

Basque clitics in morphosyntax*

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This paper addresses the question of ϕ -feature marking in Basque. Basque finite verbs display an uncommonly large number of morphemes which covary with the ϕ -features of the absolutive, ergative, and dative arguments as well as (in some dialects) the gender of the addressee. Recent work (Preminger 2009; Arregi & Nevins 2012) has addressed the question of how these morphemes are derived. In taking up this question, I conclude that there is a full complement of clitics (absolutive, dative, ergative, addressee), as well as an agreement probe which spells out the number of the absolutive.

1. Introductory remarks

Basque finite verbs can display up to six segmentable morphemes which index ϕ -features of verbal arguments (or the addressee). Five are illustrated below by underlining; the sixth is a morpheme *te* that appears to mark second person plurals:¹

- (1) z- i- ezai -zki -o -ke -a -t
PFX T AUX PL.ABS 3SG.DAT IRR MASC.ALLO 1SG.ERG

‘(To familiar male addressee) I can (verb) them to him.’

The central question of this paper is how these markers are derived. There are broadly speaking two analytic possibilities for a given marker. The first

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¹ Abbreviations used in glosses: • 1SG, etc.: ϕ -feature bundles • ABS: absolutive • ALL: allative • ALLO: allocutive (addressee) agreement • AUX: auxiliary • C: complementizer • ERG: ergative • IRR: irrealis • LGEN: the locative-genitive marker *ko* • LOC: locative • NEG: negation • NMZ: nominalizer • PFX: prefix • POT: potential • PRF: perfective • PST: past tense

is that it is a reflex of ϕ -feature Agree by a functional head, which has been linearized by the morphology as part of a complex head generated by syntactic head movement. The second is that it does not reflect ϕ -feature agreement with a functional head, but another process (such as the incorporation of ϕ -features from an argumental position into a complex functional head, as in Uriagereka (1995)).

This question is closely related to an inquiry framed in terms of “clitic” and “affix;” however, that question is not specifically morpho-syntactic, and can also be interpreted on phonological or semantic grounds (Zwicky & Pullum 1983). I take the question of derivational behavior, enmeshed in a rich theory of morphosyntax, to be more fundamentally interesting than taxonomic division between the categories “clitic” and “affix,” which are not theoretical primitives. However, the term “clitic” proves useful in naming the non-agreement class of concord markers, and in discussing previous descriptive insights; therefore I will adopt it in those two senses only.

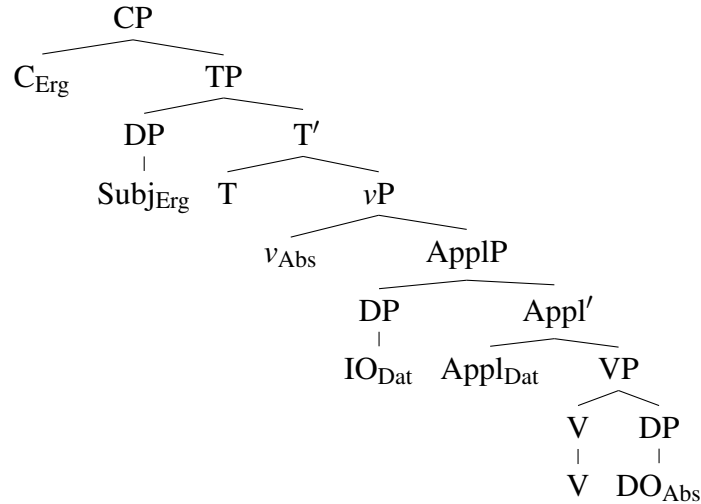
One previous account of these questions was given by Preminger (2009), based primarily on data reported by Etxepare (2006). However, this account fails to distinguish between the absolutive person prefix and number affix, which are two separate morphemes. Arregi & Nevins (2012) propose an inventory of agreement and clitic morphemes. However, their derivational mechanism requires a large number of rules to govern the distribution of these morphemes in the verb, whereas the present proposal relies on a single operation.

In this paper, I will focus on the analysis of Gipuzkoan forms, with references to other dialects included where relevant.² I will also make reference to *hika*, which is a register in some dialects (mainly rural) appropriate for use between close friends or family members, and which obligatorily displays addressee agreement. The orthography used in glosses is always the standard, unless otherwise noted.

