

THE ENCODING OF NUMBER IN THE SOULETIN VERBAL COMPLEX

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LABURPENA

Hitzaldi honetan zubereraren numeroaren kodifikazioa eztabaidatzen da. Euskalkien aditzaren kodifikazio polipertsonalaz gain, numeroaren komunztadura konplexua azaltzen da. Numeroaren kategoriaren balore markatua plurala da, singularra ez-markatua geratzen delarik. Galdera nagusia zera da: numeroaren kodifikazioa nola antolatzen da deklinabidea *ergatiboaren* arabera eta aditz sintagma erdizka *ergatiboaren* arabera antolatuta dituen hizkuntza batean? Fonemen segmentazioari dagozkion arazoak aztertu behar dira. Hau prozesuaren araberako morfologiararen bidez egiten da, non unitate morfofonemikoak arau sintagmatikoen eraginez maila fonetikora pasatzen baitira.

RESUME

Cet article ouvre une discussion à propos de la codification du nombre en basque souletin. La langue basque et ses dialectes offrent, outre une codification verbale de type pluripersonnelle, un système complexe d'accord en nombre. Le pluriel est le membre marqué de la catégorie du nombre, le singulier est non-marqué. La principale question est la suivante: comment s'organise la catégorie du nombre, à l'intérieur d'une langue dont le système des cas est *ergativement* organisé et dont le système verbal est partiellement *ergativement* organisé? Différents problèmes concernant la segmentation phonologique seront discutés. Cela sera fait dans un processus relevant de la morpho-phonologie, dans lequel les unités morpho-phonologiques sont transférées, au moyen des règles P, au niveau phonologique.

1. The data was collected in and around Atharratze. Some of the examples of vowel harmony were taken from J. Epherre. The data collected differ sometimes from the data of Inchauspe (1858) and Epherre (a.).

0. Introduction

The Souletin dialect can be described as an ergative language according to definitions such as that of R.M.W. Dixon (1979). This definition only concerns the arrangement of encoding of the main primitive semantic functions A, S and O, leaving off the dative or D-function of the participant with a target function like the beneficiary or recipient.

In Lüders 1991 it is shown that the organisation of the verbal complex of the Souletin dialect is carried through in two ways. In the so-called present tense system -summarizing present tense, synthetic future, potential/present tense and subjunctive/present tense -the encoding of personal markers follows the principle of ergativity. So the A-fct. of P1 is realised as a suffix {t}, S- and O-function are both realised as a prefix {n} (01a).

In the past tense system - summarizing all other TAM-forms - a totally different system is at work. In the past tense system, the personal markers are basically arranged according to their role in the participation in the speech act² (PSA), and an independent marker identifies the semantic function of the person (1b). A nasal prefix directly before the root indicates that the preceding P1 marker {n} takes the A-function. If this nasal prefix is missing, the preceding P1 person {n} takes the O-function.

The implications that are induced by such a system will not be discussed here more closely (Lüders 1991 and 1992)

- (01a) *dür*, I have it
 nai, s/he has me
 niz, I am
- (01b) *nüke*, I would see him/her
 nündüke, s/he would see me

1. The distribution of plural markers

Up to three participants can be found encoded in the Souletin verbal complex, absolutive, ergative and dative participants. The plural of all of these three participants can be encoded in the verbal complex, too. But if we have a first look at the distribution of these plural markers according to their semantic function (02), we will see a certain incoherence, i.e. the marker {e} is found for all three functions and a strong dispersion in the O-, especially in the S-range. Examples of the various plural markers can be seen from (03) to (12). The plural of the participants in D-function is added to the discussion in 3.3.

The representation is done in terms of a process-combinational type of morphophonology. Morphophonemic units are seen as the information of the

2. See Lüders 1991.

sound shape of a certain value of a category or concept. In a process these MP-units are combined under the influence of P-rules. These P-rules are language specific and help adjust parts of these morphophonemic sequences to each other.

