

# Using variation to understand the grammar of Basque Dative Displacement

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**Introduction** The morphology of the Basque auxiliary verb is very rich, comprising morphemes which spell out features of tense and mood, as well as the  $\phi$ -features of up to three verbal arguments. This morphology has been the subject of much study, however the interaction between variation and formal analysis has been largely ignored. In this paper I demonstrate that there are rich systematic aspects of morphosyntactic dialect variation in Basque, that this variation calls into question previous formal analyses, and that it can inform the creation of new ones.

**Dative displacement** Dative Displacement (DD; ex. 1) is a change in Basque morphology whereby a dative object concurs with typically a absolutive prefix. Figure 1 illustrates the distribution of this change within Basque dialects: there is a cohesive region of DD in the north, but also several isolated spots where it has developed independently.

**Pluralizers** Basque auxiliary verbs can contain the morphemes *zki* and *it*, often seen as markers of plural number of the absolutive (2, 3). Arregi & Nevins (2012) argue that *it* is a reflex of Agree spelled out on T; Preminger (2009) gives a similar though less detailed account. However, data from DD dialects demonstrate that the story is more complicated. In the dialect of Irun, the usual ditransitive pluralizer is *it*, generating forms such as the one on the left-hand side of example (4). However, when optional DD applies to a 1sg dative, the pluralizer becomes *zki* – the only case in which *zki* is seen in ditransitive auxiliaries. In fact, no dialect combines *it* as ditransitive pluralizer with DD. This distributional fact suggests that *it* is stem allomorphy triggered by the prefix, and not a reflex of Agree.<sup>1</sup> This conclusion is bolstered by considering dialects such as that of Ahetze, where the auxiliary may contain both *it* and *zki*: in this case, it is *zki* which marks the plurality of the absolutive, and *it* which corresponds to the prefixal dative.

**Metathetic processes** Arregi & Nevins (2012) predict that if DD is realized by doubling of the dative marker in rather than total replacement of a suffix by a prefix, the dative cannot influence the form of T (the auxiliary stem) because this replacement is necessarily computed after T Agrees; DD-by-replacement may be computed before or after Agree (5.161). This analysis is disconfirmed in the dialect of Urdaian, which contains the form in (6), where the dative prefix doubles a suffixal dative marker, yet the stem allomorphy is influenced by the person features thereof.<sup>2</sup>

For A&N the difference between DD-doubling and DD-replacement fundamentally involves where in the grammar they are computed. However, DD-doubling is rare compared to DD-replacement, and always co-occurs with variation. The dialect of Sara, which lacked DD in the mid-1800s but is in the process of acquiring it, has variable DD-doubling with plural absolutives, but categorical DD-replacement with singulars. This indicates that DD has taken hold more quickly in the singular than the plural paradigm, as also observed in other dialects which are acquiring DD. DD-doubling is thus an intermediate step in the acquisition of DD; whether there are two possible loci for DD-type rules in the grammar (as A&N propose) is orthogonal to the progress of DD as a change, as the data from Urdaian demonstrate.

**Conditioning factors on variation** Some authors have observed that dative displacement depends on the person features of the dative argument (Rezac 2008), and in some cases have written such dependence into their analyses (Arregi and Nevins 2012; ch. 5 (150)). However, the dialects with this dependence are on the periphery of the northern DD region, or are one of the isolated DD dialects. Dialects from the center of the northern DD region have DD for all non-3rd person datives. Similarly, Rezac & Fernandez 2013 describe a taxonomy of “systematic factors” which condition the availability of DD, versus factors which are excluded from doing so by their analysis. However, their predictions about factors which do not condition DD (ergative and allocutive  $\phi$ -features) each find dialects which counterexemplify them (Espelette, where DD is only available for a 1sg dative with 3sg ergative, but not other ergatives; Vera and Lezo, where DD is only available with non-allocutive forms).<sup>3</sup>

Consideration of the spatial structure of variation raises the question of whether surface patterns of inconsistency in one locality’s dialect are due to grammatical rules that are specific to certain  $\phi$ -feature bundles, or are the result of a maximally general rule which is spreading across space and time at different rates in different contexts. It also gives one pause to rely on conditioning factors in ongoing variation to undergird a non-variational analysis of the phenomenon.

