

The order of affixes in the Basque synthetic verb

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THE ORDER OF AFFIXES IN THE BASQUE SYNTHETIC VERB

Abstract

In this paper I want to provide an explanation for the rather complicated structure of the synthetic verb in Basque. The Basque verb can have, theoretically, a total of about fifteen affixes. My analysis will consist of a combination of a model for a universal order of affixes and a diachronic explanation of Basque affix order.

1. Introduction

In this paper I treat the order of affixes in the Basque synthetic verb. It will deal with Euskara Batua, the form of Standard Basque in development since the 1970's. Sometimes, however, I will refer to Basque dialects. Unless otherwise indicated, I will refer to Euskara Batua.

The description of any phenomenon in Euskara Batua, immediately raises two problems.

In the first place Batua, composed as it is out of different dialects, is sometimes inconsistent. For example, the order of the affixes in the verb **ion* ('to say', with only declined forms) is different from the order in other verbs, because it has been taken over from the Bizkaian dialect of Basque, which has an affix order differing in some respects from the affix order in Gipuzkoan and Labourdin Basque, on which Batua is mainly based.

In the second place, the process of standardization of the Basque language is still going on. This means that some phenomena existing in different forms in the dialects have not yet been standardized. I cannot provide information about the allocutive (see section four), although this is an important phenomenon in Basque dialects.

Given the separation of morphology, as is traditional, into inflection, derivation and composition, this paper focuses on in-

flection. Composition and derivation relate to affix order only partly. Basque has a lot of derivational affixes that sometimes combine. It would be otiose to enumerate these affixes here. I will only deal then with a limited set of affixes.

My criterion for dealing with a particular affix is its capacity to appear in the synthetic conjugation of the verb. In this way I avoid drawing a clear line between inflection and derivation. Some of the affixes dealt with by me will be classed as inflectional by some and derivational by others, depending on one's criteria.

For a correct understanding of the Basque verb, two distinctions are important.

First, Basque is an ergative language. The object of a transitive clause is marked with the same case ending as the subject of an intransitive clause (the absolutive case, in Basque $-\emptyset$). The subject of a transitive clause is marked by a different case, the ergative (in Basque $-k$).

Second, it is important to know that Basque has two classes of verbs, one class that contains synthetic verbs (conjugated without auxiliary) and another class of periphrastic verbs (conjugated with auxiliary). Only a limited class of verbs have a synthetic conjugation. Practically all of these have defective paradigms. Except for one or two, all of the synthetic verbs can also be conjugated periphrastically. The auxiliary in the periphrastic verb can be used independently. It then means 'to have' or 'to be'. Example (1) gives the synthetic form of *etorri* ('to come') with 1st person subject, example (2) the periphrastic form¹.

(1) na -tor
 1stsg.abs.-ROOT
 'I come'

(2) etor - tzen n-aiz
 ROOT - imperf. 1stsg.abs. -AUX
 'I come' 'I am'

Footnotes

I want to thank Pieter Muysken and Rudolf de Rijk for their help and support and the latter for initiating me into the mystery of the Basque language.

1) A list of abbreviations used is added in an appendix.

In this paper I will first describe the affixes in the Basque synthetic verb.

Some of the semantic categories that are marked on the main verb will not be considered, such as the contrast between perfective/imperfective (section 2).

In section 3 I give a brief description of Joan Bybee's recently developed universal model (Bybee, forthcoming) for the order of inflectional affixes in the verb. Basque appears to deviate rather strikingly from this model. In section 4 I will try to provide a diachronic explanation for the deviations.

Some remarks about terminology are perhaps in order. I use the term 'affix' for the set of morphemes excluding the root or the stem. With the term 'morpheme', I refer to meaningful elements (roots as well as affixes). Affixes are prefixes, suffixes and infixes. The abbreviations used are explained in the appendix.

