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Non-canonical valency patterns in Basque, variation and evolution

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In Standard Basque and in most present-day dialects, coding frames that were exceptional in Old Basque are attested by a sizeable proportion of the verbal lexicon, which results in a system characterized by a typologically uncommon type of split intransitivity. In this paper, we discuss the factors that may have played a role in the expansion of ergative encoding and more specifically of the coding frames <ERG> and <ERG, DAT>, which originally were clearly non-canonical. We argue that the situation observed in present-day Basque implies a change in the constraints underlying the organization of the valency properties of Basque verbs or in their relative ranking.

1. Introduction

Basque is one of the few non-Indo-European languages of Europe. It is spoken in the Basque Country, a small territory that straddles France and Spain. As described by Zuazo (2003), the main dialects of Modern Basque are the Western (Bizkaian and Alaves), Central (Gipuzkoan) and High Navarrese dialects in the Spanish part of the Basque Country, and the Lapurdian-Navarrese (Lapurdian and Low Navarrese) and Zuberoan dialects in the French part. The earliest Basque texts date from the 16th century, although there are poem and proverb collections of the 16th century that show features already obsolete at the time they were published, and are consequently considered by Bascologists as dating back to the 15th century.

The argument structure of Old Basque as attested by texts from the 15th/16th century was characterized by the following regularities (Mounole 2011):

- (a) with very few exceptions, coding frames with two terms in the same case were not possible;

- (b) with few exceptions, all coding frames included a term in the morphologically unmarked absolutive case, and most (but not all) exceptions to this rule concerned verbs borrowed from Spanish or French;
- (c) noun phrases representing agents of typical transitive verbs were in the morphologically marked ergative case;
- (d) argument indexing was fully consistent with case marking.¹

As can be deduced from (b) and (c), the patient of typical transitive verbs appeared in the absolutive case, and with very few exceptions, monovalent verbs assigned the absolutive case to their unique argument, which resulted in a relationship between transitive and intransitive coding of the type commonly designated as ergative alignment ($U=P \neq A$).²

The changes that have occurred during the past five centuries have not affected points (a), (c), and (d).³ As illustrated by Ex. (1), the coding frame of typical transitive verbs is still characterized by the obligatory use of the morphologically marked ergative case for the agent, and $U=P$ alignment is still predominant.⁴

- (1) a. *Hurrek ispilua puskatu dute.*
 child.PL.ERG mirror.SG.ABS break.CMP AUX_{AE}.PRS.3SG.3PL
 ‘The children have broken the mirror.’
- b. *Hurrak etorri dira.*
 child.PL.ABS come.CMP AUX_A.PRS.3PL
 ‘The children have come.’
- c. *Ispilua erori da.*
 mirror.SG.ABS fall.CMP AUX_A.PRS.3SG
 ‘The mirror has fallen down.’

1. We use *index* and *indexing* in the sense of Haspelmath (2013). In the particular case of Basque, this notion coincides with the traditional notion of verbal agreement.

2. Note that, in a language like Basque, confusions may arise from the fact that, according to the standard definitions, *ergative* alignment ($U=P \neq A$) characterizes monovalent verbs that assign the *absolutive* case to their unique argument, whereas those assigning the *ergative* case to their unique argument are involved in *accusative* alignment.

3. Concerning point (d), it must however be noted that the use of absolutive indexes cross-referencing dative NPs was observed by Lafitte (1962: 296) in the Lapurdian coastal varieties, and has been reported since in several Bizcayan and Guipuzcoan varieties – Fernández (2001), Rezac (2008).

4. The following abbreviations are used in the glosses of the examples; ABL: ablative, ABS: absolutive, ALL: allative, AUX_A: A-auxiliary, AUX_{AD}: AD-auxiliary, AUX_{ADE}: ADE-auxiliary, AUX_{AE}: AE-auxiliary, CMP: completive aspect, DAT: dative, DEM: demonstrative, ERG: ergative, FUT: future, GEN: genitive, INCMP: incompletive aspect, INSTR: instrumental, LOC: locative, PL: plural, PRS: present, PST: past, Q: question marker, REFL: reflexive, SG: singular.

However, rule (b) has been considerably relaxed, to the extent that, in Standard Basque and in most present-day dialects, coding frames that were exceptional in Old Basque are attested by a sizeable proportion of the verbal lexicon, which results in a system characterized by a typologically uncommon type of split intransitivity. Not all Basque varieties have been equally affected by the changes in this particular aspect of Basque argument structure. In this respect, Bizkaian at the western extremity of the Basque-speaking territory has been particularly innovative, whereas Zuberoan at the Eastern extremity remains particularly conservative.⁵

In this paper, after presenting the types of coding frames that contradict some of the regularities stated above, and the evolutions resulting in that they cannot be considered exceptional anymore, we discuss the factors that may have played a role in the expansion of coding frames that originally were clearly non-canonical.

The paper is organized as follows. In Section 2, we present the classification of the coding frames available for Basque verbs. Section 3 is devoted to some preliminary remarks on non-canonical coding frames. In Section 4, we discuss some aspects of Basque grammar that have a direct impact on the analysis of the valency patterns and of their evolution. In Section 5, we analyze the expansion of the coding frames lacking an absolutive slot in the history of Basque. In Section 6, we summarize the main conclusions.

2. Coding frames: Definition and classification

In Basque, the definition of the coding frames through which verbs express their argument structure involves argument indexing and case marking of the noun phrases representing arguments. Finite verb forms include 1, 2 or 3 slots for indexes cross-referencing arguments represented by noun phrases in the absolutive, ergative and dative case. In the standard language and in most dialectal varieties, the choice of the index cross-referencing a given argument is generally consistent with its case-marking properties,⁶ and consequently the paradigms of indexes can

5. See Laka (1993b) and more recently Berro (2010) for more details on the variation in the valency properties of monovalent verbs, and for a discussion of their implications for a formal analysis.