The core proposal of this paper is a classification of ϕ -morphemes into several categories of suffixes, and a movement operation which derives the agreement prefix morphology. The outline is as follows: section 2 discusses the morphology of Basque ϕ -markers, and proposes the analysis. Section 3 discusses a line of syntactic evidence which bolsters the proposed split

² Notably, this differs from the approach of Arregi & Nevins (2012), who focus on Bizkaian dialects.

Figure 1. Surface phrase structure of a Basque clause, showing only the head of phrasal movement chains. Case features are indicated on DPs/case assigners with subscripts.



between (non-)agreement morpheme classes. Section 4 concludes.

2. Morphology

For the purposes of this paper, I will assume a Distributed Morphology framework (Embick & Noyer 2001), and the structure in Figure 1 for a Basque clause. For reasons of space, I will not be able to discuss in detail the assumptions underlying the assumed phrase structure.³

Head movement in Basque proceeds from a low head to T (and then to C in questions, embedded clauses, and focus constructions). For synthetically conjugated verbs as in (2), this movement originates with the lexical verb:

- (2) Jon-ek zaborr-a kale-ra darama
 J.-ERG garbage-ABS street-ALL carry:3SG.ABS:3SG.ERG
 ‘Jon is taking the garbage out.’

³ For the assumption that ergative is assigned as a structural case by C, see Rezac et al. (2012). With respect to the head-initial structure of the tree, Basque has V2 in matrix questions, a diagnostic of head-initial C. Haddican & Elordieta (2013) develop a more nuanced theory of V2-like word order patterns in Basque.

Synthetically conjugated verbs in Basque are rare, especially at the level of types (as opposed to tokens) – only on the order of a dozen verbs are synthetically conjugated in any modern dialect, and some dialects have fewer.⁴ Most verbs are instead conjugated analytically, with the verb root carrying an aspect marker and an auxiliary verb carrying tense, mood, and agreement features. Such a construction is illustrated here:

- (3) Jon-∅ eror-i da
 J.-ABS fall-PRF AUX:3SG.ABS
 ‘Jon has fallen.’

In analytically conjugated sentences, the verbal root and aspect form a head distinct from the auxiliary:

- (4) ez da inor etorri
 NEG AUX:3SG.ABS nobody come-PRF
 ‘Nobody came.’

For Arregi & Nevins (2012), this means that there is no head movement to T; auxiliaries are directly inserted in that position. This is because Spelling out $v + T$ as the auxiliary and $V + Asp$ as the lexical verb is a Head Movement Constraint violation, assuming the sequence of heads $T > Asp > v > V$.

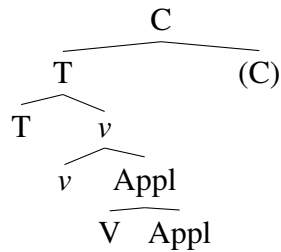
However, auxiliaries are found in non-finite contexts (lacking T), which presents a difficulty for the Arregi & Nevins analysis:

- (5) harri-tu egin nau haur-ak gezurr-a
 surprise-PRF do AUX:1SG.ABS:3SG.ERG child-ERG lie-ABS
 esa-n izan-ak
 say-PRF AUX-ERG
 ‘The child’s having told a lie surprised me.’
 (Hualde & Ortiz de Urbina 2003: ex. 1548)

Getting the Root+Asp separated from the rest of the functional heads for spellout remains a puzzle. One possible approach is to have a higher (invisible) Asp head select the morphology on a participle lower in the tree.⁵ In any event, after head movement applies to the tree in Figure 1, the morphology receives the following complex head for linearization:

⁴ Txillardegui (1979) lists 35 verbs with reasonably complete synthetic paradigms attested at any stage of the language and 20 others for which only a partial paradigm can be reconstructed from written texts.

⁵ This approach is sketched, for a set of Germanic facts, by Wurmbrand (2013).



