0. Introduction

The grammatical notions of ABS, DAT, ERG and ALLO are very handy when describing the morphology of Basque finite verbs. We thus speak of ABS prefixes, ALLO markers, ERG auxiliaries, ABS plural markers and so on. However, this descriptive utility must also be substantiated at a theoretical level by a formal analysis of the verbal morphology of Basque. That is, it must be defined what ABS, DAT, ERG and ALLO cases are and what role, if any, they really play in an empirically adequate morphological analysis.

The present article tackles this issue from a Distributed Morphology perspective (Halle & Marantz 1993, 1994). Refining and developing a proposal in Albizu 1995 and Albizu & Eguren 2000, in this article I argue that ABS, DAT, ERG and ALLO cases are not morphological primitives themselves —that is, atomic features [ABS], [DAT], [ERG] and [ALLO], respectively— but labels that represent clusters of features organized into hierarchical structures. Moreover, I define all four cases on the basis of three basic binary features, [±MARK(ed)], [±OBL(ique)], [±ARG(ument)]. Under this view, the above four cases are characterized as presented in (1):
The article will be organized as follows. Section 1 offers a very sketchy presentation of the morphology of Basque finite verbs and section 2 outlines the basic aspects of the Distributed Morphology framework adopted here. The substantive parts of the article are provided in sections 3 and 4. Section 3 lays out my reanalysis of cases, while section 4 delivers three different arguments —i.e., the economy of Basque vocabulary items for Person, and the morphological analysis of Basque allocutivity and Ergative Displacement— to support it. Finally, a very brief summary is included in section 5.

1. The morphology of finite verbs in Standard Basque: a basic characterization

Most finite verbal forms are analytic in Basque. Only a very reduced number of verbs—around thirty—have synthetic forms, even though some of them are still very productive nowadays. The four auxiliary verbs *izan “to be”, *edun “to have”, *edin “to be” and *ezan “to have” are among them. These four, on the one hand, are defined by the feature [±ERG] —*izan and *edin as [-ERG] vs. *edun and *ezan as [+ERG]— and, on the other, also differ in their different aspectual and modal values —*edin and *ezan vs. *izan and *edun.4

Finite verbs exhibit a rich and complex morphological structure in Basque. A most outstanding feature is the richness of its agreement system. In their neuter conjugation, finite verbs may express agreement with three verbal arguments, namely, ABS, ERG and DAT arguments (2):

(2) Dakar-z-ki-da-zue
EPTH.CM.ST(bring)-PL.ABS-OF-lSG.OAT-2PL.ERG
“You guys are bringing them to me (right now)”

According to their type and number, the combination of agreement markers gives rise to four different paradigms or series of verbs: ABS, ABS-DAT, (ABS)-ERG and (ABS)-DAT-ERG. The so-called allocutive system —cf. §4.2—, in its turn, adds a fourth type of agreement marker named allocutive to each of the above series. The allocutive marker refers to the...
addressee of the speech situation when this is not involved in the event expressed by
the verb. Basque finite verbs may thus include up to four agreement markers altogether.
Compare (2) to (3):

(3) Zakar-z-ki-da-te-k
EPTH.CM.ST(bring)-PL.ABS-DF-1SG.DAT-PL.ERG-ALLO
“"They are bringing them to me (right now) —familiar masculine addres-
see.”

From a formal viewpoint, ERG, DAT and ALLO person markers are all homophonous
(except for 3rd person singular) and contrast with ABS ones: the former are suffixal,
while the latter are prefixal. The table in (4) gathers the full list of person markers in
Standard Basque:

(4) Person markers in Standard Basque:

<table>
<thead>
<tr>
<th></th>
<th>ABS</th>
<th>ERG</th>
<th>DAT</th>
<th>ALLO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 SG</td>
<td>n-</td>
<td>-t /-da-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 SG</td>
<td>h-</td>
<td>-k /-n</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MASC/FEM FAM</td>
<td>-a- / -na-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 SG</td>
<td>o/-a</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 PL</td>
<td>g-</td>
<td>gu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 SG NON-FAM</td>
<td>z-</td>
<td>zu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 PL</td>
<td>z-</td>
<td>zu</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 PL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Two different aspects must be stressed regarding (4). Firstly, the language has no
3rd person marker except for DAT singular (/-o/, /-a/). Secondly, 2nd person singular
agreement marking has grammaticalized a twofold opposition: one regarding speaker’s
familiarity to the addressee (/h-/ vs. /z-/ and /-k, -a/, -n, -na-/ vs. /-zu/), the other
regarding gender (/-k, -a-/ vs. /-n, -na-/). The latter distinction is subsidiary to the former,
as the verb only expresses gender in the familiar register. Also, notice that the gender
distinction is neutralized in the ABS prefix. In addition, person markers vary with
number in (4): /n-/ vs. /g-/ /-t, -da-/ vs. /-gu/ and so on. Even so, some plural person
markers coexist with independent plural affixes. Person markers and pluralizers are
presented together in (5). Brackets indicate plural markers:

(5) Person and plural markers:
In (5), ABS agreement is split into person and number morphology, unlike ERG and DAT agreement. Notice also that non-familiar 2nd person is morphologically plural, although semantically and syntactically singular. As a result, a true second person plural are distinguished from a non-familiar (singular) second person by adding an extra plurality marker (/-te-, -e-/ in all three agreement classes.

DAT agreement prompts dative flags —also known as pre-datives in the Basque linguistic literature— in the verbal form. The dative flags in Standard Basque are /-i-, -ki-, -ts-, -Ø-/ and their allomorphy is dependent upon the verb. Their only function is to be a sign of the inclusion of a DAT agreement marker in the verbal complex.