6. There are however some exceptions, in particular the phenomenon called *ergative displacement* (Laka 1993a; Gómez & Sainz 1996; Albizu & Eguren 2000), whereby in the past and irrealis, with 1st and 2nd person agents and 3rd person patients, ergative arguments agree with absolutive indexes (*dut* AUX_{AE}-PRS.3SG.1SG vs. *nuen* AUX_{AE}-PST.3SG.1SG). Arteatz (2007) shows that, in the construction illustrated by *Jonek eskailerak erortzen entzun ditu* 'John hear the stairs fall', absolutive arguments in the embedded clause agree with the perception verb of the main clause, and as shown by Rezac & al. (2014), in some varieties of Basque, ergative case/agreement

conveniently be labeled with reference to the case marking of the corresponding noun phrases.

With the exception of a small set of verbs that have synthetic finite forms in some tenses, the finite forms of Basque verbs are analytic forms consisting of a non-finite form of the auxiliated verb inflected for aspect and a clitic auxiliary inflected for tense-modality and person. Aspect inflection is traditionally described as *completive* vs. *incompletive* vs. *future*.⁷ Four auxiliaries can be distinguished according to the number and function of the indexes they include:

- the A-auxiliary (glossed AUX_A) includes a single absolutive index,
- the AD-auxiliary (glossed AUX_{AD}) includes an absolutive index and a dative index,
- the AE-auxiliary (glossed AUX_{AE}) includes an absolutive index and an ergative index,
- the ADE-auxiliary (glossed AUX_{ADE}) includes an absolutive index, a dative index, and an ergative index.

In all Basque varieties, indexing is obligatory in finite clauses for arguments represented by absolutive and ergative noun phrases. The corresponding noun phrases are not necessarily present, and in the third person, their absence is the normal way to encode that the argument in question must be identified to some entity whose identity can be retrieved by the addressee – Ex. (2).

- (2) a. *Haurrek ispilua puskatu dute.*
 child.PL.ERG mirror.SG.ABS break.CMP AUX_{AE}.PRS.3SG.3PL
 ‘The children broke the mirror.’
- b. *Puskatu dute.*
 break.CMP AUX_{AE}.PRS.3SG.3PL
 ‘They broke it.’

In Standard Basque and in most present-day dialects, arguments encoded by dative noun phrases are obligatorily indexed too, but there are dialects in which the indexing of dative arguments overtly expressed by a noun phrase in the dative case is optional.

In such a system, indexing can conveniently be taken as a criterion for distinguishing core arguments from oblique arguments and adjuncts.

is found with the subject of intransitive verbs that would otherwise be absolutive when such verbs combine with *behar* ‘must’.

7. It can be argued that *irrealis* is a more convenient label for the aspect traditionally termed *future*.

Recent publications dealing with Basque argument structure agree on a classification of coding frames into the following six broad types of configurations according to the number of core arguments and the cases assigned to them:

- <ABS> (unaccusative) – Ex. (3a);⁸
- <ABS, DAT> (unaccusative-with-dative) – Ex. (3b);
- <ERG> (unergative) – Ex. (3c);
- <ERG, DAT> (unergative-with-dative) – Ex. (3d);
- <ERG, ABS> (transitive) – Ex. (3e);⁹
- <ERG, ABS, DAT> (transitive-with-dative) – Ex. (3f).

- (3) a. *Ispilua erori da.*
 mirror.SG.ABS fall.CMP AUX_A.PRS.3SG
 ‘The mirror has fallen down.’
- b. *Joni liburuak gustatzen zaizkio.*
 Jon.DAT book.PL.ABS like.INCMP AUX_{AD}.PRS.3PL.3SG
 ‘Jon likes the books.’
- c. *Urak irakin du.*
 water.SG.ERG boil.CMP AUX_{AE}.PRS.3SG.3SG
 ‘The water has boiled.’
- d. *Otsoek ardiei esetsi zieten.*
 wolf.PL.ERG sheep.PL.DAT attack.CMP AUX_{ADE}.PST.3SG.3PL.3PL
 ‘The wolves attacked the sheep.’
- e. *Hurrek ispilua puskatu dute.*
 child.PL.ERG mirror.SG.ABS break.CMP AUX_{AE}.PRS.3SG.3PL
 ‘The children broke the mirror.’

8. The *unaccusative/unergative* terminology is particularly misleading in the case of Basque, since so-called unergatives assign the ergative case to their unique core argument, whereas the unique core argument of unaccusatives is assigned the same case as the patient of prototypical transitive verbs. Note also that:

- (a) in Basque, contrary to the use of the same labels in descriptions of other European languages, ‘unaccusative’ and ‘unergative’ refer to a distinction overtly expressed in case marking and indexation;
 - (b) in the literature on Basque argument structure, the use of the labels ‘unaccusative’ and ‘unergative’ as referring to two morphosyntactic classes of verbs coexists with the use of the same labels as referring to a supposedly universal classification of the meanings of monovalent predicates, which may be a source of confusion.
9. In the Basque varieties that have developed a mechanism of differential patient marking, the transitive pattern can be schematized as <ERG, ABS~DAT> – on the emergence of this differential patient marking pattern, see Mounole (2012).

- f. *Haurrek Joni ispilua eman zioten.*
 child.PL.ERG Jon.DAT mirror.SG.ABS give.CMP AUX_{ADE}.PST.3SG.3SG.3PL
 ‘The children gave the mirror to Jon.’

Arguments represented by ergative noun phrases are cross-referenced by the same ergative indexes irrespective of the presence / absence of an absolutive argument in the same configuration. As illustrated by Ex. (3d), in which a verb referring to a two-participant event and selecting the <ERG, DAT> coding frame combines with the ADE-auxiliary, coding frames including no syntactic slot for an absolutive argument trigger the presence of a default absolutive index of third person singular in the verb form.¹⁰

3. Non-canonical coding frames: First observations

Among the types of configurations enumerated in Section 2, <ERG> and <ERG, DAT> are non-canonical with regard to the regularities observed in Old Basque, and their expansion in the last five centuries constitutes the main topic of this paper. For the sake of completeness, we must also mention variants of the <ERG> type including an additional oblique argument: <ERG, INSTR>, illustrated by *ikasi* ‘learn’ – Ex. (4a), <ERG, LOC>, illustrated by *sinetsi* ‘believe’ – Ex. (4b), or <ERG, ABL>, illustrated by *dimititu* ‘resign’ – Ex. (4c).

