-n) whilst the inessive construction in nominalized clauses also exhibits the article (egite-a-n) makes a relative chronology obvious.

[&]quot;Such verbal nouns [i.e. nominalized verbs] retain their verbal nature in full. [...] Several dozen common verbs form derived nouns with -te or (rarely) -tze; most verbs cannot take these suffixes for this purpose. Like all other derived nouns, nouns derived from verbs by means of -te or -tze lose their verbal properties completely and exhibit the full range of ordinary nominal properties" (Abaitua & Trask 1987: 398).

¹⁴ Nowhere in historical Basque has the gerund been obtained by means of only one suffix.

- -n and a sibilant $(egin \rightarrow egite, ikus(i) \rightarrow ikuste)$, but there are plenty of innovating exceptions such as *hasitze* or *hustutze* instead of *haste* \leftarrow *has(i)* 'begin' and *huste* \leftarrow *hustu* 'empty'.
- b) In eastern Basque, -te is more frequently used, since it can also be added to old stems ending in lateral consonants: ibilte (SB. ibiltze \(
 diffusion ib
- c) In western Basque, the situation is much more complex: in addition to -te and -tze, the varieties of Biscay and Alava exhibit a luxurious puzzle of co-occurring suffixes to form the gerund, with a very heterogeneous distribution:
 - -te is still widely used: as well as with -n class verbs —which lose their -n when forming the gerund— and sibilant endings, it is regularly added after lateral consonants (etorr(i) 'come' $\rightarrow etorte$; $ibil(i) \rightarrow ibilte$) and even nasals (ipin(i) 'put' $\rightarrow ipinte$).
 - Verbs with participles ending in -tu have gerunds ending in -tute; in other words, the suffix -te is directly added to participles ending in -tu, and the same seems to have occurred with borrowed participles ending in -idu: apurtu 'break' → apurtute, sufridu 'suffer' → sufridute.
 - The suffix -tze remains in a few gerunds, above all in those of one-syllable stems: har(tu) 'take' $\rightarrow hartze$.
 - Recently borrowed verbs with participles ending in -a(d)u take the suffix -eta: kantau 'sing' $\rightarrow kanteta$.
 - -keta is used in the Deba Valley (Biscayan of Guipuscoa) when participles ending in -tu have two or more syllables: apur(tu) 'break' → apurketa; garbi(tu) 'clean' → garbiketa.

Table 8.4.	Non-finite	verbal j	torms
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	PFV. PTCP.	RADICAL	GERUND	IPFV.PTCP.
-i class	ikusi	ikus	ikuste	ikusten
	bidali	bidal	bidaltze	bidaltzen
-n class	egin	egin	egite	egiten
-tu class	hartu	har	hartze	hartzen
-ki	eduki	eduki	edukitze	edukitzen
-0	igo	igo	igotze	igotzen
= adjective	erre	erre	erretze	erretzen
= adjective	hil	hil	hiltze	hiltzen

8.3.2.2. The gerund, suffix by suffix

Urgell's 2006 work is the most relevant contribution to the study of the Basque gerund (note that she prefers the term *verbal noun*). In this paper, the author systematizes what most linguists and philologists thought about the diachronic evolution of the Basque gerund, by means of a thorough and far-reaching search in pre-literary and literary corpora.

8.3.2.2.1. -te

The gerund-forming suffix -te has been identified with the suffix -te present in eurite 'rainy season' (\leftarrow euri 'rain'), idorte 'dry season' (\leftarrow idor 'dry') or gosete 'famine' (\leftarrow gose 'hunger'), with an original meaning of 'duration' (Trask 1995b: 221) or 'time of' (Urgell 2006: 925). Its first attestation, in the 14th c., is ozterate (TAV: 51-56), the name of a military tax in the Middle Ages. After comparing archaic texts and the distribution of the suffix in marginal areas, -te is thought to have been used with ancient verbs with [*e-STEM-i] structure (irakurte \leftarrow irakurr(i) 'read'), -n class verbs (egite \leftarrow egin), vowel-ending verbs (ozterate) and -ki/-gi verbs (jalgite \leftarrow jalgi 'go out'). Before 1545, there are no attestations of -te with loans or with verbs taking the participle -tu.

The recessiveness of -te throughout historical Basque is clear from the most ancient texts, where -te appears in co-occurrence with the central/eastern -tze and the western -eta, both firstly and mostly attested with loanwords. The beginning of this process cannot be precisely dated, but we can date its completion in the most innovating geographical area: between 1545 and 1645, the number of verbs taking -te were reduced to the two possibilities accepted in the modern standard: -n class verbs and stems ending in a sibilant.

Even if both western and eastern areas reflect a situation closer to preliterary Basque, there is an interesting difference between them: in the eastern area, verbs lacking any participle marker take -tze when forming the gerund ($hiltze \leftarrow hil$ 'die', $bethatze \leftarrow betha$ 'fill', $ithotze \leftarrow itho$ 'drown'), while in western Basque the suffix is -te: ilte, betete, itote (same gloss).

8.3.2.2.2. -tze

According to Urgell (2006: 930), the origin of the suffix *-tze* would be related to *-(*t*)*zaha*, transcribed as *-zaha* in the medieval place names of Alava (*TAV*: 25-30), and Manterola (2006: 674) has seen in this *-zaha* the trace of the Basque

¹⁵ Urgell delimits this area as a triangle between Southern High Navarrese, the Eastern Low Navarrese of Cize and the Labourdin of Donibane Lohizune and Sara (ibid.: 928).

article -a (< *-ha) added to the suffix -(t)za, profusely attested in toponyms. Lakarra has remarked to me, however, that, in forms lacking an article, this -tza would have been reduced to -tz and, consequently, an e would have been necessary when adding the inessive, the allative or any other case marker with an initial consonant: sar-tz-e-n, sar-tz-e-ra. In this case, speakers would have later reanalyzed these forms as sar-tze-n, sar-tze-ra, etc. Such a reanalysis is a very common phenomenon, also observable in place names such as Parise, Miarritze or Atharratze. Be it as it may, -tze emerged in association with -tu participles, regardless of whether they were borrowed or not. Then, a massive [V + -tu] borrowing would have facilitated the association of this suffix to vowel-ending verbs: atera 'go out' $\rightarrow ateratze$. Broadly speaking, the more ancient and/or western the text, the more unusual -tze becomes.