The verbal morphology of the language also expresses a threefold temporal distinction among present, past and irrealis tenses and, for each tense, a modal opposition between potential and non-potential forms. The resulting six sets of verbal forms are illustrated in (7) with egon “to be”:

(7) Tenses and Moods in Standard Basque:

<table>
<thead>
<tr>
<th></th>
<th>PRESENT</th>
<th>PAST</th>
<th>IRREALIS</th>
</tr>
</thead>
<tbody>
<tr>
<td>[-MOD]</td>
<td>d-a-go</td>
<td>z-e-go-en</td>
<td>l-e-go</td>
</tr>
<tr>
<td></td>
<td>EPTh-CM-ST</td>
<td>EPTh-CM-ST-PST</td>
<td>EPTh-CM-ST</td>
</tr>
<tr>
<td>[+MOD]</td>
<td>d-a-go-ke</td>
<td>z-e-go-ke-en</td>
<td>l-e-go-ke</td>
</tr>
<tr>
<td></td>
<td>EPTh-CM-ST-MOD</td>
<td>EPTh-CM-ST-MOD-PST</td>
<td>EPTh-CM-ST-MOD</td>
</tr>
</tbody>
</table>

The plural marker /-u/ corresponds to the verb etzan “to lie”. From a synchronic viewpoint the pair d-a-tza ’EPTh-CM-ST(etzan)’ vs. d-a-u-tza ’EPTh-CM-PL.ABS-ST(etzan)’ forces us to treat this morph as a true plural marker, regardless of its diachronic explanation.

This raises a very interesting theoretical question regarding the real morphological content of plural person markers and pluralizers. See Albizu 1995, 2001a and Albizu & Eguren 2000 for an answer on Standard Basque and Arregi 2002 on Ondarroa Basque.

To the best of my knowledge, the term dative flag was first proposed by Trask in an internet discussion four years ago as an alternative to the not-so-accurate pre-dative term. It is borrowed from the Relational Grammar literature, where it is used to refer to morphological markers with a function similar to the one in Basque.
To these, we must add imperative forms. Basque also exhibits specific imperative forms when ABS arguments are 3rd person. These are characterized by the insertion of the distinctive epenthetic prefixes /b/- or /I0-/ as in (8a) and (8b) respectively, and by the absence of Ergative Displacement (cf. §4.3), as in (8b):

(8) a. b-e-go  
   EPTH-CM-ST(be)  
   b. Ø-e-za-zu  
   EPTH-CM-ST(*ezan)-2SG.NON-FAM-ERG

Verbal modality is expressed by the affix /-ke/- or the lack thereof, as shown in (9). /-ke/- shows up along with the old future tense marker /-te/-, a superfluous morph nowadays, in the ABS forms of the auxiliary verbs izan “to be” and *edin “to be”:

(9) a. d-a-Ø  
   EPTH-CM-ST(izan)  
   b. d-a-Ø-te-ke  
   EPTH-CM-ST(izan)-FUT-MOD

(10) a. d-a-di-(n)  
   EPTH-CM-ST(*edin)-(COMP)  
   b. d-a-i-te-ke  
   EPTH-CM-ST(*edin)-FUT-MOD

As regards tense, the only marker is the suffix /-e/ or /-en/. It indicates past tense, so that present and irrealis forms show no temporal marker: dago vs. zego-en vs. lego in (7). Nonetheless, temporal distinctions are also morphologically expressed in an indirect way by means of epenthetic prefixes and class markers, as their allomorphy is contingent upon tense.

Basque verbal forms display five different epenthetic prefixes, /d/-, /z/-, /l/-, /b/-, /Ø/-, which surface in present, past, irrealis and imperative forms, respectively. This was shown in (7)-(8). Epenthetic prefixes are just morphological material inserted to fill the initial position of the finite verb —cf. Albizu & Eguren 2000. For this reason, they are in complementary distribution with ABS person prefixes, that is, with 1st and 2nd person ABS agreement and with the phenomenon of Ergative Displacement.

Temporal distinctions are indirectly expressed by class markers too. These markers’ function in the verbal morphology of Standard Basque is akin to Romance languages’ thematic vowels, and they are useful to classify Basque verbs into conjugation groups. The class markers are /-a/-, /-in(d)/, /-i/-, /-en(d)/, /-e/- in Standard Basque. Their allomorphy is mainly contingent upon tense (11a)-(11b,c) and verbs (11b,c), but the person of the ABS argument may also condition it (12). In any case, /-a/- only shows up in present forms, while the remaining markers occur in non-present forms —unless allocutivity is involved (cf. §4.2):

(11) a. d-a-go  
   EPTH-CM-ST(be)  
   b. z-e-go-en  
   EPTH-CM-ST(be)-PST  
   c. z-i-hoa-n  
   EPTH-CM-ST(gO)-PST

(12) a. n-ind-uka-n  
   1SG.ABS-CM-ST(have)-PST  
   b. n-e-uka-n  
   1SG.ABS-CM-ST(have)-PST

---

8 For a justification of this /Ø/- prefix, see Albizu & Eguren 2000.
9 Yet, the future marker may also occur alone in non-potential plural forms of ABS *edin “to be”: d-a-i-te-ke ‘EPTH-CM-ST(*edin)-FUT-PL.ABS’.
10 For more details, see Albizu 2001a, 2001b.
Finally, leaving the future marker /-te/- aside—which precedes the modal /-ke/-, Basque finite verbal forms conform to the schema in (13) and (14): the former, for pre-stem alignments; the latter, for post-stem ones. Most but not all of the potential arrangements are represented:

(13) Pre-stem template:
\[
\begin{align*}
&\{ \text{ABS}_{(E)} \} + (\text{DF}) + \text{CM} + (\text{PL.ABS}) + \text{ST} \\
&\text{EPTH}
\end{align*}
\]

(14) Post-stem template:
\[
\text{ST} + (\text{DF}) + (\text{PL.ABS}) + (\text{DF}) + \text{DAT} + \text{PL.DAT} + \text{MOD} + /-te/- + \text{ABS} + \text{ERG} + \text{PL.ERG} + \text{PST}
\]

2. Distributed Morphology (Halle & Marantz 1993, 1994): an outline\textsuperscript{11}

Distributed Morphology (DM) views inflected forms as structures that are generated in syntax by combining morphosyntactic features in accordance with the principles and operations (i.e., Move and Merge—cf. Chomsky 1995) of this grammatical component.\textsuperscript{12} However, DM also defends the existence of a (partially) autonomous Morphological Component (MC) intermediate to syntax and Phonetic Form (PF) that has its own primitives, rules and principles. Thus, inflected forms generated in syntax are not mapped directly to PF but are filtered by the Morphological Component, where their morphological structure and the content of their terminal nodes or morphemes may be object of modification, mainly by the application of redundancy- or deletion-rules.\textsuperscript{13}