- (4) a. *Euskaraz ikasten dut.*
 Basque.SG.INSTR learn.INCMP AUX_{AE}.PRS.3SG.1SG
 ‘I am learning Basque.’
- b. *Sinesten al duzu sorginengan?*
 believe.INCMP Q AUX_{AE}.PRS.3SG.2SG witch.PL.LOC
 ‘Do you believe in witches?’
- c. *Nire kargutik dimititu dut.*
 1SG.GEN charge.SG.ABL resign.CMP AUX_{AE}.PRS.3SG.1SG
 ‘I have resigned from my charge.’

But before analyzing the expansion of the coding frames that include no syntactic slot for an absolutive argument, we must also briefly mention the configurations <ABS, ABS> and <ERG, ABS, ABS>, which violate the constraint according to which a coding frame cannot involve two arguments represented by noun phrases in the same case. Note that the second absolutive term in such configurations cannot be

10. This use of the third person singular index as default is consistent with the fact that the indexing system of Basque can be reconstructed as originally involving overt absolutive and ergative indexes for first and second person only (see Trask 1977; Laka 1993a; Gómez & Sainz 1996).

reflected in verb morphology, since no morphological slot is available for a second absolutive index. In present-day Basque, such configurations are strictly limited to verbs of change, i.e., to cases where there is a predicative relation between the two absolutive terms, as in Ex. (5), and to constructions in which the additional absolutive term characterizes the possessive relationship between the other two terms, as in Ex. (6) (Etxepare 2003: 414–415).

- (5) a. *Ura ardo bihurtu zen.*
 water.SG.ABS wine.ABS turn_into.CMP AUX_A.PST.3SG
 ‘The water turned into wine.’
- b. *Buru hautatu naute (haiek) (ni).*
 head.ABS elect.CMP AUX_{AE}.PRS.1SG.3PL DEM.PL.ERG 1SG.ABS
 ‘They have elected me head.’
- (6) a. *Mikel Jon-en anaia da.*
 Mikel.ABS Jon.GEN brother.ABS be.PRS.3SG
 ‘Mikel is Jon’s brother.’
- b. *Jon-ek Mikel anaia du.*
 Jon.ERG Mikel.ABS brother.ABS have.PRS.3SG.3SG
 ‘Mikel is Jon’s brother.’ lit. ‘Jon has Mikel as a brother.’

However, in ancient texts, *bilatu* ‘look for’ and *eskatu* ‘ask for’, which behave now as transitive verbs occurring in the coding frame <ERG, ABS>, are also found in constructions with two absolutive arguments. For example, (7a) (from the Lazarraga manuscript) would be expressed as (7b) in present-day Basque.

- (7) a. *Beste amore bilatuco nax.* (Laz. A4: 11)
 other lover.ABS search_for.FUT AUX_A.PRS.1SG
 ‘I will search for another lover.’
- b. *Beste amorante bat bilatuko dut.*
 other lover.ABS one search_for.FUT AUX_{AE}.PRS.3SG.1SG
 ‘I will search for another lover.’

Moreover, when the second argument of *eskatu* was definite, texts from the same period show the alternative pattern <ABS, GEN>, which is not attested at all in present-day Basque.¹¹

- (8) a. *Esca equiñon Iesusen gorputzaren.* (Leiz. Mat. XXVII, 58)
 ask AUX_{AD}.PST.3SG.3SG Jesus.GEN body.SG.GEN
 ‘He asked him Jesus’ body.’

11. In Ex. (8), *eskatu* occurs in the radical form *eska*, written *esca*.

The most plausible explanation is that *bilatu* and *eskatu* have developed from the two postpositions *bila* ‘in search for’ and *eske* ‘asking for’, which take a genitive complement and usually combine with movement verbs, as in Ex. (9).

- (9) *Afrikan zehar ibili ziren Livingstone bil.*
 Africa.LOC across walk.CMP AUX_A.PST.3PL Livingstone.GEN in_search_of
 ‘They went across Africa in search of Livingstone.’

We can thus imagine that, originally, *bilatu* and *eskatu* were used in a construction modeled on that of *bila ibili* ‘go in search of’ and *eske ibili* ‘go asking for’. The absolutive encoding of the second argument probably originated from an *absolutive* ~ *genitive* alternation in the coding of the complement of the postposition, since similar alternations are not uncommon in Basque.¹² This construction was subsequently eliminated and replaced by a canonical transitive construction because of its exceptional character. Interestingly, the regularization was achieved by converting the first absolutive argument into an ergative argument, rather than by converting the second one into a dative or oblique argument. This choice is consistent with the tendencies we will observe in the expansion of coding frames lacking an absolutive slot.

4. Some particularities of Basque valency grammar

In this section, we briefly present some aspects of Basque valency grammar that condition the analysis of the valency properties of verbs and may have played a role in the expansion of originally non-canonical valency patterns.

4.1 Valency-changing derivations and valency alternations

Causative derivation is the only valency-changing derivation found in Basque. Basque has no detransitivizing derivation proper. There are however passive and antipassive periphrases, in which one of the core arguments of transitive verbs (the agent in the antipassive periphrasis, the patient in the passive periphrasis) is encoded as the subject of *izan* ‘be’, and the other core argument of the transitive verb appears in an embedded participial clause.

Valency alternations imply no change in the verb stem but are manifested by the choice of the auxiliary. The causative/anticausative alternation is particularly

12. In particular, the complement of the postpositions *bila* and *eske* shows an *absolutive* ~ *genitive* alternation conditioned by definiteness, as illustrated by *Diru eske dabil* ‘(S)he is (lit. goes) asking for money’, with *diru* ‘money’ in the absolutive vs. *Diruaren eske dabil* ‘(S)he is (lit. goes) asking for the money’, with *diru* ‘money’ in the genitive.

productive. As illustrated by Ex. (10), in this alternation, a verb form including an ergative and an absolutive index alternates with a verb form including no ergative index; the absolutive term is interpreted as undergoing the same process in both constructions; the difference is that the construction with an ergative term implies an additional participant in agent role.

- (10) a. *Hurrek ispilua puskatu dute.*
 child.PL.ERG mirror.SG.ABS break.CMP AUX_{AE}.PRS.3SG.3PL
 ‘The children broke the mirror.’
 b. *Ispilua puskatu da.*
 mirror.SG.ABS break.CMP AUX_A.PRS.3SG
 ‘The mirror broke.’

