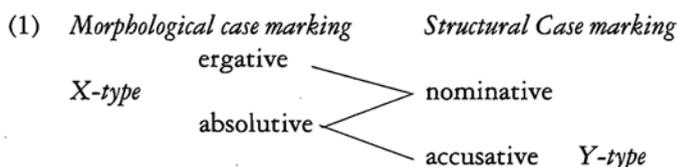


Structural Case and Inherent Case Marking: Ergaccusativity in Basque

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It has been observed (Anderson 1976, Comrie 1978, Dixon 1979) that languages which show an ergative case marking in morphology most often are not syntactically ergative, in the sense for example of the Ergativity Hypothesis (Marantz 1984) or more traditionally in the sense of the so-called Theory of Verbal Passivity (Schuchardt 1925, Gavel 1930, Uhlenbeck 1948, Lafon 1960, 1972).

A striking problem remains, however: many non-related languages have—even though often partially (split ergativity)—an X-type case marking in morphology and a Y-type (abstract) Case marking in syntax, where X and Y types offer a systematic and regular crossing, as shown in (1):¹



Let us call ergaccusative those constructions where we find an ergative or active morphology with an accusative syntax. Although ergaccusativity refers more to constructions than to languages, I will call ergaccusative languages those which show the pattern in (1) in a regular and systematic way (i.e. nominative-accusative languages with B-case-marking in Marantz's 1984 terms).

The aim of this paper is to analyze the relations between morphology and syntax in one ergaccusative language, namely Basque. I will propose to analyze the mismatch illustrated in (1) within the analysis summarized in (2) below:

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Abbreviations: A/ABS=Absolutive; ACC=Accusative; Apl=Absolutive plural marker; AFF=Affirmative; ASP=Aspectual suffix; COMPL=Complementizer; D/DAT=Dative; DET=Determiner; E/ERG=Ergative; FAM=Familiar; FUT=Future; MOD=Mood; NOM=Nominative; PL=Plural; PRES=Present Tense; RESUL=Resultative; SG=singular;

(1) *Nominative* and *accusative* in (1) only refer to structural Case when it is given to subject and object NPs respectively. This is independent of morphological case marking. When we refer to accusative constructions showing a corresponding case marking we will use the term *nominaccusative* (vs. *ergaccusative*).

(2) *Case marking in ergaccusative languages:*

- a. Ergative case is an inherent Case;
- b. Absolutive case is structural Case (both nominative and accusative).

(2a) states that the ergative case, which is morphologically marked, looks like a lexical case (in the terminology of Kiparsky 1985, among others). It is assigned at D-structure by the theta-role assigner along with theta-role. (2b) states that what is usually called the absolutive case is the structural Case. It is a default Case which makes 'visible' inherently non Case marked DPs.² It corresponds to both nominative and accusative Cases, depending on the Case assigner. As shown below, Basque verbs only assign Case inherently. Structural Case, both nominative and accusative, is assigned by functional heads.

This proposal, contrary to the Case Parameter proposed by Levin & Massam (1984), (cf. also Massam 1985), does not include any kind of Case discharging requirement.³ It also departs from previous analyses of Basque Case marking. I will not examine how previous proposals have accounted for Basque Case marking,⁴ because it would be too long an undertaking (for different proposals during the last few years, see Levin 1983, Hualde 1986, Ortiz de Urbina 1989, Cheng & Demirdash 1990). I will only indicate that the analysis proposed here differs from these works (i) by assuming that the ergative case is an inherent Case; (ii) by assuming that the absolutive case (=structural Case) is assigned by different functional heads, depending on whether it is nominative or accusative; (iii) by avoiding vacuous absolutive case assignment. However, the main elements of the proposal are very proximate to descriptions given in traditional grammars, specially in Lafitte (1944).

Following Pollock (1989) and Chomsky (1989a) I assume there are several inflectional heads. I analyze inflectional heads as F(unctional) heads in the sense of Fukui (1986) and Fukui & Speas (1986). F-projections project double bar levels. Since it is not relevant for the analysis proposed, I will remain neutral regarding the bar level

(2) I assume the DP analysis of NPs; cf. Abney (1986). This point, however, is not relevant to the analysis proposed.

(3) Levin & Massam's (1984) proposal has two parts: Conditions on Case assignment (i) and Case Parameter (ii); cf. Massam (1985):

- (i) Conditions on Case Assignment:
 - a. Cx= Abstract Case must be assigned
 - b. Case is assigned only under government
- (ii) Case Parameter:
 - a. x=I (Nominative / Accusative)
 - b. x=V (Ergative / Absolutive)

(i) and (ii) are opposed to the Ergaccusative Analysis in (ia) and (iib) respectively. For another analysis of ergative case-marking based on the right-left association of NPs (in the phrase structure) to surface cases (on the case tier), see Moira, Maling and Jackendoff (1987).

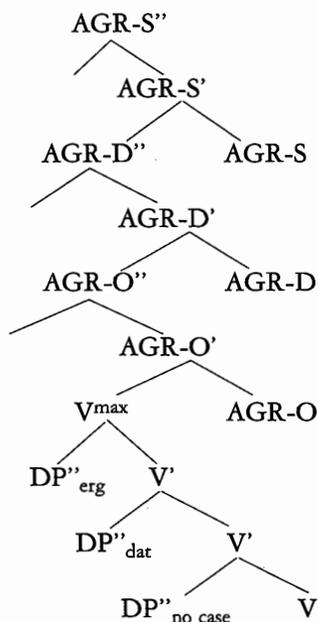
(4) The question of case marking has been discussed for a long time now. During a long period most linguists adopted the Passivist Theory (Stempf 1890, Schuchardt 1893, Gavel 1930, Uhlenbeck 1948, Lafon 1960, among others). But today this theory has very few defenders (see however, outside the Basque field, Williams 1987 and Bittner 1988). The rejection of the Passivist Theory followed the works by Anderson (1976). Another proposal has been to consider Basque as an extended ergative language in the sense of Dixon (1979), see Levin (1983).

of L(exical) projections. Further, I also assume that Spec of F-projections of lexical heads are L-related. Following Chomsky (1989b), we define L-relation as in (3):

- (3) A is L-related to B, B a lexical category, if A is included in a projection of B; (A includes B if every segment of A includes B).

In this view, Specifiers of AGR-Ps are L-related, since they are included in every segment of a projection which is a projection of V. I also assume that L-related positions are argument positions.⁵ [Spec, AGR] positions are A-positions, because agreement phrases are F-projections of V, and thus, are L-related. Abstracting away from other inflectional categories like TP, and ignoring their interactions with agreement, let us outline a structure of Inflection based on AGR-Ps:

(4a)



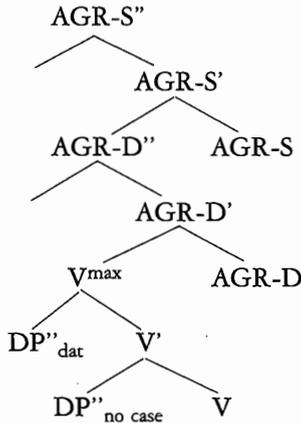
(5) Argument positions are L-related positions. They include theta-related VP internal positions, and Spec of F-projections of V (such as AGR-Ps). On L-relations, cf. Chomsky (1989b): Most Basque linguists, explicitly or implicitly, have assumed that DP_{erg} in its agreement position is in an A-position. Empirical evidence showing that the head position of the chain is an A position is provided by weak cross over effects (WCO). Thus see the following contrast:

- (i) *?nor_i jo zuen bere_i aitak e_i
 who.ACC hit AUX his father.ERG
 Who did his (own) father hit?
- (ii) nor_k jo zuen e_i bere_i semea?
 who.ERG hit AUX his (own) son.ACC
 Who hit his (own) son?

(i) is a classical illustration of WCO, and contrasts with (ii). Assuming the Bijection Principle (Koopman & Sportiche, 1982), e_i in (ii) binds *bere* and is in an A position; (cf. the following contrast: *Peter seems to his mother to be the best* vs ?* *Who does it seem to his mother that Mary saw?*).