A basic tenet of DM is the idea that terminal nodes or morphemes are complexes of semantic and morphosyntactic features that lack phonological matrices throughout the syntactic and morphological components. The supply of phonological features is achieved in the mapping from the Morphological Component to PF by late insertion of Vocabulary Items into morphemes. Vocabulary items observe the scheme in (15):

(15) /phonological matrixes/ \(\Leftrightarrow\) [morphological value] [\_\_, environment for insertion]

As shown in (15), vocabulary items incorporate a threefold information—although not necessarily all of it: (i) the phonological matrixes to be inserted into a given morpheme; (ii) their morphological value or, to put it in other words, the minimal morphological information that has to be encoded by the hosting morpheme; and (iii) the minimal morphological structure that is required in their host's neighbourhood for insertion to apply.

The insertion of vocabulary items must obey two crucial conditions. On the one hand, an entry can be inserted under a morphological node only if its features are a subset of those of the node it is inserted into, that is, the Subset Principle. In this respect, vocabulary items may be morphologically underspecified with respect to the terminal

\textsuperscript{11} See Harley & Noyer 1999 for an excellent introductory summary of the theory.

\textsuperscript{12} See Laka 1988, 1993 for a non-DM implementation of this same basic principle in Basque.

\textsuperscript{13} Under a DM-analysis of Basque verbal morphology, the occurrence of epenthetic prefixes, class markers, dative flags as well as the (morphological) plurality of non-familiar 2\textsuperscript{nd} person are all instantiations of redundancy-rules, that is, feature-adding rules. A clear-cut example of deletion-rule is Ergative Displacement in §4.3.
nodes they are inserted into. And on the other, the most specified competing entry takes precedence over competing entries that are less specified, that is, the Elsewhere Principle.

3. Cases as feature-hierarchies

Bearing all the preliminary descriptive and theoretical information introduced in §§ 1-2 in mind, let us now come to the heart of the article. Modifying and elaborating on an idea already introduced in Albizu 1995 and Albizu & Eguren 2000, in this article I would like to argue that cases must be split up into more basic morphological components. Thus, ABS, DAT, ERG and ALLO cases are not morphological primitives themselves but labels that represent clusters of features organized into hierarchical structures. In particular, ABS, DAT, ERG and ALLO cases are best characterized on the basis of three basic binary features, \([\pm{\text{MARK}}(ed)], [\pm{\text{OBL}}(i)\text{que}], [\pm{\text{ARG}}(ument)]\), which are hierarchically organized up-to-bottom in the same order as listed. Under this view, the above four cases are redefined as presented in (16):

\[
\begin{array}{c|c|c|c}
  (16) & \text{ABS} & \text{DAT} & \text{ERG} & \text{ALLO} \\
  \text{[CASE]} & \text{[CASE]} & \text{[CASE]} & \text{[CASE]} \\
  \text{[-MARK]} & \text{[+MARK]} & \text{[+MARK]} & \text{[+MARK]} \\
  \text{[+OBL]} & \text{[-OBL]} & \text{[-OBL]} & \text{[-OBL]} \\
  \text{[+ARG]} & \text{[-ARG]} & \text{[+ARG]} & \text{[-ARG]} \\
\end{array}
\]

It is worth noting that nothing in the analysis hinges on the choice of \([\pm{\text{MARK}}(ed)], [\pm{\text{OBL}}(i)\text{que}], [\pm{\text{ARG}}(ument)]\) as defining features. On the contrary, these terms are to a large extent secondary, simple labels that could be easily substituted for diacritic features. The real gist of the proposal lies in our resorting to binary oppositions to characterize cases and in our assumption that cases' complex morphological content is hierarchically organized. Nonetheless, our choice of \([\pm{\text{MARK}}(ed)], [\pm{\text{OBL}}(i)\text{que}]\) and \([\pm{\text{ARG}}(ument)]\) is not arbitrary but aimed to endow features with some appraisable content of their own. To begin with, the \([\pm{\text{MARK}}(ed)]\) feature tells the ABS case from the rest, corresponding to the fact that the former is the unmarked case in a morphologically ergative language such as Basque. In its turn, the feature \([\pm{\text{OBL}}(i)\text{que}]\) singles out DAT from ERG and ALLO on the basis of certain syntactic parallelisms between DAT and oblique phrases (Albizu in press-a, Arregi & Ormazabal 2001, Ormazabal & Romero 1998 and references therein). Finally, the feature \([\pm{\text{ARG}}(ument)]\) that sets ERG and ALLO cases apart refers to their different syntactic status as argumental/non-argumental.

For economy's sake, throughout this article I will use the formal notation in (17) instead of (16). In addition, in what follows I will also simplify cases' morphological notation in (17) by only specifying rightmost features —namely, the terminal ones—, that, needless to say, will imply all the morphological content to their left. This is represented by means of brackets in (17):
(17) a. ABS = [(CASE,) -MARK]  
   b. DAT = [(CASE, +MARK,) +OBL]  
   c. ERG = [(CASE, +MARK, -OBL,) +ARG]  
   d. ALLO = [(CASE, +MARK, -OBL,) -ARG]

4. Arguments for a redefinition of cases

Three different arguments support cases' reanalysis in (16)-(17): on the one hand, economy considerations regarding the number of vocabulary items for Person (§4.1) and, on the other hand, the morphological analysis of the phenomena of allocutivity (§4.2) and Ergative Displacement (§4.3).

4.1. Economy of vocabulary items for Person

Grammatical works on the verbal morphology of Basque commonly refer to person agreement markers as ABS, DAT, ERG and ALLO prefixes or suffixes and, by doing so, implicitly establish a four-way distinction among person agreement markers that corresponds to the four verbal cases. Our characterization in §1 is a reflection of this general use. Nonetheless, though descriptively handy, such characterization seems unfortunate from a strictly morphological viewpoint. Let us illustrate why, by considering non-familiar (masculine) 2nd person markers.

