

Using variation to understand Basque auxiliary morphology

Aaron Ecay^{*}

Mar. 29, 2014

1 Dative Displacement

The prefix position of a Basque auxiliary verb is typically occupied by an absolutive agreement marker, as in (1). In non-present tense forms with a third person absolutive argument (which thus lack a ϕ prefix, according to Arregi and Nevins (2012) among others), a process called Ergative Displacement applies, causing the ergative ϕ -features to be realized in the prefix position, as in (2). Dative displacement (DD) is an innovation in Basque morphology whereby the dative argument of a ditransitive is marked prefixally (in ditransitives, the absolutive is always 3rd person, and thus does not occupy the prefix position), as in (3). The distribution of DD is shown in Figure 1.

(1) *n- au -zu*
1SG.ABS AUX 2SG.ERG

‘You have (verb-ed) me.’

(2) *n- u -en*
1SG.ERG AUX C.PAST

‘I had (verb-ed) it.’

(3) *d- i -da -zu → n- au -zu*
PFX.DEF AUX 1SG.DAT 2SG.ERG 1SG.DAT AUX 2SG.ERG

‘You (verbed) it to me’ non-DD → DD version

2 Plural morphology: a proposal

Basque auxiliary verbs can contain the plural morphemes *it* and *zki*.

Note 1

In a small number of places, *tza* shows up, with a slightly different distribution; I set this fact aside for the moment. Equally, I set aside the Bizkaian *z/s* pluralizer, which is actually plural agreement on C. (Arregi and Nevins 2012, sec. 2.4.3)

^{*}I would like to thank the following people for their input on earlier versions of this work: David Embick, Julie Legate, Rolf Noyer, Akiva Bacovcin, Kobey Shwayder, participants in the FMART reading group and third-year research seminar at Penn, the audience at ILLS5, and an anonymous reviewer for the *Studies in the Linguistic Sciences*. Azkenik eta guztiaz gain, hizkuntza, etxea, eta bihotza zabaldu dizkidaten lagun euskaldunei eskerrak eman nahiko nizkieke. Any imperfections which remain are attributable only to me.