8.3.2.2.3. -eta

The *-eta* used in the formation of the gerund happens to be the suffix *-eta* widely used in place names, and in the origin of the local cases (see §6.3.2). Its entrance in forming the gerund seems to be closely related to the construction of the imperfective participle with an inessive marker (egin 'do' $\rightarrow egite-n$), and thus *-eta* could be the most recent suffix involved in forming the gerund. This hypothesis is reinforced by the fact that *-eta* is mainly added to (recently) borrowed verbs which have participles ending in *-adu*, *-idu*: goardadu 'keep' $\rightarrow goardaeta$; prometidu 'promise' $\rightarrow prometieta$.

As Gómez (1991: 411) realized, in the Roncalese dialect, the gerund exhibit(ed) both -eta and -ta, the latter being a simplified form which would also have supplanted the old —and phonologically close— -te. After a detailed search of the literary corpus, Urgell describes an increasing evolution of -eta as a gerund-forming suffix in western varieties and proposes that this usage would have been an Alavese innovation (ibid.: 932-3). The author comes to the conclusion that such an innovation, successful in western Basque and amenable to generalization, was blocked by the reinforcing of -tze as a regular suffix in central and eastern areas.

8.3.2.2.4. -keta

It is widely agreed that the suffixes -eta and -keta have a common origin, as Michelena observed (1987 [1971b]: 145). On the other hand, we must bear in mind phonological contexts in order to decide which of these forms is basic and which secondary, and the fact that in toponymy -keta was practically limited to

the position after the sibilant makes this issue quite clear (*FHV*: 247). As a gerund-forming suffix, the area where *-keta* first appeared has remained more or less the same —excluding most of Alava, where the Basque language has been substituted by Spanish—: the Leintz-Gatzaga Valley in Guipuscoa and Aramaio, its neighboring land in Alava.

Urgell suggests that -keta was indeed an Alavese innovation (2006: 934), unveiling the richness of examples and the complementary distribution of these suffixes in Landucci's manuscript (Vitoria-Gasteiz, 1562). Thus, both -eta and -keta can be considered to be Alavese innovations. In fact, she proposes with clarity that what irradiated from Vitoria-Gasteiz would not at first have been a pair of suffixes, but a mere morpheme -(k)eta with two allomorphs whose use depended on the phonological context (ibid.: 934): in archaic Alavese texts, -eta is restricted to vowel-ending stems (suplikaeta \leftarrow suplikaeta 'implore'; kantaeta \leftarrow kantaeta 'sing'), whereas -keta can be added to any verb (bihurketa \leftarrow bihurtu 'return'; itaunketa \leftarrow itaundu 'ask'). Therefore, in the western area, -(k)eta has struggled to replace -tze as the gerund-forming suffix for verbs with participles ending in -tu and, since this -tu class is by far the largest one in historical Basque, -tze was excluded in favor of the more frequent -eta.

8.3.2.2.5. The complex suffix -(t)zaite

In Biscayan and Alavese old texts, we can still find an additional gerund-forming suffix, -(t)zaite, present in ancient verbs with a CVC root, in forms which are monosyllabic and mostly ending in a sonorant: $sartzaite \leftarrow sartu$ 'enter'; $galtzaite \leftarrow galdu$ 'lose'; $kentzaite \leftarrow kendu$ 'take away'. In some Alavese texts, -(t)zaite seems to be the subject of analogical extension, since it is also used with sibilant endings ($autsaite \leftarrow (h)autsi$ 'break') and even polysyllabic verbs ($garbitzaite \leftarrow garbitu$ 'clean').

On the origins of -(t)zaite, two main hypotheses have been formulated. Trask (HB: 215) saw the suffix -te as being added to the gerund of a -n class verb exhibiting i (i.e. forms like izai, egoi, as commented in §8.3.1.2.2). On the other hand, Urgell (ibid.: 938) proposes a morph -tzai- which, in effect, also appears in the agent-forming suffix -tzaile. This -tzai- could have been added as a reinforcing element in one-syllable bases with noun-forming suffixes, as some

¹⁶ The suffix -tzaile is clearly composed of an unknown element (-tzai-) and the well-attested suffix -le, also and exclusively used in forming the agent. In fact, both -le and -tzaile were in complementary distribution depending on the participle marker: -tu verbs happened to take -tzaile, while the rest took -le, no longer productive: kreatzaile 'creator' ← kreatu 'create'; igorle 'sender' ← igorri 'send'; ikusle 'viewer' ← ikusi 'see'.

archaic occurrences suggest: galtzaigarri 'cause of ruin' $\leftarrow galdu$ 'lose'; sarzaikeran 'entrance' $\leftarrow sartu$. This morph -tzai- is also present in another composed suffix, the agent-forming -tzaile, which occurs in complementary distribution with -le: egile 'agent' $\leftarrow egin$, hausle 'transgressor' $\leftarrow hautsi$ 'break', irakurtzaile 'reader' $\leftarrow irakurtu$ (but synonym $irakurle \leftarrow irakurri$).

Apart from anything else, this suffix -(t)zaite was indeed related to CVC patrimonial roots. Remember that, from the first records available, these verbs formed the gerund with -tze in central and eastern areas, while solutions like (h)artute and even (h)artze would have been subsequently diffused in western dialects. Thus, -(t)zaite has been an unsuccessful solution in the history of the Basque gerund.