Any attempt to formalize the vocabulary items for /Ø/-—orthographically h— and /-k, -a/- that relies on cases as morphological primitives—namely, [ERG], [ABS], [DAT] and [ALLO]—must posit the existence of four distinct vocabulary items, as shown in (18),

(18) a. /Ø-/ ~ [+2, +PAM, +MASC, ABS]  
   b. /-k, -a-/ ~ [+2, +PAM, +MASC, ERG]  
   c. /-k, -a-/ ~ [+2, +PAM, +MASC, DAT]  
   d. /-k, -a-/ ~ [+2, +PAM, +MASC, ALLO]

or else reduce the number of entries by assigning a non-unified morphological content [ERG/DAT/ALLO] to the suffixal markers, as shown in (19):

(19) a. /Ø-/ ~ [+2, +PAM, ABS]  
   b. /-k, -a-/ ~ [+2, +PAM, +MASC, ERG/DAT/ALLO]

On the contrary, (17)'s fine-grained definition of all four cases as combinations of more primitive binary features paves the way for an alternative morphological characterization —cf. (20)— in which ERG, DAT and ALLO cases are all unified by the single morphological specification [-MARK]. Accordingly, the list of vocabulary items is reduced to two without giving up a unified definition of /-k, -a/:

(20) a. /Ø-/ ~ [+2, +PAM]  
   b. /-k, -a-/ ~ [+2, +PAM, +MASC, +MARK]

Notice that in (20) the prefix /Ø/- is the elsewhere form, the least specified entry, as it lacks any specification for gender and case: the former, for obvious reasons; the latter,
for reasons that will become clear when we study the phenomenon of Ergative Displacement in §4.3.15

Under the Distributed Morphology framework adopted in this article, the correct distribution of the vocabulary items in (20) will follow from the Subset and Elsewhere Principles (§2). On the one hand, the Subset Principle will restrict the insertion of /-k, -a-/ to morphemes containing the relevant feature [+MARK] —that is, the ERG, DAT and ALLO cases in (17bcd), respectively—and will open the way to the insertion of the underspecified prefix /Ø-/ into (17a), the ABS node. However, the Subset Principle itself does not resolve (20a) and (20b)’s competition for their insertion into (17b-d). The choice in favor of the suffixal markers /-k, -a-/, the most specific, will be determined by the Elsewhere Principle.

In brief, a redefinition of cases in terms of clusters of binary features makes a simplified and coherent morphological definition of Basque vocabulary items for Person suitable with a significant—but yet empirically adequate—reduction in number.

4.2. Allocutivity

A morphological system based on [ERG], [ABS], [DAT] and [ALLO] also falls short to describe basic aspects of the morphology of Basque allocutive forms.16 Allocutivity is an instance of non-argumental agreement that refers to the addressee of the speech situation, provided that he or she is not a participant in the event expressed by the verb. Allocutives are always 2nd person singular and are expressed by means of the suffixal agreement markers /-k, -a-/ and /-n, -na-/ for masculine and feminine familiar addressees, respectively, and by /-zu-/ for non-familiar addressees—this one only in northern dialects.

Basque allocutivity is illustrated in (21). The two sentences in (21) convey identical meanings, but the allocutive form naik in (21b) adds the extra allocutive marker /-k/ that marks the addressee to the neuter form nau in (21a):

(21) a. Peruk ni kalean ikusi n-a-u
   Peru.ERG.IABS street.in see.ASP 1SG.ABS-CM-*edun
   “Peru has seen me in the street”

   b. Peruk ni kalean ikusi n-a-Ø-i-k
   1SG.ABS-CM-*edun-DF-ALLO_m
   “Peru has seen me in the street (male addressee)”

Allocutive markers in Standard Basque are most often aligned after the DAT and modal markers—when present—, although they may also show a certain degree of mobility depending on tense (23a-b) and ERG argument’s person/number (23c-d). The scheme in (22) summarizes their potential arrangements; likewise, some illustrative examples are provided in (23):

---

15 An analysis that takes suffixes, not prefixes, as elsewhere forms could reduce the number of vocabulary items and still hold on to [CASES] as primitives. Yet, the existence of phenomena like Ergative Displacement (§4.3) and dialectal Dative Displacement—cf. Fernández 2002 and Fernández & Ezeizabarrena 2001—goes against it. See also footnote 22.

4.2.1. Morphological properties of allocutivity

Basque allocutives display complex morphological properties that vary according to their particular morphological environment. Thus, allocutives may exhibit properties that in each case we might characterize as ALLO proper, as ergative-like or even as dative-like. To begin with, distinctive ALLO properties are these markers’ ability to trigger allomorphic alternations in present forms’ epenthetic prefixes (/I-te-I>) and class markers (/I-a-I>I-e-I) —though the latter is optional and subject to variation. These are in any event restricted to instances of 3rd person ABS agreement. Both alternations apply to all non-auxiliary verbs (25); and in the particular case of the d- > z- alternation, also to the ABS-DAT-ERG forms of *edun “to have” (24) and *ezan “to have”:

(24) a. d-Ø-Ø-i-o  
   EPTH-CM-ST(*edun)-DF-3SG.DAT  
   (EDUN-DAT)  

b. z-Ø-Ø-i-o-k  
   EPTH-CM-ST(*edun)-DF-3SG.DAT-ALLO  
   (EDUN-DAT-ALLO)

(25) a. d-a-rama  
   EPTH-CM-ST(bring)  
   (BRING)

b. z-a/e-rama-k  
   EPTH-CM-ST(bring)-ALLO  
   (BRING-ALLO)

In a typically ergative-like behavior, the addition of an allocutive morpheme may also determine auxiliary selection. Auxiliary selection is defined in the language in terms of the feature [+ERG] feature, that is, by the presence or absence of the feature [+ERG] in the verbal morphological complex.17,18 Allocutives may trigger auxiliary alternations, although the phenomenon is limited to allocutive forms of izan “to be” and only in its ABS conjugation (26), not with ABS-DAT forms (27):19