2.1. Specific morphemes

In this section, specific Basque ϕ -realization morphemes will be discussed one by one, with respect to their status as (non)-agreement markers. The strategy of argument is as follows. If a ϕ -morpheme is in a position of the case assigner for the argument it concords with, there is no *prima facie* evidence to posit an extra operation of cliticization, under the assumption that ϕ -feature agreement comes for free with case assignment. On the other hand, if the ϕ -marker is in a different position, then an appeal to cliticity may be in order. The linear order of heads, then, incorporating the background information from the above complex head and the case assignment process assumed, is as follows, where Stem is either the synthetically conjugated lexical verb root or the auxiliary:

(6) T v_{Abs} Stem Appl_{Dat} C_{Erg}

2.1.1. Absolutive number

The absolutive number marker appears adjacent to the stem, as predicted. However, it appears on the wrong side of the stem:

(7) d- i -zki -gu -zu
 PFX AUX PL.ABS 3SG.DAT 2SG.ERG

‘You have (V-ed) them to us.’

Batua

In order to explain this discrepancy, I propose a Local Dislocation (LD) rule (Embick & Noyer 2001) which alters the order of these two heads in the morphological component of the grammar:

(8) [v * [V * Appl]] \rightarrow [[v V + v] * Appl]

In at least one dialect, an alternate rule is operative, which moves *v* all the way across [V Appl]:

- (9) d- i -o -tza -zu
 PFX AUX 3SG.DAT PL.ABS 2SG.ERG
 ‘You have (V-ed) them to him/her.’
 Ataun, Zegama subdialect, Central dialect (de Yrizar 1997)

The proposed structure crucially accounts for the following alternation:

- (10) a. d- aude
 PFX be:PL.ABS
 ‘They are.’
 b. d- ago -z -ki -t
 PFX be PL.ABS APPL 1SG.DAT
 ‘They correspond to me.’

In (10a), the lexical verb *egon* ‘to be (stage-level)’ and the plural agreement morpheme form a portmanteau. In (10b), the portmanteau is no longer formed, and the two morphemes are spelled out separately: *ago-z*. The applicative morpheme which appears does not disrupt the linear relationship of the potential components of the portmanteau. The interference must be structural: Appl and V are in a local relationship without being surface-adjacent. An alternative theory that built a structure like [[V *v*] Appl] rather than displacing *v* by the rule in (8) would not be able to account for the portmanteau formation pattern (quite apart from the Mirror Principle violation which it also incurs).

2.1.2. Dative

The dative agreement appears in a linear order consistent with the position of the Appl head, taking into account (8) – just to the right of the absolutive number marker:

- (11) z- i -zki -da -k
 PFX AUX PL.ABS 1SG.DAT MASC.ALLO
 ‘(To familiar male addressee) s/he has (V-ed) them to me’ (hika)

This is consistent with its being an agreement marker, although on the basis

of the syntactic evidence in the following section we will conclude that it is a clitic, albeit attached to a host different from that of other clitics.

2.1.3. Ergative and allocutive

The ergative and allocutive markers appear in the predicted place with respect to other morphemes:

- (12) d- i -a -t
 PFX AUX MASC.ALLO 1SG.ERG
 ‘(To a familiar male addressee) I have (V-ed) it’ (*hika*)

However, they are in the wrong place with respect to each other; we predict the allocutive head to be very high in the clause and thus outside of the Ergative-assigning C (Oyharçabal 1993; Miyagawa 2012). Furthermore, both appear even when the verb has not raised all the way to C, e.g. in neutral-context declaratives (Elordieta 2001). This indicates that these markers are clitics: they do not correspond to the linear positions predicted by head movement up the functional spine of the clause, and they are ordered templatically with respect to each other.⁶

2.2. Broader considerations

Having discussed each clear ϕ -morpheme, in this section we will turn to other morphological evidence which cuts across several morphemes, but which furthers the investigation of the clitic status of these morphemes.

Firstly, there is a morpheme *ke* which is a marker of irrealis mood. It separates the ergative and allocutive clitics from the dative and absolutive number agreement morphemes, diagnosing the boundary between the clitic cluster hosting absolutive, addressee, and ergative markers and the dative marker in a different position:⁷

⁶ For another example of such templatic ordering, consider object clitics in Spanish, which always occur in the linear order IO > DO, irrespective of whether the DO is the most stem-adjacent clitic (*me lo da* ‘1SG.DAT 3SG.ACC gives-3SG.PRES’); or the IO is (*dá-me-lo* ‘give.IMPER-1SG.DAT-3SG.ACC’).