As illustrated by Ex. (11), the choice of the A(D)-auxiliary with Basque verbs involved in this alternation is functionally similar to the addition of the clitic *se* to transitive verbs in Romance languages.

- (11) a. *Los niños rompieron el espejo.* (Spanish)
 the children broke.3PL the mirror
 ‘The children broke the mirror.’
 b. *El espejo se rompió.* (Spanish)
 the mirror REFL broke.3SG
 ‘The mirror broke.’

This functional similarity plays an important role in the ongoing evolution of the valency system of Basque – see Section 5.4.

4.2 Verbs and light verb compounds

Basque makes wide use of light verb compounds. In the vast majority of such formations, the non-verbal element of the compound is an uninflected noun, and *egin* ‘do, make’ is by far the verb most commonly found in light verb compounds, as illustrated in Ex. (12) by *lo egin* ‘sleep’ (lit. ‘do sleep’) or *hitz egin* ‘speak’ (lit. ‘do word’).

- (12) a. *Hurrek lo egiten dute.*
 child.PL.ERG sleep.ABS do.INCMP AUX_{AE}.PRS.3SG.3PL
 ‘The children are sleeping.’
 b. *Gizon horrek ez du euskaraz hitz egiten.*
 man DEM.SG.ERG NEG AUX_{AE}.PRS.3SG.3SG Basque.SG.INSTR word.ABS
 do.INCMP
 ‘This man does not speak Basque.’

Taken as a whole, such compounds are unergative predicates whose argument structure does not involve an absolutive argument. However, this is not in contradiction with the constraint according to which predicative constructions must include an absolutive term, since the noun that forms a compound with *egin* can be analyzed as occupying the absolutive slot in the construction of *egin*. The argument structure of light verb compounds like *lo egin* ‘sleep’ or *hitz egin* ‘speak’ can therefore be represented as <ERG, abs>, where uppercase letters indicate slots for the arguments of the light verb compound taken as a whole, and lowercase letters signal the slot for the non-verbal element of the compound. Crucially, such compounds “are not instances of incorporation of the polysynthetic sort ... the bare nominal and the verb *egin* can be separated by a number of syntactic operations, and the bare nominal can take partitive case” (Etxepare 2003: 397) – see Laka 1993b and Oyharçabal 2007 for a more detailed analysis of Basque light verb compounds.

It must however be observed that, if the assignment of the ergative case to the argument of light verb compounds such as *lo egin* ‘sleep’ or *dirdir egin* ‘shine’ can be viewed as syntactically consistent with the rule of ergative alignment, it is nevertheless hardly compatible with an analysis of the ergative case as a functionally marked case implying a relatively high degree of semantic transitivity. We will return to this question later.

Basque has a few verbs more or less recognizable as originating from the univerbation of the sequence constituted by the two elements of a light verb compound, and some of them at least have coding frames implying that the construction resulting from the incorporation of the bare noun in the absolutive case was subsequently regularized. For example, *atzeman* ‘seize, get’, with the coding frame <ERG, ABS> probably resulted from the univerbation of (*h*)*atz eman*, lit. ‘put finger (on)’; with a coding frame <ERG, ALL, abs> or <ERG, DAT, abs>.

Light verb compounds corresponding to simplex verbs cognate with the non-verbal element of the compound, like *bultza egin* lit. ‘do impulsion’ / *bultzatu* ‘push’ – Ex. (13), are much more common.

- (13) a. *Mutilak ateari bultza egin zion.*
 boy.SG.ERG door.SG.DAT impulse.ABS do.CMP AUX_{ADE}.PST.3SG.3SG.3SG
 ‘The boy pushed against the door.’ (lit. ...did impulse to the door)
- b. *Mutilak atea bultzatu zuen.*
 boy.SG.ERG door.SG.ABS push.CMP AUX_{AE}.PST.3SG.3SG
 ‘The boy pushed the door.’

In this example, a light verb compound used in the frame <ERG, DAT, abs> corresponds to a simplex transitive verb, which means that the dative argument of the light verb compound corresponds to the absolutive argument of the simplex verb. However, in many cases, the arguments of simplex verbs cognate with the

non-verbal element of a light verb compound are encoded in the same way as in the construction of the light verb compound. Consequently, as will be developed below, verbs cognate with the non-verbal element of *egin*-compounds constitute an important proportion of the verbs whose coding frame does not involve an absolutive argument. For example, the light verb compound *dirdir egin* ‘shine’ and the corresponding simplex verb *dirdiratu* equally assign the ergative case to their unique argument – Ex. (14).

- (14) a. *Eguzkiak dirdir egiten du.*
 sun.SG.ERG shining.ABS do.INCMP AUX_{AE}.PRS.3SG.3SG
 ‘The sun shines.’
 b. *Eguzkiak dirdiratzten du.*
 sun.SG.ERG shine.INCMP AUX_{AE}.PRS.3SG.3SG
 ‘The sun shines.’

Consequently, the variation observed in the coding frames of simplex verbs cognate with the non-verbal element of an *egin*-compound can be viewed as the result of the interaction between two conflicting tendencies: a tendency to align the encoding of arguments of the simplex verbs with the encoding of the same arguments in the light verb construction, and a tendency to fill the absolutive slot that would be left empty in a construction fully aligned with that of the light verb compound. In some cases, both variants are found, for example with the simplex verb *jolastu* ‘play’, cognate with the light verb compound *jolas egin* lit. ‘do play’. Note that in such cases, as illustrated by Ex. (15) (taken from Etxepare 2003: 400–401), in the variant with the unique argument in the ergative, the absolutive slot left empty may be filled by a cognate object. In this example, *jolas* in sentence (c) is a noun (which depending on the context may be translated as ‘play, amusement, festival’) whose form coincides with the radical of the verb quoted as *jolastu* ‘play’.

- (15) a. *Jon jolastu da.*
 Jon.ABS play.CMP AUX_A.PRS.3SG
 ‘Jon played.’
 b. *Jonek jolastu du.*
 Jon.ERG play.CMP AUX_{AE}.PRS.3SG.3SG
 ‘Jon played.’
 c. *Jonek jolas polit bat jolastu du.*
 Jon.ERG play nice one.ABS play.CMP AUX_{AE}.PRS.3SG.3SG
 ‘Jon played a nice game.’

