

ITZIAR LAKA[†]

DERIVING SPLIT ERGATIVITY IN THE PROGRESSIVE*

The Case of Basque

1. INTRODUCTION: THE PHENOMENON, THE ACCOUNT AND SOME CONSEQUENCES.

This paper explores the relationship between Aspect and case in ergative grammars, and the syntactic structure of sentences with a progressive meaning. It suggests an explanation for aspectually driven split-ergativity phenomena, based on an account of progressive sentences in Basque. The contrast between canonical transitive sentences and their progressive equivalents found in Basque is shown in (1), where glosses are deliberately vague for the moment:

- 1) a. emakume-a-k ogi-a jaten du¹
woman-DET-E bread-DET eating has
'The woman eats (the) bread'
- b. emakume-a ogi-a jaten ari da
woman-DET bread-DET eating PROG is
'The woman is eating (the) bread'

As we can see by comparing (1a) and (1b), a change to progressive aspect induces a change in case-assignment, and a change of inflected auxiliary. (1a) is an example of an imperfective transitive sentence, where the external argument *emakumea* 'the woman' carries ergative case (morpheme *-k*). The internal argument *ogia* '(the) bread' receives absolutive case, marked zero². In contrast, (1b) has no ergative-marked argument, despite the fact that there is an event of eating, whose agent is the woman. The progressive marker *ari* has an effect on the case assigned to the subject: it does not show ergative case; it is assigned absolutive/zero case.

The pair in (1) is reminiscent of similar phenomena in other ergative languages, where aspectual variations induce changes in the case assigned to the transitive

[†] University of the Basque Country-Euskal Herriko Unibertsitatea; itziar.laka@ehu.es

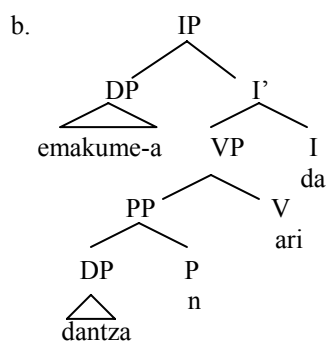
subject, a phenomenon that has come to be known as “split ergativity” (Dixon 1994). The account provided here argues that these progressive forms pattern as expected in an ergative grammar, once their syntactic structure is considered in detail. In this respect, the account derives an apparent case of split ergativity without resort to the notion of a “case split”. That is, without *necessarily* assuming that a change to an accusative pattern has taken place.

The *ari*-progressive illustrated in (1b) has drawn the attention of numerous linguists; it has been claimed to be an antipassive by several authors (Postal (1977), Alonso-Cortés (2002) among others), and it has been argued to be a progressive auxiliary (Holmer (1999)). I follow the traditional view, also assumed by Levin (1983) and expressed by Hualde & Ortiz de Urbina (1987) in the following way: “*ari*, we will argue, is a main verb with its own auxiliary which may take a nominalized clause as its complement” (p.428).

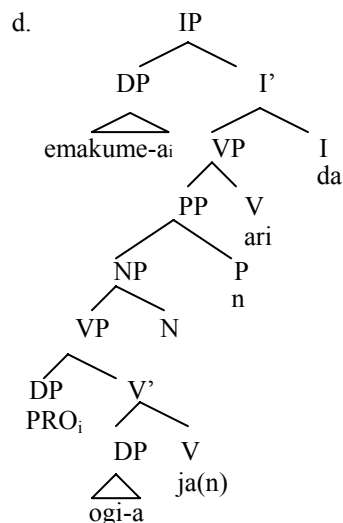
I argue that this biclausal structure of the progressive, for which there is ample evidence in the language, is not a language-particular quirk of Basque grammar, but rather, fits within a very widespread characteristic of human language: progressive is often realized in syntax in the form of a locative predication. The pervasiveness of this grammatical isomorphism between progressive and spatial location has been clearly documented in the typological overview undertaken by Bybee, Perkins & Pagliuca (1994).

The contrast in (1) results from the fact that the *ari* progressive involves a biclausal syntactic structure: the main verb *ari* ‘to be engaged’ takes a locative PP (‘in something’). This locative PP can take either a nominal complement (2a,b), or a nominalized clause (2c,d), in both cases yielding a progressive:

- 2) a. emakume-a dantza-n ari da
 woman-DET dance-LOC engaged is
 ‘the woman is engaged in dance’ (the woman is dancing)



- c. emakume-a ogi-a ja-te-n ari da
 woman-DET bread-DET eat-NOM-LOC engaged is
 ‘the woman is (engaged in) eating the bread’

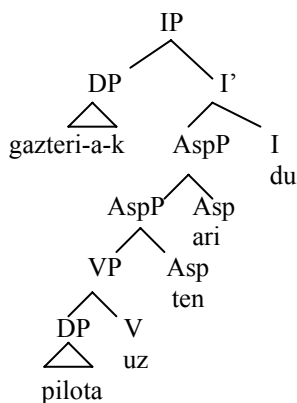


The structure in (2d), in turn, *necessarily* yields the assignment of absolutive case to the main clause's subject *emakumea* 'the woman', regardless of the nature of the verb embedded in the nominalized clause. What determines the case borne by the subject of the main clause is the fact that there is only one argument to case-mark in that clause, namely *emakumea* 'the woman', and this argument receives a non-agentive, theme theta-role, from the verb *ari* 'to be engaged'. The verb embedded in the nominalized clause, *jan* 'eat' is not involved in assigning either case or thematic role to the subject of the main clause, and this is why ergative case does not surface on the main clause's subject. If this approach is correct, then, progressive does not cause a 'split' in the Case system; rather, the case-contrast in (1) follows, given the syntactic structure underlying it (2d).

Section 6. argues that there is a process of grammaticalization currently taking place in eastern varieties of Basque, the result of which is that *ari* is no longer a member of the lexical category Verb, but has become a functional category within the inflectional domain, i.e., an aspectual head (Asp). In these varieties, then, the structure of the progressive is no longer biclausal (3b), and ergative case surfaces in the case of transitive verbs, as shown in (3a):

- 3) a. gazteri-a-k pilota uz-ten ari du
 youth-DET-E ball-DET leave-IMPF PROG has
 'the youth is leaving the ball'
 ('young people are leaving jai-alai playing')

b.



In (3a), the subject *gazteria* ‘the youth’ is the agent of the verb *utzi* (*uz-*) ‘to leave’, and that is why it displays ergative case (*-k*). In these eastern varieties, *ari* is no longer a Verb, but an aspectual element (3b), and therefore the structure contains a single clause, like in (1a).

Mateu & Amadas (1999) argue that the lexical-conceptual structure (LCS) of the progressive is universally unaccusative, because it is universally locative. If the progressive illustrated in (1a) and (2) is an instance of a locative structure, then the evidence presented in this paper supports their claim that progressives are locatives at LCS. However, as we see in the contrast between (1b) and (3a), progressives can display different properties. I account for this contrast by assuming that progressives are not *necessarily* locative in syntax. Grammars may vary in this respect, some resorting to locative/unaccusative syntactic structures for the expression of progressive, others not³.