8.3.3. The prospective participle¹⁷

The Basque prospective participle is formed by adding a suffix to the perfective participle. This suffix can be -ko or -(r)en, in a distribution which ranges from the exclusivity of -ko in western dialects to the exclusivity of -(r)en in some eastern varieties, with different degrees of co-occurrence in Labourdin, both High and Low Navarrese, and Souletin. Thus, the prospective participle of egin 'do' is egingo or eginen, of ikusi 'see', ikusiko or ikusiren, and of kantatu 'sing', kantatuko or kantaturen, always depending on the dialect. According to phonological rules, -ko becomes -go after n, and the genitive marker -en takes a euphonic -r- when added to a vowel-ending stem. Both future participles are used in Standard Basque, even if the acceptance of -(r)en is restricted to -n class verbs. The -ko / -(r)en distribution occurs in the three main models shown in Table 8.5.

I am tempted to present the geographical locations for these models, but between II and III, the data are somewhat complex. There is no doubt about the position of Biscayan and Guipuscoan in the first model, and this is clear in historical Basque. In addition, virtually all of the other present-day dialects are to be classed in II, whereas only some Souletin varieties can be located in III. But

This point deals with a specific way to express futurity: the main form of the future in historical Basque, well attested in all dialects and the only one specialized for this purpose. Following Mounole (2011: 71-77), in the 15th and 16th centuries there are several analytical constructions expressing future: i) [RAD + *edin, *ezan + -te / -ke] periphrasis, which can also fulfill potential values; ii) [PFV PTCP + egin] periphrasis, a specific construction of western dialects, where egin is used as AV instead of *ezan in future and potential; iii) [RAD + *iron]; iv) [PROSP PTCP + izan, *edun]; v) [IPFV PTCP + izan, *edun + -te / -ke]. In §9.4.1.3 and §9.4.2, reference will be made to the -te / -ke suffix.

this distribution has changed over the last centuries, since we have evidence of a recessive evolution of -(r)en in records.

Table 8.5. -ko / -(r)en distribution

	-ko	-(r)en
I (western)	all verbs	-
II (central)	all except -n class	-n class
III (eastern)	-	all verbs

As stated above, in general, the further east we go, the more range the suffix -(r)en covers, and now it can be added that this eastern area has undergone a significant withdrawal throughout the last few centuries. For instance, Dechepare (LN, 1545) uses -ko only five times in the 34 occurrences of verbs which could take this suffix. An even more revealing example is Leiçarraga¹⁸ (eastern Labourd, 1571): out of one thousand instances of prospective participles, excluding those of -n class verbs, only one is formed by means of -ko: ethorriko (4 occurrences). In the oldest texts in Souletin, -ko is almost non-existent, -ko but at a given moment it shows up and becomes normal, always co-occurring with -(r)en.

In the 18th century, the eastern end of the geographical area of the Basque language, represented by the Souletin-speaking village of Esquiule, located in Bearn, offers three relevant texts: two printed books (1758 and 1780) and a popular drama copied down in 1750.²⁰ Data are as follows: The 1750 drama has 7

Among Leiçarraga's merits, we cannot forget his attempt, the first in the history of Basque, to create a standard variety for continental speakers. For this purpose, he chose most of his assistants from Soule. As far as I am concerned, however, the primacy of -(r)en in Leiçarraga's works is to be explained by bearing in mind the former extension and strength of this suffix, and not —at least not exclusively— because of his deliberated linguistic choices. Coherently with this argument, *Kadet eta Bettiriño* —another eastern Labourdin text dated ca. 1750— shows a balanced co-occurrence of -ko and -(r)en in the classes of verbs where -ko can be used.

¹⁹ Mounole (2011: 74) excludes the prospective -ko in Souletin after the single example found in Oihenart's proverbs, but we can offer very different data. In addition to the texts of Esquiule mentioned in this section, Jean de Tartas (17th century) exhibits a distribution which is 90% favorable to -ko, even if he represents a marked exception in Old Souletin, since this author consciously adopted some features of other dialects in order to get closer to non-Souletin readers, i.e., in his historical context, Labourdin and Low Navarrese readers.

²⁰ The two printed books are Sacramentu-Saintiaren Aurhidegouaco maniac eta chediac. Esquiulaco parropia eliçan, Andredonamariaren Conceptionecouan, eçaria... (Pau, 1758), and Andere Dona Maria, scapulariocouaren confrarioco bulla, decreta, statutac

samples of -ko, all of which are formed with -tu verbs except for the astonishing $edanco \leftarrow edan$ 'drink'; in the 1758 text, all occurrences of the prospective participle take -(r)en, whereas in the 1788 text, futures formed with -ko represent about a third. Even if it may be somewhat anecdotal evidence, certain eastern varieties of Souletin have developed a pleonastic innovation: jin 'come' $\rightarrow jinen \rightarrow jinenko$; egin 'do' $\rightarrow eginen \rightarrow eginenko$. We must note that it is precisely in Soule where other periphrases involved in the formation of the future —and more specifically by means of the suffix -te/-ke— still remain in use (see at the beginning of this subsection §8.3.3, in footnote). In order to explain the expansion of -ko in eastern Basque, a hypothesis can be formulated by the conjunction of some of these factors:

- a) The fact that eastern dialects —which generally prefer -(r)en as the prospective participle marker—add -ko to the non-verbal element of verbal locutions when expressing futurity²¹ (Mounole 2011: 77).
- b) The fact that the areas where the -(r)en destinative and the -(r)en prospective participle have been attested are coincident, which impels us to consider that the quasi-extinction of the first has caused the withdrawal of the second (see below, at the end of this Subsection §8.3.3, in footnote).
- c) Together with a) and b), the well-known principle of economy in language.
- d) The contact with speakers of other varieties and/or some writers' choices.

