The *have/be* alternation in Basque

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Abstract

Basque has a *have/be* alternation similar to the one found in several Romance and Germanic languages. I provide evidence from this language confirming the hypothesis that these two verbs are grammatically related, as proposed in Freeze 1992 and Kayne 1993. However, by examining evidence from several types of syntax/morphology mismatches, I argue that the nature of this alternation is morphological, not syntactic. More specifically, within the framework of Distributed Morphology, I provide an analysis in which the alternation in Basque is the result of certain restrictions on the insertion of these verbs.

Keywords: Auxiliary selection, *have/be* alternation, Distributed Morphology, Basque.

In Freeze 1992 and Kayne 1993, it is argued that the verbs *have* and *be* are related derivationally. Specifically, they propose that this alternation is basically a syntactic phenomenon. Freeze (1992) claims that possessive and existential *have* is the spell-out of the verb *be* with an incorporated preposition, and Kayne (1993) extends this

analysis to this same alternation in the auxiliary system of Romance and Germanic languages.

In this paper, I examine the *have/be* alternation in Basque. Even though Basque confirms the general hypothesis that these two verbs are grammatically related, there are several contexts that show that this relation is not syntactic, but morphological. I discuss two kinds of cases: (i) those in which the alternation does not correlate with a syntactic contrast, but it does correlate with a morphological contrast; and (ii) cases in which the alternation correlates with a difference in syntactic configuration, but in which the syntactic analysis in fact makes the wrong prediction. As I argue below, all these cases receive a straightforward explanation if auxiliary selection in Basque is analyzed as the result of morphological restrictions imposed on the insertion of *have* and *be*.

1 Auxiliary selection in Basque

In Basque, an ergative language, a tensed verb agrees in person and number with absolutive, dative, and ergative arguments in the clause. This three-way agreement is exemplified in (1), where, for reasons that will become clear below, ergative agreement is labeled Agr_1, absolutive agreement Agr_2, and dative agreement Agr_3.[1]

(1) a. Jon-Ø Bilbo -ra joa-n   d   -a.

   Jon-A   Bilbao-to go -PRF 3.S.Agr_2-be

   'Jon has gone to Bilbao.'

2

b. Zu -ek   Miren-Ø ikus-iko   d   -u   -zue.

   you-E.P Miren-A   see -FUT 3.S.Agr$_2$-have-2.P.Agr$_1$

   'Y'all will see Miren.'

c. Ni-k ikasle -ei   ingles -a   irakas-ten d   -i   -e   -t.

   I -E student-D.P English-A.S teach -IMP 3.S.Agr$_2$-have-3.P.Agr$_3$-1.S.Agr$_1$

   'I teach English to the students.'

Unlike Romance and Germanic languages, all tenses, not just perfect or perfective ones, are compound in Basque for most verbs,[2] as exemplified in (1b) with the future, and in (1c) with the imperfective. Furthermore, as can be seen in the contrast between (1a) and (1b,c), there are two auxiliaries, whose citation forms are *izan* 'be' and *edun* 'have'. [3]

Before describing their uses as auxiliaries, it is important to note some general properties of these two verbs. First, *izan* is one of the two verbs that are used in copular sentences. In Basque, as in Spanish and other Romance languages, there are two copular verbs, *izan* and *egon*, which correspond to Spanish *ser* and *estar* respectively. As in Spanish, the difference between them can be roughly described as follows: *izan* (Spanish *ser*) is used with individual level predicates, and *egon* (Spanish *estar*) with stage level predicates. Second, *edun*, in some dialects, is used to express possession, as with English *have*. In other dialects, *edun* can only be used as an auxiliary in compound tenses, and the verb *eduki* is used for possessive meanings. As we will see below, the analysis proposed here applies to the verbs *izan* 'be' and *edun*

'have' both as auxiliaries and as nonauxiliaries.