(26) a. n-a-iz  
   1SG.ABS-CM-ST(izan)  

b. n-a-u-k  
   1SG.ABS-CM-ST(*edun)-ALLO

(27) a. n-a-tza-i-o  
   1SG.ABS-CM-ST(izan)-DF-3SG.DAT

b. n-a-tza-i-o-k  
   1SG.ABS-CM-ST(izan)-DF-3SG.DAT-ALLO

17 See footnote 4.
18 This characterization will be refined as we proceed in §§ 4.2.3 and 4.3.2.2.
19 See footnote 34.
It should be clear, however, that this morphological property does not fully equate ergative-like ALLO markers and true ERG markers, as the two of them show divergent patterns as regards Ergative Displacement. As shown in (28)-(29), the past forms corresponding to neuter (28a) and allocutive (29a) *duk* differ as to the realization of their 2\textsuperscript{nd} person agreement marker: the ERG argument is marked by the prefix *h-* (28b), a typical instance of Ergative Displacement, while allocutivity sticks to its suffixal realization, in this case */-a/- (29b):\(^{20}\)

\begin{align*}
(28) & \text{a. } d-\varnothing-\text{u-k} & \text{b. } h-\varnothing-\text{u-en} \\
& \text{EPTH-CM-ST(*edun)-2SG.M.NONFAM.ERG} & \text{2SG.NONFAM.ABS}\_\text{CM-ST(*edun)-PST}
\end{align*}

\begin{align*}
(29) & \text{a. } d-\varnothing-\text{u-k} & \text{b. } z-\varnothing-\text{u-a-n} \\
& \text{EPTH-CM-ST(*edun)-ALLO}\_\text{M} & \text{EPTH-CM-ST(*edun)-ALLO}\_\text{M-PST}
\end{align*}

Finally, like DAT agreement, allocutives may also trigger the insertion of a dative flag (DF) —in particular, */-i/- into the verbal complex. The phenomenon is very restricted: it only applies to allocutive forms of ABS-ERG *edun “to have” (31b), in which case the verb stem will display the */-u-/ > */-i-/ alternation also characteristic of neuter ABS-DAT-ERG forms of *edun “to have” (30b):\(^{21}\)

\begin{align*}
(30) & \text{a. } d-\varnothing-\text{i-t-u} & \text{b. } d-\varnothing-\varnothing-\text{i-zki-o} \\
& \text{EPTH-CM-PL.ABS-ST(*edun)} & \text{EPTH-CM-ST(*edun)-DF-PL.ABS-3SG.DAT}
\end{align*}

\begin{align*}
(31) & \text{a. } d-\varnothing-\text{i-t-u} & \text{b. } d-\varnothing-\text{i-t-}\varnothing-\text{i-k} \\
& \text{EPTH-CM-PL.ABS-ST(*edun)} & \text{EPTH-CM-PL.ABS-ST(*edun)-DF-ALLO}\_\text{M}
\end{align*}

Again, dative-like ALLO markers are not fully like true DAT markers either. Note that the allocutive form *ditik* in (31b) shows the plural marker */-it-/* characteristic of non-dative contexts and fails to display or trigger the expected */-it-/* > */-zki-/* alternation found with canonical DAT agreement —namely, *diskio* in (30b).

4.2.2. A problem: the morphological analysis of allocutive forms of *edin “to be”*

Bearing all this in mind, a morphological analysis relying on cases as morphological primitives faces a problem as simple as characterizing the suffix */-k/* in *daitekek*, a 3\textsuperscript{rd} person potential allocutive form of the verb *edin “to be”*:

\begin{align*}
(32) & \text{a. } d-a-i-\text{te-ke} & \text{b. } d-a-i-\text{te-ke-k} \\
& \text{EPTH-CM-ST(*edin)-FUT-MOD} & \text{EPTH-CM-ST(*edin)-FUT-MOD-ALLO}\_\text{M}
\end{align*}

The allocutive form *daitekek* in (32b) observes none of the morphological properties just observed in the previous section and respectively identified as ALLO proper, ergative-like and dative-like. That is, it shows no */d-/ > */z-/ nor */a-/ > */e-/ alternation, triggers no auxiliary shift and, finally, carries no dative flag insertion. In a morphological system built upon primitives such as [ALLO], [ERG] and the like, this amounts to saying that the

\(^{20}\) See section 4.3.

\(^{21}\) Euskaltzaindia 1987 analyzes */-i/* as an allomorph of the verb stem, instead of as a dative flag. This does not weaken our argumentation, because in that case the dative-like nature of the ALLO would then be manifested by the */u-/ > */i-/ stem alternation itself.
ALLO morpheme realized as /-ki/ in *daitekek is morphologically neither [ALLO], [ERG] nor [DAT]. And the only remaining option, [ABS], can also be readily excluded because of its suffixal, not prefixal, realization. Likewise, a deletion-rule dispensing with its initial [ALLO] morphological specification would not work either, as it would also activate the insertion of the prefix, the elsewhere form, that is, an incorrect result. How do we then define the ALLO morpheme?

4.2.3. The morphological analysis of allocutive forms of *edin “to be”: a solution

A more suitable explanation of the data calls for an enriched theoretical apparatus. In this article, this is achieved by virtue of the decomposition of cases postulated in (17) along with the vocabulary items in (20). These are repeated next for convenience:

(33) a. ABS = [(CASE, -MARK] c. ERG = [(CASE, +MARK, -OBL, ) +ARG]
b. DAT = [(CASE, +MARK,) + OBL] d. ALLO = [(CASE, +MARK, -OBL, ) -ARG]

(34) a. /0-/-[+2, +FAM] b. /-k, -a/- [+2, +FAM, +MASC, +MARK]

Under these premises, all the morphological properties of the ALLO morpheme in *daitekek will be accounted in a straightforward manner by applying a simple deletion-rule that just eliminates the ALLO node’s terminal feature [-ARG]:

(35) [+MARK, -OBL, -ARG] → [+MARK, -OBL] in env. [III] + ... + ___

For reasons that I will not explain here and that have to do with the allomorphy of class markers, the contextual specification [III] refers to a particular verb class that comprises the four auxiliary verbs of Basque: *izan “to be”, *edin “to be”, *edun “to have” and *ezan “to have”. Nonetheless, (35) only targets ABS forms of *izan and *edin, while the remainder fall out of (35) because of the previous application of other rules. Readers interested in the details might take a look at Albizu 2001b.