2. Basque affix order

In Basque, the following categories can be marked by means of affixes in the Basque synthetic verb:

- the grammatical functions ergative, absolutive and dative;
- the plural of the absolutive;
- the plural of the second person plural ergative;
- tense markers for future and past time;
- allocutive: marking of the sex (and sometimes status) of the person spoken to;
- modals: prefixes mark, whether or not a clause is negative, affirmative, interrogative, true according to rumors etc.;
- subordination is marked by affixes on the verb. If subordination is marked by a suffix, it can sometimes be followed by nominal suffixes (case endings), functioning as subordinate conjunctions, a phenomenon that is known as hyper-declension.

While confining myself to the synthetic verb, I enumerate here, for the sake of completeness, the categories marked in the periphrastic construction of the main verb.

- future; Euskara Batua distinguishes between a synthetic and a periphrastic future tense
- completedness/incompletedness of an action (perfect/imperfect)
- aspect is marked (in some cases) by contrasting synthetic and periphrastic forms. Other aspects are not expressed morphologically.

The subjunctive or counterfactual mood is marked by a different stem in the auxiliary.

The morphemes in the synthetic verb in Basque show a rather fixed ordering, which can be summarized as in Table 1.

A slot matrix like this has a few weak points. Many forms possible according to this matrix do not occur.

Only a limited class of verbs can be conjugated synthetically and nearly all of these only defectively. Some affixes in different positions in the matrix exclude each other. Finally, there are some exceptions, to be discussed below. First I want to make some remarks about combinations of a subset of these affixes.

By combining *-en-* (and allomorphs), *-ke* and *-n* (marking respectively past tense, future tense/potential and past tense), a whole spectrum of moods and tenses can be marked, viz. the moods conditional, potential, imperative and indicative in the present tense, past tense and future tense. Some examples of the verb *egon* (to stay, to remain) with a first person subject are given in (3):

- (3)
- | | |
|------------------|--|
| <i>nago</i> | 'I stay' (ind. present tense) |
| <i>nagoke</i> | 1) 'I will stay' (ind. future tense)
2) 'I can stay' (potential) |
| <i>nengoen</i> | 'I stayed' (ind. past. tense) |
| <i>banengo</i> | 'if I stayed' (cond., with cond. prefix) |
| <i>nengoke</i> | 1) '(then) I would stay' (cond. present)
2) '(then) I could stay (cond. pot.) |
| <i>nengokeen</i> | '(then) I would have stayed (cond. past) |

In addition to the problems already mentioned and normally connected with such a matrix, in Basque a number of additional caveats have to be made.

In the first place I abstract from phonological changes. In different positions epenthetic vowels (often *-e-*, or *-i-* sometimes *-a-*) are added. Maybe this is not completely correct, since sometimes some meaning is assigned to these vowels (for example by Heath 1977 concerning the past tense prefixes). Furthermore, some affixes have allomorphs depending on their position. The affix *-da* for example (1st person dative, allocutive or ergative) loses its *-a* at the end of a word, after which the *-d-* devoices to *-t*. This has no influence on the morpheme order however.

The second caveat does bear on the morpheme order. The position of the affix marking the plural of the absolutive case in the clause, is mostly found in the position mentioned in Table 1, but there are some lexical exceptions.

The verb *eduki* ('to have', 'to keep', root *uka*) has an infix in the stem instead of a suffix:

- (4a) da - uka - t
3^dabs.-ROOT - 1stsg.erg.
'I have it'
- (4b) da - uzka - t
'I have them'

The verb **edun* (to have) most often has a prefix *it-* before the stem:

- (5a) du
3abs.-ROOT
'he has it'
- (5b) ditu
'he has them'

The verb **ion* (to say) has a plural affix at the end of the verb, after the ergative marker and before the past tense suffix *-n*. This

is the normal morpheme order in the Bizkaian dialect, from which this word was introduced into Euskara Batua.