⁷ The form in (13) may not be in common, productive use, but simpler forms such as *d-eza-ke-t* ‘PFX-AUX.POT-IRR-1SG.ERG’ and *l-itzai-da-ke* ‘PFX-AUX-1SG.DAT-IRR’ demonstrate the facts as well.

Table 1. The distributuon of *te*

	2PL.ABS + 1SG.ERG	3SG.ABS + 2PL.ERG
Present	<u>zaituztet</u> ‘I have you (pl)’	<u>duzue</u> ‘You (pl) have it’
Past	<u>zintuztedan</u> ‘I had you (pl)’	<u>zenuten</u> ‘You (pl) had it’

- (13) z- iezai -zki -o -ke -a -t
 PFX AUX.POT PL.ABS 3SG.DAT IRR MASC.ALLO 1SG.ERG
 ‘(To familiar male addressee) I can (verb) them to him’ (*hika*)

Secondly, there is a ϕ -marking prefix, which appears word-initially before T. It spells out either 1st or 2nd person features of some argument (often, but not always, the absolutive), or (if no 1st or 2nd person is available), a morpheme is inserted whose form varies with tense, mood, argument-structure, and presence of addressee agreement. This prefix has been analyzed as absolutive agreement Preminger (2009) or as a clitic Arregi & Nevins (2012).

I conclude that this prefix is a clitic. I have already argued that the ergative and allocutive markers are clitics. The conclusion that the absolutive is a clitic allows its behavior to be subsumed along with these other two clitics, which also occur in the prefix position under proper conditions:

- (14) n- u -en
 1SG.ERG AUX C.PST
 ‘I had (V-ed) it.’

- (15) h- u -en
 ALLO AUX C.PST
 ‘(To masculine familiar addressee) it is (V-ed).’ (*hika*)

The derivational steps to generate the prefix, informally stated, are:

1. Absolutive, ergative, and allocutive clitics form a clitic cluster to the right of T

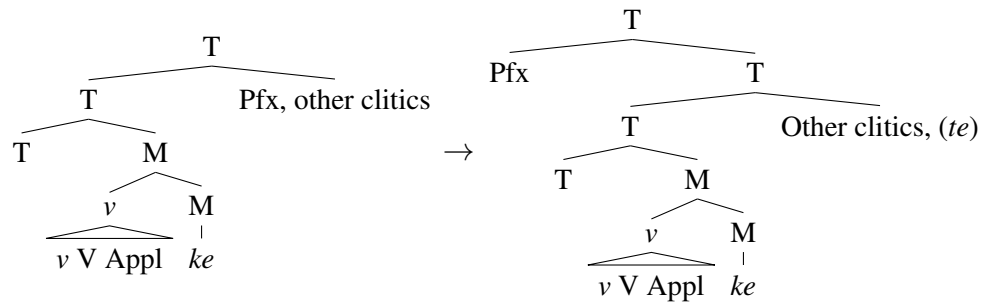


Figure 2. The generation of the Basque agreement prefix

2. Third person clitics are deleted⁸
3. One clitic, selected in accordance with the following rules, is moved across T
 - In the present tense: only absolutive is eligible
 - In non-present tenses eligibility is determined by the hierarchy Abs > Erg > Allo; dialects differ as to where along the hierarchy they bound accessibility to movement
 - NB: this is the reverse of the height of the base position of these clitics
4. If nothing can be moved, insert a default morpheme whose form depends on tense and mood features

The application of these steps is illustrated in Figure 2. This approach has echoes of the discussion in Arregi & Nevins (2012: sec. 5.4 f.) of the Ergative, Allocutive, and Dative Metathesis or Doubling rules, as well as their stipulation in sec. 2.2 (27) about the linearization behavior of dative clitics. However the present account most economically explains the behavior of absolutive, addressee, ergative and (see below) dative prefixes by deriving

⁸ It is necessary for them to be present and later deleted to account for alternations in the auxiliary stem, which are sensitive to the number of clitics present, and not their identity. Thus, *d-u-k* ‘Pfx-Aux-2sg.fam/masc’ is the form of the auxiliary both for 3sg.Abs-2sg.Erg transitive sentences and 3sg.Abs intransitive allocutive sentences. Arregi & Nevins (2012) handle this allomorphy with a [+have] (more perspicuously [+transitive]) feature on the stem; their extension of this analysis to the allocutive paradigm (p. 316) is flawed, as it predicts contrary to fact that Abs-Dat auxiliaries with an allocutive marker should behave identically to Abs-Dat-Erg. Importantly for the third person clitic case, *u* insertion is triggered when there is no overt third-person clitic in forms like *du* 3sg.Abs-3sg.Erg (cf. *da* 3sg.Abs).

them from one general movement process, as opposed to several independent ones.