The matching between inflectional structure and case morphology as shown in (4a) is reminiscent of other previous proposals (see especially Laka 1988).⁶ However, I will argue that, while AGR-O assigns accusative Case to inherently non Case marked DPabs in transitive sentences, AGR-S assigns nominative Case to DPabs in unaccusative sentences. The D-structure of unaccusative sentences is illustrated in (4b) below:

(4b)



In the first section, I show that Basque corresponds to an ergaccusative language in the sense of (1), and I give the main indications regarding the relevant data in that language. In section 2, I examine the proposal of considering ergative case as an inherent Case (see also Levin & Massam 1984, Williams 1987, Mahajan 1989). I discuss the conditions in which ergative case is assigned and realized, assuming there is DP_{erg} movement forming an L-related A-chain. In order to provide an account for DP_{erg} movement, I will formulate the Condition for inherent Case marking (17). Despite crucial differences in the formulation, this latter Condition keeps a core idea of the Uniformity Condition discussed by Chomsky (1986a), since it assumes the possible compositional character of inherent Case marking (under the same lexical domain), and distinguishes between Case assignment (at D-structure) and Case realization (at S-structure). In section 3, I analyze the absolutive case, assuming that Basque verbs are not structural Case assigners and cannot have more than one non inherently Case-marked argument. Under these assumptions, I will propose that absolutive is a morphologically non-marked form, which corresponds

(6) Laka (1988) proposes that the heads of F-projections are rather T(ense) (on the top), M(odality), and R(oot) (on the bottom). In her proposal, NP_{erg}, NP_{dat}, and NP_{abs} occupy respectively the Spec positions of T'', M'', and R''. This analysis gives a direct account of verb inflection morphology (a question I will not directly discuss in this paper). Laka doesn't deal with the question of Case marking, and it is not clear whether her analysis is compatible or not with the ergaccusative analysis: probably it is, with respect to the analysis of ergative as an inherent Case, but it seems to be at odds with the analysis of absolutive as corresponding to structural Case assigned by distinct F-heads. Cheng & Demirdash (1990), following Laka's proposal, examine also the possibility that AGR-Ps (not DPs themselves) are generated in Spec of T'', M'', and R''.

to structural Case marking. DPs which are not inherently Case marked must move to get structural Case from functional heads. With unaccusative verbs, I will argue, D-object DPs move to [Spec, AGR-S"] to get (nominative) Case. With transitive verbs, the [Spec, AGR-S"] position is occupied by the DPerg, and D-object DPs move to [Spec, AGR-O"], where they are assigned accusative Case. This last point accounts for the fact that Basque has obligatory object agreement. Since all verb arguments but one (at most) receive inherent Case, nominative-accusative sentences are not allowed in Basque. In the following section I will discuss some consequences of this analysis regarding several constructions: object incorporation and object genitivation in nominalized sentences; passive and implicative constructions.

1. Data on Ergaccusativity in Basque.

I will briefly show, first, that Basque is morphologically ergative, and second, that it is syntactically accusative. The main arguments of this section are not new and they are well-known by linguists familiar with the Basque language. Since the question is not controversial, I will only keep in this presentation the most salient elements which can be useful to non-specialist readers. Before entering the matter, let me briefly indicate that Basque is a relatively free word order language, though most of the authors agree that there is a neutral order SOV (following de Rijk 1969). It also has a rich agreement system and it allows empty forms (*pro*) for pronouns which agree with verbs. Agreement occurs with ergative, dative and absolutive DPs.

1.1. Ergative morphology in nominal inflection

Basque is morphologically ergative or, more accurately, morphologically active. This is obvious in nominal inflection. On one hand, the subject DPs in transitive sentences (5a) and intransitive active sentences (5b) receive a special marker, the suffix *-k*, called ergative (*Maddi-k* 'Mary'-ERG in (5a,b)).⁷ On the other hand, the object DPs in transitive sentences (5a), and the subject DPs in intransitive sentences with unaccusative verbs (5c), don't take any overt suffix (*sagarra-Ø* 'the apple' in (5a,c), where the absence of overt suffix is glossed *-Ø*):

- (5) a. *Maddi-k* *sagarr-a- Ø* *jan du*
 Mary- ERG apple- DET-ABS eat AUX
 Mary ate the apple

(7) As pointed out by Dixon (1987) recent literature has introduced some confusion in the terminology. The use of *ergative* to name the case now usually called *ergative* was introduced by Ditt in 1929 in Caucasian studies (Tchekhoff 1978). In Basque grammars the name *active* was traditionally used (it appears already in the 17th century), but most modern linguists have been reluctant to employ it. Regarding the names of the two classes of intransitive verbs, the names used by Perlmutter (1978) and by Burzio (1986) are not felicitous in the case of languages like Basque. Indeed, unergative verbs in Perlmutter's terminology are the verbs in which subject NPs receive the ergative suffix, and ergative verbs in Burzio's terminology are verbs in whose subjects NPs cannot receive the ergative suffix or cannot select the [+ERG] auxiliary. Since Basque shows a semantic split in the nontransitive verbs, the term *active* is not in contradiction with other uses it has in general linguistics; (cf. Dixon 1977, Harris 1981, 1982, Durie 1987).

- b. *Maddi-k bazkaldu du*
 Mary- ERG lunch AUX
 Mary had lunch
- c. *Sagarr-a- Ø erori da*
 apple- DET-ABS fall AUX
 The apple fell

The usual morphological analysis says that the absence of an overt suffix in nominal inflection corresponds to a morphological case (\emptyset suffix) called absolutive.⁸ The implicit and, most often, explicit assumption underlying this analysis is that absolutive case is a single case, in fact one of the Basque grammatical cases⁹ on a par with dative and ergative cases. This view clearly contradicts our proposal. However, for the sake of convenience, I will keep using the term in the usual way in this section. But it must be clear that absolutive case only means structural Case within the view adopted here. It can actually correspond to both nominative and accusative Cases.

1.2. Ergative morphology in verbal inflection

Besides nominal inflection, ergative morphology is also reflected in verbal inflection, both in Auxiliary Selection, and in person / number agreement marking within verbal inflection.

1.2.1. Auxiliary Selection is carried out in Basque in a way similar to Italian.¹⁰ However this selection in Basque strictly corresponds to the presence or the absence of ergative agreement within the inflection. On one hand, ordinary transitive sentences and intransitive active sentences have a [+ERG] auxiliary, that is, an auxiliary which carries ergative agreement (e.g. **edun* 'to have'). On the other hand, sentences with an unaccusative verb must have a [-ERG] auxiliary, that is, an auxiliary which excludes ergative agreement (e.g. *izan* 'to be'). The biunivocal correspondance between the type of auxiliary selected ([+ERG]) and ergative agreement makes Auxiliary Selection reflect ergative morphology. This is illustrated in (6):

- (6) *Auxiliary selection in Basque:*
- | | |
|--------|---|
| [+ERG] | aux: * <i>edun</i> 'to have', * <i>in</i> , * <i>ezan</i> →
transitive / intransitive active verbs |
| [-ERG] | aux: <i>izan</i> 'to be', * <i>edin</i> → unaccusative verbs |

For example, for verbs which show the transitive (causative) / unaccusative (inchoative) alternation, each of the auxiliary types will correspond to one option. See (7) below with the verb *hil* 'to die, to kill' (Basque is a pro-drop language; dropped pronouns are not shown in the examples):

(8) The term *nominative* has also been traditionally used in Basque grammars. Such a name could be interpreted as linked to the Passivist Theory, where absolutive DPs are analyzed as subjects, even in transitive sentences.

(9) Grammatical cases are defined in Basque grammars as cases which carry verb agreement. They are opposed to instrumental and locative cases; see Euskaltzaindia (1985, 322).

(10) Most Basque verbs need an auxiliary for inflection. However, there are some verbs which can also be inflected without auxiliary (see the paradigms in (8) for an illustration). The morphology of agreement inflection doesn't change in both cases. When a verb can have synthetic inflection (i.e. without auxiliaries) it is unambiguously [+ERG] or [-ERG] in this use.

- (7) a. *bilen n—a—iz*
 die.FUT 1sgA-PRES-AUX
 [-ERG]
 I will die
- b. *bilen n—a—u—zu*
 kill.FUT 1sgA-PRES-AUX-2sgE
 [+ERG]
 You will kill me

1.2.2. Basque has multicase person agreement, and inflected verbs must agree in person with ergative and absolutive DPs. The examples in (7) above illustrate this point. In (7a) the inflected verb contains a 1st person absolutive prefix (*n-*); in (7b) it contains both a 1st person absolutive prefix (*n-*) and a 2nd person ergative suffix (*-zu*). Agreement is obligatory.¹¹

Observe that the position and the form of the person agreement marker for the absolutive inside the inflection do not change in (7); the prefix *n-* in both inflected forms of (7) stands for the 1st person absolutive, which corresponds to the subject DP in (7a), and to the object DP in (7b). On the other hand, the subject DP is encoded as a prefix in the inflection in (7a), but as a suffix in the inflection in (7b). This is why Basque inflectional verb morphology is assumed to follow the ergative pattern.

This observation applies to most verb paradigms.¹² The verb paradigms below give an overview of Basque verbal morphology: in (8a) the root corresponds to the unaccusative verb *ibili* 'to walk'; in (8b) the root corresponds to the transitive form *erabili* 'to use'. The comparison between both paradigms, [-ERG] in (8a) and [+ERG] in (8b), confirms that, like in (7), person agreement in inflectional morphology does not reflect the syntactic ambiguity of absolutive DPs.

(8)	a.	<i>person</i>	(ABS)	<i>tense/</i>	<i>root /</i>	<i>number</i>	(ABS)	
		(1st sg)	<i>n</i>	<i>a</i>	<i>bil</i>	∅		Im walking
		((fam.)2nd sg)	<i>h</i>	<i>a</i>	<i>bil</i>	∅		You are walking
							(sg. fam.)	
		(3rd sg)	∅	<i>da</i>	<i>bil</i>	∅		He/She is walking
		(1st pl)	<i>g</i>	<i>a</i>	<i>bil</i>	<i>tza</i>		We are walking

(11) Dative person agreement is also required when absolutive person agreement is absent or has no overt realization, i.e. when it is 3rd person (not marked and glossed). See the example in (i) where the inflection shows agreement with the three argument NPs.