The third exception has to do with the person markings. It is important to keep the ergative system of the verb in mind. If not, the system would be even more complicated because subject and object (or better agent and patient) can be marked with a prefix or with a suffix, depending on the transitivity of the verb.

- (6) na - tor
1stsg. abs - STEM
'I come' (from *etorri*, 'to come')
- (7) na - kusa - k
1stsg.abs. -STEM -2nd sg. erg.
me see you
'you see me' (from *ikusi*, 'to see')
- (8) ager-tzen na - tza - i - k
ROOT-imperf. 1stsg.abs- ROOT - dat.marker - 2ndsg. dat.
appear I be to you
'I appear to you'² (from *agertu* 'to appear' plus auxiliary)
- (9) da - kar - ki - o - t
3^dsg.abs. ROOT dat.marker - 3^dsg.dat - 1stsg.erg.
it bring to him I
'I bring it to him' (from *ekarri*, 'to bring')

Sentence (6) indicates an intransitive sentence (7) a transitive one. (8) is a sentence with an absolutive and a dative, and (9) is (9) a bitransitive sentence. The three verbal forms beginning with *n-* marking the absolutive match the Table, although this prefix *n-* in (7) indicates an object and in (6) and (8) a subject. In all these cases the prefix marks the absolutive.

There is one exception to this order: in the past tense, when the object (in the absolutive case) is third person, the absolutive

2) Martin-Callejo (1982) considers this *-i-* morpheme as a kind of bi-transitivity marker in the auxiliary.

case is not overtly marked and prefixes instead of suffixes mark the ergative. For example:

- (10) ne - kusa - n
 1stsg.erg. - STEM - past
 'I saw it' (compare (7))
- (11) ne - kar - kio - n
 1stsg.erg. - STEM - 3^dsg. dat - past
 'I brought it to him' (compare (9))

The last point concerning which Table 1 lacks precision is the allocutive. In Basque the person addressed to is marked in some cases in independent clauses. For example:

- (12a) nago
 'I stay' (neutral situation)
- (12b) nagok
 'I stay' (when talking to a man with whom the
 speaker is familiar)
- (12c) nagon
 'I stay' (when talking to a woman with whom the
 speaker is familiar).

I passed over this phenomenon called 'allocutive marking', because no system of forms has been accepted yet by the Basque Academy for Euskara Batua. The phenomenon differs widely from dialect to dialect and even within the same dialect. For a description of Labourdin and Souletine allocutive, see Lafon (1959). In 1977 a proposal was published for the standardization of the allocutive (see Knörr 1977), but nothing has been decided yet. This proposal places the allocutive marker between the fut./pot. marker and the ergative marker³.

3) This kind of affixes were not included in Bybee's scheme. She found this only for Korean, although Basque was included in her language sample.

In the hope that this description of Basque affix order is sufficient for the present purpose, in the next section I turn to Bybee's universal model for affix orders (Bybee, forthcoming) in order to see whether Basque fits in the universal model.

3. Bybee's universal model for affix orders in the verb

Generally the order of bound morphemes is much more fixed than the order of words. Therefore it is somewhat strange that word order is much more intensively studied than affix order. Greenberg's famous article (1966) about ordering universals lists twenty morphological universals, but only two of them relate to the order of morphemes.

Universal 28

If both the derivation and inflection follow the root, or they both precede the root, the derivation is always between the root and the inflection.

In other words: derivation is internal to (closer to the stem than) inflection.

Universal 39

When both morphemes of both number and case are present and both follow or precede the noun base, the expression of number almost always comes between the noun base and the expression of case.

In other words: number is internal to case.

Only the first of these two universals has to do with verbal morphology. Later work in this direction, for example in the volume *Word Structure* in the series *Universals of Language* (Greenberg (ed) 1978), does not provide any more information.

As far as I know a universal model for affix orders has been developed only in the last few years (Bybee, forthcoming, ch. 2)⁴.