4.3 Anaphoric and non-specific readings of unexpressed absolutive arguments

As already mentioned, in Basque, the use of third person indexes with no corresponding noun phrase constitutes the usual strategy to encode that the argument in question must be identified anaphorically. But in the case of absolutive arguments, constructions with a third person singular index and no corresponding noun phrase may be ambiguous between an anaphoric and a non-specific reading, for example with *erre* ‘burn’ – Ex. (16).

- (16) a. *Jonek tabako beltza erretzen du.*
 Jon.ERG tobacco black.SG.ABS burn.INCMP AUX_{AE}.PRS.3SG.3SG
 ‘Jon smokes black tobacco.’
 b. *Jonek erretzen du.*
 Jon.ERG burn.INCMP AUX_{AE}.PRS.3SG.3SG
 ‘Jon burns/smokes it.’ or ‘Jon smokes (= is a smoker).’

In other languages that share with Basque the obligatory indexing of both agents and patients of typical transitive verbs, the expression of non-specific patients may require the use of a special detransitivizing derivation, which in languages with ergative alignment results in modifying the coding characteristics of the agent. The fact that nothing similar occurs in Basque, and that verb forms including a third person singular absolutive index may be ambiguous between an anaphoric and a non-specific reading, must therefore be noted as an important feature of the transitivity system of Basque. Note that this feature is consistent with the existence of verbs that take an ergative argument but no absolutive argument and include a default absolutive index of third person singular.

The maintenance of the ergative encoding of agents in constructions involving a non-specific patient is also consistent with a general tendency of Basque towards consistent encoding of arguments, i.e. towards avoiding situations in which a given argument of a given verb occurs in different constructions with different coding characteristics. But at the same time, this aspect of the transitivity system of Basque implies that Basque is a language in which the use of the ergative case does not necessarily correlate with a relatively high degree of semantic transitivity.

4.4 Atypical objects

By ‘atypical objects’, we mean noun phrases that show the same coding characteristics as patient noun phrases in the construction of typical transitive verbs but do not represent participants. In addition to the non-verbal element of light verb

compounds, two types of atypical objects are common in Basque: cognate objects, and objects expressing a spatial delimitation.

In constructions with cognate objects or objects expressing a spatial delimitation, monovalent verbs occur in formally transitive constructions. Consequently, with monovalent verbs that assign the absolutive case to their unique argument, the introduction of an atypical object results in a change in the coding characteristics of the argument – Ex. (17).

- (17) a. *Gizona kalean ibili zen.*
 man.SG.ABS street.SG.LOC walk.CMP AUX_A.PST.3SG
 ‘The man walked in the street.’
 b. *Gizonak hiru kilometro ibili zituen.*
 man.SG.ERG three kilometer.ABS walk.CMP AUX_{AE}.PST.3PL.3SG
 ‘The man walked three kilometers.’

By contrast, the addition of an atypical object does not modify the coding characteristics of the argument of monovalent verbs that assign ergative case – Ex. (18).

- (18) a. *Jonek korritu du.*
 Jon.ERG run.CMP AUX_{AE}.PRS.3SG.3SG
 ‘Jon ran.’
 b. *Jonek maratoia korritu du.*
 Jon.ERG marathon.SG.ABS run.CMP AUX_{AE}.PRS.3SG.3SG
 ‘Jon ran the marathon.’

In other words, with monovalent verbs that assign absolutive case, the introduction of atypical objects contradicts the tendency towards consistent encoding mentioned in the previous section, whereas this tendency is respected in the case of monovalent verbs that assign ergative case.

Interestingly, with monovalent verbs which show variation in the case they assign to their unique argument, it may happen that cognate objects are possible only for the speakers that treat such verbs as unergatives. For example, *Neskak tangoa dantzatu du* ‘The girl danced the tango’ is possible for the speakers who say *Neskak dantzatu du*, but not for those who say *Neska dantzatu da* ‘The girl danced’, with *neska* ‘girl’ in the absolutive case and the verb conjugated by means of the A-auxiliary.

4.5 The fuzziness of the unergative vs. transitive distinction

Uncontroversial unergative verbs, like *irakin* ‘boil’, never combine with an absolutive NP behaving like the patient NP of transitive verbs. However, many verbs commonly classified as unergative in recent works on Basque argument structure

have more or less marginal uses with an absolutive term that triggers agreement of the absolutive index, and the absolutive term added to the construction of verbs commonly considered unergative is not always an atypical object of the type mentioned in Section 4.4 (i.e., a cognate object, or an object expressing a spatial delimitation). The absolutive term added to the construction of verbs commonly considered unergative may also represent a canonical participant (i.e., an entity that exists independently of the event in which it participates), as in Ex. (19b).

- (19) a. *Jonek bazkaldu du.*
 Jon.ERG have_lunch.CMP AUX_{AE}.PRS.3SG.3SG
 ‘Jon had lunch.’
- b. *Jonek bi arrain bazkaldu ditu.*
 Jon.ERG two fish have_lunch.CMP AUX_{AE}.PRS.3PL.3SG
 ‘Jon ate two fish for lunch.’

In such cases, there is no obvious reason not to analyze (19a) as an instance of the construction in which the missing absolutive argument of a transitive verb is interpreted as non-specific, as in (16b) above. In this particular case, at least for some speakers, the absolutive term in (19b) does not behave in all respects like the absolutive argument of typical transitive verbs, which supports analyzing *bazkaldu* as an unergative verb with a marginal transitive use. For example, at least for some speakers that conjugate *bazkaldu* with the AE-auxiliary, an anaphoric reading of (19a) (‘Jon had IT for lunch’) is impossible. But there are other cases of verbs commonly classified as unergative for which this criterion does not work. For example, for the speakers that conjugate *dantzatu* ‘dance’ with the AE-auxiliary, depending on the context, *dantzatu dut* can be interpreted as ‘I have danced it’ (where *it* refers to a particular type of dance previously mentioned), which means that for those speakers, the cognate object of *dantzatu* behaves in all respects like the second argument of typical transitive verbs.