(02)

plural markers³

S-fct. {z}, {te}, {t}?, {r(a)}, {e}⁴

O-fct. {z}, {t}, {e}

A-fct. {e}

examples of the S-fct.:

(03) P3/ABS PRES go PL
dabiltza, they go < d + a + bi+z
1, 2

1: affrication rule

2: vocalic Auslaut-rule

R(intr.) DM PL P1/DAT
zaizt, they are to me < za + i + z + t

(04) P3/ABS PRES R PL
daude, they are < d + a + u+te
3

3: intervocalic voicing

(05) P2'/ABS go PL PL
zoazte, you/PL go < z + oa + z + te

(06) P3/ABS PL NF REL
ditian, they are (SUBJ) <? d + it + te + an
(see (23))

(07) P3/ABS R? PL
dira, they are < d + i + r
2

2: vocalic Auslaut-rule

(08) P2'/ABS R? PL PL
ziraye, you/PL are < (z + i + ra⁵)+e
3

3: y-insertion⁶

3 In Lüders (1991, 128) another rather marginal *absolute plural marker* {en₂} is discussed. Heath (1977, 128) has already recognised a segmentation including such a marker.

4. For the role of accent of {e} see Lüders (1991)

5. The plural marker //e// is combined with the whole complex, as the vowel <a> is a part of this form. If //e// were suffixed to the preceding plural marker directly, the resulting form would have to be *zire, as no Auslautvowel is necessary now. This is indicated by the brackets around zira.

6 "y" is phonetically realised as vowel [i] or as semi-vowel [j].

examples of the O-fct.:

(09) *daramatzat*, I bring them <

P3/ABS PRES CAUS give PL P1/ERG
 d + a + ra + ma +z + t

(10) *züntian*, s/he had you/SG < $\frac{P2' \text{ MSF PL R(tr.) PAST}}{z + \underline{n} + t + \underline{ü} + \text{an}}$
 $\frac{4}{\underline{\hspace{1cm}}}$
 $\frac{5}{\hspace{1cm}}$ $\frac{6}{\underline{\hspace{1cm}}}$

4: vowel insertion rule
 5: ü-harmony rule (R(tr.) triggers ü-harmony before becoming itself derounded before a following vowel)
 6: regressive vocalic derounding rule

(11) *zütiät*, I have you/PL <

P2'/ABS PL R(tr.) PL P1/ERG
 z + $\frac{\underline{it} + \underline{ü} + \underline{e} + t}{5 \quad 6}$

5: ü-harmony rule (R(tr.) triggers ü-harmony before becoming itself derounded before a following vowel)
 6: regressive vocalic derounding rule

examples of the A-fct.:

(12) *die*, they have it < d + $\frac{P3/ABS R(tr.) PL}{\underline{ü} + \underline{e}}$
 $\frac{6}{\hspace{1cm}}$

6: regressive vocalic derounding rule

P3/ABS say P3/PL
diöye, they say it < d + $\frac{i\bar{o} + \underline{e}}{3}$

3: y-insertion

It could be the case that in Souletin the distribution of plural markers is not only organised according to semantic function. If we could find other language-immanent parameters we could possibly disentangle Table (02) and present a more coherent distribution of plural markers.

A first step is the substraction of all plural markers used for the plural of P2'. Souletin Basque -as it is usual in Basque- has an elaborated system of politeness (Haase 1988, Lüders 1991, Allières 1979), where the addressee is both lexicalised and grammaticalised according to the degree of intimacy between speaker and addressee. It seems that an earlier plural of the addressee changed to a singular more respectful value (= P2'), while an earlier neutral respectful pronoun {hi} (= P2) drifted to a more intimate value. Because of

the loss of the old plural form a new plural had to be introduced. And this new plural does not follow the ergative scheme. It uses {e} for all three semantic functions. {te} is used in some forms with intransitive constructions. If we subtract the plural marker {e} of PL/P2', we have table (13) as the result. We see that the marker {e} now is only found as the marker of the A-function⁷.