4) The chapter is called: 'Semantic determinants of inflectional expression'. An earlier draft of the same chapter was called 'Cognitive Bases for Morphological Universals'. At that moment the title of her book was planned to be named 'Morphology and Morphophonemics'.

Bybee investigated what semantic categories can be expressed inflectionally and derivationally in verbs and in what order these categories will appear (and, connected with that, what the chance of fusion with the stem is).

She based her model on two notions: relevance and generality. The greater the *relevance* of a semantic category for the meaning of a verb, the greater the degree of fusion (thus expression in a separate word or stem) and the closer its affix will appear to the stem.

The greater the *generality* of a semantic category, the greater the chance of expression as an inflectional affix in a language. A semantic category has to be generally applicable in order to be expressed as an affix.

Thus the chance of expression of semantic categories as an affix in languages is determined by the generality principle. The order of the elements is determined by the relevance principle. Of course, these are not laws, but universal tendencies.

Bybee distinguishes the following semantic categories for verbs:

valence: the number of participants of the action and their role (transitive, causative, etc.).

voice: the perspective from which an action is looked at (passive, active, reflexive, etc.).

aspect: internal temporal constituency (perfect, iterative, durative etc.).

tense: the situation in time with respect to the moment of speech.

mood: vision of the speaker concerning the truth of the proposition.

number agreement: concord with arguments of the verb (singularity, plurality, etc.).

person agreement: concord by person with arguments of the verb (e.g. subject agreement).

gender agreement: concord with arguments of the verbs according to lexical classes (e.g. gender, classifiers, etc.).

These are not the only possible inflectional categories. Some minor ones, like status markers and purposives, were too rare to be included in the comparative survey.

According to Bybee the most probable order in which these categories will appear with respect to the verbal root is, as follows considering their relevance:

- (13) ROOT-valence-voice-aspect-tense-mood-number-person-(obj.)-gender.

Her hypothesis has been tested in a sample of fifty languages without genetic relations or areal contact. The results appeared to affirm her predictions, except for some minor details. The results of the test are summarized in Table 2, where the columns show the frequency of occurrence of the semantic categories as morphological markings on verbs. The black areas show their occurrence as inflectional elements and the white areas as derivational.

Not only were the predicted frequencies confirmed in general, but the ordering hypothesis also. A few tendencies exist: the more to the left in ordering pattern (13), the closer an affix will appear to the verb root. The more to the center of (13) (where the combination of relevance and generality is most important) the greater their frequency as inflectional categories in languages.

In this paper I confine myself, as mentioned before, to affix order. In the next chapter I will investigate to what extent the Basque language (that was included in Bybee's language sample) fits Bybee's model with respect to the affix order. Aspect and gender are not expressed morphologically in the Basque verb, and thus will be excluded from the comparison.