This said, the -ko / -(r)en distribution can be represented in a quadripartite schema in which the mixed model corresponds to a geographical area not yet well-delimited, but historically withdrawing to the east, and nowadays circumscribed to somewhere in the province of Soule. This is shown in Table 8.6.

	-tu class	-i class	-Ø class ²²	-n class
I	sortuko	igorriko	-ko	izango
II	sortuko	igorriko	-ko	izanen
Mixed	sortuko / sorturen	igorriko / igorriren	-ko / -(r)en	izanen
III	sorturen	igorriren	-(r)en	izanen

Table 8.6. Models for the prospective participle

eta maniac edo chediac... (Pau, 1780). The manuscript is Sainte Elisabeth de Portugal, the oldest preserved pastoral.

²¹ The verb of a locution can express the future by taking the suffix -te / -ke or by being analytically conjugated; additionally, the prospective suffix can be directly added to the non-verbal element of the locution.

Here, for the sake of clarity and concision, I shall not provide instances of every subclass in the zero class of verbs, since all of these behave in the same way in a given model.

With respect to their origins, both prospective participle-forming suffixes are transparent. As Trask remarks (1995b: 219), after its function of deriving participles passed from the ancient -i to the Latin-origin -tu, the perfective participle began to be used as a base for the construction of the new future participle in finite verb forms. In order to do so, the different dialects made different choices between the two genitive markers. Following Trask, "it is generally believed that this -en is in origin the mere genitive case suffix -en, and that this -ko is the same morph as the familiar relational affix occurring in etxeko andrea 'housewife'". In other words, every dialect made a choice between the possessive genitive -(a)(r)en and the local genitive -ko.²³ Michelena (1987 [1981]: 48), relating the origin of Basque periphrastic constructions to those of neighboring Romance languages, saw the Basque future participle as a gloss on the medieval Romance forms like he de ver (lit. 'I have of see') and es de venir (lit. '(s)he is of come').²⁴ The following section returns to this issue.

8.4. The Basque periphrastic verb: History and Pre-History

At the beginning of this chapter, we have briefly seen how the Basque periphrastic verb is formed by means of one of the non-finite forms —radical, participle or gerund— as MV, together with an AV. Now we shall explore how those forms can be combined in order to express TAM categories (TENSE, ASPECT and MOOD). Our second aim will be to briefly explain the diachronic evolution of Basque periphrases.

8.4.1. Combining non-finite forms with auxiliaries: TAM categories²⁵

If a synthetic verbal form contains both semantic and grammatical information in a single word, in an analytic verb such information is distributed between the MV (semantic content and aspectual value) and the AV (argumental, temporal and

This choice is also observable when expressing the destinative: apart from the standard -(a)(r)entzat 'for' —formed on the genitive marker -(a)(r)en— most varieties attest different solutions involving -ko: Biscayan -(a)(r)entzako, -(a)(r)endako and eastern -(a)(r)endako, -(a)(r)entako, besides the archaic use of the possessive genitive marker with a destinative meaning: jente (people) prauben (poor.GEN.PL), 'for the poor people'. Oyharçabal has remarked to me that the parallel choice in destinative and prospective morphs is a sign of the connection between these grammatical features.

²⁴ That is, in effect, the beginning of the modern Spanish future inflections: *ver he > veré*, *ver has > verás*, and so on.

²⁵ A detailed description of present-day Basque TAM systems is given in Oyharçabal (2003).

modal information). For the verbs which are capable of synthetic inflection, compact forms are compatible with all the modal values, even if their use of synthetic forms in their full range of possibilities —subjunctive and potential, for example— is nowadays a marked choice which is somewhat archaic; in this respect, periphrastic conjugation is preferred to express every value in a more regular way. Nevertheless, some differences in value remain perceptible between synthetic forms and their composed equivalents, so that in both the imperfective present and past tenses, analytic forms express a habitual meaning, whereas their synthetic pairs have a progressive sense.²⁶

Table 8.7. Basque periphrastic conjugation (transitive verbs)

nt	Imperfective	ikusten du	dakus*	'he sees it'	Ir
Present	Perfective	ikusi du		'he has seen it'	ndic
Pı	Prospective	ikusiko du		'he will see it'	ati
	Imperfective	ikusten zuen	zekusan*	'he saw it'	Indicative moods:
Past	Perfective	ikusi zuen		'he saw it'	mo
	Prospective	ikusiko zuen		'he would see it'	sbc
al	Past: protasis	ikusi balu		'if he had seen it'	
ons	Past: apodosis	ikusiko zu(ke)en		'he would have seen it'	*edun AV
diti	Pres/Fut: prot.	ikusten/ikusiko balu	balekus	'if he saw it'	n A
con	Pres/Fut: apod.	ikusiko luke		'he would see it'	<
Hyp. conditional	Past subj: prot.	ikus baleza		'if he saw it'	
H	Past subj: apod.	ikus lezake	lekuske	'he would see it'	Non-indicative moods: *ezan AV
	Present	ikus dezan		'so that he may see it'	i-in
Subj.	Past	ikus zezan		'so that he might see it'	dica
	Hypothetical	ikus lezan		'were he to bring it'	tive
t.	Present	ikus dezake	dakuske	'he can see it'	m
. po	Past	ikus zezakeen	zekuskeen	'he could see it'	000
Subj. pot.	Hypothetical	ikus lezake	lekuske	'he would be able to see	ls: >
O 1	Пурошенса	ikus iezake	iekuske	it'	kez.
Imp	erative	ikus ezazu		'see it!'	ı nr
Juss	ive	ikus beza	bekus	'let him see it!'	ΔV
Juss	ive	(ikus dezala)	(dakusala)	ict iiiii see it:	
1					

[Adapted from Oyharçabal (2003: 250-1)] *Synthetic forms marked with an asterisk have a different meaning to that of their periphrastic equivalents.