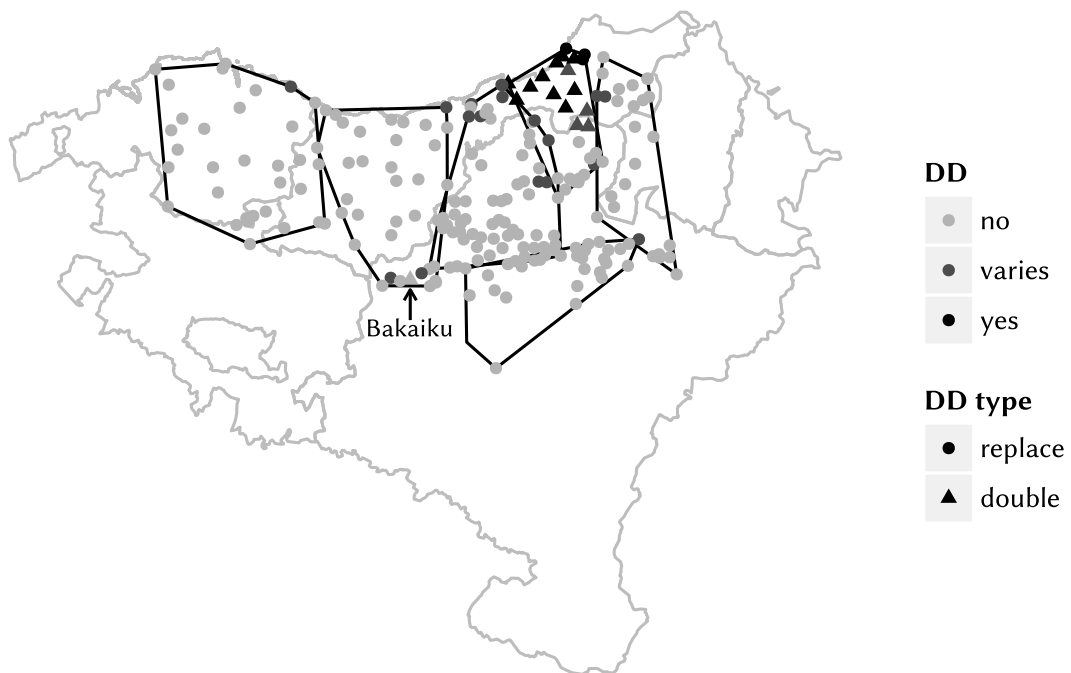


Figure 1: A map of the distribution of Dative Displacement. Grey lines indicate traditional province boundaries. Black lines delineate dialect areas from the MVAV (originally based on Bonaparte's classification). Does not include data from Western Low Navarre or Zuberoa.

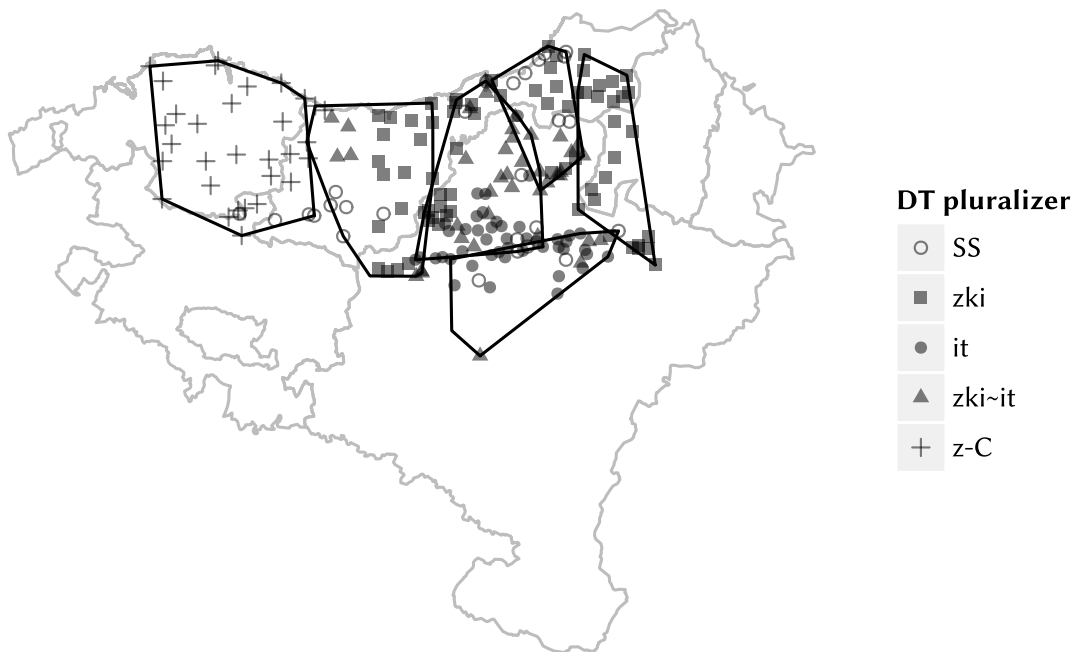


Figure 2: A map of the distribution of pluralizers in the ditransitive auxiliary paradigm. z-C indicates plural complementizer agreement; SS indicates syncretism with singular (no pluralizer appears)

| Town | zuri | zuei | Other |
|-------------------|------|------|---------------------------------------|
| Sare | yes | yes | |
| Saint-Pée | yes | no | |
| Ahetze | yes | yes | |
| Zugarramurdi | yes | no | |
| Urdax | yes | no | |
| Ainhoa | yes | no | |
| Saint-Jean-de-Luz | yes | yes | |
| Guéthary | yes | yes | <i>X-ek hiri</i> and <i>hark guri</i> |
| Bidart | yes | no | <i>X-ek hiri</i> |
| Ascain | yes | no | |
| Biriatou | yes | yes | <i>X-ek hiri</i> and <i>hark guri</i> |
| Hendaye | yes | no | <i>X-ek hiri</i> |
| Urrugne | yes | no | <i>X-ek hiri</i> |
| Arbonne | yes | no | |
| Bakaiku | no | no | <i>X-ek guri</i> |
| Urdiain | no | no | <i>X-ek guri</i> (??) |