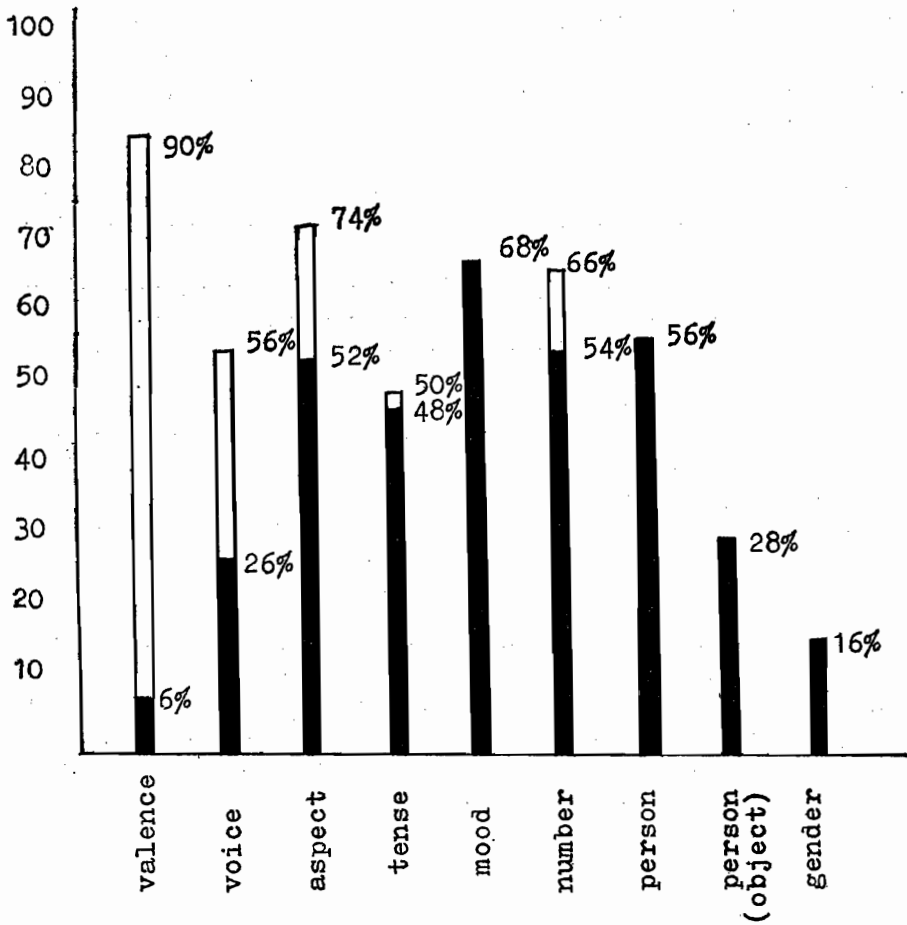


Table 2: Morphological categories marked on verbs (black = inflectional, white is derivational) (from: Bybee).

4. Bybee's model and the Basque language

In this section I compare the affix order in Basque with the universal affix order predicted by Bybee. For convenience I confine myself to the categories mentioned in Bybee's model. Thus subordination is excluded as well as the nominal system that can follow it. I do include the modal proclitics.

In Basque the order of the relevant affixes is as follows:

(14) Bybee's model

ROOT-valence-voice-aspect-tense-mood-number-person-

A B C D E F G H

person(obj.)-gender

I J

(15a) Basque prefixes

mood-person-tense-ROOT

F H E A

(15b) Basque suffixes

A G I E/F H G E

ROOT-number-person(obj.)-tense/mood-person-number-tense

abs. indir.obj. fut./pot. erg. erg.2°pl.-past

In summary: ⁵

Bybee: A B C D E F G H I J

Basque: A E G/H F (prefixes)

and: A G I E/F H G E (suffixes)

5) Since only the order of affixes with respect to the stem is relevant here, I changed the order of the prefixes in this summary from prefixes-ROOT to ROOT-prefixes for ease of survey.

As we see, Basque affix order is rather different from the general tendencies predicted by Bybee:

- the mood prefix is external to person in Basque, contrary to Bybee's model.
- the suffix marking number of absolutive is too close to the root.
- the indirect object is internal to tense/mood instead of external.
- the suffix marking past tense should be closer to the root.
- the ergative marker should be much closer to the root.
- the number marker of the second person plural has a divergent position.

In the remainder of this section I will try to explain the deviations from Bybee's model. I will do this on the basis of a reconstruction of the morphology of the Basque verb by Robert Trask (1977) and to a lesser extent on the basis of other sources.

Trask tried to make a historical reconstruction of the formation of Basque verbal morphology, based on typological arguments and parallels in other languages as well as on a comparison of Basque dialects. Two hypotheses are central in his argumentation: Basque word order shifted from SVO to SOV in the past and the ergative system originates from the passive of a nominative/accusative system. Trask's reconstruction appears to be able to explain the Basque deviations from the universal order.

Trask distinguishes roughly the following stages during the shift from SVO to SOV, as far as the order of morphemes is concerned.