²⁶ However, these aspectual nuances are less and less respected in spoken Basque.

nt	Imperfective	ibiltzen da	dabil*	'he walks'	In
Present	Perfective	ibili da		'he has walked'	dic
Pı	Prospective	ibiliko da		'he will walk'	ativ
	Imperfective	ibiltzen zen	zebilen*	'he walked'	/e r
Past	Perfective	ibili zen		'he walked'	noc
I	Prospective	ibiliko zen		'he would walk'	ods:
.1	Past: protasis	ibili balitz		'if he had walked'	Indicative moods: izan AV
ona	Past: apodosis	ibiliko z(ateke)en		'he would have walked'	m +
diti	Pres/Fut: prot.	ibiltzen/ibiliko balitz	balebil	'if he walked'	\ \ \
conc	Pres/Fut: apod.	ibiliko litzateke		'he would walk'	
Hyp.conditional	Past subj: prot.	ibil baledi		'if he walked'	No No
Н	Past subj: apod.	ibil liteke	lebilke	'he would walk'	n-ir
	Present	ibil dadin		'so that he may walk'	ndic
Subj.	Past	ibil zedin		'so that he might walk'	ativ
9 1	Hypothetical	ibil ledin		'were he to walk'	e m
	Present	ibil daiteke	dabilke	'he can walk'	1000
pol	Past	ibil zitekeen	zebilkeen	'he could walk'	ds:
Subj. pot.	Hypothetical	ibil liteke	lebilke	'he would be able to walk'	Non-indicative moods: *edin AV
Imp	erative	ibil zaitez		'walk!'	AV
T	:	ibil bedi	bebil	11 at 1 a	
Juss	ive	(ibil dadila)	(dabilela)	'let him walk!'	
[Ad	apted from Oyharç	cabal (2003: 250-1)] *S	ynthetic forn	ns marked with an asterisk h	ave

Table 8.8. Basque periphrastic conjugation (intransitive verbs)

[Adapted from Oyharçabal (2003: 250-1)] *Synthetic forms marked with an asterisk have a different meaning to that of their periphrastic equivalents.

In Tables 8.7 and 8.8, I present a general schema of the TAM combinations in Standard Basque,²⁷ first for the transitive verb *ikusi* 'see' (Table 8.7), and then for the intransitive *ibili* 'walk' (Table 8.8). Note the defectiveness of synthetic forms, as well as the clear division of periphrastic forms in accordance with the auxiliaries for indicative or non-indicative moods.

Furthermore, eastern Basque kept the suffix -ke —with its allomorph -te(ke) in the (monopersonal) verbs *edin eta izan— for the inflected forms in indicative tense/aspects, carrying a sense of uncertainty, probability or futurity. The usages shown in Table 8.9 are those accepted in the most elevated style in Standard Basque.

Some periphrases which are well-attested in historical Basque are excluded, since they remain entirely archaic. Such is the case with the subjunctive-present-based protasis (*ikus badeza*), the so-called aorist (*ikus zezan* 'he saw it', in contrast with its modern meaning of subjunctive) and the handful of combinations involving an AV which are no longer productive, apart from non-standard or markedly dialectal constructions.

		TRANSITIVE	INSTRANSITIVE
Present indicative	IPFV	ikusten duke	ibiltzen dateke
	PFV	ikusi duke	ibili dateke
	PROSP	ikusiko duke	ibiliko dateke
Past indicative	IPFV	ikusten zukeen	ibiltzen zatekeen
	PFV	ikusi zukeen	ibili zatekeen
	PROSP	ikusiko zukeen	ibiliko zatekeen

Table 8.9. Periphrasis with -(te)ke suffixed AV

8.4.2. Addition of further elements in periphrastic conjugation

Apart from the canonical [MV + AV] periphrasis, analytic conjugation can incorporate a third element to this basic structure, the most common being the particle *ari* for expressing the progressive aspect, and the participles *izan* or *ukan* to reinforce the perfective aspect, in addition to the eventual use of modal particles like *ohi* (habit) *ote* (uncertainty) or *omen* (to express second-hand information). I shall leave these modal particles aside to focus on the functioning of periphrastic verbs.

8.4.2.1. Remoteness in present perfect and past

The reinforcement of the perfective aspect by introducing a second participle gives what Lafon calls *formes surcomposées*, expressing a sort of remoteness. This second participle can be izan 'be' for all verbs or, in eastern dialects, izan in concurrence with uk(h)an 'have' for transitive verbs:

(10)	Judas	etorr-i	izan	zen	
	p.n.	come-PFV	be(PFV)	AUX	
	'Judas cam	e'			
(11)	Guregatik	bekatu	egin	ukan	du
	we.MOT	sin	do(PFV)	have(PFV)	AUX
	'He sinned	for us'			

8.4.2.2. Marking the verbs as a sentence focus

When the verb becomes the focus of an affirmative sentence, western speakers tend to insert *egin* 'do' between MV and AV (13). Such a usage of *egin* seems to be a modern innovation:

(12) Eneko birritan jauz-i da p.n. twice fall-PFV AUX(PRS)

'Eneko has fallen down twice'

(13) Eneko jauz-i egin da
p.n. fall-PFV do(PFV) AUX(PRS)
'Eneko has fallen down'

8.4.2.3. Expressing progressive aspect: ari, ibili, egon, jardun

As seen above, the present and past of synthetic forms have a meaning of continuous aspect, while the analytic forms express a sense of frequency:

(14) Ane eskola-ra joa-ten da egunero
p.n. (the) school-ALL go-IPFV AUX every.day
'Ane goes to school every day'

(15) Ane eskola-ra d-oa
p.n. school-ALL 3SG-go
'Ane is going to school'

As there is no such synthetic conjugation for the vast majority of verbs, most of the dialects (i.e. all of them except Biscayan) mark the progressive aspect by means of the particle ari, in a typical inessive construction with izan 'be':²⁸

(16) *Madalena-k egunkari-a irakur-tzen du*p.n.-ERG newspaper-ART read-IPFV AUX
'Madalena reads the newspaper'

Since the ari periphrasis is in origin a mere locative construction, its use blocks any expression of morphological ergativity and, consequently, all verbs are treated as intransitive, taking an intransitive AV. Nonetheless, some varieties also mark the transitive / intransitive opposition with ari, in a clear innovation. As Mounole reminds us (2008: 589), many languages show a semantic connection between the locative and progressiveness. With regards to the etymology of ari, Aldai (2003) links it to the ancient form of the verb hartu 'take' $\leftarrow hari$ (cf. Dechepare's pleonastic haritu); grammaticalization explains the loss of the h-.