This question would quite obviously deserve deeper investigation, but it seems reasonable to think that, with unergative verbs whose meaning suggests the possibility of transitive uses, the development of such uses is facilitated by the fact that the introduction of an absolutive argument does not necessitate any morphological readjustment, since a default absolutive index is already present. For example, *borrokatu* ‘fight’ is an intransitive verb conjugated with the A-auxiliary in some Basque varieties – Ex. (20a), and with the AE-auxiliary in others – Ex. (20b). However, speakers that conjugate it with the AE-auxiliary may have at their disposal an alternative construction in which the oblique argument of the intransitive construction is converted into the absolutive term of a transitive construction – Ex. (20c).

- (20) a. *Etsaien aurka borrokatu ginen (gu).*
 enemy.PL.GEN against fight.CMP AUX_A.PST.1PL 1PL.ABS
 ‘We fought against the enemies.’
- b. *Etsaien aurka borrokatu genuen (guk).*
 enemy.PL.GEN against fight.CMP AUX_{AE}.PST.3SG.1PL 1PL.ERG
 ‘We fought against the enemies.’
- c. *Etsaiak borrokatu genituen (guk).*
 enemy.PL.ABS fight.CMP AUX_{AE}.PST.3PL.1PL 1PL.ERG
 ‘We fought against the enemies.’

5. The expansion of coding frames lacking an absolutive slot in the history of Basque

5.1 Occasional changes and general tendencies

In Old Basque, non-borrowed verbs used in a coding frame lacking an absolutive slot (and in particular, monovalent verbs assigning the ergative case to their unique argument, such as *irakin* ‘boil’) were not totally lacking, but they represented a minute percentage of the verbal lexicon.¹³ It is reasonable to assume that their coding frame resulted from isolated accidents in the evolution of individual verbs. The only problem is that such accidental changes are relatively easy to reconstruct in the case of verbs still attested with canonical coding frames in some of their meanings, but cannot be reconstructed with certainty for verbs that have only subsisted with a non-canonical coding frame.¹⁴

In particular, ellipsis conventionalization may explain why some verbs otherwise attested with coding frames including an absolutive slot may occur in coding frames lacking an absolutive slot in some of their meanings.

For example, *ikasi* ‘learn’ can be used as a regular transitive verb, as in (21a), but its second argument can also be a complement clause, and the coding frame <ERG, INSTR> in which *ikasi* may also be found can be explained as resulting from the ellipsis of a dependent verb assigning the instrumental case to its complement – Ex. (21b).

13. The question of borrowed verbs is dealt with in Section 5.4.

14. For example, it is difficult to explain the exceptional coding frame of *irakin* ‘boil’, which is exclusively attested as a strictly monovalent verb with no other possible meaning than ‘boil (intr.)’. This verb seems to include the old causative prefix *ra*, and could therefore be the causative form of *ekin* ‘begin’, ‘act’, as proposed recently by Joseba Lakarra (pers.com.), but this hypothesis implies semantic and syntactic changes that are somewhat problematic.

- (21) a. *Filosofia ikasten dut.*
 philosophy.ABS learn.INCMP AUX_{AE}.PRS.3SG.1SG
 ‘I am learning philosophy.’
- b. *Euskaraz [mintzatzen] ikasten dut.*
 Basque.SG.INSTR speak.INCMP learn.INCMP AUX_{AE}.PRS.3SG.1SG
 ‘I am learning [to speak] Basque.’

Similarly, the verb *hartu* ‘take’ is a regular transitive verb whose use in the frame <ERG> with the meaning ‘take root’ probably results from the ellipsis of *erroak* ‘roots’ in *erroak hartu*, also attested with this meaning.

We can also mention the ellipsis of a reflexive pronoun originally filling the absolutive slot as a possible explanation of the fact that, in the Bizkaian dialect, *urten* ‘go out’ assigns the ergative case to its argument: according to Mitxelena, *urten* ‘go out’ might have developed from an autocausative reading of *egorri* ‘send, throw’.

However, such isolated accidents cannot explain the important increase of the proportion of verbs with coding frames lacking an absolutive slot that occurred in the history of most Basque varieties. A change in the constraints underlying the organization of the valency properties of Basque verbs or in their relative ranking is the only possible explanation of the situation observed in present-day Basque.

5.2 From ‘strict’ to ‘loose’ ergative coding: Evidence from aiming verbs

Most of the verbs occurring in coding frames lacking an absolutive slot are, either verbs cognate with the non-verbal element of a light verb compound, or borrowings. As a rule, the changes in the valency properties of verbs already attested in the ancient texts have not resulted in substituting a non-canonical frame to a canonical one. There is however a semantically consistent group of verbs whose evolution reveals a change in the principles underlying the use of ergative encoding.

In the most ancient Basque texts, aiming verbs (i.e., verbs referring to two participant events in which one of the participants exerts a volitional activity directed toward the other participant, without however triggering a change of state affecting the second participant: *help*, *follow*, *beg*, *attack*, etc.) are typically found with the coding frame <ABS, DAT>, but no modern dialect has maintained this situation (Mounole 2011: 132–136). In all dialects, the aimer tends to show the same ergative coding as the agent of typical transitive verbs, but variation can be observed in the treatment of the second participant: Western dialects have maintained the ancient dative coding, resulting in a non-canonical pattern <ERG, DAT> – Ex. (22a), whereas in Eastern dialects, the original <ABS, DAT> pattern has been replaced by the canonical pattern <ERG, ABS> – Ex. (22b).

- (22) a. *Amaiari bazkaria prestatzen lagundu nion.*
 Amaia.DAT luch.SG.ABS prepare.INCMP help.CMP AUX_{ADE}.3SG.3SG.1SG
 'I helped Amaia prepare the lunch.'
- b. *Amaia bazkaria prestatzen lagundu nuen.*
 Amaia.ABS luch.SG.ABS prepare.INCMP help.CMP AUX_{AE}.3SG.1SG
 'I helped Amaia prepare the lunch.'

The use of <ABS, DAT> as the coding frame for aiming verbs in Old Basque suggests that, at some point in its history, the ancestor of Basque was probably a language characterized not only by ergative alignment, but also by relatively strict constraints on the use of ergative coding. The notion of ergative alignment as it is commonly defined takes into consideration the relationship between the coding characteristics of the argument of monovalent verbs and those of the arguments of prototypical transitive verbs (i.e., of verbs implying not only a volitional agent, but also a patient undergoing a change of state triggered by the action of the agent), but says nothing about the possible coding frames of the other semantic types of bivalent verbs. The relevant notion here is the distinction between strict and loose ergative coding as it was introduced by Harris (1985) and applied to Basque by Aldai (2008).