Stage 1

AgentSubj. - mood - ROOT - $\left\{ \begin{array}{l} \text{obj.} \\ \text{prep. } ki + \text{indir. obj.} \end{array} \right.$

Stage 2

AgentSubj + mood - plur.*it* - pass. - verb ROOT-complements
 (sometimes)

**Stage 3**

PatientSubj. -(*it*) - past - ROOT { complements
 -*ke* and -*en*
 (mood) (past)

Stage 4

Abs. - past - ROOT - plur. intrans. { complements
 -*ke* and -*en*

Stage 5

Abs. - past - ROOT - plur. abs. - { complements
 (trans + intrans) -*ke* and -*en*

In Stage 5 (modern Basque) we have roughly the affix order as in Table 1

abs-past-ROOT-plur.abs-indir.obj.-tense/mood-erg.-2ndplur. erg-tense

We see that in Trask's reconstruction the relative age of the affixes is important. This is a logical consequence of Givón's theory (e.g. Givón 1976), that verbal agreement markers originate from personal pronouns. When we extend the idea to other categories marked on the verb, then the affix order would also give indications about the temporal order of integration of lexical elements (via clitization) into the verb. Although counterexamples can be easily cited (e.g. Bybee chapter 2.8), this seems to be generally true. In any case it is striking that Trask's reconstruction can account for the exceptions on Bybee's model. Trask, however, also used some generalities about existing affix orders in other languages in his reconstruction of Basque. This would make my argumentation circular. Therefore I will now consider the exceptions to Bybee's model mentioned above one by one.

1) The mood prefix is external to the person prefix

In Basque the morpheme marking mood sometimes ranks first in the verbal complex, even before the absolutive marker. These mood prefixes found further from the root than the person marking prefixes, contrary to Bybee's model, have a rather special status however. Although they form a phonological unit with the verb, they are written separated from the verb in Euskara Batua. De Rijk (1972, p. 113) prefers to call them proclitics rather than affixes. One of them can be used elliptically without a verb (*zu ote?*, 'maybe you?') and others can be used as a noun: *omen* 'rumour', indicating as a proclitic that the speaker has the information from hearsay; *bide* 'way, road', which as a proclitic marks high probability of the proposition; *ahal* marks yes/no questions and it can mean 'possibility' too. *Ez* and *ba(i)* are used as negation and affirmation respectively. An important difference between the moods marked by proclitics and the moods marked by the *-ke* suffix is that the proclitics refer to the modality of the sentence as a whole (and thus are comparable to the subordination markers), while this is not always the case with the tense/mood suffix *-ke*, that can also refer to the verbal complex only.

In short: the proclitics do not have the status of affixes (as indicated by the word 'proclitic'). Moreover, since they refer to the modality of the whole sentence, one could call them 'modals' or 'evidentials'. This explains their position at the front: clitics are external to affixes.

2) 'Number' is close to the root

Although Bybee included affixes specifying 'number' in her predictions, she was not able to test whether number affixes occur in the position she had predicted. This was due to the fact that 'number' and 'person' were too often fused within one morpheme (Bybee chapter 2.6), so that she took these two together. In Basque however, the two morphemes are separate morphemes. It is striking that 'number' affixes are separated in nearly all cases from the 'persons' morpheme with the same reference. The plural marker of the absolutive is nearly always found behind the root and the absolutive marker in front of the root. Two examples with transitive and intransitive verbs:

(16a)	da-bil 3 ^d abs.-ROOT 'he walks'	(16b)	da-bil - tza 3 ^d abs. -ROOT- plur.abs. 'they walk'
(17a)	da-kar 3 ^d abs.-ROOT 'he bears it'	(17b)	da-kar - tza 3 ^d abs. -ROOT- plur. abs. 'he bears them'