To begin with, the lexical insertion of the suffixal marker /-ki/ is dictated by the Elsewhere Principle. the ALLO node specified as [+MARK, -OBL] meets the conditions for the insertion of both vocabulary items, but the most specific /-ki/ wins because of its extra feature [+MARK]. The absence of dative flags also results from the ALLO morpheme’s feature content itself, as dative flags’ insertion is only activated by the feature [+OBL], namely by true DATs. The following redundancy-rule for dative flag insertion was proposed in Albizu 2001a-b. Obviously, the ALLO node, specified as [-OBL], is unable to trigger (36):

(36) [+OBL] → [__, DATIVE FLAG]

Like dative flag insertion, *edin forms’ failure to undergo auxiliary alternations is determined by the feature content of the ALLO morpheme, provided that we assume the following two vocabulary items for *edin “to be” and *ezan “to have”. The contextual

---

22 Again, one might be tempted to save this line of analysis by reversing my proposal on vocabulary items in §4.1, so that suffixes, not prefixes, would then be viewed as elsewhere forms. This approach would make the properties of *daitekek compatible with the insertion of /-ki/ by simply deleting the [ALLO] specification of the allocutive morpheme. Nevertheless, the elsewhere nature of prefixes seems uncontroversial to me (cf. footnote 15 and §4.3).
specification [MOD] is aimed to single them out from *izan “to be” and *edun “to have”, respectively:23

\[(37)\] a. / *edin/ \[\leftrightarrow [V] \text{ in env. } \_ \_ \_ + \ldots + [MOD] \]
b. / *ezan/ \[\leftrightarrow [V] \text{ in env. } \_ \_ \_ + \ldots + [MOD] + [+ARG] \]

As a result of (35), the insertion of the vocabulary item / *ezan/ in (b) into the [V] morpheme violates the Subset Principle (§2). Since the ALLO morpheme is only specified as [-OBL] and lacks [+ARG], it will fail to provide the adequate morphological environment for / *ezan/’s insertion. Accordingly, the less specified / *edin/ in (a) will be inserted into the [V] morpheme.

Two morphological properties remain to be accounted for, namely, present forms’ lack of alternation regarding epenthetic prefixes (/d-/ > /lz-/) and class markers (/a/ > /e-/). Under this system, both properties are captured by making the two of them contingent upon the feature [-ARG] erased by the rule in (35). In the case of epenthetic prefixes, this is so because the vocabulary item /lz-/ in (38) requires the contextual presence of [-ARG] for its insertion:

\[(38) \quad /lz-/ \leftrightarrow [EPENT] \text{ in env. } \_ \_ \_ + \ldots + [-ARG] \]

As for class markers, this time the effect comes in an indirect way, as the rule in (35) undoes the conditions for the application of a preliminary rule that sets the grounds for the right lexical insertion. The technical details are intricate and tedious. Pressured by space constraints, here I will spare the reader the specifics and I will just refer him to Albizu 2001a-b.

4.3. Ergative Displacement

The term Ergative Displacement (ED) designates a morphological phenomenon24 whereby, under particular conditions, sentential ERG arguments are cross-referenced on the verb by the set of prefixal person markers rather than by the regular set of person suffixes. ERG arguments’ verbal agreement markers thus surface on the left edge of the inflected verbal form, displaced from their regular position.25 An illustrative example is provided in (39) by the contrast between /-k/ in duk, the regular agreement pattern, and /h/- in huen, the corresponding instance of ED:

\[(39) \quad \text{Thou.ERG EPTH-CM-ST(*edun)-2SG.FAM.MASC.ERG 2SG.FAM.ABS-CM-ST(*edun)-PST} \]

"You (fam. masc.) have it / You (fam. masc.) had it"

---

23 Compare these vocabulary items with those of izan “to be” and edun “to have” in § 4.3.2.2. Their differing case-specifications will be crucial to explain the distinct pattern of izan “to be” and edun “to be” as regards auxiliary alternation in allocutive forms.


25 The term Ergative Displacement was first cast by Laka 1993 and latter adopted by subsequent work. In addition to the descriptive observation, Laka’s motivation for the term was also theoretical.
In Standard Basque, three different conditions must come together for ED to apply. In the first place, tense has to be either past (40b) or irrealis (40c), two morphological contexts uniformly characterized as [-PRES] on independent grounds—cf. (40); second, ABS agreement must be 3rd person or be absent altogether—cf. (41); and last, ERG agreement must be 1st or 2nd person—cf. (42):

(40) a. d-Ø-u-k
   EPTh-CM-ST(*edun)-2SG.FAM.MASC.ERG
   2SG.FAM.ABS₂-CM-ST(*edun)-PST

   b. h-Ø-u-en

   c. h-Ø-u
   2SG.FAM.ABS₂-CM-ST(*edun)

(41) a. n-ind(e)-rama-a-n
   1SG.ABS-CM-bring-2SG.FAM.MASC.ERG-PST
   2SG.FAM.ABS₂-CM-ST(bring)-PST

   b. h-e-rama-n

(42) a. z-Ø-u-te-n
   EPTh-CM-ST(*edun)-PL.ERG-PST
   2SG.FAM.ABS₂-CM-ST(*edun)-PST

   b. h-Ø-u-en
   2SG.FAM.ABS₂-CM-ST(*edun)-PST

Finally, notice that the latter two agreement conditions combined together do not suffice by themselves to trigger ED-effects on imperative forms:

(43) Ø-e-za-k
   EPTh-CM-ST(*ezan)-2SG.FAM.MASC.ERG

4.3.1. [CASES] as primitives: two flawed analyses of ED

Under a DM-analysis that takes [ERG], [ABS], [DAT] and [ALLO] as morphological primitives, two different avenues could be explored for ED: on the one hand, a restructuring-analysis and, on other hand, a deletion-approach. As I will show next, none of them provides a satisfactory analysis of the phenomenon.