At first sight, it seems that their distribution as auxiliaries is parallel to their counterparts in other languages with auxiliary selection: *izan* 'be' is used with unaccusative predicates (1a), and *edun* 'have' with transitive ones (1b, c). Furthermore, as exemplified in (2), most unergative verbs are complex verbs formed by a noun and the verb *egin* 'do', that is, they are transparently transitive, and, as expected, they need *edun* as auxiliary.

(2)   Jon-ek barre-Ø egi-n   d   -u   -Ø.

Jon-E laugh-A do-PRF 3.S.Agr$_2$-have-3.S.Agr$_1$

'Jon has laughed.'

However, if we examine these specific examples more closely, there is another fact that correlates with the *have/be* alternation, and that also seems like a good candidate for being responsible for the alternation. Specifically, all sentences in which *edun* 'have' is used (e.g. (1b, c, 2)), the auxiliary also contains Agr$_1$ (i.e. ergative agreement), while the one in which *izan* 'be' is used (e.g. (1a)), Agr$_1$ is absent. Thus, there are two possible analyses of the *have/be* alternation, which are summarized in (3).

(3)   a.   *The syntactic analysis: edun* 'have' appears in transitive clauses, and *izan* 'be' in intransitive ones.

        b.   *The morphological analysis: edun* 'have' appears in verbs with Agr$_1$, and *izan* 'be' in verbs without Agr$_1$.

For most cases, the two analyses make the same predictions, since, as in the examples in (1, 2), syntactic (in)transitivity usually coincides with the presence or absence of Agr_1. In the next section, I examine certain cases in which there these two factors do not coincide, and that show that the morphological analysis makes the right predictions.

2 Syntax-morphology mismatches

In this section, I examine certain syntax/morphology mismatches in Basque, arguing that they provide evidence for the morphological analysis of the *have/be* alternation in this language.

2.1 The Person/Case Constraint in Basque

As in many other languages with rich verbal agreement, there is a condition that restricts the possibilities of agreement with internal arguments. Specifically, when a finite verb has both Agr_2 (i.e. absolutive agreement) and Agr_3 (i.e. dative agreement), Agr_2 must be third person. This restriction is standardly known as the *Person/Case Constrain* (PCC; see, among others, Perlmutter 1971, Bonet 1991), and is exemplified in (4) for Basque.

(4)   * Jon-ek ni -Ø etsai -ari sal -du   n   -ai   -o   -Ø.

           Jon-E.S me-A enemy-D.S sell-PRF $1.\text{S}.\text{Agr}_2$-have-$3.\text{S}.\text{Agr}_3$-$3.\text{S}.\text{Agr}_1$

           'Jon has sold me to the enemy.'

As can be seen in (4), the PCC clearly holds in transitive sentences. In intransitive sentences, however, there is dialectal variation. Whereas in Standard Basque it is possible to have Agr_3 and nonthird Agr_2 together (5a), this is not possible in many other dialects, as exemplified in (5b), taken form the western dialect of Ondarroa.

(5)   a.   Ni-Ø Jon-i joa-n   n   -atzai-o.

           I -A Jon-D go -PRF 1.S.Agr_2-be   -3.S.Agr_3

           'I have gone to Jon.'

     b.   * Su -Ø   ni -ri gusta-ten s   -a -sta.

           you-A.S me-D like   -IMP 2.S.Agr_2-be-1.S.Agr_3

           'I like you.'

The relevance of this fact for auxiliary selection has to do with the strategy that is used to avoid a PCC violation in intransitive clauses in Ondarroa Basque. In this dialect, in a sentence like (5b), an auxiliary is used that morphologically looks like a transitive one. This is exemplified in (6).

(6)   **Su** -**Ø**   ni -ri es d-   -**o**   -sta   -**su**   gusta-ten.

           you-A.S me-D not 3.S.Agr_2-**have**-1.S.Agr_3-**2.S.Agr_1** like -IMP

           'I don't like you.'