Figure 3: Distribution of DD doubling across the plural absolutive paradigm. The towns above the line are in Lapurdi. The middle columns refer to doubling with 2SG and 2PL datives respectively with some (any) ergative argument(s). *X-ek hiri* refers to the same configuration, but with the familiar 2sg pronoun. *hark guri* is 1PL.DAT+3SG.ERG. Doubling is less common with singular DOs, but not entirely unattested.

These morphemes have often been analyzed as reflexes of agreement. (for a review consult Arregi and Nevins 2012)
I propose a different approach:

The pluralizer *it* is part of allomorphic realization of AUX conditioned by a ϕ -prefix; *zki* is a reflex of agreement.

This proposal accounts for several facts:

- The appearance of both *it* and *zki* in DD forms (top right)
- The appearance of *it* (but not *zki*) triggered by non-plural prefixes

This proposal also resolves a failed prediction of the account given by A&N of DD's interaction with their multi-layered morphological system.

3 Data sources and other notes

The *Morfología del verbo auxiliar vasco* (Yrizar 1997) provides data on the auxiliary verb paradigm in 282 localities, based primarily on surveys carried out in the 1980's and early 1990's. For this project, I have looked at the transitive and ditransitive present tense paradigms (Tablos II, III, and IV) for all towns except those in Eastern Low Navarre and Zuberoa (since there is no DD at all in these dialects).

I have used the place names given in the *MVAV* (generally, the Spanish or French name and not the Basque one) to ease cross-reference with that work. Abbreviations used for dialects: • Lap: Labourdin • WLN: Western Low Navarre • NHN: Northern High Navarre

Abbreviations used for glosses: • 1SG etc.: ϕ -features • DAT, ERG, ABS: case • AUX: auxiliary stem • PL: pluralizer • T: tense • PFX.DEF: default prefix (in the absence of ϕ -concord) • FAM: familiar

4 Metathetic processes

Arregi and Nevins (2012) claim that there are two types of metathetic processes at work in Basque auxiliaries.

Previous analyses

A&N trace variation between doubling (4) and replacement (5) in DD to the difference between these processes.

(4) *g- ai -zki -gu -Ø*
1PL.DAT AUX PL 1PL.DAT 3SG.ERG

'S/he has (verb-ed) it to us.'

Bariatou (Lap)

(5) *g- a- it- u -Ø*
1PL.DAT T PL AUX 2SG.ERG

'S/he has (verb-ed) it to us.'

Arcangues (Lap)

Note 2

An examination of the data indicates that doubling is restricted in its distribution in two senses. First of all, it occurs in only the interior of the Labourdin DD area, and in Bakaiku in the extreme southwest of the High Navarre dialect area. The dialect of Bakaiku, along with its neighbors in the La Burunda dialect area, shows other striking peculiarities which are not attested in any other dialects. These include 1sg 1PL syncretism of datives in the *nor-nori-nork* paradigm, and obliteration of non-3rd person absolutive agreement in the *nor-nork* paradigm. These radical levelings could be indicative of advanced stages of language death, as the traditional dialect of these places is moribund if not already extinct. It also always occurs in a small subpart of the *nor-nori-nork* paradigm. Every doubling locality in Lapurdi has doubling for 2sg datives; most of them only have doubling in this context.

A&N derive the strong prediction from this claim. Doubling, which is generated by a post-syntactic process, cannot interfere with the agreement probe in T. For them, this probe is responsible for allomorphy of AUX and the existence of pluralizers.