(13)

	plural marker (minus PL/P2')
S-fct.	{z}, {te}, {t}?, {r(a)}
O-fct.	{z}, {t}
A-fct.	{e}

2. Basic problems of segmentation

Before going on we have to have a closer look at the morphophonology of the plural markers. The units used for discussion are the units of the morphophonemic level (MP-units)⁸. MP-units will help us judge the determination of phonemic sequence, also. Only if the phonemic forms result correctly from supposed MPs and the appropriate assignment of P-rules, will the statements on phonemic segmentation be accepted as correct. This procedure will also help delimit speculations on possible segmentations. Sometimes, however, the impossibility is shown to determine a phonemic sequence.

Basically, we have three types of problems in which the arrangement, the form and the acceptance of the MP-units differ. The respective processes, however, yield the same result in the phonemic level: Ambiguous arrangement of a MP-unit (example *dütü* (2.1)), convergence of different P-processes (example *detzaket* (2.2.)) and zero-conversion (example *ditian* (2.3.)).

2.1. Ambiguous arrangement of a MP-unit

The absolutive plural forms as *dütü*, *s/he has them* is one of the examples where the clear determination of the phonemic sequences is not possible on the basis of comparison between singular and plural forms. If we compare the singular *dü*, *s/he has it* with *dütü*, *s/he has them* and take the segmentations of *dü* in (14) into account, at least two possible phonemic segmentations for the absolutive plural marker arise, /tü/ and /üt/. Whether we insert a //tü//⁹

7. If we include the D-function in our discussion, we see that {e} is also found with the D-function. Such a system is called weak ergativity where instead of target-levelling one of the target-function is marked in the same way as the A-function.

8. Mainly I distinguish between three levels: a morphophonemic, a phonemic and a phonetic level. This is a different standpoint than found with generative or natural generative phonologists who do not distinguish the latter two levels in the same way.

9. For the notation see R. Lass. Different notations are chosen in order to differentiate between MP-sequences and units (// //), phonemic sequences (/ /) and units, morphemes ({ }) and phonetic units ([]) and inserted units (< >).

ergative distribution of {t}-distribution has vanished. Unfortunately, we will see that neither of the two possibilities I propose gives sufficient arguments for preferring one analysis over the other.

If we accept an underlying plural MP-unit this would have to consist at least of a //t// as discussed above. If we combine this //t// in the way as is shown in (22), we would have to add an additional vowel-insertion rule. An <i> would have to be inserted between the first consonant and //t//. The reason would again be a phonotactic rule which does not allow consonantal clusters at the beginning of a word. In another solution the <i> could be counted to //t//, resulting in an //it//, as the underlying MP-unit of the plural. This //it// would correspond to the //i/ of the analysis (17) of the example *dütü, s/he has them*.

$$(22) \quad \text{ditian, they are (SUBJ)} < \begin{array}{c} \text{P3/ABS PL NF REL} \\ \underline{\text{d}} + \underline{\text{t}} + \text{te} + \text{an} \\ \text{4} \qquad \underline{\qquad} \\ \qquad \qquad \text{7} \\ \qquad \qquad \underline{\qquad} \\ \qquad \qquad \qquad \text{8} \end{array}$$

- 4: vowel insertion rule
- 7: t-contraction rule
- 8: raising rule

The problem of the analysis above is that we would have to accept a further very isolated P-rule of a t-contraction. This would only be found in these examples, which makes it rather improbable.

If we reject this analysis and try it without any plural morpheme at all, we see that the result will be the same phonemic form. Again we had to apply a vowel-insertion and a raising, two prominent rules in Souletin Basque, to gain the correct phonemic form. But it does not seem very probable that a plural form does not contain a plural marker (23).

$$(23) \quad \text{ditian} < \begin{array}{c} \text{P3/ABS NF REL} \\ \underline{\text{d}} + \underline{\text{te}} + \text{an} \\ \text{4} \qquad \underline{\qquad} \\ \qquad \qquad \text{8} \end{array}$$

- 4: vowel insertion rule
- 8: raising rule

An argument which strengthens the first solution is the phonemic shape of the first vowel /i/. If we accept a vowel insertion rule we still have to ask why an //i// is used for insertion and not any other vowel. If we assume a certain regressive influence of a non-first vowel on the choice of the first vowel, it should be /e/ here, because the underlying MP-unit which follows the first

>i¹⁴ is itself no //i// but an //e//. There are examples where an //e// and an //i// have a regressive influence in the same way as //ü// has a regressive harmonising influence (24). So a solution with an underlying //it// seems more probable. Now the first /i/ is the result of an underlying //i// as a part of //it//.