(17) Madalena egunkari-a irakur-tzen ari da p.n.(ABS) newspaper-ART read-IPFV 'ari' AUX 'Madalena is reading the newspaper'

Instead of *ari*, Biscayan has its own way of expressing progressive aspect, making use of the verbs *ibili* 'walk', *egon* 'be, stay' or *jardun* 'be engaged on' as auxiliaries:

- (18) Jon egunkari-a irakur-ten da-go
 p.n. newspaper-ART read-IPFV 3SG.ABS-be
 'Jon is reading the newspaper'
- (19) Mikel etxe-a garbi-ketan da-bil
 p.n. house-ART clean-IPFV 3SG.ABS-walk
 'Mikel is cleaning the house'
- (20) Karmele-k ardo-a egi-ten dihardu-Ø
 p.n.-ERG wine-ART do-IPFV be.engaged-3SG.ERG
 'Karmele is making wine'

8.4.2.4. Further auxiliaries

Without trying to exhaust all the possibilities, we can now consider the use of other autonomous verbs as AV, as used in present-day Biscayan. Indeed, from 1545, both *joan* 'go' and *eroan* / *eraman* 'take' are well attested as AV with a habitual meaning for intransitive and transitive verbs, respectively. Such a usage, formerly common in Basque, has survived in Biscayan until the 19th century. These two examples are taken from Dechepare:

- (21) Bihotz-a d-oa-t ebaki (Dch. VI, 6)

 Heart-ART 3SG.ABS-go-1SG.DAT break(PFV)

 'My heart gets broken'
- (22) Mundu hon-ek anhiz jende engana-tu darama.

 world this-ERG a.lot people confound-PFV take.3SG.ERG

 'This world confounds a lot of people' (Dch. II, 74)

8.4.3. Historical changes in the TAM system

zidi

'Abraham engendered Isaac'

Since the beginning of the literary period, the Basque verbal system has undergone remarkable changes. Always with regard to auxiliaries, we can see that in 16th century texts —and even later— many instances of periphrasis in the past tense involving auxiliaries *edin / *ezan actually have an indicative meaning, unlike in present-day Basque:

(23)Jaigi nagi-a AUX(*EDIN) stand.up(RAD) lazy-ART (RS, 294)zizan erra uri-a burn(RAD) AUX(*EZAN) town-ART 'The lazy (person) stood up and set fire to the town' (24)Abraham-ek enjendra Isaak (Lc., *Math* I, 2) zezan engender(RAD) AUX(*EZAN) p.n.-ERG p.n.

The relevance of these "anomalous" constructions of the past tense, the socalled aorist, is highlighted by the fact that Lakarra chose this feature as a linguistic criterion to establish the limit between archaic and old stages in his periodization of the history of Basque (1997: 511-7). Furthermore, the changes noticed in the *edin and *ezan periphrases encouraged Mounole to undertake an exhaustive analysis of all the types of analytical forms in historical Basque (2006 and subsequent works). In view of the fact that different types of periphrasis may have different origins, she has researched their distinct grammaticalization processes and diachronic evolution, proposing a relative chronology. These are the structures of Basque periphrasis (samples are given in Tables 8.7 and 8.8, as well as in the examples given throughout this chapter):

- Type 1: RAD + aux. *edin, *ezan, *iron (western equivalent: PFV PTCP + egin).²⁹ Examples (2), (5), (6), (7).
- Type 2: PFV PTCP + aux. *izan*, **edun*. Ex. (4), (12).
- Type 3: IPV PTCP + aux. izan, *edun. Ex. (1), (3), (14).

Mounole describes a general reorganization of the TAM system in Basque, which occurred from the 15th to the 18th centuries (2011: 316):

²⁹ Western periphrasis [PTCP + egin] would have more recent origins than the other structures in this group. Mounole dates its emergence to the "Old Common Western Basque", after the dialectal split (2007: 15-8).

- a) The 3rd type of periphrasis becomes the main form of the present, to the detriment of synthetic forms, which become used increasingly less. There are traces of the ancient present in 15th and 16th century texts: periphrasis of the 1st type in the present and the [PFV PTCP + *joan / eroan*] periphrasis would remain only in secondary usages (non-indicative and habitualness, respectively), which were acquired as a new form of the progressive became more widespread.
- b) Periphrasis of the 2nd type develop narrative values, replacing the ancient 1st type, which would specialize in non-indicative usages. Synthetic forms of the past also lose their narrative value to be confined to the imperfective past.
- c) A similar replacement takes place in conditional and potential moods, whereby both synthetic forms and periphrasis of 1st type withdraw in favor of the new periphrasis involving *izan*, **edun*.
- d) The periphrasis [PROSP PTCP + izan, *edun] becomes the main form of the future in all dialects, and the only one in peninsular Basque.
- e) As a result of these processes, the subjunctive emerges as a morphologically marked mood, since *edin, *ezan and egin auxiliaries have been expelled from the indicative.

In other words, the set of periphrases based on *izan* / **edun* auxiliaries constitutes the axis of the new TAM system. It must be pointed out that the majority of the changes described above began to take place before the historical period of the language; in fact, in the 15th and 16th centuries plenty of forms are attested in co-occurrence. Thus, in the earliest centuries of its literary period, Basque undergoes a transition from a pre-historical TAM system to the 18th century system, which remains more or less the same in present-day language. The next point deals with the reconstruction of such a pre-historical system.