2. ASPECT-DRIVEN “SPLIT ERGATIVITY”

It has frequently been stated in the literature that ergative systems have a great tendency to display “splits” in their ergativity. That is, most ergative languages appear to be mixed systems, involving varying amounts of ergative and accusative phenomena within their grammars: “Many languages have a mixture of ergative and accusative systems, with these splits being conditioned by the semantic nature of any one or more of various types of obligatory sentence components – verb, noun phrases, aspect/tense/mood – or by the distinction between main and subordinate clauses.” (Dixon 1994:2).

The term “split ergativity” is thus often used as a label for case-alternations in languages otherwise displaying ergative morphology. What must be determined by linguistic theory is whether this label, (a) captures some uniform grammatical phenomenon present in (many) ergative languages, whereby the grammar switches to an accusative mode under certain conditions; or (b) is a cover descriptive term for a set of different but limited grammatical phenomena that yield the observed changes in case assignment without switching to an accusative system. These two

possibilities are not mutually exclusive; we could find that some “split ergativity” phenomena genuinely fall in (a), while others fall in (b). Here, I argue that the case-alternation at stake is an instance of (b).

Focusing our attention on aspectually driven case-splits⁴, it is surely a very significant fact for linguistic theory that they conform to a general pattern, making it plausible that there is a uniform source for the phenomenon. The general pattern we find is: “... if a split is conditioned by tense or aspect, the ergative marking is *always* found either in past tense or in perfective aspect.” (Dixon 1994:99) This pattern is pervasive, and replicated language after language. The pattern of variation follows one direction, but the point at which different grammars display a change in case assignment varies. A classical example of an aspect-driven split is provided by Hindi (from Mahajan (1990)):

- 4) a. Raam-ne roTii khaayii thii
 Raam-E bread/FEM eat-PERF.FEM was.FEM
 ‘Raam had eaten bread’
- b. Raam roTii khaataa thaa
 Raam/MASC bread eat-IMPF.MASC was.MASC
 ‘Raam was eating bread’

In (4a), with perfective aspect, the external argument *Raam*, a masculine name, is marked ergative, and the internal argument *roTii* ‘bread’ bears zero case. The inflected copula agrees in gender with the internal argument. This pattern contrasts with (4b), imperfective, where the external argument *Raam* is assigned zero case, and agrees with the inflected copula in gender. Notice that the nominal morphology of the internal argument, the object, in (4b) has not changed to a distinct accusative form, and neither has the subject of (4b) surfaced in a distinct nominative form. They bear no overt case ending. While Hindi grammar makes the cutting point between perfective and imperfective, Basque grammar makes a similar cutting point between imperfective and progressive.

Let us review the Basque data in order to see the similarities:

- 5) a. emakume-a-k ogi-ak ja-n d-it-u
 woman-DET-E bread-DET.PL eat-PRF 3A-PL-have3E
 ‘The woman has eaten (the) breads.’
- b. emakume-a-k ogi-ak ja-ten d-it-u
 woman- DET-E bread-DET.PL eat-IMPF 3A-PL-have3E
 ‘The woman eats (the) breads.’
- c. emakume-a ogi-ak ja-ten ari da
 woman- DET bread- DET.PL eat- IMPF prog 3A.is
 ‘The woman is eating (the) breads.’

Both perfectives and imperfectives (5a,b) pattern in a similar fashion in Basque, and they pattern like Hindi perfectives⁵: the external argument is assigned ergative case; the internal argument bears zero case and it agrees with Inflection. Hindi and Basque differ slightly with respect to agreement: Basque displays agreement both with ergative and absolutive, whereas Hindi displays agreement only with absolutive; there is no gender agreement involved in Basque, while Hindi arguments agree in gender. However, if we consider when agreement with the internal argument surfaces and when it does not, the pattern is similar in both grammars. In contrast, the progressive in (5c) patterns like the Hindi imperfective: the external argument does not carry ergative, but zero case, and it agrees with Inflection; the internal argument does not overtly change its case morphology, but it no longer agrees with Inflection.

Besides the imperfective and perfective values shown in the previous examples, there is one more value that the aspectual morpheme attached to the verb can have in Basque: *irrealis*⁶. As we can see in (6), the *irrealis* behaves like the imperfective and perfective regarding case and agreement, and thus they all contrast in the same way with the progressive:

- 6) a. emakume-a-k ogi-a ja-ngo du
 woman-DET-E bread- DET eat-IRR 3A/have/3E
 ‘The woman will eat (the) bread’
- b. emakume-a-k ogi-ak ja-ngo d-it-u
 woman- DET-E bread-DET.PL eat- IRR 3A-PL-have/3 E
 ‘the woman will eat the breads.’

Therefore, the significant contrast we are concerned with is that of the progressive versus all other aspectual values.

The phenomena induced by the “split” are correlated, but where the “split” occurs is subject to variation across languages, as to whether it involves imperfectives as in Hindi, or whether it involves only progressives but not imperfectives, as in Basque. The questions that I would like to address regarding aspectually driven changes in case assignment are: a) Why is it that there are no languages showing a nominative pattern in the perfective aspect and an ergative pattern in other aspectual values? That is, why is it that perfective aspect does not display case splits? b) What determines why imperfective aspect can trigger a split in some languages but not in others?, and c) Why is there no uniformity in aspect driven splits? In order to address these questions, we will start by looking at the syntactic structure of the *ari* progressive in detail.

3. THE SYNTACTIC STRUCTURE OF THE *ARI* PROGRESSIVE.

3.1 *The ari-progressive is not an antipassive.*

The distinct case pattern induced by the *ari* progressive has long been noted in the literature; in particular, (a) the fact that with transitive verbs, the external argument surfaces in absolutive, (b) the fact that the inflected auxiliary is not transitive (*ukan* ‘have’), but intransitive (*izan* ‘be’), and (c) the fact that it agrees only with the external argument. The *ari* progressive has been treated as an antipassive (Postal 1977, Alonso-Cortés 2002, among others), even though there is no “demotion” of the internal argument, a defining property of antipassives. Notice that in all the examples, it is only the external argument that undergoes a change in case morphology, not the internal one⁷. Also, as argued by Hualde & Ortiz de Urbina (1987), the use of *ari* is not restricted to transitive verbs, as would be expected of an antipassive morpheme. As the example in (7b) shows, *ari* is used for every kind of progressive, regardless of the valency of the verb:

- 7) a. emakume-a hurbil-tzen da
 woman-DET get/near-IMPF is
 ‘The woman gets closer.’
 b. emakume-a hurbil-tze-n ari da
 woman-DET get/near-NOM-LOC engaged is
 ‘The woman is (engaged in) getting closer.’