According to Trask this plural suffix originate as follows. He takes as an example the verb *egon* ('to stand', 'to exist'). The root is *go*. First there was an unmarked form *da-go* (other moods *lego*, *bego*, *ego/engon*), to which the personal pronouns were attached. Consider eg. the indicative mood:

1 st sg. *na-da-go > nago	1 st plur. *ga-da-go > gago
2 nd sg. *ha-da-go > hago	2 nd plur. *za-da-go > zago
3 ^d sg. da-go	3 ^d plur. dago

The third person forms are identical for plural and singular in the paradigm. To obviate this ambiguity, a plural suffix was added in these two forms, and it later was extended to first and second person plural. In Gipuzkoan Basque (and in Batua) the plural suffix for this verb was *-de*, in Bizkaian dialect (with different affix order) *-z*.

Gip.:	*dago-de > daude	'They stay'
Bizk.:	dago-z	'They stay'

In a later stage the plural suffixes extended by analogy from intransitive verbs to transitive verbs. The same thing could have happened, according to Trask, in the other moods.

The moods are still marked in the third person by distinct initial consonants. In a later stage the other suffixes would have been attached to the verb and plural marker, according to Trask. This would explain, very tentatively, that the plural number marker is so close to the verb stem.

3) Indirect object is internal to tense/mood in Basque

According to Trask, in an earlier stage of Basque the mood was marked by a prefix on the verb (only surviving in the third person in modern Basque). In the same stage the (direct or indirect) object pronouns were integrated, via cliticization, onto the verb, becoming agreement markers. When these mood prefixes lost their meaning by the incorporation of the subject in the verb, a new mood marking affix *-ke* was added in Trask's stage 3. Since the indirect object was already integrated in the verbal complex at that moment, it goes without saying that this suffix has a position further from the verb. The *-ki* morpheme, accompanying in some verbs the indirect object, could have originated from a preposition in an earlier stage when Basque was still SVO.

4) For the past tense suffix *-n* Trask provides a similar explanation. This is a relatively recent suffix and therefore found behind the person agreement markers.

5) Indirect object is internal to ergative (subject marker)

Bybee gives the order ROOT-SUBJ.-OBJ. as the most probable order for person agreement. OBJ. covers both direct and indirect object. In Basque the order of the relevant morphemes is: ABS.-ROOT-INDIR.OBJ.-ERG., which implicates for intransitive verbs: SUBJ.-ROOT and for transitive verbs: OBJ.-ROOT-INDIR.OBJ.-SUBJ.

The order of the person agreement markers in transitive verbs differs from Bybee's predictions. Following her hypothesis, the ergative should have been marked internal to the indirect object.

For this an explanation can be provided.

Basque is an ergative language. According to some scholars ergative languages originate from languages with a nominative/accusative distinction. The passive voice (object in nominative case and oblique subject) was more and more frequently used and thus became the unmarked form. In this way the passive voice ousted the active form. It is possible that after this a new passive came into existence (see e.g. Dik 1978, 159 ff. or Dik 1980, 113-126 for a model for this).

Trask advocates something similar for Basque. The ergative system originates from a passive and if we consider the passive as a change of perspective (as does Bybee, ch. 2.3 and ch. 2.4) and if the order of the transitive verbal complex has indeed originated from the passive, then the earlier pattern would have been: PatientSubj.-ROOT-Indir.obj.-oblique Agent

This order is in agreement with Bybee's model. In fact it is close to the order in the English passive: 'the book was given to Mary by John'. This could explain the positions of the indirect object and the ergative (subject) in intransitive clauses. The oblique Agent was thus integrated in this position into the verb. The postposition of the oblique Agent could be the origin of the ergative case marker *-k* in nouns in Basque.

Trask also provides an explanation for the past tense prefix *en-*. He suggests that this morpheme was possibly an earlier passive marker (or an intransitivity marker). The position of this voice marking morpheme, close to the root, is in any case in accordance with Bybee's model. In no way however is it necessarily so. Trask himself is not all certain and for example Heath (1977) has a totally different explanation for this morpheme, which has to do with a hierarchy of subjects in his view.