8.4.4. Origins of the Basque periphrastic verb

At the beginning of the literary period, auxiliary verbs were used in different ways, which offers some key information for the diachronic analysis of Basque periphrases. Concerning the auxiliaries involved in the 1st type of periphrasis, only the verbs *edin 'become' and egin 'do' have simple forms —i.e. synthetic forms which do not occur as the AV of another verb— although the occurrences of *edin in the present tense are subject to constraints. On the other hand, *ezan and *iron lack any simple form, since they always appear combined with a verbal radical or the particles ahal (potentiality) or ezin (impossibility). From this situation, Mounole (2006: 726) deduces an advanced stage in the grammaticali-

zation processes of these verbs in general, and points out different levels in such processes: *ezan and *iron seem to be the most grammaticalized AV, whereas egin has not yet lost its syntactic and lexical autonomy.

Moreover, the grammaticalization processes concerning *izan* 'be' and **edun* 'have', used in the 2nd and 3rd types of periphrasis, would be hardly advanced in the 16th century, as they were still used in all tenses and moods. Nowadays, *izan* and **edun* show different levels of grammaticalization depending on the dialect. Thus, in western Basque they no longer occur in simple forms and the verbs *egon* and *eduki* have taken their place; but in eastern dialects, *izan* / **edun* have not lost their autonomous use, while *egon* / *eduki* still keep their original meanings of 'stay' and 'hold', with any replacements not yet having occurred.

With regards to the forms used as MV in the three types of periphrasis, their relative chronology is clear, as has been described in §8.3.1.1. The origin of the gerund —dated by Urgell to the centuries after the dialectal split, i.e. the Middle Ages— is closely related to the emergence of a new periphrasis of the imperfective (3rd type). The periphrasis of the perfective (2nd type, also involving auxiliaries *izan* / *edun) may be at least³⁰ contemporary: both gerund and participle are derived from the radical. Finally, it would seem that periphrastic forms—perhaps those of the 1st type— already existed when the periphrasis of the 2nd type entered the language.

Luckily, the first record of the Basque language, consisting of two short comments written *in margine* in the Emilian Glosses (11th century), contains the obviously verbal form *dugu* 'we have it', surprisingly identical to the form in modern central dialects. These *glossae* also exhibit negation in a different order, and what we could identify as two participles,³¹ one of which (*ajutu*) is to be classified as a *-tu* verb, and the other (*izioqui*) presumably as a member of the *-ki* subgroup of the zero class of verbs. If such constructions are to be considered

³⁰ In Mounole's words: "elles doivent au minimum être contemporaines" (ibid.: 733). If not, the 2nd type of periphrasis could be older than the 3rd, since the formation of the perfective participle is a common feature in all dialects.

³¹ The formal transparency of these medieval glossae contrasts with their semantic obscurity, not yet elucidated (cf. *TAV*: 41-44). We do not know what *ajutu* and *izioqui* actually were, although morphologically they exhibit the same suffixes as historical participles. The question is whether these forms were adjectives, nouns or verbs: the hypothesis of the grammaticalization of verbal periphrases starts from the premise that adjectives / nouns would have been grammaticalized as MV, whereas the ancient MV would have become AV, but in the case of Basque we have no means of precisely dating such processes. In addition, the aspect of both constructions would change depending on the category of *izioki* and *ajutu*: if they were adjectives or nouns the meaning would be imperfective, but if they were participles of an analytical form, they would express perfective aspect.

verbal periphrases, the analytic conjugation would have a proven antiquity of nearly a millennium; it appears, moreover, that its origins would be in PB (considering the periphrasis of the 1st type).

The supposed antiquity of synthetic forms with reference to analytic conjugation is a topic which has been explored throughout the history of Bascology. However, since the proposal of Lakarra (2006b: 300) that, in the past, not all Basque verbs would have been subject to synthetic inflection, the opposite hypothesis is now emerging among scholars. Lakarra describes the panorama in PB: "When Latin and Basque languages came into contact, this presumably had a reduced class of synthetic verbs —with several dozens, maybe one hundred members—, a fossilized or almost unproductive class, as it would remain 1500 years later and, also, surely, in the dawn of Romance languages" [translation mine, MPM] (2006a: 613). Mounole comes to a similar conclusion: "Ne conviendrait-il pas mieux de penser à une classe de verbes simples ou flexionables fermée, en distribution complémentaire avec une classe ouverte de prédicats complexes de type racine verbale + auxiliare?" (2006: 734).

The question is to determine what the supposed MV of those ancient periphrases with AV *edin, *ezan (and even now with izan & *edun!) actually were (see above, within this Subsection §8.4.4, in footnote). A high degree of grammaticalization in the periphrasis of the 1st type —and notably earlier than in constructions of the 2nd type— is very plausible. Finally, even in the case that synthetic forms eventually proved to be older than analytical verbs, they would have come from the grammaticalization process of an even older verbal periphrasis.³² To conclude, it can be argued that the most ancient forms surviving in the historical period are both synthetic verbs and periphrases based on the auxiliaries *edin and *ezan.

8.4.5. The influence of Romance models

Michelena (1987 [1981a]: 48) describes a parallelism between Romance —and more generally western European— and Basque periphrastic forms of the perfective and future. He shows good sense in only mentioning periphrases with *izan* / *edun as AV, since both imperfective periphrases and constructions involving any of the *edin, *ezan, *iron and egin auxiliaries escape such Romance-Basque parallelism, as will be explained. Table 8.10 shows a selection of such parallels in some European languages.

³² Here, Trask (1977) saw in the morph da- involved in synthetic forms the trace of an ancient copula: dator 'he comes' < da + tor (tor being the MV).