Contradictory data

A robust generalization emerges from the Labourdin doubling dialects: most dialects do not trigger a plural allomorph of AUX for doubled 2PL datives (as A&N predict); however, some do.

Forms of *nor-nori-nork* AUX with PL DO, 2PL IO. The singular form is *au*, as seen in for example *nauzki* with PL DO + 1sg IO.

Note 3

For more context on the distribution of doubling, consult Figure 3.

| Place | -au- | -ai- |
|-----------------|------------|------------|
| Sare | ✓ | |
| Ahetze | ✓ | |
| St. Jean de Luz | ✓ (1980's) | ✓ (1860's) |
| Guéthary | ✓ | ✓ |
| Ascain | ✓ | |
| Biriatou | | ✓ |
| Hendaye | ✓ | |
| Urrugne | ✓ | |
| Bassussary | ✓ | |
| Arbonne | ✓ | |

My analysis

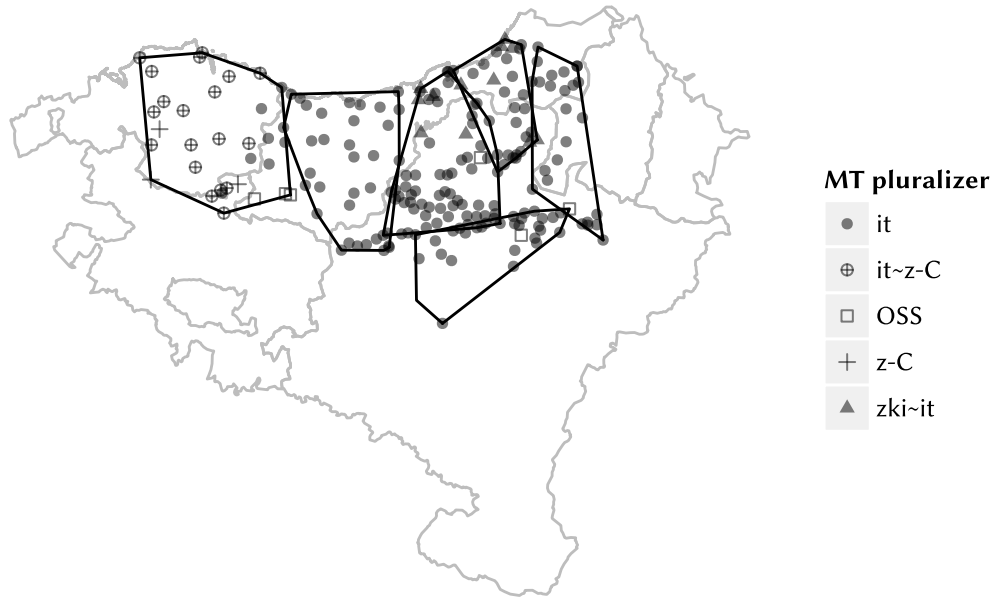
On my analysis, this variation is allomorphy of AUX conditioned by linear adjacency. Dialects can differ as to whether 2PL is on the list of allomorphy-triggering elements.

5 Pluralizers and DD

Basque auxiliary verbs can contain the pluralizing morphemes *zki* and *it*. In Batua, *zki* is used in ditransitives and *it* in monotransitives. However, there is rich variation in ditransitives, as shown in Figure 2. Monotransitives show a small amount of variation.

Note 4

This variation is illustrated in the following map:



Interpretation of the legend follows that of Figure 2; OSS indicates optional (variable) syncretism with the singular (i.e. lack of pluralizer)

Previous Analyses

Preminger (2009) and Arregi and Nevins (2012) both argue that *it* is a reflex of [+plural] Agree between T and the absolutive argument.