The second person plural marker *te* appears in the suffixal clitic cluster and always indexes the same argument as the prefix, as seen in Table 1. Under this analysis, a plural feature is stranded during movement to prefix position and spelled out suffixally as *te*. The feminine feature of second person singular familiar ϕ -feature bundles can meet a similar fate in some dialects.⁹

A well-studied variational phenomenon in Basque morphosyntax is so-called Dative Displacement (DD), whereby the ϕ -feature prefix concords with the features of a dative argument. Under the analysis laid out above, this change can readily be described as a reanalysis of the dative clitic to belong to the clitic cluster outside *ke*, and thus to be accessible to movement to the prefix position. The dative prefix in dative displacement dialects behaves as expected from its hierarchical position, broadly speaking: in the present only absolutive and dative, the two lowest positions, move to the prefix position. In non-present tenses, it is predicted that the dative should outrank the ergative for movement to prefix; this seems to be broadly true in the Labourdin dialects where DD is most widespread.¹⁰

2.3. Summary

In this section, I have provided evidence that the absolutive number marker is a reflex of agreement, in a close morphological relationship with the verb stem. The absolutive person, ergative, and addressee markers on the other hand are clitics. I have also laid out a proposal for the derivation of the ϕ -prefix from these clitics, which naturally extends to the explanation of dative displacement as well. Now we will turn to a line of syntactic evidence, which supports these conclusions and also provides direct evidence on the status of the dative marker.

⁹ Including that of Lekeitio, with forms like *(h)-au-na-t* '2SG.FAM.ABS-AUX-2SG.FAM.FEM.ABS-1SG.ERG,' as well as typical Central dialects such as that of Tolosa (de Yrizar 1997).

¹⁰ Insofar as exceptions exist in other DD dialects they could be attributed to contact with non-DD dialects.

3. Syntax

This section discusses evidence from long-distance ϕ -marking in Basque which bears on the clitic status of the ϕ -markers. As background, Restructuring is an “infinitival construction[] which [is] characterized by the lack of clause-boundedness effects” (Wurmbrand 2004). It comes in two types: functional, where the higher verb spells out a functional projection above the lower lexical verb; and lexical, where the higher verb is a V and takes the VP headed by the lower verb as its complement. Restructuring enables clitic climbing.

Another relevant phenomenon is Long Distance Agree, or agreement across a clause boundary. Similar phenomena are attested in Hindi, due to Restructuring (Bhatt 2005); and in Tsez, not due to Restructuring (Polinsky & Potsdam 2001).

Basque has long-distance ϕ -marking phenomena (LDM), reported by Etxepare (2003: abbreviated hereafter E). They are said to be characteristic of “substandard” speech. Judgments are not uniform across dialects, and LDM is always optional when it is permitted at all.

In order for LDM to be possible, The matrix verb must agree with the infinitive (cf. Hindi). Thus, LDM is possible with *agindu* ‘order’ but not *ohartarazi* ‘make aware’ because the former but not the latter shows plural agreement when its complement is two conjoined infinitives:

- (16) [liburu-a erama-te-ko] eta [aldizkari-a
 book-ABS carry-NMZ-LGEN and magazine-ART
 ekar-tze-ko] { *ohartarazi / agindu }
 bring-NMZ-LGEN cause-to-note order
 dizkigute
 AUX:3PL.ABS:1PL.DAT:3PL.ERG
 ‘They { *made us aware / asked us } to take the book away and bring
 the magazine.’ E ex. 94b, 95b

Verbs whose subject is a causer allow LDM of the person and number of an embedded clause argument on a matrix auxiliary (ϕ -LDM):