	Basque	French	Spanish	German
'he has came'	etorri da	est venu	ha venido	ist gekommen
'he has done'	egin du	a fait	ha hecho	hat gemacht
'he will come'	joanen (joango) da (cf. old Sp. es de ir)	ira	irá (< ir ha)	er wird gehen
'he will do'	eginen (egingo)du (cf. Sp. ha de hacer)	fera	hará (< ha(ce)r ha)	er wird machen
[Michelena (1987 [1981a]: 48)]				

Table 8.10. Parallel structures in European languages

Embracing all kinds of periphrasis in a *totum*, Haase (1994, apud Mounole 2006: 730) proposes: "the analytical construction is an innovation that came about in a (pre)-Romance language-contact situation, most probably originating from spoken Latin. The reason for such an assumption is the structural similarity with the *habeo-factum* perfect". Mounole (2008: 601) also refutes the hypothesis formulated in Haase (1992), which identifies the Gascon influence as the origin of imperfective participle-based periphrasis in Basque.

For Lakarra (2006a: 613), it is not at all plausible that a Latin-Romance influence should have dramatically reduced a class of synthetic verbs which were formerly productive, or that such an influence caused the replacement of this class by the periphrastic constructions mainly used in the history of Basque. Only the structure [PFV PTCP + *izan*, **edun*] has obvious Latin-Romance models and chronologies, unlike the periphrases [IPFV PTCP + *izan*, **edun*] and [RAD + **edin*, **ezan*]. Moreover, he suggests that before the influence of Latin-Romance, the class of synthetic verbs was in a minority, whereas the ancient periphrases —not necessarily those used in the historical period, nor with a similar distribution or function— enjoyed an absolute majority, as has occurred in more recent times.

In Mounole's words (2006: 727): "Il convient souligner que si l'emploi de la racine verbale comme verbe principal n'est pas connu des langues qui nous entourent, il est le plus commun et étendu parmi les périphrases des langues du monde", and "les deux autres périphrases [i.e. other than [PFV PTCP + *izan*, **edun*]] n'ont pas de cognat parmi les périphrases des langues qui ont été ou sont en contact avec le basque, ce qui signifie qu'elles sont issues de processus d'évolution internes à la langue basque elle-même" (ibid.: 730). Supporting the opinion that the entire Basque periphrastic conjugation is due to Latin-Romance influence would entail some serious problems in chronology (ibid.: 731).

To sum up, then, the trace of a Latin-Romance influence in Basque periphrastic verbs is limited, at most, to the periphrases based on either perfective or prospective participles with *izan* / **edun* as AV (i.e. the most recent construc-

tions in Basque periphrases). Such an influence could have prompted the emergence of parallel structures in Basque, or simply the increase in frequency of a pre-existing periphrasis.

8.5. Conclusion

Basque non-finite verbal forms may be arranged in a chronological sequence starting from the time of Proto-Basque (radical, from which PERFECTIVE PARTICIPLE would be derived) to develop, after the dialectal split (from the 6th century onwards), a PROSPECTIVE PARTICIPLE and a GERUND —the latter with a high degree of geographical variation.

As far as PB reconstruction has reached in its development, there is no sign of a former universal synthetic conjugation in Basque, and the related idea which attempts to explain the whole periphrastic conjugation as a result of Latin-Romance influence has been sturdily refuted. Such an influence could explain only one type of periphrasis (based on both perfective and prospective participles), whereas the rest of them date from PB (periphrases involving the radical) or from the Middle Ages (periphrases involving the gerund). In accordance with the diachronic evolution of Basque, dialectal differences concerning non-finite verbal forms —and hence periphrastic conjugation— have incessantly increased since the dialectal split.

In short, even if our knowledge of non-finite verbal forms has considerably profited from the general improvement of research in Basque historical linguistics over the last few decades, some questions remain unresolved, and the limited records available oblige diachronists to fully exploit the resources at their disposal. In addition, the absence of any genetically related languages makes reconstruction work especially difficult, hence the importance of internal comparison, assisted —as has been well understood in recent years—by typology.

Appendix. Basque Non-Finite Verbal Forms: an Approximate Relative Chronology

?	Lakarra's Old PB	 *e- prefix, productive *da-, *(-)ra- prefixes, productive
?-1 st c.	Michelenian PB	• -i suffix, productive
1 st -4 th cc.	Aquitanian	• *e- prefix fossilized
5 th -6 th cc.	Common Basque	 [RAD + *edin, *ezan & *iron] periphrasis Latin-Romance origin -tu suffix enters the language -tu suffix spreads to patrimonial words
6 th -15 th cc.	Medieval Basque	 -tu replaces -i as productive PFV PTCP morpheme Prospective participle: -ko / -(r)en [PTCP + egin] periphrasis in Western Basque (B, Al, G) [PFV PTCP + izan & *edun] periphrasis Historical gerund arises (-te suffix dates back to PB) -tze gerund-forming suffix emerges as a central innovation -(k)eta gerund-forming suffix, a western innovation Periphrasis of imperfective [gerund + inessive]
15 th -16 th cc.	Archaic Basque	 Reorganization of the TAM system (16th-18th) Reanalysis of certain [N-V] verbal periphrases as [MV-AV] In B, egin begins to replace *ezan as transitive AV for marked moods In L, LN and HN, *ezan begins to replace *iron as transitive AV for marked moods
1600- 1750	Old Basque	 The so-called aorist disappears Complementary distribution of egin / *ezan in B, Al, G Reinforcement of the radical in eastern dialects Radical disappears in western dialects (from B to G)
1750- 1875	1 st Modern Basque	• Literary G generalizes *ezan as transitive AV for marked moods in detriment of egin
1875- 1960	2 nd Modern Basque	 *iron defective AV withdraws dramatically in the east *edin & *ezan fossilized in B and G
1960 →	Unified Basque	• Generalization of nominalized clauses in detriment of the subjunctive conjugation with AV *edin & *ezan