Another piece of data that is a problem for the antipassive account⁸ is that *ari* can take a PP that does not contain a clause (Hualde & Ortiz de Urbina (1987)). We have seen an example in (2a,b), and another one is offered in (8):

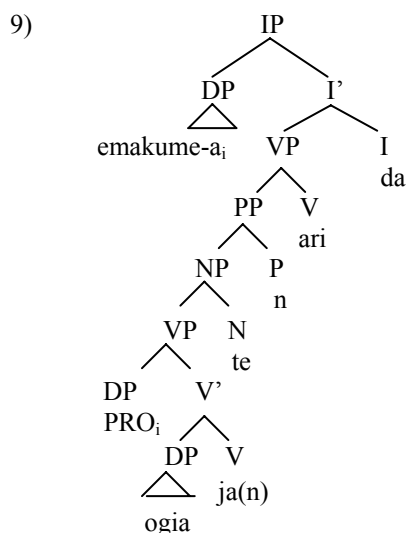
- 8) emakume-a lan-ean ari da
 woman-DET work-in engaged is
 ‘The woman is engaged in work’

In (8), there is no verb besides *ari*, and the complement it takes is a locative PP, whose complement is the noun *lan* ‘work’; this example has the structure depicted in (2b). An account of *ari* in terms of antipassive is thus forced to assume that (7) and (8) are fundamentally different from (1b), (2c) and (5c), whereas the hypothesis that *ari* is a verb selecting a PP can provide a single, unified explanation for all these cases, and others that we will see below.

3.2 *Traditional accounts of ari: a verb selecting a postpositional phrase.*

The crucial distinction in Basque between progressive on the one hand, and perfectives/imperfectives/irrealis on the other, is the fact that the former involves two clauses and the latter one. This basic insight is by no means new; in fact, the

idea that *ari* is a verb whose meaning is akin to ‘to be engaged’ is the predominant one among all traditional grammarians describing the language. Michelena (1987), the most comprehensive dictionary of the language available so far, translates *ari* as ‘*ocuparse, estar en actividad*’ (to be engaged, to be busy). This vast compilation also offers an extensive list of linguists and grammarians, all of whom have considered *ari* to be a verb⁹. The hypothesis that *ari* is a verb which can take as a complement a non-finite clause, was assumed by Levin (1983)¹⁰ in her study of ergativity in Basque, and it is also assumed in the description of the language undertaken by the Academy of the Basque Language, *Euskaltzaindia* (1987). The biclausal structure of the *ari* progressive is developed in Hualde & Ortiz de Urbina (1987), who argue and show in detail some of the grammatical consequences that follow from this analysis. Thus, the structure of a progressive form is essentially as shown in (9):



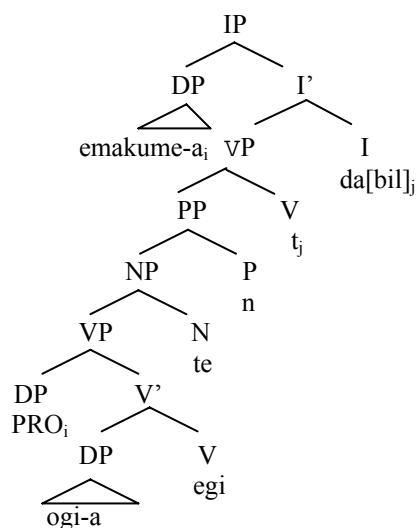
In what follows, I provide various kinds of evidence in support of the structure in (9). The first piece of evidence involves other progressive forms in Basque. The *ari* progressive is used in central and eastern dialects of the language (Laffite (1979), Lafon (1943)), while western varieties of the language have progressives of the type illustrated in (10)¹¹:

- 10) a. emakume-a ogi-a egi-te-n da-bil
 woman-DET bread-DET make-NOM-LOC 3Abe-about
 ‘the woman is (about) making the bread’
- b. emakume-a ogi-a ja-te-n da-go
 woman-DET bread-DET eat-NOM-LOC 3Abe-location
 ‘the woman is (stays) eating bread’

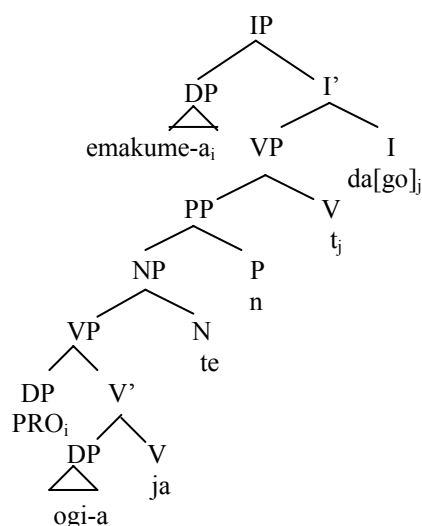
Both (10a) and (10b) denote progressive aspect. They differ from the *ari* construction in the choice of main verb: in (10a), the inflected verb is *dabil*, the third person singular present form of *ibili* 'to walk, to be about', the choice of verb indicates that the activity the woman is engaged in involves a certain amount of movement on her part. In (10b), the choice of inflected verb is *dago*, third person singular present form of *egon*, the locative copula, and the choice of verb indicates that the activity the woman is engaged in does not involve a significant amount of movement on her part¹².

This western-type progressive has not generated much discussion in the literature, perhaps because the main verbs involved, *ibili* 'to walk, to be about' and *egon* 'stative be' are very patently unaccusative verbs that select locative PPs. The syntactic structure of the progressive forms in (10) is shown in (11):

11) a.



b.



The structures in (11) are identical to the structure of the *ari* progressive depicted in (2d); the difference is found in the verb that heads the main clause, *ibili* ‘to be about’ in the case of (11a) and *egon* ‘to be/stay’ in the case of (11b). Both these verbs in turn raise to Inflection, unlike *ari*, because both *ibili/egon* belong to the class of “synthetic” verbs in Basque, that is, the set of verbs that raise to Inflection and form a single morphological unit with it (see Laka 1993a, 1996, and Aldai 2002 for details and different views about inflectional morphology in Basque).

These two verbs, *ibili* ‘to be about’ and *egon* ‘to be/stay’ can also take PPs containing non-clausal complements, that is, PPs whose complements do not involve nominalized clauses:

- 12) a. emakume-a [ppBilbo-n] da-bil
 woman-DET [ppBilbao-LOC] is-about
 ‘the woman is about in Bilbao’
 b. emakume-a [ppBilbo-n] da-go
 woman-DET [ppBilbao-LOC] is-stay
 ‘the woman is in Bilbao’

Similarly, *ari* can take as a complement a non-clausal locative PP, as we saw in (2a, 8). To further illustrate the verbal nature of *ari*, we can see in (13) that the adjunct selected by *ari* need not be a locative:

- 13) a. emakume-a [ppOihu-ka] ari da
 woman-DET scream-ITERATIVE engaged is
 Literally: ‘The woman is engaged in a repeated scream’

- b. emakumea [pp negarr-ez] ari da
 woman-DET cry-INST engaged is
 Literally: 'The woman is engaged in a cry'

In (13a), the phrase *oihu-ka* contains the noun *oihu* 'scream' and the postposition *-ka*, which denotes repetition, and in (13b) the phrase *negarr-ez* is a PP headed by the instrumental Postposition *-z* whose complement is the Noun *negar* 'cry'¹³. The examples provided in (13) do not exhaust the possibilities for PPs selected by the verb *ari* (see Laffite (1979), Hualde & Ortiz de Urbina (1987))¹⁴.