In (6), the absolutive argument is second person. Since there is also a dative argument, agreement on the finite verb with these two arguments would cause a violation of the PCC. In order to avoid this, Agr_1 (i.e. what is usually ergative agreement) is used

to agree with the absolutive argument, instead of the expected Agr_2. Note also that the absolutive argument remains absolutive. The result is a syntax/morphology mismatch: Agr_1, which usually agrees with an ergative argument, agrees in this case with an absolutive argument. Furthermore, the appearance of Agr_1 on the finite verb triggers the use of the auxiliary *edun* 'have', instead of *izan* 'be'. Finally, since Agr_2 is obligatory in all finite verbs, it is realized as third person singular (i.e. the default). The result is a finite verb that is identical to the one in a ditransitive sentence such as (7).

(7) Su -k   ni -ri es   d   -o   -sta   -su   emo-n   liburu-Ø.
     you-E.S me-D not 3.S.Agr$_2$-have-1.S.Agr$_3$-2.S.Agr$_1$ give-PRF book -A
     'You haven't given me a book.'

The finite form in (6) contrasts sharply with the one in (8), where there is no context that could trigger a PCC violation (i.e. the absolutive argument is third person). In the latter, as expected, there is no Agr_1, and the auxiliary *izan* 'be' is used.

(8) Jon-Ø ni -ri es   g   -a -sta   gusta-ten.
     Jon-A me-D not 3.S.Agr$_2$-be-1.S.Agr$_3$ like   -IMP
     'I don't like Jon.'

However, the two sentences seem to be syntatically identical in the relevant aspects. Thus, even though Agr_1 (i.e. what is usually ergative agreement) is used in the finite verb in (6), the argument that is supposed to be absolutive remains absolutive. In

sum, a PCC violation is avoided by changing the morphology of the finite verb (by using Agr_1 instead of Agr_2), but the syntax is not altered. This, in turn, seems to force the choice of *have* over *be* as the stem of the auxiliary. This suggests that, at least in some cases, auxilairy selection in Basque depends on morphological, not syntactic, factors.

2.2 Allocutive agreement

In many dialects of Basque, there is a different case of syntactically unmotivated Agr_1 from the one discussed above. In these dialects, finite verbs heading root declarative clauses have to contain second person agreement, even in cases where there is no second person argument in the clause. This phenomenon is traditionally known as *allocutive agreement*. (9) contains some relevant examples.[4]

(9)   Hi -Ø   etorr-i   h   -aiz,

        you-A.S come-PRF 2.S.Agr_2-be

        baina beste-ak   ez   d   -itu -**k**   etorr-i.[5]

        but   other-A.P not 3.P.Agr_2-have-**2.s.Agr₁** come-PRF

        'You have come, but the others have not come.'

In (9), there are two root auxiliaries. The first one, *haiz*, agrees with a second person absolutive argument. In the second sentence, event though there is no second person argument, and the finite verb, *dituk*, contains a second person agreement morpheme, apart from the expected third person absolutive agreement.

The specific items that are used to realize allocutive agreement are identical to either dative (Agr_3) or ergative agreement (Agr_1). Specifically, as illustrated in (10a), if the finite verb agrees with an ergative argument (via Agr_1), allocutive agreement is realized as Agr_3. The result is a finite verb that is identical to one containing agreement with both ergative and second person dative arguments (see (10b)).

(10) a. Ni-k liburu-a   eros-i   d   **-i**   **-a**   -t.

I -E book -A.S buy-PRF 3.S.Agr_2-**have-2.S.Agr_3**-1.S.Agr_1

'I have bought the book.'

b. Ni-k hi -ri   liburu-a   eros-i   d   -i   -a   -t.

I -E you-D.S book -A.S buy-PRF 3.S.Agr_2-have -2.S.Agr_3 -1.S.Agr_1

'I have bought the book for you.'

If, on the other hand, there is no ergative argument to agree with, allocutive agreement is realized as Agr_1, as exemplified in (11a). In this case, the finite verb is just like the one in (11b), which agrees with a second person ergative argument.

(11) a. Jon-Ø   eror-i   d   **-u**   **-k**.

Jon-A.S fall -PRF 3.S.Agr_2-**have-2.S.Agr_1**

'Jon has fallen.'

b. Hi -k   zer -Ø   eros-i   d   -u   -k?

you-E.S what-A.S buy-PRF 3.S.Agr_2-have-2.S.Agr_1

'What have you bought?'