(i) *zuk eni sagar bat eman d—i—da-zu*
 you.ERG me.DAT apple one.ABS given 3A-PRES-AUX-1D-2E
 You gave me one apple

(12) However, sometimes person agreement morphology appears in a different way. These alterations appear for ergative agreement markers in non-present tense paradigms when there is no overt absolutive person agreement (3rd person absolutive, or no absolutive agreement at all). In this case ergative person agreement markers have the same position (prefixed) and the same form as absolutive person agreement markers. These forms have been analyzed sometimes as an illustration of split ergativity (cf. Trask 1979, and, for an analysis against this view, Laka 1988).

((non fam.) 2nd sg)	<i>z</i>	<i>a</i>	<i>bil</i>	<i>tza</i>	You are walking (sg. non fam.)
(2nd pl)	<i>z</i>	<i>a</i>	<i>bil</i>	<i>tza -te</i>	You are walking (pl.)
(3rd pl)	∅	<i>da</i>	<i>bil</i>	<i>tza</i>	They are walking
b. <i>person</i>	(ABS)/	<i>tensel</i>	<i>root</i> /	<i>number</i> (ABS)/	<i>person</i> (ERG)
(1st sg)	<i>n</i>	<i>a</i>	<i>rabil</i>	∅	<i>t</i> (1st sg)
((fam.)2nd sg)	<i>b</i>	<i>a</i>	<i>rabil</i>	∅	<i>k/n</i> (2nd sg fam.: masc./fem.)
(3rd sg)	∅	<i>da</i>	<i>rabil</i>	∅	∅ (3rd sg)
(1st pl)	<i>g</i>	<i>a</i>	<i>rabil</i>	<i>tza</i>	<i>gu</i> (1st pl)
((non fam.)2nd pl)	<i>z</i>	<i>a</i>	<i>rabil</i>	<i>tza</i>	<i>zu</i> (2nd sg non-fam.)
(2nd pl)	<i>z</i>	<i>a</i>	<i>rabil</i>	<i>tza -te</i>	<i>zu-e</i> (2nd pl)
(3rd pl)	∅	<i>da</i>	<i>rabil</i>	<i>tza</i>	∅- <i>te</i> (3rd pl)

N-a-rabil—zu You make use of me

Z-a-rabil-tza-t I make use of you.

...

These are the morphological data concerning the ergative part of ergaccusativity. Obviously, to be an ergaccusative language Basque must also satisfy the right side of (1), and must have an accusative syntax. I will not examine this point in detail now, since most of the authors today admit that Basque is an accusative language as far as syntax is concerned; for a review of different arguments, see Ortiz de Urbina (1989) and Salaburu (1989). However, I understand ergaccusativity here as including the consequences of Burzio's generalization for the analysis of unaccusative verbs.¹³ The latter point is challenged in Levin (1983), but convincingly supported in my view by several authors (Hualde 1986, Eguzkitza 1986, Ortiz de Urbina 1989); see also 3.2.

As seen in (8a,b), besides person agreement, absolutive DPs have a specific and autonomous number agreement for all persons. Absolutive number agreement, like absolutive person agreement, does not distinguish between the syntactic functions of the absolutive DPs it agrees with. Thus, the absolutive number agreement (only overt with plural: *-tza-* in (6)) doesn't change when it agrees with a subject DP (8a) or with an object DP (8b). Thus, number agreement follows the ergative/ absolutive pattern.

1.3. *Syntactic accusativity*

The fact that Basque syntactic processes are sensitive to S-structure configurations and not to D-structure relations, or to morphological case marking, can be shown in several constructions. I will only mention two of them here: object incor-

(13) Obviously I do not assume Burzio's Generalization in its genuine formulation, since I claim that Basque verbs do not assign structural Case. I will keep however its basic descriptive insight: when there is no subject theta-role, accusative Case cannot be assigned (by AGR-O in our analysis). Within our proposal, this is the result of several constraints, including Extended Projection Principle, and constraints on structural Case marking; see below (32).

poration in nominalized sentences, and control structures. The first construction shows that some processes apply only to objects of transitive sentences (and not to all D-objects); the second one shows that some processes apply to subject DPs, whatever the morphological case they receive, either absolutive or ergative.

1.3.1. Non specific objects of nominalized transitive sentences can incorporate into the verb. This option is illustrated in (9a) below:

- (9) a. [*Zuk handik ur isurtzea*]-*k* *barritu*
 you.ERG there.LOC water run.NOML.DET-ERG surprised
ninduen
 1A.AUX.3E
 [You to run water from there] surprised me
- b. [*Zuk handik ura isurtzea*]-*k*
 you.ERG there.LOC water.DET.ABS run.NOML.DET-ERG
barritu ninduen
 surprised 1A.AUX.3E
 [You to run water from there] surprised me

In transitive sentences the object noun can incorporate (9a) or it may be realized without incorporating (9b). The syntactic incorporation illustrated in (9a) is restricted to transitive sentences. Indeed, as shown in (10a), noun incorporation is blocked in unaccusative sentences.

- (10) a. * [*Handik ur isurtzea*]-*k* *barritu*
 there.LOC water run.NOML.DET-ERG surprised
ninduen
 1A.AUX.3E
 [To water-run from there] surprised me
- b. [*Ura handik isurtzea*]-*k*
 water.DET.ABS there.LOC run.NOML.DET-ERG
barritu ninduen
 surprised 1A.AUX.3E
 [The water to run from there] surprised me

It is obvious from the data above that object incorporation follows an accusative pattern, since only D-objects can incorporate in transitive sentences. On the contrary, absolutive case marking on object DPs is available in both kind of sentences (9b, 10b).

1.3.2. Obligatory control structures also correspond to an accusative pattern. Indeed the controlee of control verbs can only be the S-subject DP (no matter whether it is ergative or absolutive). Thus obligatory control is blind to morphological case marking. See the examples of obligatory control structures in (11-12):

- (11) *Ez dakit* [*zer-Ø egin*]
 NEG PRES.know.1sgE what-ABS do
 I don't know [what to do]

- (12) a. *Ez *dakit* [zer- Ø gerta]
 NEG PRES.know.1sgE what-ABS happen
 I don't know [what to happen]
- b. *Ez *dakit* [nor-k egin]
 NEG PRES.know.1sgE who-ERG do
 I don't know [who to do it]

The examples in (11-12) are control structures, where the controlee is the subject DP of the indirect question. In (11) the subject DP (non overt) is the controlee, and the sentence is well formed. On the contrary, in (12), the WH-words are S-subjects. Thus, there is no control on the subject DPs and (12a, b) are bad.

We conclude that the constructions discussed above¹⁴ clearly show that Basque syntax and case morphology don't match, in the way illustrated in (1), and consequently that Basque is an ergaccusative language.

2. Ergative Case as an Inherent Case

In the literature, the Basque ergative case has been analyzed as (i) a kind of preposition (an option taken in Basque studies by linguists defending the Passivist Theory); (ii) a morphological case/Case assigned by I(nflection), see Goenaga (1980), Hualde (1986), Ortiz de Urbina (1989), and, within a multi-headed conception of Inflection along the lines of Laka (1988), Cheng & Demirdash (1990). There is another option which has not been developed within the Basque field, although it has been adopted for other ergaccusative languages; see for example Levin & Massam (1984), Williams (1987), Mahajan (1989, 1990) among others. This option, which I will defend here, claims that ergative case is an inherent Case assigned by V.¹⁵

I assume that Basque verbs assign theta-role to all the arguments they select within the lexical projection V, and that DP_{erg} is base generated inside VP. The proposal that all the arguments of the verb are generated VP internally (including the 'external' argument) has received considerable support in the past few years (see Fukui & Speas 1986, Kitagawa 1986, Koopman & Sportiche 1988, Kuroda 1988, Diesing 1988, ...). Thus, this is not presumably a property of ergaccusative constructions.

In this section I first examine DP_{erg}-movement (2.1.), and formulate a Condition on inherent Case marking that relates DP_{erg}-movement to V-movement to AGR-S (cf. (17)) (2.2.); I also discuss the question of proper government of traces of moved DPs, using the notion of extended chain as defined by Chomsky (1986b), (2.3.). In (2.4.) I discuss the case of expletive ergative DPs.

(14) Among the other arguments which confirm that Basque is syntactically accusative, those referring to binding of lexical anaphors have also been mentioned by several authors, including Levin (1983), Salaburu (1986), Hualde (1986), Ortiz de Urbina (1989).

(15) See Cheng & Demirdash (1990) for another proposal where theta-roles are indirectly assigned to the argument NPs base generated outside VP. Within their proposal, although ergative is an inherent Case, DP_{erg} is not VP internal at D-structure, because functional heads are both Case and theta-role assigners.