Another piece of evidence that supports the claim that *ari* is a verb is the fact that it can be nominalized by means of the morpheme *-tze*, a process that is only available to verbs in Basque¹⁵:

- 14) pro [DP[NP[emakume-a lan-ean ari] tze] a] ona da
 pro woman-DET work-LOC engage- NOM-DET good is
 'the woman's engaging in work is good'

In (14), the clause headed by *ari* has been nominalized by the morpheme *-tze*, which is followed by the determiner *-a*. The possibility of nominalization distinguishes the class of verbs from the class of modals, auxiliaries and other verbal particles in Basque. Thus, for instance, the modal *ahal* 'can' cannot be nominalized because it is not a verb:

- 15) a. *pro [NP[emakume-a izan ahal]tze] a ona da
 pro woman-DET be can-NOM-DET good is
 (*it is good to can be a woman)
 b. pro [NP[emakume-a izan ahal iza] te] a ona da
 pro woman-DET be can be- NOM-DET good is
 'It is good being able to be a woman'

In (15a), an attempt to nominalize the modal *ahal* 'can' results in ungrammaticality (similarly to attempts to make infinitival forms of English *can*, **to can*), but once the modal is followed by a true Verb, such as *izan* 'to be', the nominalization is successful. The contrast between (14) and (15a) shows that *ari* does not behave like modals and other verbal particles with respect to nominalizations, behaving once again like a verb.¹⁶

The verb *ari* can display the various aspectual markers that verbs can carry in Basque, as we see in (16), where the aspectual morphemes have been highlighted¹⁷:

- 16) a. emakume-a_i [ppPRO_i ogi-a ja-te-n] ari da
 woman-DET_i [PRO_i bread-DET eat-NOM-LOC] engage is
 'the woman is (engaged in) eating bread'

- b. emakume-a_i [_{PP}PRO_i ogi-a ja-te-n] ari-**tu** da
 woman-DET_i PRO_i bread-DET eat-NOM-LOC engage-PERF is
 ‘the woman has been (engaged in) eating bread’
- c. emakume-a_i [_{PP}PRO_i ogi-a ja-te-n] ari-**tzen** da
 woman-DET_i PRO_i bread-DET eat- NOM-LOC engage-IMPF is
 ‘the woman is habitually (engaged in) eating bread’
- d. emakumea_i [_{PP}PRO_i ogi-a ja-te-n] ari-**ko** da
 woman-DET PRO bread-DET eat- NOM-LOC engage-IRR is
 ‘the woman will be (engaged in) eating bread’

(16a) shows the verb *ari* in its unmarked form, without any overt aspectual morpheme attached to it. But since *ari* is a verb, forms such as (16b,c,d) are also grammatical. In (16b), we find the form *ari-tu*, composed of the verb *ari* and the perfective marker *-tu*, thus yielding a perfective reading. In (16c), the verb *ari* takes the imperfective morpheme *-tzen*, yielding a habitual reading¹⁸. Finally, in (16d), we see the verb *ari* taking the irrealis marker, *-ko*, and yielding a future reading. In brief, we have seen that *ari* displays all the properties that can be expected of a Verb, thus supporting the hypothesis that it *is* a Verb, an idea that has been consistently present in traditional descriptions of the language.

3.3 Progressives do not become monoclausal in syntax

Having shown that *ari* is a verb, whose meaning is akin to ‘to be engaged’, and having argued that progressive constructions involving *ari* are constituted by two clauses, I now consider the claim made in Hualde & Ortiz de Urbina (1987) that this biclausal structure undergoes a process of restructuring, as a result of which it is rendered monoclausal. I argue that this restructuring process does not take place in syntax.

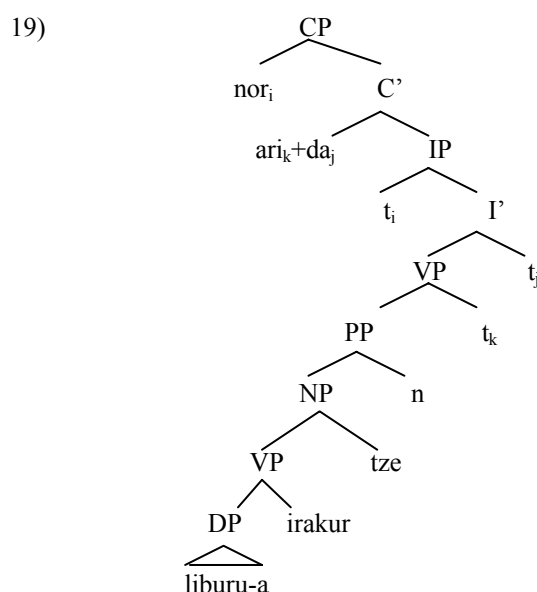
One of the central claims made in Hualde & Ortiz de Urbina (1987) is that “some interesting peculiarities of *ari* with sentential complements can only be accounted for by assuming that a restructuring process has taken place”. The outcome of this restructuring is schematized in (17):

- 17) a. NP_i s[PRO_i v_P[...V]] ari
 b. NP v_P[...v' [V ari]] (Hualde & Ortiz de Urbina 1987:442)

The main motive for this proposal is the behaviour of *ari* progressives under Wh-movement¹⁹. According to Hualde & Ortiz de Urbina (1987), “*ari* constructions deviate from the normal pattern found in other verbs with inessive [locative] nominalized complements”. This pattern is illustrated in (18):

- 18) a. *nor irakurtzen ari da liburu-a?*
 who reading engaged is book-DET
 ‘who is reading the book?’
- b. *nor ari da liburu-a irakurtzen?*
 who engaged is book-DET reading
 ‘who is reading the book?’ (Hualde & Ortiz de Urbina, 1987)

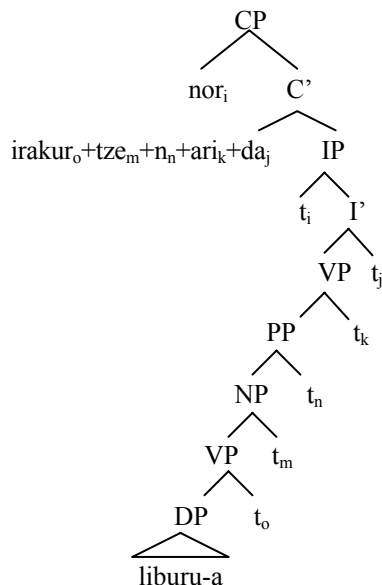
In (18a), the Wh-element *nor* precedes the embedded nominalized verb, whereas in (18b), it precedes the main verb *ari*. The authors follow the account of Wh-movement proposed in Ortiz de Urbina (1989): the WH-constituent moves to Spec-CP, and the verb+auxiliary move to a head-initial CP. Given this account of Wh-movement, the word-order in example (18a) can only be accounted for if it is assumed, as Hualde & Ortiz de Urbina (1987) do, that the embedded verb *irakur*, plus the nominalizer *-tze* and the locative P *-n* have undergone restructuring, amalgamating with the verb *ari*, “with [*irakurtzen ari*] as one single complex verb” (p.445). However, (18b) cannot be accounted for this way, despite the fact that (18b) is the preferred word order. As the authors acknowledge: “matrix subject wh-words tend to be placed immediately preceding the matrix verb *ari* itself” (Hualde & Ortiz de Urbina 1987:445). It would appear that the only way to derive (18b) is if restructuring does not take place, as in the exact derivation in (19):