- (17) [zuek ikus-te-a] pentsa-tu z-aituz-te
 2PL.ABS see-NMZ-ABS think-PRF 2.ABS-AUX:PL.ABS-2PL.ABS
 ‘S/he has thought about seeing you’ E ex. 52

The following serve as diagnostics of (non-)causerhood, in Basque:

- If the subject is not ergative, it is not a causer¹¹
- If the verb can combine with the morphological causative *-erazi*, its subject is not a causer

Verbs which do not have a causer subject (but do agree with a subjectless complement infinitive) allow LDM only with the number of an embedded object (#-LDM):

- (18) * Denda horr-etan, [(zu) ondo trata-tze-{a,n}]
 store that-LOC 2SG.ABS well treat-NMZ-{ABS,LOC}
 ahantz-i z-aituz-te
 forget-PRF 2.ABS-AUX:PL.ABS-3PL.ERG
 ‘In that store, they forgot to treat you well’ E ex. 33b

- (19) [liburuak ekar-tze-{a,n}] ahantz-i
 books-ABS.PL bring-NMZ-{ABS,Loc} forget-PRF
 d-ituz-te
 PFX-AUX:PL.ABS-3PL.ERG
 ‘They forgot to bring the books’ E ex. 34b

Thus, verbs can be classified as ϕ -LDM or #-LDM based on which type of LDM they allow to be triggered from their complement.

ϕ -LDM can take place across multiple clause boundaries, as long as all intermediate verbs are ϕ -LDM verbs (as *segitu* and *pensatu* are):

- (20) [[e_i lagun-tze-n] segi-tze-a] pentsa-tu
 help-NMZ-LOC continue-NMZ-ABS think-PRF
 d-i-zu_j-te
 3.ABS-AUX-2SG.DAT-3PL.ERG
 ‘They have thought about continuing to help you.’ E ex. 113b

#-LDM on the other hand can cross maximally one clause boundary (*hitzartu*

¹¹ This diagnostic may have a small leak. There are three verbs taking an absolutive subject (in Batua) which nonetheless allow person and number LDM: *ari izan* ‘to be engaged in,’ *hasi* ‘begin,’ and *saiatu* ‘try.’ The latter verb in some dialects has a synonym *probatu*, which does take an ergative subject. In fact, in the dialect Etxepare reports on these verbs in fact appear with ergative subjects in LDM contexts (his examples 19b, 20b, and 29b respectively) – so the diagnostic may in fact be exceptionless in that dialect.

Table 2. Reconstruction diagnostics applied to Basque ϕ -LDM

Diagnostic	Fulfilled?
No inanimate subjects	✓
Optional	✓
No ordering restrictions	✓
Disallow weather <i>it</i>	*

and *aztertu* are #-LDM verbs):¹²

- (21) * [[nobel-ak_i argitara-tze-a] azter-tze-a] hitzartu
 novel-ABS.PL publish-NMZ-ABS test-NMZ-ABS agree
 d-ituz_i-te
 PFX-AUX:PL.ABS-3PL.ERG
 ‘They have agreed to test publishing the novels.’ E ex. 115a

I analyze ϕ -LDM as lexical Restructuring followed by clitic climbing. It has no restriction on number of embeddings the entire sentence will be one clause after repeated applications of Restructuring, and there is no barrier to clitic climbing within a single clause. #-LDM, on the other hand, is long distance agreement. The embedding restrictions observed are due to the Phase Impenetrability Condition(/Subjacency).¹³

Since I have analyzed ϕ -LDM as lexical Restructuring, it should fulfill the diagnostics of lexical Restructuring in Wurmbrand (2004) which are applicable to Basque. With the exception of disallowing weather *it*, it does, as shown in Table 2.

We have seen that absolutive and dative person markers participate in unbounded LDM after Restructuring – that is, clitic climbing. They are therefore clitics (although on different hosts, as the dative does not participate in

¹² Though the one-clause restriction also holds when a #-LDM verb is embedded under a ϕ -LDM one, or vice versa: #-LDM is impossible in these circumstances.