In the prototype of strict ergative coding, ergative coding is used only for the agent of prototypical transitive verbs in contexts implying a high degree of semantic transitivity, whereas in the prototype of loose ergative coding, ergative coding is used for the most agent-like argument of all bivalent verbs, irrespective of the precise semantic roles involved and of the contexts in which bivalent verbs are used. Therefore, the absolutive coding of aimers is characteristic of systems close to the prototype of strict ergative coding, since aimers are in some respects very similar to prototypical agents but differ from them in that their activity does not result in a change of state affecting the participant toward which it is directed. The extension of ergative coding to aimers is consistent with the fact that Old Basque already showed features typical of systems with loose ergative coding, with in particular ergative coding for the experiencers of perception verbs like *ikusi* 'see', ergative coding in constructions with non-specific patients, and ergative coding in constructions formally transitive but in which the absolutive term does not represent a participant.

In other words, the change in the encoding of the aimer observed in historical Basque can be viewed as the elimination of one of the last vestiges of a more ancient system characterized by strict ergative coding.¹⁵

15. The use of dative encoding for the experiencer of affective verbs such as *gustatu* 'please', or of cognitive verbs such as *iruditu* 'seem', can be viewed as another vestige of an ancient system in which <ERG, ABS> was not the default frame for bivalent verbs. Interestingly, a change in the

5.3 Relaxing the constraint on the obligatory presence of an absolutive term in predicative constructions

In Old Basque, coding frames that did not include an absolutive term were exceptional, but a similar situation is found only in some Eastern varieties now.

In the Eastern varieties in which the principles underlying the organization of valency patterns have remained basically unchanged, the change *absolutive* > *ergative* in the encoding of the aimer was compensated by a change *dative* > *absolutive* in the encoding of the second argument of aiming verbs, so that this extension of ergative encoding did not result in a violation of the constraint on the obligatory presence of an absolutive term.

By contrast, the maintenance of the dative encoding of the second argument in Western varieties implies that, in the varieties in question, this constraint had already ceased to be active when the change *absolutive* > *ergative* in the encoding of the aimer occurred. It is interesting to observe that those are precisely the varieties in which a differential patient marking has developed, with an alternation between absolutive and dative encoding for the patients of transitive verbs traditionally used in the frame <ERG, ABS>. Although the use of the frame <ERG, DAT> for aiming verbs and of the frame <ERG, ABS~DAT> for prototypical transitive verbs are two distinct phenomena, they have in common that both imply relaxing the constraint on the obligatory presence of an absolutive term in predicative constructions.

This opened the way for further changes, since once this change in the principles underlying the organization of valency patterns had occurred:

- (a) there was no reason not to align the valency patterns of verbs cognate with the non-verbal element of light verb compounds with the valency pattern of the corresponding light verb compounds;
- (b) it became possible to re-analyze ergative encoding as marking a participant as agentive irrespective of the presence of an absolutive term in the same construction, and consequently to extend ergative encoding to arguments of monovalent verbs sharing the feature [+agentive] with the ergative-marked arguments of bivalent verbs.

coding frame of such verbs is attested in some Basque varieties, but it constitutes a particular case of a more general phenomenon occurring in some Basque varieties, already mentioned in Footnote 3. This change affects dative indexing only, not case marking, resulting in constructions in which dative-marked NPs are cross-referenced by absolutive indexes, which implies a reorganization of the principles underlying argument encoding distinct from that we are dealing with in this paper. For more details on this phenomenon, see Fernández (2004).

5.4 The integration of borrowed verbs

5.4.1 *The situation in Modern Basque*

In dialects other than the particularly conservative Eastern dialects, the integration of recently borrowed verbs confirms that, for present-day speakers, the use of ergative encoding is not bound to a condition on the number of arguments, and is rather associated to agentivity conceived in a relatively broad sense. Interestingly, the choice between absolutive and ergative encoding of the argument of monovalent verbs borrowed from Spanish or French is not directly triggered by the agentivity feature, but rather by a particular manifestation of this feature in the morphology of the source languages.

This question has been investigated by Alberdi (2003), who shows a very strong correlation between ergative vs. absolutive encoding of the argument of monovalent borrowed verbs and absence vs. presence of the clitic *se* in Spanish or French. This explains why the argument of *dibortziatu* ‘get divorced’ tends to show absolutive encoding in dialects that borrowed this verb from Spanish *divorciarse*, but ergative encoding in dialects that borrowed it from French *divorcer*. Similarly, the variation observed in the encoding of the argument of *entrenatu* ‘train’ used intransitively can be explained by the fact that, in Spanish, *entrenar(se)* can be used intransitively with or without the clitic *se*.

The functional equivalence between the use of the clitic *se* in Romance languages and the use of the A(D) auxiliary in Basque is obvious for verbs involved in the causative/anticausative alternation: for such verbs, the use of the A auxiliary in Basque and the use of *se* in Spanish or French equally mark that the agent is suppressed from argument structure, and that the only remaining argument is [-agentive].

- (23) a. *Ispilua puskatu dute. Ils ont cassé le*
 mirror.SG.ABS break.CMP AUX_{AE}.PRS.3SG.3PL / they have broken the
miroir.
 mirror
 ‘They broke the mirror.’
- b. *Ispilua puskatu da. Le miroir s’est cassé.*
 mirror.SG.ABS break.CMP AUX_A.PRS.3SG / the mirror has_itself broken
 ‘The mirror broke.’

The awareness of this equivalence is certainly the reason why Basque speakers borrowing monovalent verbs from French or Spanish tend to model the choice between absolutive and ergative coding of the argument on the distinction between so-called ‘pronominal’ and ‘non-pronominal’ verbs in French or Spanish, which

results in a considerable increase in the number of monovalent verbs with their unique argument in the ergative case.