The derivation of (18b) is left open, however: “Agreement facts seem to indicate that in the latter type of questions, restructuring has also taken place, but further research should be conducted on the distribution of the two alternatives”. If we pursue the idea that restructuring does not take place in either (18a) or (18b), and

therefore that the structures remain bi-clausal throughout the derivation, we can easily derive (18b) as in (19). And we can still derive the marked word-order in (18a), by assuming that a derivation like (20) can also take place:

20)

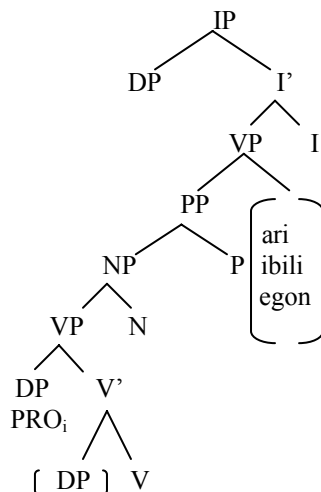


The derivation in (20) results from the application of successive head-movement. This account does not change the biclausal structure of the progressive, that is, we need not argue that there is one clause where there were originally two. This alternative analysis can also explain why (18b), where only the minimally necessary movements have taken place, is the preferred word order for Wh-questions in *ari*-progressives.

3.4 The structure of progressives: *ari*, *ibili*, *egon*

To summarize so far, I have argued that the syntactic structure of progressives in Basque is as follows²⁰:

21)



This structure contains two verbs, heading two clauses. The main clause can be headed by either of three verbs, *ari* ‘to be engaged’, *ibili* ‘to be about’ or *egon* ‘to be/stay’. These verbs select a Postpositional Phrase, which is often headed by the locative Postposition, but other Postpositions can appear as well. The Postposition in turn takes as a complement a Noun Phrase, which, in the case of the progressive, consists of a nominalized clause headed by a verb, transitive or intransitive. This verb assigns thematic roles to its argument(s), and absolutive case to its internal argument (if any), while the embedded subject is empty, controlled by the subject of the matrix clause, and requires no case. In the main clause, the verb, which is unaccusative in all of the three choices, assigns a theme theta-role to its argument and it also assigns absolutive case to it²¹. No process of restructuring is required to account for the case pattern, and marked word-orders can be derived by successive head-movement. The same structure accounts for all other uses of these verbs beyond the progressive readings, when the PPs they select do not contain a nominalized clause.

4. ON THE SYNTACTIC NATURE OF PROGRESSIVES.

I have argued that the syntactic structure of the various progressive forms in Basque is homomorphic with a locative structure. The homomorphism of spatial and temporal relations in human language is a pervasive and well known phenomenon, and the locative-like structure of the progressive is just one instance of this widespread homomorphism. Bybee, Perkins & Pagliuca (1994) report that “The majority of progressive forms in our database derive from expressions involving locative elements (...) The locative notion may be expressed either in the verbal auxiliary employed or in the use of postpositions or prepositions indicating location...” (pp.129-130). What the ultimate reason for this homomorphism might be is

undoubtedly a worthy issue to pursue, but it is a question I will not address here, beyond showing that it manifests itself clearly in the grammar of modern Basque²².

Demirdache & Uribe-etxebarria (1997) and Mateu & Amadas (1999) have independently argued for grammatical architectures where temporal relations are implemented by the same means as spatial relations. Specifically, Mateu & Amadas (1999) argue that “the progressive construction must be regarded as implying an unaccusative structure over that structure assigned to the verb in the lexicon”. Among the examples of grammars where the identification of a locative structure is manifest, besides Basque, they present the following, from typologically distinct languages:

- | | | |
|--------|--|-----------------------|
| 22) a. | Ik ben aan het/’t werken
I am LOC the working
‘I am working’ | Dutch |
| b. | Mae Rhiannon yn cysgu
is Rhiannon in sleep
‘Rhiannon is sleeping’ | Welsh |
| c. | He is on hunting | Middle English |

(Borsley & Roberts, 1996)

Thus, the claim that the syntactic structure of progressives in Basque is the one in (21) is not a marked, exceptional property of this grammar, and it is not directly related to its ergativity. This syntactic structure happens to manifests itself in many other human languages, regardless of their case system.

Demirdache & Uribe-etxebarria (1997) and Mateu & Amadas (1999), despite the differences in their accounts, share the view that the proposed spatio/temporal structures are language universals. In the case of Demirdache & Uribe-etxebarria (1997), for instance, it is argued that imperfective aspect is universally conveyed by means of a locative structure. However, in the case of Basque grammar, the lack of contrast between perfective and imperfective (5a,b) remains to be accounted for, and similarly the contrast between imperfective and progressive (5b,c) finds no direct explanation. Also, the contrast between Basque and Hindi imperfective, for instance, could not be due to the different structure of the imperfective in the two grammars. Similarly, claiming that progressives are universally unaccusatives, as argued for by Mateu & Amadas (1999) predicts that progressives should always display a locative-like syntax, a prediction that is not borne out, as I argue in the following section.

4.1 *Grammaticalization at work: ari as a functional category*

Biclausal, locative-like unaccusative structures cannot be the only way to construct progressive aspect in the syntax of natural languages. If this were the case, progressive structures should always yield absolutive subjects in all varieties of Basque regardless the valency of the embedded verb. In what follows, I consider data from eastern varieties of Basque that depart from the biclausal pattern in (21). I

argue that they are generated as monoclausal structures, which accounts for their distinctive properties.

As shown in (3), there are varieties of Basque where *ari* progressives contain ergative-marked subjects. One more example of this kind of progressive is shown in (23):

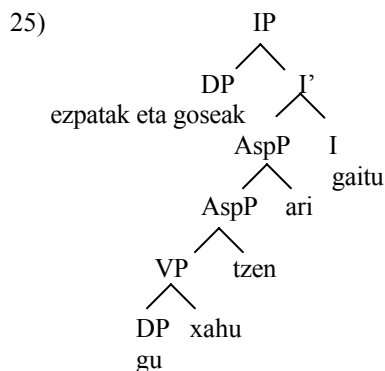
- 23) *ezpata-k eta gose-a-k gu xahu-tzen ari gaitu*
 sword-E and hunger-the-E us-A destroy-IMPF PROG 1pl E -have-3pl A
 ‘the sword and the hunger are destroying us’
 (Duvoisin, in Michelena 1989)

In this usage of *ari* progressive, the case borne by the subject varies depending on the valency of the “embedded” verb, that is, depending on the valency of the verb that we have argued sits in the nominalized clause in our previous account. In (23), the ergative case borne by the subject *ezpatak eta goseak* ‘the sword and the hunger’, is determined by the fact that the verb *xahu(tu)* ‘to destroy, to empty’ is diadic. This fact is clearly seen when we look at sentences with monadic verbs, like (24):

- 24) a. *gu hurbil-tzen ari gara*
 we-A get/close-IMPF PROG 3plA-be
 ‘we are getting close’
 b. **gu-k hurbil-tzen ari gara*
 we-E get/close-IMPF PROG 3plA-be
 (we are getting close)

In the eastern varieties of the language where (23) is grammatical, (24b) is never grammatical, while (24a) always is. The overt difference between this progressive and the more extended one studied in the preceding sections lies precisely in the case-pattern displayed: in the extended type of progressive the case of the subject is always absolutive, regardless of the valency of the embedded verb (due to the fact that it is precisely the unaccusative verb *ari* that assigns this case), but in this eastern type, the case borne by the subject is exclusively determined by the valency of this verb.