What is important for present purposes is the fact that when allocutive agreement is realized as Agr$_1$, as in (11a), the auxiliary must be *edun* 'have'. Crucially, the sentence is syntactically intransitive (i.e. there is no ergative argument), which means that the appearance of Agr$_1$ is not motivated syntactically. Thus, as in the case discussed in the previous section, this constitutes further evidence that the *have/be* alternation in Basque is depedent on purely morphological factors.

3 Nonfinite forms

In the previous section, I discussed cases in which the appearance of syntactically unmotivated Agr$_1$ triggers the presence of *edun* 'have'. In this section I discuss the opposite case, where despite the transitivity of the clause, the relevant verb lacks Agr$_1$, and therefore it is realized as *izan* 'be', rather than *edun* 'have'.

Verbal agreement in Basque is restricted only to finite forms. Nonfinite verbs never have any kind of agreement. Given this fact, the morphological analysis makes the following prediction: the verb *have* in Basque has no nonfinite forms. In fact, this is well known in Basque linguistics; the citation form for this verb, *edun*, a past participle, is not a possible word.

Given that auxiliaries are used mainly in compound finite tenses, it is actually not easy to find relevant examples of nonfinite auxiliaries. One case is provided by a reduced class of verbs, which I shall term *defective*. These verbs are special in that they cannot bear any verbal morphology. For instance, in "simple" tenses (i.e. tenses

in which there is no aspectual suffix and which usually involve no auxiliary verb), they need an auxiliary that can bear inflectional morphology (i.e. tense and agreement), as exemplified in (12).

(12)   a.   Jon-ek liburu hori-Ø   nahi d   -u   -Ø.
           Jon-E   book   that-A.S want 3.S.Agr$_2$-have-3.S.Agr$_1$
           'Jon wants that book.'

       b.   Jon-Ø Bilbo -n bizi d   -a.
           Jon-A   Bilbao-in live 3.S.Agr$_2$-be
           'Jon lives in Bilbao.'

It is important to note that these verbs are exceptional only in that they cannot bear verbal morphology. Otherwise, clauses containing them are not excpetional. Specifically, the *have/be* alternation works as predicted both by the syntactic and the mophological analysis, as can be seen in (12).

The relevant examples are those in which a verb is required to bear some type of nonfinite morphology, such as participles in compound tenses. As expected from defective verbs, an additional auxiliary is needed to bear participial morphology, as exemplified in (13).

(13)   a.   Jon-ek liburu hori-Ø   nahi **iza**-ten d   -u   -Ø.
           Jon-E   book   that-A.S want **be** -IMP 3.S.Agr$_2$-have-3.S.Agr$_1$
           'Jon usually wants that book.'

b. Jon-Ø Bilbo -n bizi **iza**-n d -a.

Jon-A Bilbao-in live **be**-PRF 3.S.Agr$_2$-be

'Jon has lived in Bilbao.'

As can be seen in (13), the nonfinite auxiliary inserted is always *izan* 'be', irrespective of the transitivity of the clause. This is exactly as predicted by the morphological analysis, since nonfinite forms do not have any form of agreement, including Agr$_1$. It is also important to stress the fact that these auxiliaries inserted in the context of defective verbs do participate in the *have/be* alternation, as shown by the finite examples in (12). As in previous cases, it is clear that what determines directly the distribution of *edun* 'have' and *izan* 'be' is a morphological factor (presence vs. absence of Agr$_1$), not a syntactic one (such as (in)transitivity).

Finally, another case in which one can find the relevant nonfinite forms comes from the dialects in which *edun* 'have' can be used as a possessive verb. (14a) is an example of this verb in a simple tense, and (14b) in a compound tense.

(14) a. Jon-ek liburu bat-Ø d -u -Ø.

Jon-E book one-A 3.S.Agr$_2$-have-3.S.Agr$_1$

'Jon has a book.'

b. Jon-ek liburu hori-Ø **iza**-ten d -u -Ø.