2.1. DPerg Movement

2.1.1. Following Chomsky (1986a) I give two properties that distinguish inherent Case from structural Case: (i) it is assigned at D-structure, contrary to structural Case which is assigned at S-structure, and (ii) it is straightforwardly linked to theta-role assignment, in the sense that the element which is the Case assigner also theta-marks the DP; on the contrary structural Case is assigned independently of theta-marking.¹⁶

Assuming that subject DPs are generated VP internally and that verbs are not structural Case assigners, D-structure subject DPs in nominaccusative constructions must move in order to satisfy the Case Filter. On the contrary, if ergative DPs are Case marked in their D-structure position (sister to V'), one could expect they need not move, because the Case requirement can be satisfied VP internally. However, the latter prediction is not fulfilled, since there is DPerg-movement in Basque.

2.1.2. DPerg movement in Basque is transparent, because ergative agreement is obligatory (see however section 4.2.). Consider (13):

- (13) *Liburuak amari nik ekarri *zitzaizkion /*
 books.ABS mother.DAT I.ERG brought 3A.AUX.plA.3D
nizkion
 (3A).1E.AUX.plA.3D
 I brought the books to (my) mother

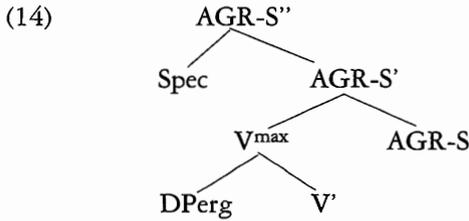
In (13) I give two auxiliary forms. The first one (*zitzaizkion*, [-ERG] auxiliary) agrees with the absolutive DP and the dative DP, but not with the ergative DP. The second one (*nizkion*, [+ERG] auxiliary) agrees with the absolutive, dative and ergative DPs. Only the latter auxiliary form is grammatical, because it has ergative agreement.

As we saw in section 1, ergative DPs are subject DPs. Within our analysis of sentence structure illustrated in (4), an S-subject occupies the [Spec, Sub-AGRS"] position (an L-related and, thus, an A-position). Thus, we assume that DPerg movement results in an A-chain.

2.2. Conditions on Inherent Case Marking

If the ergative case is an inherent Case, how can we account for DPerg-movement in a structure like (4), repeated here in a simpler configuration for convenience?

(16) Following Chomsky (1986a), I assume that inherent Case doesn't imply assignment of one and only one particular theta-role; (see also Williams 1987, Baker 1988). The reader must not infer from our analysis that ergative case (or dative case) assignment in Basque is linked to one specific theta-role (as these are usually identified in current works). This would be false, since ergative DPs can have agentive and also experiencer or instrumental theta-role, for example. The restrictions on the specific theta-role(s) related to ergative or dative case assignment is another (separate) issue that I will not discuss here (though I do admit that there are such restrictions); cf. the distinction between semantic Case and inherent Case in Baker (1988, 113-4).



Two kinds of proposals come to mind to explain why DPerg moves in (14). Within the first one, DPerg-movement is required from 'outside', that is, for reasons independent of DPerg itself. For example, it would be the consequence of the Extended Projection Principle, or the consequence of the fact that Inflection has an ergative agreement marker which would have to be satisfied (see for example the Principle of Agreement discussed by Fukui 1988). This view, conceptually, entails the idea that Case marking is fully accomplished at D-structure, since DPerg-movement results from other constraints. It is obviously in contradiction with the standard view that only heads of A-chains are Case marked.

The second type of explanation follows the standard analysis of DP-movement. Within this view, DPerg-movement results from requirements on the DPerg itself, and more specifically from conditions on Case marking. Obviously, this analysis implies that, even if the ergative is an inherent Case, Case marking is not fully accomplished at D-structure. The distinction which comes to mind here is the one discussed in Chomsky (1986a) between Case assignment and Case realization. This distinction suggests that under some conditions inherent Case realization is satisfied in a position different from the one where it is assigned.

Even though the case discussed in Chomsky (1986a) is different from DPerg, I will follow this idea, and will assume the (possible) compositional character of inherent Case marking (i.e. assignment at D-structure in position x , realization at S-structure in position y ; x and y being respectively the head and the tail of the same A-chain).

Two possibilities at least seem to be available to implement this idea. The first one is to formulate some conditions on inherent Case realization; the second one, to derive the solution from properties regarding the inherent Case assigner.

The first option is discussed in Mahajan (1989). Mahajan proposes that the realization of inherent Case for DPerg in Hindi is submitted to a condition on Case realization. There would be, for example, a Licensing Condition such as (15) below:

- (15) *Licensing Condition*: Inherent ergative Case is realized under government by T

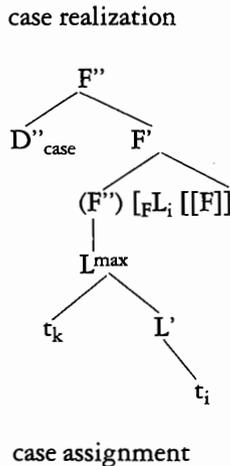
The licensing condition (15)¹⁷ has the desirable effect of unifying DP-movement in nominaccusative languages, and DPerg-movement in ergaccusative languages.

(17) (15) is formulated for Hindi. Notice that under this formulation, the Licensing Condition is probably too weak in the case of Basque (assuming that after V-movement VP is not a barrier). However, I will not pursue this issue. See also Mahajan (1990) for another proposal, where Structural Case is added to inherent ergative Case. If the last suggestion were maintained, Case Theory ought to be revised.

However, it looks rather stipulative.¹⁸ Furthermore, it implies that DPerg-movement is always obligatory (assuming that T doesn't govern DPerg inside VP, since otherwise (15) serves no purpose). This is not a desirable consequence, because it excludes the availability of ergative DPs within VP at S-structure. As we will see in section 4, some constructions in Basque seem to indicate that ergative DPs can be inherently Case marked without moving. Thus, I will propose an analysis of DPerg movement which follows the second perspective and links together DPerg-movement and inherent Case assigner-movement (i.e. V-movement).

The intuition behind our proposal is that movement of the inherent Case assigner can disrupt full accomplishment of inherent Case marking in the theta position (Case-assignment position and Case-realization positions being, thus, distinct positions). More precisely, I would like to suggest that head-movement of an inherent Case assigner can entail a correlated movement of the DP(s) it inherently Case marks.¹⁹ The latter moves to the Spec position of the F-projection where the Case assigner moves. This can be illustrated by the diagram in (16), where L stands for a lexical head, F a functional head of L (say, T or AGR), and D''_{case} an inherently Case marked DP:

(16)



DPerg movement is an illustration of compositional inherent Case-marking as shown in (16). The question arises whether the correlation between DP-movement and inherent Case assigner movement is obligatory, or whether it is restricted by (probably language dependent) constraints. I will assume that whenever a Spec of an

(18) If the Licensing Condition is formulated in such a way that it restricts licensing of DPerg to subject position, then, it is empirically similar to the proposal that inherently Case marked ergative DPs must receive structural Case; cf. Mahajan (1990).

(19) This can be analyzed as a kind of Government Opacity as opposed to the Government Transparency discussed by Baker (1988). Recall that the Government Transparency Corollary (Baker, 1988) only holds for incorporation into a lexical head.

L-related projection is available to DP_{case}, DP_{case} movement must follow V-movement. In the case of DPerg in ergaccusative constructions, this is always the case since the DPerg is an S-structure subject (whether there is overt ergative agreement like in Basque or not, like, say, in Hindi). In the case of dative, language dependent variation has to be allowed.²⁰

I formulate the conditions regarding compositional Case marking as in (17); see also, however, fn. 47:

(17) *Condition on inherent Case marking:*

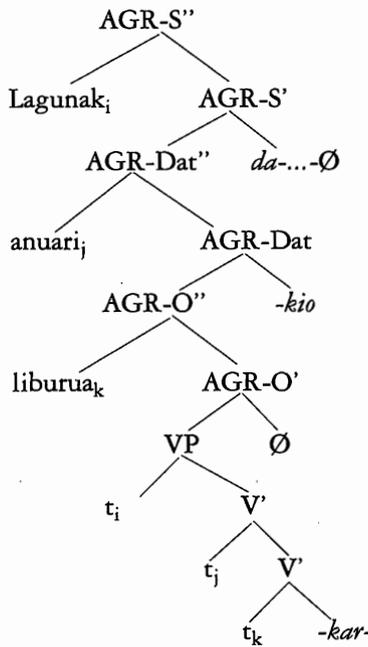
Let α be an inherent Case assigner and β the head of an F-projection of α , α Case-marks inherently γ , iff:

- i. α theta-marks γ ;
- ii. where α moves to β , $\alpha\beta$ and the chain $\{\gamma_i, \dots, \gamma_n\}$ are coindexed.

Applying (17) to Basque, one obtains the representations of sentence structure given in (4). This is illustrated in (18), where the moved ergative DP, and in the same manner the dative DP, form an inherently Case marked A-chain.

- (18) a. *Lagunak anaiari liburua Ø-da—kar-kio-Ø*
 friend.ERG brother.DAT book.ACC 3A-PRES-bring-3D—3E
 The friend is bringing the book to (my) brother

b.