I argue that the crucial structural difference between the “standard” progressives, shown in (21), and the eastern progressives illustrated in (23) is the fact that the eastern progressive is not biclausal. The element *ari* has undergone a process of *grammaticalization*, that is, it has become a member of a functional category. It is no longer a verb, and thus it cannot build a clause; instead it has become an aspectual head. In turn, the lexical verb is not a nominalized form with a locative postposition attached as in (21), but rather it is the imperfective value of the verb, as in (5b). This arrangement of categories generates the structure shown in (25)²³:



In this structure, the only verb is *xahu(tu)* ‘to destroy, to empty’; it assigns a theme theta role to the internal argument, *gu* ‘us’, and an agent theta-role to the external argument *ezpatak eta goseak* ‘the sword and the hunger’. In an ergative system, this configuration necessarily yields ergative-marking for the agent and absolutive-marking for the theme, regardless of the particular proposal we subscribe to (Bobaljik (1992), Laka (1993), Bittner & Hale (1996), Nash (1995), Manning (1996), among others), because it constitutes an example of a canonical transitive structure.

These monoclausal progressives, which belong to some of the eastern varieties of the language, are relatively recent according to Michelena (1987): “En el resto de los casos, *ari* con auxiliar transitivo es, al parecer, un fenómeno moderno, que sólo podemos documentar desde la 2ª mitad del s. XIX, si bien con ejemplos en casi todos los autores bajo-navarros y labortanos de la época.”²⁴ More descriptive work needs to be undertaken to determine the extent of this grammaticalized progressive, but it appears to have expanded during the XXth century into central-southern varieties as well.

The change of category undergone by the form *ari* follows the general pattern we find in grammaticalization, in the sense that the change of category is from lexical to functional. This pattern of linguistic change is described in parallel terms already by Kurylowicz (1964):

Grammaticalization consists in the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status, e.g. from a derivative formant to an inflectional one. (page 69).

In the case that concerns us here, the change in category involved is a verb becoming an Aspectual morpheme, a type of change well described for Creole languages (Holm 1988).

This process of grammaticalization of the *ari* progressive, which in some eastern varieties has changed from a locative, unaccusative biclausal structure into a monoclausal structure containing a progressive functional element, illustrates the fact that natural languages *can* convey aspectual and temporal relations by means of

locative structures, but do not need to. Aspectual and temporal relations can be conveyed by means other than locative-like structures.

A similar process appears to have taken place earlier in the history of the language. Consider the imperfective aspect marker shown in (26):

- 26) emakume-a-k ogi-a ja-ten du
 woman-DET-E bread-DET eat-IMPF has
 'The woman eats the bread'

Many authors have noted (Trask 1997, Demirdache & Uribe-etxebarria 1997, Aldai 2002 among others) the similarity between the modern imperfective marker *-t(z)en* and a nominalization with a locative marker attached, like the ones discussed in this paper and illustrated in (21). There is general agreement that in modern Basque the imperfective marker is a single morpheme, because its behaviour is clearly distinct from the behaviour of true nominalizations with locative endings; some distinguishing properties of the two have in fact been discussed in this paper. It appears extremely plausible that older stages of the language had truly locative-like imperfectives, which have been reanalyzed and grammaticalized as containing a single aspectual marker, thus turning what was originally a biclausal structure, like the one displayed by progressives (21), into a monoclausal structure, as it is today. Note that the contrast between (2c) and (3), that is, biclausal and monoclausal progressives, replicates this plausible change in the imperfective at earlier stages of the grammar of Basque.

5. SOME CONCLUSIONS.

The apparent "case split" we find in *ari*-progressives in Basque is the result of their biclausal syntactic structure: *ari* is an unaccusative verb, and it heads the main clause, which contains a nominalized clause. The fact that *ari* is unaccusative explains why its argument receives absolutive case. In fact, these progressive sentences are not instances of agents being assigned absolutive or nominative case; rather, they are themes, and as such they are assigned *absolutive*. In this sense, then, the so-called *ari*-construction is not an instance of split ergativity in Basque.

The syntactic structure proposed here for progressive sentences in Basque is not unique; locative structures like the one studied here are pervasive in human grammars (Bybee, Perkins & Pagliuca 1994). However, this is not the only syntactic architecture that human languages can employ in order to express progressive aspect. In particular, I have argued that there has been a process of grammaticalization in eastern varieties of Basque, as a result of which *ari* has turned into a functional element, an aspectual head. As a consequence of this change of category, *ari*-progressives in these varieties are not biclausal: *ari* occupies an aspectual projection, and the verb heading the VP determines the case assigned to its arguments in the usual way: absolutive is assigned to themes, and ergative is assigned to agents.