Data from DD dialects suggest that this analysis misses a generalization. In the dialect of Irun, *it* is the pluralizer in every cell of every paradigm, **except** when DD applies to a 1sg dative, in which case *zki* is used:

(6) *d- it- i -da -zu*
PFX.DEF PL AUX 1SG.DAT 2SG.ERG

> *ttirazu* 'You have (verb-ed) them to me.'

Irun (NHN)

(7) *n- a -zki -zu*
1SG.DAT AUX PL 2SG.ERG

'You have (verb-ed) them to me.'

Irun with DD

Note 5

The lonely status of *zki* in the Irun auxiliary paradigm seems puzzling, but it can be understood as the last remnant of an ongoing change. *MVAV* data collected by Azkue in the 1920's show *zki* in the intransitive-dative (*nor-nori*) paradigm. Indeed, *zki* survives in the informal *hika* register of the *nor-nori* paradigm in the data from the 1980's as well. Contact with the neighboring Oiartzun dialect area and Batua (both of which have *zki* in *nor-nori* and *nor-nori-nork* paradigms) could also be responsible for re-introducing and maintaining *zki* in Irun.

There are also dialects in which both *it* and *zki* can surface on DD forms:

- (8) *g- ait- u -zki -zu*
 1PL.DAT PL.DAT AUX PL.ABS 2SG.ERG

'You have (verb-ed) them to us.'

Ahetze (Lap)

My analysis

The above data from DD forms show that *it* is always associated with the prefix, whereas *zki* is always associated the absolutive. Thus, *it* is adjacency-triggered allomorphy of the auxiliary stem, whereas *zki* is a reflex of Agree.

Note 6

This hypothesis raises several questions. The first is, by virtue of what does *it* appear in forms such as the following, where the *d-* prefix is commonly thought not to mark ϕ -features at all:

- (9) *d- it- u*
 PFX.DEF PL AUX

'S/he has (verbed) them.'

Batua

The second is, by virtue of what does it appear in forms like the following, where the prefix is marked for singular:

- (10) *n- it- u -en*
 1SG.ERG PL AUX C.PST

'I had (verbed) them.'

Batua

In order to answer those questions, I will argue that there is an invisible number-bearing absolutive prefix in both of these cases.

I have previously argued (Ecay 2013), following Etxepare (2003), that there is lexical Restructuring in Long-Distance ϕ -marking constructions in Basque (which are really clitic climbing constructions; the Restructuring potentiates the clitic climbing). There is also number agreement which may cross maximally one clause boundary, even in the absence of Restructuring. However, Restructuring does not obviate clause boundaries for number agreement. This can be seen in the following example:

- (11) *[[*nobela beltz-ak; irakur-tze-n*] *saiatze-a*] *azter-tu d-it;-uz-te*
 book black-ABS.PL read-NMZ-LOC try-NMZ-ABS test-PRF PFX-PL-AUX-3PL.ERG

'They have tested trying to read detective novels'

E 114a

Aztertu is not a Restructuring verb, but *saiatu* is.^a Thus, the clause boundary between *saiatu* and *irakurri* should be obviated, and there should be only one clause boundary between the matrix agreement probe and its target, ordinarily a felicitous condition for number agreement. This does not suffice, however, to make the sentence grammatical; evidently, number agreement is sensitive to pre-Restructuring boundaries. Turning then to cases where we observe long-distance ϕ -marking (that is, where both verbs with a clausal

complement are Restructuring verbs), we see that the pluralizer does agree even across two clause boundaries:

- (12) [[*nobela beltz-ak*; *eros-te-n*] *saia-tze-a*] *erabak-i d-it_i-uz-te*
 novel black-ABS.PL buy-NMZ-LOC try-NMZ-ABS decide-PRF PFX-PL-AUX-3PL.ERG

‘They have decided to try reading detective novels.’