5.4.2 *The situation in Old Basque*

Not surprisingly, at least some of the verbs that were borrowed at a more ancient period show variation consistent not only with the changes that may have occurred in the use of *se* in Spanish or French, but also with the fact that the constraint on the obligatory presence of an absolutive argument in predicative constructions was still more or less active in dialects that have relaxed it since. For example, in the modern dialects *saltatu* ‘jump’ and *dantzatu* ‘dance’, show variation in the assignment of absolutive or ergative case to their argument, whereas the same verbs are found in ancient texts from all dialects with their argument in the absolutive case. This suggests that they were borrowed at a time when the constraint on the obligatory presence of an absolutive-marked term in predicative constructions was still active, but were still perceived as loanwords when ergative coding became usual for borrowed monovalent verbs whose Spanish or French equivalent does not take the clitic *se*.

In order to have a more precise idea of the extent to which the treatment of borrowed verbs in Old Basque differed from their treatment in the modern language, we have systematically noted the borrowed verbs found in three texts from the 16th century representing three distinct dialectal varieties: Leizarraga (Lapurdian), Etxepare (Low Navarrese), and Lazarraga (Alavese). An important proportion of the borrowed verbs in these texts (in particular in Leizarraga) were occasional borrowings whose presence in texts from this period must be explained by the very particular situation of an emerging literary language. This makes it difficult to use this data to confirm the observation made above about *saltatu* ‘jump’ and *dantzatu* ‘dance’. It is however interesting to note that the valency properties of borrowed verbs in texts from the 16th century are not very different from those of recently borrowed verbs in the modern language.

Not surprisingly, in the texts we have studied, borrowed verbs that are transitive in the source language are almost uniformly found with the coding frame <ERG, ABS>. The only exception is *suplikadu* ‘beg’, found in the Lazarraga text with the coding frame <ABS, DAT>. We will return to this below.

In the case of borrowed verb that are ‘pronominal’ (i.e., combined with the reflexive clitic *se*) in the source language, the situation is the same as in the modern language: they are uniformly treated as unaccusative verbs with an absolutive argument and no ergative argument.

Borrowed verbs that are neither transitive nor pronominal in the source language are the only case in which the situation is slightly different from that of Modern Basque. In Modern Basque, such verbs are uniformly treated as unergative

verbs with an ergative argument and no absolutive argument. The same tendency is predominant in the texts we have studied, with however a significant proportion of exceptions, since out of 20 borrowed verbs that are neither transitive nor pronominal in the source language, 15 have a coding frame with an ergative argument corresponding to the subject in the source language, and no absolutive argument. The 5 exceptions are *resuscitatu* ‘come back to life’, *habitatu* ‘live (somewhere)’, *danzatu* ‘dance’, and *akordatu* ‘come to an agreement’ in the Leizarraga text,¹⁶ and *assaiatu* ‘try’ in the Etxepare text.

These exceptions to the predominant regularity (according to which the borrowed verbs that are neither transitive nor pronominal in the source languages are integrated into Basque as unergative verbs) do not lend themselves to a semantic explanation. The point is that most of these verbs assign a relatively active role to the argument encoded as an absolutive noun phrase, and agentivity should rather be expected to favor ergative coding. A more plausible explanation of the variation observed in Old Basque in the treatment of borrowed verbs that were neither transitive nor pronominal in the source language is that, in the 16th century, the rule accounting for the treatment of borrowed verbs in present-day Basque was already active, and the exceptions we observe in texts from this period are verbs that had been borrowed earlier, at a time when the ban on coding frames without an absolutive term was still strong.

In this perspective, it is particularly interesting to analyze the case of *suplikadu* ‘beg’. In Spanish, *suplicar* is transitive, but *suplikadu* is found in the Lazarraga text with the coding frame <ABS, DAT>. In more recent texts, the same verb is found with the coding frame <ERG, DAT>. The explanation is that, semantically, *suplikadu* ‘beg’ can be viewed as an aiming verb. We have seen in Section 2 that, in Old Basque, aiming verbs are typically found with the coding frame <ABS, DAT>, but in modern Basque varieties, the only possible coding frames for aiming verbs are <ERG, DAT> and <ERG, ABS>. This suggests that this verb was borrowed early enough to take the coding frame <ABS, DAT> by analogy with verbs assigning similar roles to their arguments, and that its coding frame was subsequently modified like that of the other aiming verbs.

To summarize, the study of borrowed verbs in texts from the 16th century suggests that, four centuries ago, the productive rule accounting for the treatment of recently borrowed verbs was already the same as in present-day Basque. However, some of the borrowed verbs found in texts from this period behave in

16. It is interesting to observe that *erresuzitadu* is found in an Alavese text from the same period with the coding frame <ERG>, which is consistent with the general contrast observed between the eastern and western varieties of Basque in the development of coding frames including no absolutive term.

a way suggesting that they were borrowed before the emergence of this regularity, at a time when the valency system of Basque still included elements of strict ergative coding.

6. Conclusion

The use of a morphologically marked case for the agent of prototypical transitive verbs has remained constant throughout the history of all Basque varieties, but the expansion of ergative encoding has resulted in that most present-day Basque varieties show a complex situation of split-intransitivity whose ongoing evolution is characterized by the integration of the majority of monovalent verbs recently borrowed into the class of monovalent verbs that are conjugated by means of the AE-auxiliary and assign the ergative case to their unique argument.

This situation has been characterized as ‘semantic alignment’ by Aldai (2008). However, this term may be misleading, if it is understood as implying the existence of a unified semantic principle accounting for the distribution of ergative encoding among monovalent verbs in the present state of the verbal lexicon of Basque. The distribution of ergative encoding can only be explained with reference to diachrony. Three groups of verbs must be distinguished, and strictly speaking, the notion of semantic alignment applies only to one of them, and only in an indirect way:

- (a) With a limited number of exceptions probably due to isolated accidents in the history of individual verbs, the monovalent verbs for which there is no evidence of a relatively recent creation or borrowing assign the absolutive case to their unique argument.
- (b) With a limited number of exceptions probably due to the fact that the ergative encoding of the unique argument of monovalent verbs was still perceived as non-canonical when they were created, the monovalent verbs cognate with the non-verbal element of an *egin*-compound assign the ergative case to their unique argument.
- (c) In the case of recent borrowings, as explained in section 5.4, absolutive encoding strongly correlates with the presence of the clitic *se* in the Spanish or French source, which can be viewed as an indirect manifestation of the feature [-agentive].

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