6. REFERENCES

- Alcázar, A. 2002. *Aspectual Interpretation in Basque*. Ms., University of Southern California, Los Angeles.
- Alcázar, A. 2003 'The imperfective paradox of Basque', *USC Working Papers in Linguistics*.
- Aldai, G. 2002. 'Split ergativity in Basque: The Pre-Basque antipassive-imperfective hypothesis.' *Folia Linguistica Historica* XXI/1-2, 31-97
- Alonso-Cortés, A. 2002 *Lingüística*. Madrid: Cátedra.
- Artiagoitia Beaskoetxea, X. 2002. 'The functional structure of the Basque noun phrase.' In X. Artiagoitia, P. Goenaga y J.A: Lakarra, eds., *Erramu Boneta: A festschrift for Rudolf P. G. de Rijk*, ASJU-EHU, Bilbao.
- Bittner, M. & K. Hale. 1996. 'Ergativity: towards a theory of a heterogeneous class.' *Linguistic Inquiry* 27:4, 531-604.
- Bobaljik, J.D. 1992. 'Nominally absolutive is not absolutely nominative.' *Proceedings of WCCFL 11*, UCLA.
- Bybee, J., R. Perkins, and W. Pagliuca. 1994. *The Evolution of Grammar. Tense, Aspect, and Modality in the Languages of the World*. Chicago/London: The University of Chicago Press.
- DeLancey 1994. 'Grammaticalization and linguistic theory.' *Proceedings of the 1993 Mid-America Linguistics Conference and Conference on Siouan/Caddoan Languages*, pp. 1-22. Boulder: Dept. of Linguistics, University of Colorado
- DeLancey 2004. 'Grammaticalization.' In G. Booij, C. Lehmann, J. Mugdan, eds., *Morphology: A Handbook on Inflection and Word Formation*. New York: De Gruyter.
- Demirdache, H. & Uribe-Etxebarria M. 1997. 'The primitives of temporal relations.' In R. Martin, D. Michael & J. Uriagereka, eds., *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*. Cambridge: MIT Press.
- Dixon, R.M.W. 1994. *Ergativity*. Cambridge: Cambridge University Press.
- Hale, K. & S. J. Keyser 1993. 'On Argument Structure and the lexical expression of syntactic relations.' In K. Hale & S. J. Keyser, eds., *The View from Building 20*, Cambridge: MIT Press.
- Holm, J. 1988. *Pidgins and Creoles*, (2 vols.) Cambridge University Press, New York.
- Holmer, A. 1999 'An active analysis of Basque ergativity.' *Fontes Linguae Vasconum* XXXI-81, Mayo-Agosto, 189-225.
- Hualde, J. I. & J. Ortiz de Urbina, J. 1987. 'Restructuring with ARI.' *ASJU International Journal of Basque Philology*, XXI-2, 425-452.
- Hualde, J.I. & Ortiz de Urbina, J., eds. 2003. *A Grammar of Basque*, Mouton de Gruyter.
- Inchauspe, E. 1858. *Le verbe basque*, Bayonne-Paris. (Facsimile edition, Donostia-San Sebastián 1979).
- Johns, A. 1996. 'Ergativity: working through some recent analyses.' In *Glott International*, Volume 2:6, 3-8.
- Kurylowicz, J. 1964. *The Inflectional Categories of Indo-European*. Heidelberg.
- Laffite, P. 1962. *Grammaire Basque. (Navarro-Labourdin littéraire)* Elkar, Donostia, 1979.
- Lafon, R. 1945. *Le système du verbe basque au XVI siècle*. Bordeaux: Editions Delmas, Publications de l'Université de Bordeaux.
- Laka, I. & J. Uriagereka. 1987. 'Barriers for Basque and vice-versa.' In J. McDonough & B. Plunkett eds., *Proceedings of the North Eastern Linguistic Society Conference 1986*, 394-408. 17-2.
- Laka, I. 1993a. 'The structure of inflection: A Case study in X⁰ Syntax.' En J.I. Hualde & J. Ortiz de Urbina eds., *Generative Studies in Basque Linguistics*, pp.21-70. Current Issues in Linguistic Theory 105. Amsterdam/Philadelphia :John Benjamins.
- Laka, I. 1993b. 'Unergatives that assign ergative, unaccusatives that assign accusative.' In J. Bobaljik and C. Philips, eds., *MITWPL 18: Papers on Case & Agreement 1*, 149-172.
- Laka, I. 1996. *A Brief Grammar of Euskara, the Basque Language*. Available at <<http://www.ehu.es/grammar>>.
- Laka, I. 2000. 'The blind Case: Burzio's Generalization and its image in the mirror.' In *Arguments and Case. Explaining Burzio's Generalization*, 103-129. Amsterdam/Philadelphia: John Benjamins Publishing Company,
- Laka, I. 2002. 'Delimitando la Gramática Universal: la ergatividad en la Gramática generativa.' In N. Catalá, J. A. Diez eta J.E. García-Albea, eds., *El lenguaje y la mente humana*, 77-142. Ariel Practicum. Barcelona: Ariel.
- Larramendi, M. 1745. *Diccionario Trilingüe del Castellano, Bascuence y Latin*, San Sebastián.

- Levin, B. 1983. *On the Nature of Ergativity*. Doctoral dissertation, MIT, Cambridge, Massachusetts.
- Mateu, J. & L. Amadas 1999. 'Extended argument structure: Progressive as unaccusative.' *Catalan Working Papers in Linguistics*, Barcelona, 159-174.
- Mahajan, A. 1990. *The A/A' Distinction and Movement Theory*. Doctoral dissertation, MIT, Cambridge, Massachusetts.
- Manning, C. D. 1996 *Ergativity. Argument Structure and Grammatical Relations*. Stanford: CSLI Publications.
- Michelena. 1987. *Diccionario General Vasco-Orotariko Euskal Hiztegia*, Royal Academy of the Basque Language-Euskaltzaindia, Bilbao: Desclée De Brouwer/Ediciones Mensajero.
- Nash L. 1995. *Portée argumentale et marquage casuel dans les langues SOV et dans les langues ergatives : l'exemple du géorgien*. PhD dissertation, Université Paris VIII, Paris.
- Ortiz de Urbina, J. 1989. *Parameters in the Grammar of Basque*. Studies in Generative Grammar 33, Dordrecht:Foris.
- Postal, P. M. 1977. 'Antipassive in French.' *LI* 1, 333-74.
- Rosen, C. 1984. 'The interface between semantic roles and initial grammatical relations.' In D. Perlmutter & C. Rosen, eds., *Studies in Relational Grammar Volume 2*. Chicago: University of Chicago Press.
- Trask, L. 1997. *The History of Basque*. New York: Routledge.
- Zabala, I. & Odriozola, J.C. 1996. 'On the relation between DP and TP. The structure of Basque infinitivals.' *Catalan Working Papers in Linguistics* 5/2, Barcelona: Servei de Publicacions Universitat Autònoma de Barcelona, pp.231-281.

* I would like to thank Alana Johns, Diane Massam and Juvenal Ndayiragije, editors of this volume, for their editorial care and help. I also want to thank them as organizers of the "Ergativity Workshop" at the University of Toronto for their invitation to present this work, and thanks to all the participants and audience for a stimulating series of discussions on various aspects of ergativity in several languages. Special thanks to Mari Jose Ezeizabarrena, Arthur Holmer, Beatriz Fernández and Lea Nash for their comments and suggestions; all errors and misunderstandings are solely mine. This research has been supported by the University of the Basque Country (9/UPV 00027.130-13587/2001), and the European Science Foundation/Spanish Ministry of Science and Technology (BFF2002-10379-E).

- ¹ The following abbreviations are used in the glosses: *det* = determiner, *det_{pl}* = plural determiner, *E* = ergative, *A* = absolutive, *prog* = progressive, *loc* = locative, *nom* = nominalizer, *impf* = imperfect, *prf* = perfective, *irr* = irrealis.
- ² For descriptions and accounts of case-marking in Basque, see Ortiz de Urbina (1986), Laka (1996), (2000), Hualde & Ortiz de Urbina (2003) among others. As for the ambiguity induced by the determiner *a* in objects, see Laka (1993), Artiagoitia (2002): the morpheme *a* can yield definite or indefinite readings in theme positions, a matter I will be ignoring throughout the present paper.
- ³ Variation of this sort, in turn, can be due to two (independent) factors: (i) Variation at the level of lexical-conceptual structure: some grammars may have locative LCS for the progressive, others not. Variation at the level of LCS is found elsewhere, for instance in the contrast between *sonrojarse/arrosire*(unaccusatives) and *blush* (unergative), first observed by Rosen (1984); and (ii) Variation in syntax: even if progressives are locative at LCS, conflation or incorporation processes in the mapping from LCS to syntax may yield syntactic structures lacking locative properties. A parallel case is found in unergative predicates, claimed to be universally transitive at LCS (Hale & Keyser 1993). In some grammars this transitive LCS is mapped as a transitive structure in syntax (Basque for instance, Laka 1993b), whereas in others, there is a Noun-incorporation process that yields an intransitive structure in syntax.
- ⁴ As for other "split ergativity" phenomena that have been discussed in Basque, the interested reader can look at Ortiz de Urbina (1989), Laka (1993a) and Aldai (2002) for the morphology of the inflected auxiliary, and to Levin (1983), Laka (1993a) Fernández (1996) and Holmer (1999) for various case patterns in intransitive/unaccusative predicates.
- ⁵ To be more precise, we refer here to ergative varieties of Hindi (Cf. Mahajan (1990)).