(20) In Basque, one interesting case is partitive. Assuming that partitive is an inherent Case (Belletti 1988), I will leave for further research the task of determining whether or not there is DPpartitive-movement.

element for A-bound traces under the concept of Minimality we are following; cf. Chomsky (1986b: 76).²⁴ We would like to make sure that the traces t_i and t_k are antecedent governed in (22):

- (22) [_T *Manexek*_i [_{AGR-O} *Maddi*_k [_{V^{max}} t_i [_V t_k t_i]] t'_1] *dakus*]
 John.ERG Mary.ACC 3A.PRES.sec.3E
 Johns sees Mary

(22) is a violation of the Minimality Condition, in the sense of Chomsky (1986b).²⁵ Under the narrow interpretation the immediate projection of V (V') is a barrier to antecedent government of t_k ; under the broader interpretation, both t_k and t_i violate ECP, since V^{\max} and AGR-O" also are barriers: thus, antecedent government of t_i by the ergative DP is blocked.

The concept of extended chain provides a good solution to this problem. It leaves the terminal position of an X⁰-chain (t_i in (23)) to be antecedent-governed by chain coindexing.

This solution has been put forward by Chomsky (1986b: 74-80) to account for DP-movement with raising verbs and passives.²⁶ It takes advantage of the agreement relation between I and [Spec, I] and assimilates chain coindexing and agreement indexing. Consider (23), (cf. Chomsky 1986b: 169):

- (23) *John*_k [_{α} *seem-I*] [_{VP} t_i [_{IP} t_k *to be intelligent*]]

In (23) VP is a barrier to antecedent government of t_k by *John* (by Minimality). However, the sentence is well formed. Suppose that agreement indexing and chain coindexing must not be distinguished. Thus, $i=k$ in (23), and t_i antecedent-governs t_k by chain coindexing under government. Chomsky defines chain coindexing as in (24):

- (24) a. C = ($\alpha_1, \dots, \alpha_n, \beta$) is an extended chain if ($\alpha_1, \dots, \alpha_n$) is a chain with index i and β has index i .
 b. Chain coindexing holds of the links of an extended chain.

The solution is consistent with our proposal about DPerg-movement, provided that a single final position (t_i in (22)) can belong to more than one (independent) extended chain, with different coindexing.

Returning to (22), there are two extended chains as shown in (25):

- (25) a. (*Manexek*_i, t_i , t_i), where $i=1$ b. (*Maddi*_k, t_k , t_i), where $k=1$

In both cases the traces of the DPs (t_i , t_k) are properly governed by t_i .

(24) Crucial in the sense that (under Rigid Minimality) theta-government is not sufficient to license the trace. The relevant example is super raising as in (i)

- (i) * *a man seems there to be killed* t

In (i) t is theta-governed, but, however, there is arguably an ECP violation. Within a framework using Relativized Minimality (Rizzi 1990), such a problem doesn't arise, but the whole concept of Relativized Minimality seems incompatible with our analysis.

(25) *Minimality Condition*: a is a barrier for b if a is a projection (broad interpretation)/ the immediate projection (narrow interpretation) of g, a zero-level category distinct from b. (Chomsky 1986b: 42). Our analysis is hardly compatible with the concept of Relativized Minimality proposed by Rizzi (1990).

(26) If the VP-internal-subject-analysis applies to nominaccusative languages, the concept of extended chain has to be used in the same manner (within the broad interpretation of the Minimality Condition).

2.4. *Lack of Nonargument Ergative Expletives*

The hypothesis of ergative as an inherent Case predicts the lack of nonargument ergative expletive DPs (see also Levin & Massam 1984). Indeed, since inherent Case marking implies theta-role assignment, nonargumental expletives cannot be inherently Case marked.

This prediction is fulfilled in Basque,²⁷ though one could consider the following cases as counterexamples:

- (26) a. *e euri egin du*
 rain made AUX-3E
 It rained
- b. *e irudi du [zerbait gertatu dela]*
 seem Aux.3E smth happened 3A.AUX.COMPL
 It seems [that something happened]

In (26a,b) *e* is an empty pronominal ergative, and it brings about verb agreement. This *pro* is not referential and cannot be overtly realized. But does this show Basque has nonargumental ergatives? No. In the case of (26a), an atmospherical expression, we can follow Chomsky (1986a) by admitting that the subject DP is a quasi-argument (i.e. that it is nonreferential, but does have a theta-role). I will show the same analysis can be provided for (26b) too.

The locution *irudi ukan* 'seem' is [+ERG].²⁸ In many languages *seem*-verbs are raising verbs. Raising verbs require the subject not to be theta-marked, since it is the basic requirement for DPs in embedded sentences to raise from a non Case-marked position. So if *irudi ukan* were a raising verb, *e* in (26b) would be a nonargumental ergative. But there is no evidence of DP-raising with *irudi ukan*. Moreover there is evidence that *irudi ukan* assigns theta-role to its subject argument, as it is shown in (27):

- (27) *zuk/pro irudi duzu [pro eri zarela]*
 you-ERG seem AUX.2E sick 2A.AUX.COMPL
 lit. You seem [you are sick]

In (27) the sentential complement of *irudi ukan* contains an inflected verb form which has 2nd person absolutive agreement. Thus the subject DP of the embedded sentence is an empty pronominal. The subject of the matrix sentence too is *pro* or *zuk* (2nd ergative). Therefore there is no DP-movement in (27), and the subject of the matrix sentence must have received its theta-role from the matrix verb *irudi ukan* (cf. for a similar view Salaburu 1988).²⁹

(27) Basque uses quasi-argumental empty expletives similar to the one in (26) and which have 3rd sg verbal agreement, for example in atmospherical expressions.

(28) *Irudi* 'to seem' has two kinds of verbal use. Joined to **edun* in a locution or synthetically inflected, it is [+ERG]. As a derived verb (*iruditu*), with a periphrastic inflection, it is a [-ERG,+DAT] verb.

(29) I will not examine which theta-role is assigned by *irudi ukan*. I do not see why it would have to be different in (26b) and (27). The opposition between both examples lies on referentiality (in Chomsky's sense) rather than on thematic distinctions.

Even though *irudi ukan* and atmospherical (or time) expressions are not counter-examples to the predictions following from the ergaccusative hypothesis, one would like to find more positive evidence of the lack of ergative nonargumental expletives. Impersonal sentences offer us a possibility to test this prediction.

Impersonal sentences can be realized by lexical saturation of the subject argument (cf. Rizzi 1986, and for an application to Basque, Ortiz de Urbina 1989, and Oyharçabal 1989). Therefore the subject argument of impersonal verbs has no realization in syntax. See now what happens with monadic verbs, comparing the situation for active and unaccusative verbs.

Impersonal sentences with monadic verbs display the structure shown in (28):

(28) *Nonarg. expl. - Verb - AUX*

Even though the expletive in (28) has to remain empty in Basque, auxiliary selection helps us to determine whether the empty expletive in impersonal sentences is ergative or not. If ergative nonargumental expletives were allowed, we would have a [+ERG] auxiliary in impersonal sentences with active monadic verbs, just like we find [-ERG] auxiliaries with impersonal unaccusative sentences (29b). However in active intransitive sentences [+ERG] auxiliaries are not allowed as shown in (29a):

(29) a. *Holakoetan*, pro_{expl} *ihardokitzen* *da*
withstand.ASP 3A. AUX [-ERG]. AUX
/ **du*
[+ERG] . 3E

In such cases, one withstands

b. *Holakoetan*, pro_{expl} *joaten da* / **du*
go.ASP 3A.AUX [-ERG] AUX [+ERG].3E

In such cases, one leaves

Following previous assumptions, in both sentences of (29) the subject DP is a nonargumental expletive pronominal, required by the Extended Projection Principle (Chomsky 1981). Assuming that licensing of *pro* requires Case-marking (Rizzi, 1986), pro_{expl} is Case-marked in (29a,b). In fact, it receives structural Case from AGR-S" (see next section). Since ergative case is excluded in (29a) (like in (29b)), this confirms that nonargumental expletive DPs cannot be ergative: ergative is an inherent Case and must be theta-related.

3. Absolutive Case as Structural Case

Let us now consider absolutive DPs. The present analysis assumes that absolutive corresponds to structural Case. Structural Case is assigned to DPs that do not receive inherent Case at D-structure. In Basque structural Case is not phonologically realized, and there is no morphological evidence showing syntactic dichotomy. However the present analysis claims that both nominative and accusative Case are assigned by different structural Case-assigners: AGR-S and AGR-O (not V) respectively. Together with inherent ergative Case-marking, these elements will help us to provide

an account for Case-marking and some other related phenomena in Basque. In this section, I will discuss the following points:³⁰

- Obligatory object-agreement and lack of nominaccusative constructions; 3.1.
- Syntactic dichotomy of DPs receiving the zero case (structural Case); 3.2.
- Parallelism between case morphology and D-structure grammatical relations; 3.2.³¹
- Structural Case requirement and verb-morphology; 3.4.

3.1. *Object-Agreement and Lack of Nominaccusative Constructions*

Let us consider the case of transitive sentences. Two different points must be accounted for: object agreement and lack of nominative DPs.