- (24) *ginizakio*, we would (give) it to him/her
 (Epherre a, IV.12)
geneikon, we would have (given) it to him/her
 (Epherre a, IV.10)
günüke, we would (see) it

It can be seen that the determination of the correct MP-units and the correct segmentation remains unsatisfying. The distribution of {t} has to be taken with care. In O-function it is used undoubtedly (in a morphophonemic shape of //t// or //it//), but possibly not in S-function with subjunctive auxiliaries or other TAM-forms.

2.4. Free variation

Additionally, we have the problem of free variation of plural forms, which is typical for non-standardised languages. Processes containing a plural marker //e// - the plural of P2' or P3 - are not easily described because of their varying realisations. So accent varies on these forms¹⁵. Furthermore, there is sometimes free variation of y-insertion. If we are confronted with forms containing two plural markers //e//, one for PL/P3 and one for PL/P2', the duration of the vowel /e/ varies, which could have consequences for the assumption of underlying MP-units (25).

- (25) [sytié:]¹⁶, they have (seen) you/PL varies with
 [sytijé], idem.
 [sytié], they have (seen) you/SG varies with
 [sytjé], [sytiê]¹⁷ and [sytjé].

3.1. Plural encoding in synthetic verb forms

After the subtraction of the relatively new plural marker of P2' and the splitting up of the listing of plural markers according to the parameters of semantic function and auxiliary vs. synthetic verb forms we have a more

14. >< symbolizes an unclear status.

15. For the discussion of accent phenomena in Souletin Basque see Lüders (1991). See also Hualde 1991, 174-176 based on the sources of Txillardegui (1984), Mitxelena (1958; 1985) and Larrasquet (1928; 1934; 1939).

16. [i] represents a mid-high front unrounded vowel, [e] represents a sub-mid-high front unrounded vowel.

17. ê shoes a tone-accent with a contour tone (rising-falling).

coherent picture. We can say that Souletin Basque exhibits an ergative system for synthetic verb forms with a dispersion in the S-range (26).

(26)	S-fct.	z, te	
	O-fct.	z	
	A-fct.	e	
plural marker of the synthetic verb forms (minus PL/P2')			

3.2. Plural encoding in auxiliary forms

The plural of auxiliaries is marked differently. {z} and {r(a)}, {t} or {it} are distributed differently. The first are used with biintransitive auxiliaries and the latter with intransitive and transitive auxiliaries, the prototypical constructions discussing ergative or accusative encoding. So we have a neutral principle of organisation with a dispersion in the S-range ((27) and (28)).

(27)	S-fct.	r(a), z, te	
	O-fct.	t/it	
	A-fct.	e	
plural marker of the auxiliary (minus PL/P2')			

(28)	S-fct.	r(a), te	
	O-fct.	t/it	
	A-fct.	e	
plural marker of the auxiliary (minus PL/P2')			

3.3. The plural of the participant in D-function

If we take the encoding pattern of the participants in D-function into account we see that Souletin Basque exhibits a weak ergative system. A weak ergative system shows an identical encoding of participants in A-function and D-function and an identical encoding of participants in S- and O-function. In (29) it can be seen that the plural of the participant in A-function and D-function are marked in the same way, namely by an {e}.

A weak ergative system is a *bipolar system*. The cause for such a bipolar system is the principle of economy (see Bossong (1986)). The more common system is identical marking of several target functions, as is found in Laz or Kiswahili. Both exhibit a system with *target-levelling* (see Lüders a., Bossong (1986), Blansett (1984)).

Examples of synthetic verbs with three persons encoded do not exist, but they are found for auxiliaries. As auxiliaries are mainly organised neutrally, we cannot speak of weak ergativity. Instead, we speak of a neutral *non-bipolar system* with *adverse actant levelling* (AAL) in contrast to target-levelling with an identically marked participant in D- and in O-function.