E 113a

This should not happen, on the above finding that number agreement is sensitive to clause boundaries irrespective of Restructuring. Thus, I attribute it to an otherwise-invisible 3PL clitic climbing into the matrix clause and moving into prefix position, whence it can trigger *it* allomorphy.^b

Positing a 3PL clitic is necessary to explain the behavior of the pluralizer in the above-discussed multi-clausal environments. Shifting back to the original problem of (monoclausal) *ditu* and *nituen*, we see that the presence of this clitic allows the allomorphy explanation suggested by the distributional facts to be supported. In the former case, this clitic has moved to the prefix position, followed by insertion of the default *d* prefix. In the second case, the 3PL absolutive clitic has moved to the prefix position, followed by the 1sc ergative one. This requires us to enrich our former account of prefix movement and default prefix insertion. The 3PL clitic must be specified not to count as filling the prefix position (perhaps because it has a number feature but lacks a person one, as expressed in the ϕ -feature geometry posited by Arregi and Nevins (2012)); thus it allows further iterations of the Prefix Movement rule, and/or the application of Default Prefix Insertion. (on these rules see Ecay 2013)

Why is the invisible 3PL clitic not able to trigger *it* in a DD dialect, and then give way to a non-plural clitic like 1sc? The answer can be sketched along the lines of absolutive and dative clitics being somehow equidistant; only one of them can move to the prefix position. One approach to grounding this supposition is that both originate inside the complement of *v*; if there is a unique escape hatch for clitics from the *v*P phase, the restriction follows, as incidentally does the ban on non-3rd person absolutes in ditransitives. Ergative clitics on the other hand originate higher (for example Spec, *v*P); they thus do not compete for the escape hatch and can co-occur with the zero 3PL clitic.

^aImportantly, these are lexical Restructuring verbs, where the Restructuring depends on the structure of the verb’s complement and not on higher heads in the functional hierarchy. (Wurmbrand 2004) Therefore, the fact that *saia* is in a non-finite context should not effect its potential for restructuring.

^bActually, this clitic can trigger *zki* as well:

- (13) [[*nobela beltz-ak argitara-tze-n*] *segi-tze-a*] *debeka-tu d-i-zki-o-te*
 novel black-ABS.PL publish-NMZ-LOC continue-NMZ-ABS forbid-PRF PFX-AUX-PL-3SG.DAT-3PL.ERG

‘They forbade him/her to continue publishing detective novels’

E 120d

This likely results from an intermediate trace of the clitic in an escape-hatch position (e.g. at the edge of the *v*P phase headed by *segitu*) being visible to the matrix clause’s number agreement probe. However, this does not affect my linear allomorphy account. I use the multi-clausal case to argue for the 3PL clitic’s existence, and the monoclausal and distributional facts to argue for linear adjacency as the trigger.

6 Non-plural pluralizers

In Basque, the neutral-politeness 2sc pronoun *zu* is treated as plural by verbal agreement, for historical reasons. The familiar 2sc pronoun *hi*, however, never is. Nonetheless, in some dialects it triggers *it* (but not the [+part +pl] intransitive AUX root *-ara*):

(14) *h- it- u -gu*
2SG.FAM PL AUX 1PL.ERG

‘We have (verbed) you.’

Mendionde (WLN)

7 Bibliography

- Arregi, Karlos and Andrew Nevins (2012). *Morphotactics: Basque Auxiliaries and the Structure of Spellout*. Springer.
- Eçay, Aaron (2013). “Basque clitics in morphosyntax”. In: *Studies in the Linguistic Sciences*, pp. 53–67.
- Ettxepare, Ricardo (2003). “Menpeko infinitiboak eta urruneko komunztadura”. In: *Lapurdum* 8, pp. 167–206.
- Preminger, Omar (2009). “Breaking agreements: Distinguishing agreement and clitic doubling by their failures”. In: *Linguistic Inquiry* 40.4, pp. 619–666.
- Wurmbrand, Susi (2004). “Two types of restructuring: lexical vs. functional”. In: *Lingua* 114, pp. 991–1014.
- Yrizar, Pedro de (1997). *Morfología del verbo auxiliar vasco*. URL: <http://euskaltzaindia.net/mvav>.