Assuming that V does not assign structural Case in Basque (a proposal that is formulated in (32)) object agreement follows straightforwardly from Case requirements. DPs which do not receive inherent Case must move to a position where they can satisfy the Case requirement. In a transitive sentence, if the object DP does not move to Spec of AGR-O", the sentence is ungrammatical:

- (30) **Nik zu ikusi dut*
 I.ERG you.ACC seen AUX.1E
 I saw you

In (30) the inflected auxiliary does not agree with the 2nd person object. If the verb were able to assign structural Case, the object DP would not have to raise to get Case, and agreement would be optional. This is what happens in Hindi with long distance agreement. In this case, the infinitive (and then the matrix verb) can optionally agree with the embedded object, depending on object movement; see Mahajan (1990: 92).³²

(30) Ortiz de Urbina (p.c.) observes that the analysis proposed here does not explain verb morphology, since, for example, subject agreement induces both prefixation (ergative) and suffixation (nominative), whereas, object agreement and subject agreement with unaccusative verbs display the same morphology (prefixation); see (8). This is obviously true. As for the first point (subject agreement), I think the two agreement types correspond to nominal morphology (ergative case and structural case). But as for the second point—in fact the hard core of ergativity—one could propose to extend what can be said for nominal morphology (i.e. that structural case is a zero-case) to agreement morphology. However, this remains somewhat artificial.

(31) One could propose that grammatical relations are directly encoded by case morphology in Basque. In this view, structural Case is only assigned to D-structure objects in both transitive and non-transitive sentences. This would be one interpretation of Levin's (1983) analysis. However, this implies that D-structure grammatical relations and thematic relations are related in a very fuzzy way, because thematic relations are not always reflected by case morphology; see fn. 43.

(32) The relevant examples are the following (Mahajan 1990: 87-8):

- (i) *raam ne roTii kbaanii caabii*
 Ram (m.) erg bread (f.) eat (inf. f.) want (perf. pst. f.)
- (ii) *raam ne roTii kbaanaa caabaa*
 Ram (m.) erg bread (f.) eat (inf. m.) want (perf. pst. m.)
 Ram wanted to eat bread.

In (i) the infinitive and the matrix verb agree with the object (fem.). Mahajan assumes that the object of the lower clause moves to the higher AGR-O" through the lower AGR-O". On the contrary, in (ii) no agreement occurs, because the infinitive assigns structural Case and the object does not move.

The second question applies to the ungrammaticality of (31):

- (31) **Manex Maddi ikusi Aux*
 John.NOM Mary.ACC seen
 John saw Mary

In (31) the subject DP does not have ergative case. However, since AGR-S can assign structural Case, one expects the subject DP to be Case marked in (31), and therefore the sentence to be well formed. But (31) is hopeless. Why can not structural Case be assigned to the raised subject DP in (31)?

As it is well known, several languages show split ergativity in nominal inflection. For instance, some languages, like Dyrbal (Dixon 1972: 49-50), do not have an ergative type inflection with pronouns, whereas they have it with nominals. Other languages, like Georgian (Harris 1981:41), split in accordance with Tense-Aspect distinctions. Thus, there is no general reason to exclude (31).

Baker proposed to base parameters of Case Theory depending on how many Cases of what type the verbs of a given language can assign (Baker 1988:167). Suppose now that these parameters must also include Case assignment by I, as it seems to be necessary. Thus, one could suggest that languages which do not show split ergativity in nominal inflection (like Basque) do not allow more than one argument with structural case (the D-object in unmarked cases, as we will see in 3.3.).³³ On the other hand, it could be said that true ergative languages (in Harris' 1982 sense) must have at least one argument with structural case.³⁴ The right formulation in such a case could be: [-Case_{struc}] → [-ERG], meaning that in these languages ergative case is assigned only if there is an argument available for structural Case assignment.³⁵ (Observe that such a generalization does not exclude nominaccusative constructions for the very same language.)

(33) Mahajan (1990: 99) also mentions such a parameter for Hindi (limiting the restriction to assignment by inflectional heads).

(34) Tongan, for instance, satisfies this requirement. In this language all nontransitive verbs (unergative and unaccusative) must have an absolutive argument. Moreover when a transitive verb has only one argument in syntax (indefinite object deletion), the sentence is ambiguous between an active and a passive reading, as (i) below:

(i) 'oku ui 'a e f?fin? (Tchekhoff, 1978: 61)
 PRES call Abs Det mother
 The mother is calling / The mother is being called

Compare (i) with (ii) and (iii):

(ii) 'oku ui 'e he fa'? 'a e pep?
 PRES call Erg Det mother Abs Det mother
 The mother is calling the baby

(iii) * 'oku ui 'e he fa'?
 PRES call Erg Det mother

Dyrbal shows the same pattern; the sole argument is marked absolutive and the verb takes the reflexive suffix:

(iv) bayi yara dangaymarijnu (Dixon 1972: 90)
 Abs man eat-REF

The man is eating (the reflexive reading is also possible, though pragmatically excluded).

(35) Notice that ergative case assignment is not conditioned by the sole selection of an object argument (in this case, we would obtain the reverse of Burzio's generalization). Indeed in these ergative languages, object arguments with an inherent case do not allow ergative case assignment. This can be seen in antipassives, (i):

(i) bayi yara bagul bargangu / bangul bargandu durgananu (Dixon 1972: 65-6)
 Abs man Dar wallaby Inst. wallaby spear.PASS
 The man is spearing wallaby (Man topic)

Following these views, I formulate the Basque option for the Case Parameter as in (32):

(32) *Basque option for the Case parameter:*

- (i) Structural Case is assigned by inflectional heads only;
- (ii) Structural Case is not assigned more than once.

In accordance with such a proposal, which, as we will see below, is independently motivated, suppose that in (31) the subject DP has structural Case. In that case, the object DP remains without Case, and the sentence is ruled out, as wanted.

However, (32) does not account for cases like (33):

- (33) a. **Manex etsaiei ibardoki zaie*
 John.NOM enemies.DAT resisted 3A.AUX.3plD
 John resisted the enemies

In (33a) the non subject argument receives inherent case (dative), and the requirement that structural Case is assigned only once is satisfied. Therefore, if there were not any other constraints, the subject DP would be Case marked nominative, and the sentence would be well formed. See also (33b):

- (33) b. **euskara orain arte irau da*
 Basque.NOM now till last 3A.AUX
 Basque has lasted until now

(33b) is not a transitive sentence, since it has a monadic verb. Thus, (32ii) does not rule out nominative assignment. However, the sentence is bad (*irau* 'last' appears as an active verb and assigns ergative to its argument).

I propose that the ungrammaticality in (33a,b) (and also (31), if we put aside other violations of Case Theory) follows from morphosyntactic restrictions on selectional properties of the verbs. *Ibardoki* 'resist' and *irau* 'last' select a DP that is assigned ergative case as major or sole argument. Failing to assign ergative case is enough to make (33a,b) ungrammatical, just like (33c) below, where the ungrammaticality results from failing to assign dative case to the second argument:

- (33) c. **Manexek etsaiak ibardoki ditu*
 John.ERG enemies.ACC resisted 3plA.AUX.3E
 John resisted the enemies

I assume that each verb is associated with a theta-grid and is specified for case selection. Besides, verbs associate theta-roles and cases in a biunique fashion (Baker 1988: 113). In (33) the offending DP receives structural Case. However, since the sentence is ungrammatical, one may suggest that its theta-role is not visible at LF,

In (i) the D-object receives morphological case (dative or instrumental). Therefore, the subject DP must receive structural Case,

That the generalization proposed must refer to Case (and not to thematic features) is also confirmed in dative shift constructions in these languages. When the patient takes an inherent case, the subject DP is still marked ergative, structural case being assigned to the recipient (Marantz 1984: 203-4).

because theta-role assignment for these arguments is linked to inherent case assignment. This does not mean we have to conform with unprincipled statements on lexical items to explain an ungrammaticality of this kind. Indeed, even if the restrictions on argument selection are tied to each predicator, one may think of some generalizations on the lexicon, specially in the way theta-roles and cases are related.³⁶ I will not pursue this issue here.

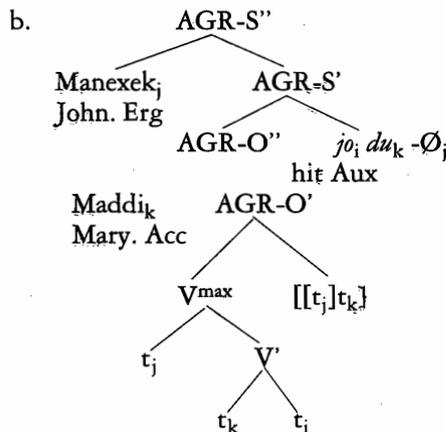
3.2. Syntactic Dichotomy of absolutive DPs

As indicated in the previous section, structural Case assignment by V is excluded in Basque. Obligatory object agreement in transitive sentences (along with obligatory subject agreement in unaccusative sentences) is the most obvious consequence of this constraint. So the analysis of zero-case we suggest assumes that structural Case is assigned at S-structure by AGR-Ps. Furthermore, we propose that AGR-S and AGR-O assign Case to subject and object DPs respectively.

This proposal follows from the basic features of ergaccusativity: (i) S-structure DPs show a regular and principled split depending on case marking; (ii) DPs that are not inherently Case marked are syntactically ambivalent at S-structure (though they are not so at D-structure, as we will see below). The analysis proposed here tries to capture these elements straightforwardly.