- (29) deiet, I (give) it to them <
 P3/ABS ? DM? P3 PL P1/ERG¹⁸
 d + e+i + ø+e+t

4. Conclusion

This discussion was meant to show that there is not only one principle responsible for the organisation of plural markers in Souletin Basque. While the encoding in the synthetic verbs follows ergativity, the encoding in auxiliaries is neutral. Both complexes exhibit a dispersion in the S-range. The historically recent encoding of PL/P2' is not conditioned by semantic functions. {e} marks the plural of all functions. A slight exception is found concerning the S-function. Here the markers {te} and {e} are used. Taking the D-function into account, one can describe plural encoding of auxiliaries as a *non-bipolar system with adverse actant levelling*.

abbreviations:

A-fct.	function of the subject in transitive clauses
ABS	absolutive
biintr.	biintransitive
bitr.	bitransitive
COND	conditional
D-fct.	function of the dative participant
DM	dative marker
ERG	ergative
fct.	function
FUT	future
MP	morphophonemic
MSF	marker of semantic function
NF	non-fact
O-fct.	function of the object in transitive clauses
P	phonological
PL	plural
POT	potential
PRES	present tense
P1	first person, speaker
P2	second person, addressee; intimate degree of politeness

18. For the difficulty of interpreting bitransitive forms see Lüders 1991, 173ff.

P2'	second person, addressee; neutral degree of politeness
P3	third person
R	root
REL	relative marker
R1, R2	first and second part of a discontinuous root
S-fct.	function of the subject in intransitive clauses
tr.	transitive

References

- ALLIÈRES, J., 1979, *Manuel pratique de basque*, Paris: Editions A. & J. Picard.
- BLANSITT, 1984, "Deicticaetative and dative", *On Objects in Language and the Objects of Linguistics*, Frans PLANK (ed.), pp. 137-150. London: Academic Press.
- BOSSONG, Georg., 1986, Review Article, *On Objects in Language and the Objects of Linguistics*, Frans PLANK (ed.), 1984, *Lingua* 69, 139-164.
- DIXON, R.M.W., 1979, "Ergativity", *Language* 55, 59-138.
- EPHERRE, Jean, a. *Le Verbe Basque*, Atharratze: published by the author.
- HAASE, Martin, 1988, *Die Bezugnahme auf den Angesprochenen* (Magisterarbeit), Universität Köln. Unpublished.
- HEATH, Jeffrey, 1977, "Remarks on Basque Verbal Morphology", in W.A. DOUGLASS et. al. (eds.), *Anglo-American Contributions to Basque Studies: Essays in Honor of Jon Bilbao*, pp. 193-201. Reno: Desert Research Institute Publications on the Social Sciences No. 13.
- HUALDE, José I., 1991, *Basque Phonology*, London: Routledge.
- INCHAUSPE, L'Abbé, 1984/1858, *Le Verbe Basque*, Donostia: Hordago.
- LARRASQUET, Jean, 1928, *Action de l'accent dans l'évolution des consonnes étudiée dans le basque souletin*, Paris: Vrin.
- 1934, *Le basque souletin nord-oriental*, Paris.
- 1939, *Le basque de la Basse-Soule orientale*, Paris: Librairie C. Klincksieck.
- LASS, Roger, 1989, *Phonology*, Cambridge: Cambridge University Press.
- LÜDERS, Ulrich J., 1991, *The Souletin Verbal Complex*, Unpublished Dissertation (University of Bern).
- 1992, "The Laz Verbal Complex", in HEWITT, G. (ed.), *Caucasian Perspectives*, Unterschleissheim / München: LINCOM EUROPA.
- MICHELENA, L., 1958, "A propos de l'accent basque", *Bulletin de la Société de Linguistique de Paris* 53: 204-233.
- 1985, *Fonética histórica vasca*, 3.^a ed. San Sebastián: Diputación de Guipúzcoa.
- REBUSCHI, Georges, 1982, *Structure de l'énoncé en basque*, Collection ERA-642, Paris: Université Paris VII et CNRS, numéro spécial.
- TXILLARDEGI, 1984, *Euskal Azentuz*, San Sebastian: Elkar.