Jon-E book that-A.S **be**-IMP 3.S.Agr$_2$-have-3.S.Agr$_1$

'Jon usually has that book.'

In (14a), a simple tense is used, which means that possessive *have* appears as a finite verb. Since the finite verb has Agr_1, the verb used is *edun* 'have'. However, consider the case of (14b), where a compound tense is used, which means that the main verb, possessive *have*, appears in a nonfinite form, and therefore has no Agr_1. As predicted by the morphological analysis, the possessive verb is realized as *izan* 'be', not *edun* 'have' in this case. Otherwise, the clause containing it is perfectly regular. Specifically, it is syntactically transitive, the external argument is ergative, and the finite verb (the auxiliary) is *edun* 'have' and contains Agr_1 (ergative agreement). As in previous cases, the presence of *edun* 'have' or *izan* 'be' depends on morphological factors, not syntactic ones.

4   Spelling out the morphological analysis

In the previous sections, we have seen a number of arguments in favor of the morphological analysis. In this section, I provide a way to formalize it within a morphological framework assuming late insertion. Finally, I also examine certain facts that provide an apparent counterargument to the analysis. As I show, the analysis can be easily extended to cover those facts.

As argued above, the presence or absence of Agr_1 is what governs the *have/be* alternation in Basque. This generalization can easily be formalized in a morphological framework that assumes late insertion, such as Distributed Morphology (see Halle and Marantz 1993). I propose that the alternation is due to conditions on the inser-

tion of vocabulary items realizing the relevant verbal stems. Some of the necessary vocabulary entries within this analysis are represented in (15).[6]

(15)   a. $/u/ \leftrightarrow V \ / \ \underline{\quad} \ \mathrm{Agr}_1$

         b. $/a/ \leftrightarrow V$

In these entries, the *have/be* alternation is simply seen as the consequence of a restriction on the insertion of *have*: if Agr_1 is present, *have* is inserted (15a); otherwise, the default *be* is inserted (15b).

There is a phenomenon in Basque morphology that seems to provide a counter-argument to the morphological analysis. In certain contexts,[7] agreement with the ergative argument is realized as Agr_2, that is, with affixes that are normally used for absolutive agreement, and there is no agreement with the absolutive argument. This phenomenon is commonly known as *ergative displacement* (ED) and is exemplified in (16b).

(16)   a.   Gu-k zu -Ø   ikus-i   z   -intu -gu   -n.

              we -E you-A.S see -PRF 2.S.Agr_2-have-1.P.Agr_1-PST

              'We saw you.'

         b.   **Zu -k**   Jon-Ø ikus-i   z   -enu -en.

              you-E.S Jon-A see -PRF **2.S.Agr_2**-have-PST

              'You saw Jon.'

As shown in (16a) the Agr_2 prefix *z-* is typically used for second person absolutive agreement. In ED contexts, such as (16b), this same prefix agrees with the ergative,

rather than the absolute, argument. Furthermore, there is no agreement with the absolute argument, and Agr_1 seems to be absent. However, contrary to what might be expected in the morphological analysis, the verb used is *edun* 'have', as shown in (16b). On the other hand, the syntactic analysis makes the right prediction: the choice of *edun* correlates with syntactic transitivity.

In order to find a solution for this problem, we must first ask what kind of process drives ED. Laka (1993) and Albizu and Eguren (2000) defend the view that it is a morphological process. The basic insight behind these analysis is that Agr_2 in Basque must not be empty, and that under the relevant conditions, it can be used for agreement with the ergative argument.[8] One of the main reasons for assuming it is not a syntactic process is that ED does not seem to affect the syntax of the clause. Thus, as shown in Laka 1993, the external argument is ergative, and it is also, as expected, the highest DP in the clause.