4.3.1.1. ED as a restructuring-rule

A prompt option for the analysis of ED is to view it as a restructuring-rule that turns the initial [ERG] specification of the ERG morpheme into [ABS].

This would license the insertion of person prefixal markers, no matter their morphological characterization as [ABS] prefixes or as elsewhere prefixes—that is, lacking any specification for [CASE]. Such a rule is illustrated in (44), where the morphological environment details the three conditions required for its application, namely, a 3rd person (or [-PART(icipant)]) ABS morpheme, a 1st or 2nd person (or [+PART (icipant)]) ERG morpheme and a non-present tense:

(44) [ERG] → [ABS] in env. [ABS, -PART] + ... [____, +PART] + [-PRES]²⁷

²⁶ In particular, based on the allomorphy of class markers.

²⁷ Notice that (44)—and also (46) later in the text, for that matter—would have a direct effect on auxiliary selection in Basque, as it would rule [-ERG] auxiliaries out, contrary to facts. To solve the problem, the application of (44)—and (46)—must be ordered after the lexical insertion into the V morpheme.
However, this analysis faces empirical problems. Although the rule in (44) makes displaced ergatives and true ABS morphemes equal, they still behave differently as regards the allomorphy of plural markers. As it turns, true ABS morphemes convey the insertion of so-called ABS plural markers (/-z-, -it-, -zhi-, -tea-, -de-, -ra-, -u-/)—see (5) in §1—, while displaced ergatives take the idiosyncratic plural marker /-en-.\(^{29}\) Compare (45a) to (45b):

(45) a. g-a-rama-tza
   1PL.ABS-CM-ST(bring)-PL.ABS

b. g-en-e-rama-n
   1PL.ABS\(_2\)-PL.ABS\(_2\)-CM-ST(bring)-PST

The rule in (44) thus turns out too powerful in the light of the contrast in (45).

### 4.3.1.2. ED as a deletion-rule

As an alternative to the restructuring-approach, ED could be analyzed as a rule that simply takes the [ERG] specification of the ERG node off, as formulated in (46):

(46) [ERG] \(\rightarrow\) [ ] in env. [ABS, -PART] + … [____, +PART] + [-PRES]

Again, (46) would preclude the insertion of the suffixal vocabulary items for Person into the ERG node and would license the insertion of the prefixal markers, this time necessarily lacking any specification for [CASE]. The problem to this second approach is brought by allocutive past forms of ABS *izan* “to be”, in particular by *zuan*. The relevant contrast is the one in (47). Zen in (47a) is the 3rd person past form of ABS *izan* “to be”, and *zuan* in (47b), its corresponding allocutive form:

(47) a. z-Ø-O-en\(^{30}\)
   EPTh-CM-ST(*izan*)-PST

b. z-Ø-u-a-n
   EPTh-CM-ST(*edun*)-ALLO\(_M\)-PST

Two conflicting morphological properties coincide in *zuan* that put a [CASE]-based approach to the test. On the one hand, the allocutive marker triggers the unexpected occurrence of the ERG auxiliary *edun* “to have”, a typical ergative-like property. On the other hand, the allocutive marker fails to undergo ED, a non-ergative property. Under a morphological analysis that takes [CASES] as primitives, the two contradictory properties can only be handled by ordering rules, and in particular by ordering restructur­ing-rules. Thus, a first restructuring-rule will turn the initial [ALLO] feature of the ALLO node into [ERG], so opening the way to the insertion of *edun* “to have”. Once the verb is inserted, a second restructuring-rule must undo the effects of the former and turn the now [ERG] feature of the ALLO node back into [ALLO] in order to block ED, namely (46).

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\(^{28}\) This argument was first presented in Albizu & Eguren 2000.

\(^{29}\) It is quite controversial that /-en-/ be a plural marker in Standard Basque. From a diachronic viewpoint, that is clearly not the case. But from a synchronic perspective, the systematicity of the contrast between (1\(^{st}\) and 2\(^{nd}\) person) singular and plural forms—that is, n-u-en '1SG.ABS-ST(*edun*)-PST', vs. g-en-u-en '1PL.ABS-PL.ABS-ST(*edun*)-PST'—seems to point out in that direction, especially if we put this fact together with the systematic cooccurrence of Basque plural ABS person prefixes and indepent plural markers (cf. (5) in §1). Be that as it may, the contrast in (45) —and, therefore, also my point in the text— holds regardless of the morphological analysis of /-en-/.

\(^{30}\) Iz-I is analyzed as an epenthetic prefix in parallelism to z-i-O-en 'EPTh-CM-ST(*izan*)-PL.ABS-PST'. Nonetheless, it could also be treated as an allomorph of the verb on the basis of n-int-z-en '1SG.ABS-CM-ST(*izan*)-PST'.
However, although descriptively correct, the morphological analysis of _zuan_ in terms of [ALLO]'s return trip to [ERG] is not particularly elegant nor appealing.

### 4.3.2. An alternative: a fine-grained definition of cases

Much better suited to handle the above ED-facts is a theory like the one I have presented in §3 that relies on a fine-grained definition of cases in Basque. Indeed, the system turns out much more flexible in order to bring the problematic examples like _generaman_ in (45) and _zuan_ in (47) that display mixed morphological properties into terms. On the basis of our redefinition of cases in (17) and repeated in (33), the phenomenon of ED is recast as a deletion-rule that prunes the ERG node’s initial [CASE, +MARK, -OBL, +ARG] morphological structure and reduces it to the feature [CASE]. The rule is formulated in (48):

(48) \[
[\text{CASE, +MARK, -OBL, +ARG}] \rightarrow [\text{CASE}] \text{ in env. } [-\text{MARK}, -\text{PART}] + \ldots + [\underline{\phantom{MARK}}, +\text{PART}] + [-\text{PRES}]
\]

Provided that the vocabulary items for familiar 2^{nd} person (masculine) are those in (34), now repeated in (49), the displacement effect is readily accounted for. In accordance with the Subset Principle (§2), the elimination of the [+MARK] feature by (48) will rule the suffix /-h/ in (49b) out and will open the way to the prefix /Ø-/ in (49a).