¹³ A potential wrinkle is that, in #-LDM constructions, the absolutive clitic and the absolutive number agreement marker are (were?) potentially independent:

- (1) *pro*_i [etsai-ari_j arm-ak_k har-tze-ra] n_i- ind- oa -z_k
 1SG.ABS enemy-DAT arm-ABS.PL take-NMZ-ALL 1SG.ABS T go PL.ABS
 -ki -o_j -n
 APPL 3SG.DAT C.PST
 ‘I was going to take the weapons to the enemy.’ Lafitte (1962)

the prefix movement characteristic of the other clitics). On the other hand, the absolutive number marker is limited to LDM at a distance of at most one clause boundary, and is thus the reflex of an agreement probe constrained by the PIC.

4. Conclusion

In this paper, I have provided morphological and syntactic evidence on the status of Basque ϕ -marking morphemes. The conclusion on which this evidence converges is that Basque has one clitic for each of the absolutive, dative, ergative, and (in applicable dialects) addressee. It additionally has a single reflex of ϕ -feature agreement, which spells out the number features of the absolutive. This account has several benefits. It provides a simple account of the derivation of the unique ϕ -feature prefix in Basque. It also allows dative displacement, a recent innovation, to be understood as an incremental change in this system.

REFERENCES

- Arregi, Karlos & Andrew Nevins. 2012. *Morphotactics: Basque auxiliaries and the structure of spellout*. Springer.
- Bhatt, Rajesh. 2005. Long distance agreement in Hindi-Urdu. *Natural Language and Linguistic Theory* 23. 757–807.
- Elordieta, Aranzazu. 2001. *Verb movement and constituent permutation in Basque*. LOT.
- Embick, David & Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32. 555–595.
- Etxepare, Ricardo. 2003. Menpeko infinitiboak eta urruneko komunztadura. *Lapurdum* 8. 167–206.
- Etxepare, Ricardo. 2006. Number long distance agreement in (substandard) Basque. In Joseba A. Lakarra & José Ignacio Hualde (eds.), *Studies in Basque and historical linguistics in memory of R. L. Trask*, 303–350.
- Haddican, Bill & Arantzazu Elordieta. 2013. $V \geq 2$ in Basque. *Penn Working Papers in Linguistics* 19.
- Hualde, José Ignacio & Jon Ortiz de Urbina (eds.). 2003. *A grammar of Basque*. Mouton de Gruyter.
- Lafitte, Pierre. 1962. *Grammaire basque (navarro-labourdin littéraire)*. Bayonne: Amis du Musée Basque and Ikas, 2nd edn.

- Miyagawa, Shigeru. 2012. Agreements that occur mainly in the main clause. In Lobke Aelbrecht, Liliane Haegeman & Rachel Nye (eds.), *Main clause phenomena: New horizons*, 79–111. John Benjamins.
- Oyharçabal, Bernard. 1993. Verb agreement with non-arguments: On allocutive agreement. In J. J. Hualde & J. Ortiz de Urbina (eds.), *Generative studies in Basque linguistics*, 89–114. John Benjamins.
- Polinsky, Maria & Eric Potsdam. 2001. Long-distance agreement and topic in Tsez. *Natural Language and Linguistic Theory* 19. 583–646.
- Preminger, Omar. 2009. Breaking agreements: Distinguishing agreement and clitic doubling by their failures. *Linguistic Inquiry* 40. 619–666.
- Rezac, Milan, Pablo Albizu & Ricardo Etxepare. 2012. The structural ergative of Basque and the theory of Case. URL <http://www.umr7023.cnrs.fr/sites/sfl/IMG/pdf/ERG-Complete12f.pdf>. MS.
- Txillardegi. 1979. *Euskal aditz batua*. Euskaltzaindia.
- Uriagereka, Juan. 1995. Aspects of the syntax of clitic placement in western romance. *Linguistic Inquiry* 26. 79–123.
- Wurmbrand, Susi. 2004. Two types of restructuring: lexical vs. functional. *Lingua* 114. 991–1014.
- Wurmbrand, Susi. 2013. The syntax of valuation in auxiliary–participle constructions. In *Proceedings of the 29th West Coast Conference on Formal Linguistics*.
- de Yrizar, Pedro. 1997. Morfología del verbo auxiliar vasco. URL <http://euskaltzaindia.net/mvav>.
- Zwicky, Arnold & Geoff Pullum. 1983. Cliticization vs. inflection: English n't. *Language* 59. 502–513.