Let us assume, then, some version of the morphological analysis for ED. Under this view, the relevant facts about ED can be accomodated under the morphological analysis of the *have/be* alternation. Recall that the apparent problem with ED is that *edun* 'have' is used, even though, apparently, there is no Agr_1. However, if we assume that, in the syntax, the finite verb in ED contexts has the same structure as any other finite verb, the input to the postsyntactic morphological component does contain an Agr_1 node. As argued in Albizu and Eguren 2000, there is in fact morphological evidence that, even though ergative agreement is not realized in its

canonical position, as Agr_1, this Agr_1 is still in some sense present in the structure of the verb.[9] Furthermore, Laka's (1993) version of the morphological analysis of ED is implemented by assuming that the node containing ergative agreement features moves from the Agr_1 position to the Agr_2 position, leaving a trace behind. Thus, even after ED occurs, Agr_1 is still present in the structure (in the form of a trace). The consequence is that, when vocabulary insertion occurs, the root of *edun* 'have' is inserted (see 15). Thus, under plausible assumptions about ED, the apparent puzzle posed by this phenomenon for the morphological analysis of the *have/be* alternation can receive a natural explanation.

5 Conclusion

In this paper, I have discussed some interesting facts about the *have/be* alternation in Basque. Even though the facts seem to confirm the general hypothesis that these two verbs are grammatically related, I have argued that the alternation is basically a morphological phenomenon.

The question remains whether the *have/be* alternation is a uniform phenomenon accross languages. The morphological analysis proposed above crucially depends on the fact that Basque finite verbs have ergative agreement. On the other hand, other languages that display this alternation, such as in Romance and Germanic, are not ergative languages. Thus, unless a deeper explanation for the facts is found which can be extended to nonergative languages, it seems that the *have/be* alternation is

not a uniform pehnomenon across languages.

Notes

[1]In the examples, I use the following abbreviations: A (absolutive), D (dative), E (ergative), FUT (future), IMP (imperfective), P (plural), PRF (perfective), PST (past), S (singular).

[2]There are a very reduced number of verbs, traditionally called *synthetic*, which can also appear in simple tenses.

[3]Even though I am following standard practice in using *edun* as the citation form of this verb, it is worth noting that this verb has no nonfinite forms (see §3). Since the citation form of verbs is the past participle, *edun* is in fact a reconstruction of what the past participle of this verb should be.

[4]The data in this section are from Eguren 1995, which concentrates mainly on Guipuscoan dialects. Allocutive agreement facts in other dialects are more complicated, but basically confirm the argument presented in this section. Allocutive agreement is a rather complex phenomenon, but I have omitted details that are not inportant for the argument (see Eguren 1995 for details).

[5]In the dialect discussed here, allocutive agreement is used only in informal contexts, that is, when the appropriate personal pronoun is the informal singular *hi*. In other dialects, it also occurs in other contexts, that is, with the formal singular pronoun *zu* and the plural *zuek* (unmarked for formality).

[6]The vocabulary entries in (15) must be understood as partial, since several details have been ignored. First, as can be seen easily by inspecting all the examples provided so far, both *edun* 'have' and *izan* 'be' have several allomorphs, and these also vary dialectally. This probably means that there are additional vocabulary items (and morphological rules) involved in the analysis. Second, I do not necessarily assume that labels like "Agr_1" and "Agr_2" are actually more than simply convenient labels. Presumably, Agr_1 within a finite verb can be easily identified without reference to this label. Finally, Agr_1 is not always adjacent to the verb stem (compare (1b), where it is adjacent, with (1c), where Agr_3 intervenes). Since none of these details are relevant for the argument, and including them would take us too far afield, I have chosen to ignore them for ease of exposition.

[7]There is some degree of dialectal variation with respect to what these contexts are. A necessary condition that has to be met in all dialects is that tense be past, and agreement with the absolutive argument third person. In different dialects further restrictions are added.

[8]Eguren (1995), based on suggestions made in Bonet 1991, proposes a different

morphological analysis of ED. See also Fernández 1999 and Fernández and Albizu 2000 for a syntactically based analysis.

[9]This evidence has to do with allomorphy elsewhere in the finite verb. For reasons of space, I cannot include the relevant examples here, since it would involve discussion of matters that would extend beyond the scope of the present paper. See, however, Albizu and Eguren 2000 for details.

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