(49) a. /Ø-/ \[+2, +FAM\]  
    b. /-k, -a-/ \[+2, +FAM, +MASC, +MARK\]

I should add that, for this analysis to work, (48) must be ordered after the insertion of the verb stem, namely, the auxiliary *edun* “to have”. This minimal ordering is required to ensure that the right auxiliary —that is, the [+ERG] auxiliary— will be selected despite the effects of (48). We will come back to this in §4.3.2.2. —cf. also footnote 33.

### 4.3.2.1. ED and plural markers

The distinct plural allomorphy associated to true ABS prefixes and to displaced ergatives —that is, /-tza-/ in _garamatzza_ vs. /-en-/ in _generaman_, respectively— also follows from (48). Crucially, the morphological content of the ERG node coming out of the ED-rule ([CASE]) differs from that of the ABS node ([-MARK]). Therefore, we just need the two vocabulary items in (50) to make our account of the facts complete:

(50) a. /-tza-/ \[\underline{\phantom{MARK}}\] in env. _/eraman/_ + \ldots + [-MARK, \underline{\phantom{MARK}}]\[31\]  
    b. /-en-/ \[\underline{\phantom{MARK}}\]

In (50), the true ABS plural marker /-tza-/ includes the feature [-MARK] in its very close morphological context, while /-en-/ is the elsewhere pluralizer, unspecified for case. Accordingly, in instances of ED the Subset Principle rules /-tza-/ out because its contextual [-MARK] specification is missing under the ERG node and thus forces the insertion of /-en-/.

---

31 For simplicity’s sake, I limit /-tza-/’s morphological environment only to forms of _eraman_ “to bring”. However, the list of verbs making use of /-tza-/ as their ABS plural marker also includes _ibili_ “to walk”, _ekarri_ “to bring”, _erabili_ “to use” and _eran_ “to carry”. Parallel vocabulary items are also posited for other true ABS plural markers like /-is-, -zki-/ in Albizu 2001a.
The opposite result will be obtained, however, as regards their insertion into the ABS node: although now the two vocabulary items qualify for insertion, the Elsewhere Principle comes into play and gives precedence to the most specific /-tza-/ over /-en-/.

4.3.2.2. ED and allocutivity

Our system also derives the conflicting morphological properties of the allocutive form zuan in (47)—that is, the unexpected insertion of the ERG auxiliary *edun “to have” and its lack of ED-effects—in a natural way, without serial loops. To begin with, the effects of ED are neutralized in allocutive forms by virtue of our own redefinition of ALLO case as [CASE, +MARK, -OBL, -ARG]. Thus, the deletion-rule in (48) for ED, that only targets [+ARG] morphemes, may not apply to it because of its opposite [-ARG] specification.32

In its turn, the analysis of the auxiliary alternation triggered by the ALLO node also profits from our redefinition of cases. Indeed, a full account of the fact will simply require a fine-grained definition of izan “to be” and *edun “to have” along the lines defended in this article. In particular, both auxiliaries’ traditional characterization in terms of [+ERG] is recast as illustrated in (51). In (51), *edun “to have” becomes a [-OBL] auxiliary, while izan “to be” is the elsewhere vocabulary item:

\[
\begin{align*}
(51) & a \quad /izan/ \leftrightarrow [V] \\
& b \quad /^{*} \text{edun}/ \leftrightarrow [V] \text{ in env. } \_+\ldots + [-\text{OBL}]
\end{align*}
\]

Given (51), the ALLO node provides the contextual specification [-OBL] that */^*\text{edun}/*s insertion into [V] would require to abide by the Subset Principle. Accordingly, the choice between (51a) and (51b) will be dictated by the Elsewhere Principle, which will favor the insertion of */^*\text{edun}/* over that of */izan/*33,34.

5. Conclusion

Considerations on the economy of vocabulary items for Person and on allocutivity and Ergative Displacement have underscored the methodological as well as empirical limitations of a morphological analysis of Basque finite verbs that exclusively relies on [ABS], [DAT], [ERG] and [ALLO] features. This article’s argumentation has been framed

32 For concreteness’ sake, I should note that in this case the ALLO node undergoes the same deletion-rule earlier proposed in (35) for *edin “to be” —cf. §4.2.3— that gets rid of its terminal feature [-ARG]. That rule is now repeated in (i):

\[
(i) \quad [+\text{MARK}, -\text{OBL}, -\text{ARG}] \leftrightarrow [+\text{MARK}, -\text{OBL}] \text{ in env. } [\text{III}] + \ldots + _+
\]

This much is needed in order to account for the absence of the /d-/ > /z-/ alternation in the corresponding present allocutive form d-O-u-k ‘EPHT-CM-ST(*edun)-ALLO’ —cf. also §4.2.3. In any event, the application of (i) does not interfere with our account in the text.

33 See footnote 23.

34 The reader should be aware, however, that a full morphological analysis of allocutivity requires further concretion. For instance, an extra rule is independently needed in the system in order to block auxiliary alternations in the allocutive forms of neuter ABS-DAT izan “to be”, that is, the pattern in (i):

\[
(i) \begin{align*}
& a \quad n-a-tza-i-o \\
& b \quad n-a-tza-i-o-k
\end{align*}
\]

See Albizu 2001b for details. Such a rule also turns out unavoidable under the [CASES]-based approach discussed in §4.3.1.
within the Distributed Morphology Theory, but it seems to me that the same problem would carry over to other morphological frameworks.

To solve the problem, this article has argued in favor of an enriched formal system in which cases are viewed as clusters of features organized in a hierarchical manner. ABS, DAT, ERG and ALLO cases have thus been redefined in terms of the basic binary features $[\pm \text{MARK}](\text{ed})$, $[\pm \text{OBL}](\text{ique})$, $[\pm \text{ARG}](\text{ument})$. In any case, no special stress should be put on features’ names, as labels are totally secondary to the proposal.

References


BASQUE VERBAL MORPHOLOGY: REDEFINING CASES