We have not yet given an explanation for the order of affixes in the transitive verb in the past tense with 3^d person object (see the third exception in section 2).

According to Trask this still displays the original order. The object was not marked. The ergative subject is in the absolutive position. This could also explain why in the third person forms the *-en* prefix (originally possibly a passive marker, now a past tense marker) is lacking.

In short, the order of person markers is entirely consistent with the hypothesis that the ergative originates from a passive. Since the ergative marker was incorporated into the verb later than the indirect object marker, it has a position after the indirect object suffix.

6) The suffix marking second person plural

The suffix marking the plurality of the second person ergative in the verb is separated from the person marker, as in:

- (18) eman z - en - i - gu - te - n
 'to give' 2nderg- past - indir. obj-1stplur.-2nderg.pl.-past
 given you have it to us
 'you (plur.) have given it to us'

The *-i-* morpheme is indicated here as an indirect object marker. This auxiliary lacks a root. It could be argued (as does Martin-Callejo (1982) that the auxiliary marks the valency of the verbal complex (*-i-* bitransitive, *-u-* transitive).

In (18) the indirect object marker is found between the root (or bitransitivity marker) and the plurality marker of the ergative. For this a natural explanation can be provided. Originally the Basque language disposed of two second person pronouns *hi* (singular) and *zu* (plural). In the course of time *zu* was used more and more when speaking to respected individuals (as paralleled in many other languages), thus slowly ousting the *hi* form. The meaning of *zu* became more and more singular and at this moment *hi* has disappeared in a number of regions. *Zu* is now semantically singular, but morphologically still plural. A new plural form *zuek* (*zu* + plur.) came into existence. When the second person plural is marked by a suffix, the form *-zue* (Gipuzkoan *-zute*) is used. When it is marked by a prefix, the ergative suffix is followed by the plural marker *-te*. This *-te* suffix is obviously identical with the suffix marking the third person plural (see Lafon 1959, 124-127). It is a clear case of markedness-shift (Dik 1978, 111-112).

5. Conclusiones

In this paper we have tried to account for the areas in which Bybee's universal model for affix order deviated from Basque affix order. We did this by comparing it with a reconstruction by R. Trask of the history of Basque verbal affixes. This reconstruction was able to explain the deviations. It is based on the idea, that the order of affixes is related to the relative age of the affixes: the closer to the stem, the older the affix. It is an extension of Givón's model (e.g. 1976), which asserts that agreement always originates from free words that get attached to the verb via cliticization. In the same way morphemes different from agreement (like tense) could be attached to the verb. Thus an 'older' morpheme would be closer to the root.

This idea is not incompatible with Bybee's model. She mentions it as one of the factors influencing affix order (ch. 2.8). The chance of attachment of a full word is of course greater when the relevance of the word for the verb is greater and thus their chance of appearance next to each other. It appears that sometimes relevance and generality are not the only factors. Maybe the factors influencing some of the exceptions were social factors: more frequent use of passive to avoid personal reference, disappearance of the *hi* second person form caused by growing respect for the addressee and the elaboration of an allocutive system to stress solidarity with interlocutors in familiar contacts.

In any case Bybee provided an interesting model for affix model which is a useful tool for the investigation of affix order cross-linguistically.

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APPENDIX: list of abbreviations used.

abs. — absolutive	ind. — indicative
ag. — agent	indir. — indirect
cas. — case	mark. — marker
cond. — conditional	obj. — object
dat. — dative	p. — person
det. — determiner	pass. — passive
dim. — diminutive	pl. — plural
dir. — direct	plur. — plural
erg. — ergative	pot. — potential
fut. — future	procl. — proclitics
imp. — imperfect	sg. — singular
imperf. — imperfect	subj. — subject
	subord. — subordination

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