3.2.1. Let us consider the structure of a transitive sentence:

- (34) a. *Manex-ek Maddi-Ø jo du*
 John-ERG Mary-ACC hit 3A.AUX.3E
 John hit Mary



(36) If causativization is analyzed as a syntactic process, case marking on the causee in causative constructions creates some difficulties. In this case we have to admit some kind of case-substitution ergative-dative:

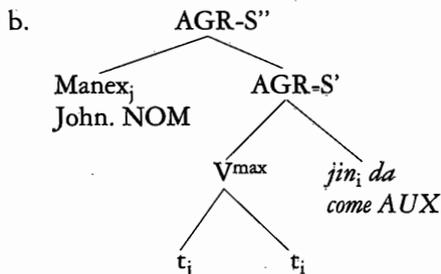
- (i) *Zuri lan egin arazi dizut*
 you.Dat work CAUS AUX.2D.1E.
 I made you work

I will leave open the question whether such an unusual case marking could be avoided. Baker (1988:193) observes that case assignment on the causee needs a special insertion rule. As he says: "the causee acts like it is neither structurally nor inherently Case-marked" (id.: 192).

In (34) the internal argument of the verb moves to [Spec, AGR-O"] where it receives accusative Case. It cannot raise to [Spec, AGR-S"], because this position is filled by the ergative DP.

Let us see now the case of an unaccusative sentence:

- (35) a. *Manex-Ø jin da*
 John-NOM come 3A.AUX
 John came



In (35) we admit that the moved DP raises up to the Spec of AGR-S". There is another alternative, which consists of making the DP move to the same position as in transitive sentences. This position is Spec of AGR-O" in (34), though, within this new option, the projection would have to be defined in another way: AGR-ABS" for instance (or Root" within Laka's 1988 proposal). Such an analysis would account for the syntactic ambivalence of structural Case, in an indirect way: although the subject DP would be the highest DP within the L-related complex (I keep on ignoring other inflectional heads), nevertheless it would fill different positions in active / transitive and unaccusative sentences.

Such an analysis would offer several advantages, specially by giving a more suitable account of verb morphology. However, I will dismiss it, because it would require two different positions for AGR-DAT with regard to AGR-ABS. In ditransitive sentences AGR-DAT is admitted to be higher than AGR-ABS (see Laka 1988, and in the same way (4a) in Section 1). This is reflected by the non marked word order: DPerg-DPdat-DPabs (S-IO-DO). On the contrary, there is strong evidence that in absolutive-dative sentences the absolutive DP is in a higher position than the dative DP. See the following examples:

- (36) a. *Haurrak elkarri hurbildu zaizkio*
 children.ABS RECIP.D approached 3plA.AUX.3D
 The children went near each other

- b. **Elkar hurrei hurbildu zaie*
 RECIP.ABS children.DAT approached 3A.AUX.3plD
 Each other went near the children

In (36a) the DPabs binds the dative anaphor, whereas (36b) shows that the DPdat cannot bind an absolutive anaphor. This is accounted for if DPabs and DPdat

occupy asymmetric positions, where the former c-commands the latter. The same conclusion may be drawn from the following examples:

- (37) a. ??*Nori_i hurbildu zaizkio bere_i anaiak t_i?*
 Who.DAT approached 3A.AUX.Apl.3D his brothers.ABS
 Who did his brothers go near?
- b. *Nor_i hurbildu zaie t_i bere_i anaiei?*
 Who.ABS approached 3A.AUX.3plD his brothers.DAT
 Who went near his brothers?

(37) illustrates classical Weak Cross-Over effects. In (37a) the dative WH-word A'-binds both its trace and *bere*. Therefore, the Bijection Principle is violated (see fn. 5). On the contrary, in (37b), *bere* is A-bound by t_i , and the absolutive WH-word A'-binds one variable only (t_i). Thus, the variable and the operator being related in a biunique fashion, the Bijection Principle is not violated. Therefore there is strong evidence that the structure of absolutive-dative sentences is as shown in (4b).

These facts show that morphological likeness of nominative and accusative cases hides a structural difference.³⁷ The structures given in (34b) and (35b) capture this difference.

3.2.2. In order to make sure the zero case marked DP in (35) moves to [Spec, AGR-S"], and is not case marked accusative, some version of Burzio's Generalization must be admitted for Basque. Although accusative is not assigned by V in the present analysis, the same constraint as the one captured by Burzio's Generalization holds in Basque (i.e. $T \rightarrow A$, without taking into account the Case assigner). Thus we want to prevent sentences like (38) where the D-object does not raise to the subject position:

- (38) *pro_{expl} gizonak-Ø etxera doaz*
 NOM men-ACC home.LOC 3plA.go
 The men are going home

In (38) the argument DP receives structural Case from AGR-O. The Extended Projection Principle is satisfied since an expletive empty pronoun fills the subject position. However, since structural Case is assigned twice (nominative and accusative), (32ii) rules out representation (38); I repeat (32ii) for convenience below:

(32ii) Structural Case is not assigned more than once.

The examples in (39) below show that the argument DP in unaccusative sentences is an S-structure subject. When (38) is a sentential complement of *nahi ukan* 'want', the subject DP must be distinct from the subject DP in the matrix sentence (39a, b).

(37) Languages with split ergativity give a good illustration of such a dichotomy. In Georgian, where nominative is the zero-case, object DPs appear with the zero case in ergaccusative sentences. Harris (1981: 41) shows that case marking in Georgian sentences with verbs in Series II display the syntactic correspondances summarized below:

Subject Direct Object Indirect Object
 Class 1, 3 verbs: ERGATIVE NOMINATIVE DATIVE
 Class 2 verbs: NOMINATIVE DATIVE DATIVE

- (39) a. *Maddik nabi du gizonak etxera*
 Mary.ERG want AUX.3E men.ABS home.LOC
doazen
 3A.go.Apl.COMPL
 Mary wants the men to go home
- b. *Gizonek_i nabi dute e*_{i/k} etxera*
 men.ERG want AUX.3plE home.LOC
doazen
 3A.go.Apl.COMPL
 The men want them to go home

If both subjects are coreferential there is a syntactic process of reconstruction in a manner similar to Italian (see Rizzi 1982, Burzio 1986). This process however is compulsory in standard Basque, as shown in (39b). Moreover, case marking properties of the embedded verb can be transmitted to the verbal complex produced by restructuring.

- (39) c. *Gizonak_i nabi dira e_{i/*k} etxera joan*
 men.NOM want AUX.3plE home.LOC gone
 The men want to go home

If (38) were a well formed structure, restructuring would not be compulsory in (39c), and the starred option of (39b) would be erroneously allowed.

In the same way (32) predicts that D-objects of transitive sentences surface as subjects in impersonal detransitivized sentences:

- (40) a. *Sagarrak neguan biltzen dira*
 apples.NOM winter.LOC gathering 3A.AUX.Apl
 One gathers apples in winter

In (40a) the agentive theta-role is not borne by a realized argument. Ortiz de Urbina (1989: 193) adapts Rizzi's (1986) idea that arbitrary and canonical interpretation of arguments can be realized by lexical saturation. He suggests that this is what happens in impersonal sentences showing detransitivization. The agentive theta-role being lexically saturated is not realized in syntax as an argument. Thus, these impersonal sentences appear to be similar to unaccusative or passive constructions regarding the S-structure position of the D-object.

Within the present analysis the D-object in (40a) must move to get structural case. If it goes to AGR-O" as in ordinary transitive sentences, the subject position has to be filled, in order to satisfy the Extended Projection Principle. Ergative non-argument expletives are not available, as we saw before (2.4.), and, thus, only nominative case can be assigned to the subject. However, (32) prohibits that both the subject and the object receive structural Case. As above with unaccusative sentences, the sole remaining possibility involves raising the D-object to the subject position. Consequently, in restructuring constructions the D-object of the impersonal constructions is the S-subject of the complex predicate, as shown in (40b) below:

- (40) b. *Sagarrak bildu behar dira*
 apples.NOM gathered need 3A.AUX.Apl
 Apples must be gathered

3.3. *Parallelism Between Case Morphology and D-structure GR*

Levin (1983: 334) claims that Basque has a case marking system that reflects D-structure relations straightforwardly: absolutive DPs are identified as D-structure objects, and ergative DPs as D-structure subjects. She proposes then that D-objects are case marked accusative by V in their D-structure position, and that D-subjects are case-marked ergative by I.³⁸ I will not discuss this view, though it is obviously inconsistent with some of the major claims made in this paper. However, I would like to emphasize one basic element of Levin's proposal, and discuss another one related to it.

The basic observation of Levin I would like to highlight concerns the parallelism found between case marking and D-structure relations in Basque. Within the present analysis this parallelism is accounted for by the following generalization: all arguments except D-objects receive inherent case in Basque. Since structural case is zero-case, and inherent cases are phonetically realized, there is a narrow correspondance between D-structure relations and morphological case marks (see, however, fn. 42):³⁹

- (41) ergative case → D-subject;
 zero-case (structural Case) → D-object.