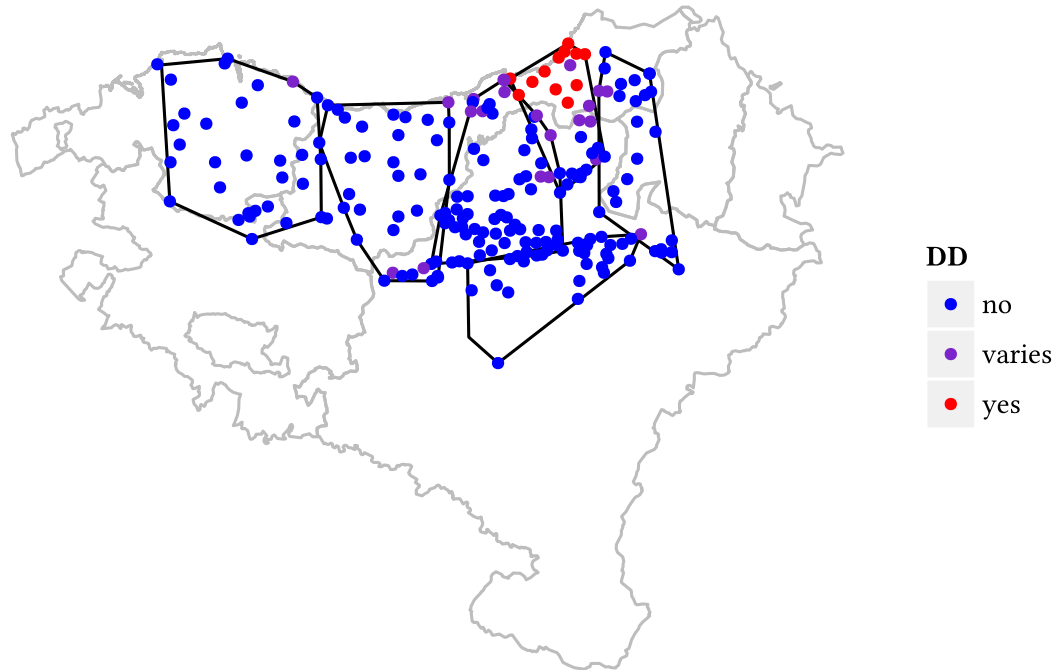
**Conclusion** The structure of this variation in geographic space, time, and grammatical feature geometry is vital to arriving at a correct synchronic, single-dialect linguistic analysis. At a minimum the reification of the distribution of variation into the grammar must be avoided; however facts about variation can also suggest novel analyses as in the case of differentiating *it* from other pluralizers.

<sup>1</sup> *it* does show up in past tense forms with an ergative-marking prefix, for instance in *n-itu-en* ‘1sg.Erg-Aux+pl-Pst’. This perhaps indicates that the ergative prefix is derived differently than the absolutive and dative ones.

<sup>2</sup> The fact that the *u* is 1pl is not immediately obvious, as the expected form of this morpheme is *gu*. Here the *g* has deleted by lenition, a common process applying also to intervocalic /*g*/ in e.g. *ago* > *au* the comparative morpheme.

<sup>3</sup> R&F also discuss morphological gaps as a source of restriction on DD, but these non-availabilities are not gaps, as the relevant  $\phi$ -feature combinations can appear on auxiliaries (e.g. in monotonatives), but cannot do so in DD contexts.

- (1) *eman d- i -da -zu → eman n- au -zu*  
 given PFX AUX 1SG.DAT 2SG.ERG {} given 1SG.ABS AUX 2SG.ERG  
 ‘You gave it to me.’ (Standard →DD)
- (2) *sagar-ra du-∅ → sagar-rak ditu-∅*  
 apple-ABS AUX-3SG.ERG apple-ABS.PL AUX+PL-3SG.ERG  
 ‘He has an/some apples.’ (Standard)
- (3) *sagar-ra eman di-zu-∅ → sagar-rak eman di-zki-zu-∅*  
 apple-ABS given AUX-2SG.DAT-3SG.ERG apple-ABS.PL given AUX-PL-2SG.DAT-3SG.ERG  
 ‘He has given you an/some apples.’ (Standard)
- (4) *d- it- i -ra -zu ~ n- a -zki -zu*  
 PFX PL AUX 1SG.DAT 2SG.ERG 1SG.DAT AUX PL 2SG.ERG  
 ‘You (verbed) them to me.’ (Irun)
- (5) *g- ait- u -zki -tzu ~ g- ait- u -tzu*  
 1PL.DAT PL AUX PL.ABS 2SG.ERG 1PL.DAT PL AUX 2SG.ERG  
 ‘You (verbed) them to us’ / ‘You (verbed) it to us.’ (Ahetze)
- (6) *g- e -zki -u -zai*  
 1PL.DAT AUX[1PL] PL.ABS 1PL.DAT 2PL.ERG  
 ‘You(pl) have (verbed) them to us’ (Urdiain)



**Figure 1:** The distribution of DD in Basque speaking localities (present tense paradigm only). Black polygons are the boundaries of dialect areas as classified by de Yrizar (1997), which is also the source of the data. (Eastern Low Navarrese and Zuberoan are dialects are not shown, as they do not have any DD at all.)

**References** Arregi, Karlos and Andrew Nevins. (2012). *Morphotactics: Basque auxiliaries and the structure of Spell-out*. Springer. Preminger, Omar. (2009). “Breaking agreements: Distinguishing agreement and clitic doubling by their failures.” *Linguistic Inquiry* 40:4. Rezac, Milan and Beatriz Fernández. (2013) “Dative Displacement in Basque.” In: *Variation in datives: a micro-comparative perspective*, Fernández, B. and R. Etxepare, eds. OUP. de Yrizar, Pedro. (1997). *Morfología del verbo auxiliar vasco*. Bilbo: Euskaltzaindia.