⁶ Some descriptions of the language refer to the irrealis marker as “future”. However, this marker is not only used to form the future; it is also necessary to form some consequences of conditionals, such as (i), and modals such as (ii):

- (i) zu ba-nintz, ogi-a ja-ngo nuke
you if-I/were, bread-det eat-irr I/would
‘if I were you, I would eat bread’
- (ii) honezkero, emakumeak ogi-a ja-ngo zuen
by now, woman-det-E bread-det eat-irr had
‘the woman would (probably) have eaten the bread by now’

For details of aspectual marking in Basque, see Laka (1996), Hualde & Ortiz de Urbina (2003), Alcazar (2002).

⁷ Alonso-Cortés (2002) offers examples where the internal argument is assigned genitive case, as evidence of the demotion to oblique of the absolutive object:

- (i) ogi-a-ren gizon-a jaten ari da
bread-det-Gen man-det eating prog is
‘the man is engaged eating (from) the bread’ (Alonso Cortés 2002:p.303)

It should be noted that this example is ungrammatical in all varieties, given this word order. As is well known (Laffite 1962), the possibility of assigning genitive to the object is restricted to eastern dialects, and is independent from the *ari* progressive, as shown in (ii):

- (ii) nire ogi-a-ren egi-te-ra Paris-era noa
my bread-det-gen make-nom-to Paris-to 1s-go
‘I go to Paris to make my bread’

The *ari* progressive is widely used in varieties of the language where sentences like (ii) are ungrammatical. Therefore, genitive-marking of the object and the *ari* progressive are distinct phenomena.

⁸ This also a problem for the hypothesis that *ari* is an auxiliary verb, as argued in Holmer (1999)

⁹ Among them we find for instance: “*Andar o estar haciendo algo, lo que fuere*” (to be busy doing something, whatever that is) Larramendi (1745); “*exprime l’idée d’une action continue mais déterminée; le mot qui le accompagne indique de quel genre est cette action. Le verbe français “occuper” donne une idée de la signification de ce mot, mais il n’en red pas tout le sens.*” Inchauspe (1858).

¹⁰ “Another type of construction involving a non-finite clausal complement is the *ari izan* construction. This construction is found with the verbs *ari* (used to express the progressive), *hasi* “to begin” *jardun* “to be occupied with”. These verbs select non-finite clausal complements which have the verb in the *-tzen* form” (Levin 1983:353)

¹¹ It should be noted that eastern varieties of Basque also use the verbs *ibili* “to be about” and *egon* “to be/stay” to denote ongoing events like (10a,b). For instance, Laffite (1979) describes the three types of constructions (*ari*, *ibili*, and *egon*) right next to each other (Laffite 1979:351), and he also considers *ari* to be a verb, which he translates into French as “*agir*”.

¹² Both unaccusatives, *ibili* and *egon* are employed in Basque to denote location in space and time, and thus also to denote stage level predication, as opposed to individual level predication, as shown in (i) versus (ii):

- (i) emakumea nekatuta dago/dabil
woman-det tired 3A/be-stay/be-about
‘the woman is tired’

- (ii) emakumea indartsua da
 woman-det strong 3A/be
 'the woman is strong'

As for the choice between *ibili* 'be about' and *egon* 'be stative' in progressives, the amount of movement considered significant varies depending on the speaker's assessment.

¹³ The epenthetic vowel *e* is inserted to avoid the /tʃ/ sequence in word final position.

¹⁴ Parallel to the choice of selected PP in the case of non-clausal adjuncts, the *ari* progressive can also select different Postpositions for the case of nominalized clauses, as shown by Laffite (1979:351):

- (i) sendatzen ari da, *il est en train de guérir* (locative PP)
 (ii) sendatze**ari** ari da, *il approche de la guérison* (dative PP)
 (iii) haren sendatze**erat** ari da, *il s'efforce de le guérir* (allative PP)

For the purposes of this paper, we concentrate on the locative case, but note that the same account extends to these cases, which, in turn, give further support for the view that *ari* is an unaccusative verb.

¹⁵ For further details on nominalized clauses in Basque, see Zabala & Odriozola (1996).

¹⁶ For further details about modals and particles, and how they depart from *ari* with respect to their grammatical behaviour, see Hualde & Ortiz de Urbina (1987).

¹⁷ See Michelena (1987) *Diccionario General Vasco-Orotariko Euskal Hiztegia* for further examples and illustrations of these aspectual variations.

¹⁸ For details of imperfective and habitual aspect in Basque verbal morphology, see Alcazar (2002), (2003).

¹⁹ Hualde & Ortiz de Urbina (1987) take both questions and focus constructions to be instances of overt Wh-movement, in the spirit of Ortiz de Urbina's (1989) analysis. For a different view that takes Wh-movement and focus to be different processes, see Laka & Uriagereka (1986). For the purposes of this argument, I concentrate on questions, since my objective is to show that restructuring is not required to account for the data at stake.

²⁰ Some details of the derivation have been simplified, for instance the structure of Inflection itself (Laka 1993a), or the generation of the subject within the VP, which is also simplified for ease of exposition.

²¹ There is another verb that denotes 'engagement in activity', namely *ihardun/jardun*, which we are not discussing here, although its syntactic structure is identical to the one depicted in (21). This verb does not appear to be unaccusative in all varieties (Michelena 1987); in some, it seems to assign an agentive theta-role to its argument, always yielding ergative case-marking, as shown in (i). In other varieties, it seems to assign a theme theta-role, always yielding absolutive (ii):

- (i) emakume-a-k lanea-n jardun du (ii) emakume-a jolasea-n jardun da
 woman-det-E work-loc engage has woman-det play-loc engage is
 'the woman has engaged in work' 'the woman has engaged in play'

²² Aldai (2002) argues persuasively that earlier stages of the language have resorted to similar grammatical/morphological isomorphism in the realm of verbal inflection.

²³ Once again, the syntactic structure omits some detail, the interested reader can turn to Laka (1993), (2000) for further details about the structure of Inflection, agreement relations etc.

²⁴ "In the rest of cases, *ari* with transitive auxiliary is, it seems, a modern phenomenon, which we can only document from the 2nd half of the XIXth century onwards, although with examples in all Low Navarrese and Labourdin authors from the period."