Related to this matter, Levin (1983) adds another hypothesis she calls *the NOR Verb Hypothesis* (where NOR means absolutive and NORK means ergative):

- (42) *The Nor verb Hypothesis* (Levin 1983: 298):
- Only verbs with a patient single argument are NOR verbs.⁴⁰
 - Other verbs will not be NOR verbs.
 (They might be NOR-NORK verbs or NORK verbs.)

This hypothesis seems inconsistent with the analysis we propose for Basque. Indeed, inherent Case being theta-related, one expects inherently non Case marked arguments (i.e. those receiving the zero case) to be the thematically non-marked ones, and their class to form the semantically open one. On the contrary, the NOR verb hypothesis states that this class is semantically entirely homogeneous. Let me make some brief remarks about this subject.

As it is well known, there are discrepancies between languages in the way they distinguish unergative and unaccusative verbs (Rosen 1984). So it is not easy to say according to which criterion one determines whether such or such a verb has to be taken cross-linguistically as unergative or unaccusative. Let us, however, consider Perlmutter & Postal's (1982) classification for unergative verbs:

(38) Levin (1983) assumes that neither Burzio's Generalization nor any other similar generalization applies in Basque.

(39) D-objects can receive inherent Case, but need not. For instance, partitive case (morphologically realized in Basque) may be assigned to D-structure objects.

(40) Levin also suggests an alternative form: *No verb with only an agent argument can be a NOR verb.*

(43) *Unergative verbs* (Perlmutter & Postal 1982):

- predicates describing willed or volitional acts (including manner-of-speaking verbs, and predicates describing sounds made by animals);
- involuntary bodily processes.

As observed by Levin, most of the verbs corresponding to these two classes are active verbs in Basque. However, the NOR verb hypothesis makes another prediction: it predicts that no verb belonging to these two classes appears as a NOR verb in Basque. The only exception, Levin says, is *mintzatu* 'speak'.

In fact, there are many others exceptions: other speech verbs (*solastatu* 'speak with', *elekatu*, *elestatu* 'chat', *bizkatu*, *bizketatu* 'converse'), meal verbs (*bazkaldu* 'have lunch', *afaldu* 'have dinner', *gosaldu* 'have breakfast', *askaldu* 'have a snack'), several other verbs having agentive arguments (*trabailatu* 'work', *jarraiki* 'follow (sb)', *mendekatu* 'take revenge', *jazarri* 'revolt', *oldartu* 'attack', *gudukatu* 'wage war on', *borrokatu* 'fight', *jostatu* 'play', *jokatu* 'to play games', etc...). All these verbs are NOR verbs (at least in eastern dialects and in standard Basque, see Sarasola 1978) and their sole or highest argument receives the zero case.⁴¹

Besides, there are several verbs that take two forms in the lexicon: one corresponding to the active pattern (compounds or verbal locutions of the form N + *egin* 'do'), the other one corresponding to the unaccusative pattern (derived verbs).⁴² Here is a sample of these verbs:

(44) Lexically incorporated noun	Verbal locutions [+ERG]	Derived verbs [-ERG]
<i>ele</i> expression	<i>ele egin</i>	<i>elekatu</i> , <i>elestatu</i> to chat
<i>solas</i> expression	<i>solas egin</i>	<i>solastatu</i> to speak with
<i>borroka</i> fight	<i>borroka egin</i>	<i>borrokatu</i> to fight
<i>jolas</i> game	<i>jolas egin</i>	<i>jolastu</i> to play
<i>zintz</i> mucus	<i>zintz egin</i>	<i>zintzatu</i> to blow one's nose
<i>trufa</i> mockery	<i>trufa egin</i>	<i>trufatu</i> to laugh at

(41) Several of the verbs listed in the text appear as active verbs in some dialects. Notice however that when a verb shows dialectal variation, it belongs to the one of the two classes defined in (43). This is what is predicted if the NOR class is the semantically open class. The only exceptions I know of are a few motion verbs: *urten* / *irten* 'leave' and *igo* / *igan* 'go up, climb'. See also with respect to (44) the case of *irrist egin* / *irristatu* 'slide'. As it has been observed motion verbs are often ambiguous with respect to agentivity (Perlmutter & Postal 1982: fn.13).

As for verbs showing diachronic variation in their case marking system, it seems that the changing has been normally from absolutive to ergative case marking: *ekin* 'start doing', *jarraiki* 'follow', *atxiki* 'hold'...

(42) The systematic crossing can be explained if one admits that in one case the incorporating verbal morpheme (e.g. *egin* 'do') assigns inherent ergative case to the agentive argument, while in the other case the affix does not assign inherent case.

Observe that within the Uniformity of Theta Assignment Hypothesis (Baker 1988), the generalization in (41) ought to be revised, since the agentive argument of all verbs listed in (44) would occupy the same structural position at D-structure. The main argument against this proposal lies on partitive case, if one assumes partitive is only assigned to D-objects. Indeed all [-ERG] verbs, even those listed in (44), can assign partitive case to their argument.

The verbs listed in (44) are synonymous. However, N + *egin* locutions require ergative case marking, whereas in derived forms the agentive argument takes zero case. What is relevant here is the fact that verbs showing such an alternation belong to the classes defined in (43) for unergative verbs. The ergaccusative hypothesis does not directly deal with the way theta roles and cases relate. However, since it opposes ergative case which is theta related and zero case which is not theta related, it is consistent with the data shown in (44): the zero case corresponds to a semantically open class.

3.4. *Absolutive Case and Verb Morphology*

The present analysis does not require all inflected verbs to contain an absolutive agreement marker. This implicit claim contrasts with other views where absolutive is considered as an obligatory component of verb-morphology (Rebuschi 1984, Ortiz de Urbina 1989); see also the Case-discharge requirement in ergative languages (Levin & Massam 1984).

Only one piece of evidence is provided in order to assume that absolutive indexing within verb inflection is compulsory in Basque. This evidence follows from verb morphology. It is assumed that the prefixes *d-*, *z-*, *l-* in inflected verbs are 3rd person agreement markers.⁴³ Therefore all inflected verbs having ergative agreement are analyzed as taking transitive morphology, and showing (possibly vacuous) absolutive agreement. See the examples in (45):

- (45) a. *Urak diraki*
 water.ERG PRES.boil.3E
 The water is boiling
- b. *Et zuten irauenen*
 NEG. AUX.3plE.PAST last.FUT
 They would not last
- c. *Lanean ba-lekikete*
 work.LOC AFF-know.MOD.3plE
 They would know how to work

If *d-*, *z-*, and *l-* in (45a, b, c) are 3rd person absolutive agreement markers, they must be related to some object DP. Lafon (1975), for instance, proposes such a solution for (45a,b), suggesting that *iraun* 'last' and *iraki* 'boil' are causative verbs from *egon* 'remain' and *jaiki* 'get up'.⁴⁴ Therefore, he suggests, the absolutive marker corresponds to some deleted reflexive form in (45b), or to an indefinite canonical object in (45a). For instance, (45a) would be literally *the water is raising something*.

This analysis (which is also traditionally used for non-transitive uses of transitive verbs, and verbal locutions where a cognate noun is joined to a verb like *egin* 'do') is hardly consistent with the views defended in this paper. Therefore it is necessary to give another analysis of the *d-*, *z-*, *l-* prefixes.

(43) Putting aside imperative forms, every verb form that does not have a 1st or 2nd person prefix displays one of these consonants initially. As indicated in the text the distribution of these consonants correlates with Tense/Mood.

(44) The causative affix would be *-ra-*. For instance, *iraun* 'to last' > **e-ragon* 'to make x remain'.

In fact, such a proposal has been put forward by Trask (1981). He proposes that the prefixes, *d-*, *z-*, *l-*, which correlate with tense and mood, are not 3rd person markers. Their distribution, he argues, corresponds to tense/mood distinctions and they are better analyzed as resulting from the absence of prefixed 1st or 2nd person. That is to say, either the absolutive 3rd person singular agreement is \emptyset (as is the case for ergative agreement) or there is no 3rd person agreement, (see also Euskalzaindia 1987: 143).

As discussed in Oyharcabal (1989), vacuous absolutive agreement is theoretically puzzling, because it entails the existence of nonargumental expletive objects. This, in turn, implies a new extension of the Extended Projection Principle, and in fact empties it of its substance. However, since *d-*, *z-*, *l-* can be analyzed as tense / mood markers, nothing prevents us from restricting structural Case assignment to unaccusative sentences, and to true transitive sentences.⁴⁵

4. Ergative Case Marking Without DPerg-Movement

The condition on inherent Case marking (17) establishes a tight relation between V-movement and DP-movement. However, following this view, in the case V does not move, it is predicted that inherent Case can be realized within the lexical projection itself. I would like to suggest that this is illustrated in passive-like constructions. Compare the following sentences:

(46) *Liburuak- \emptyset Manex-ek erosi-ak dira*
 book.PL-NOM John-ERG bought-RESUL.Pl 3pl.AUX
 The books have been bought by John

(47) **Liburuak- \emptyset Manex-ek erosi dira*
 book.PL-NOM John-ERG bought 3pl.AUX
 John bought the books

(46) looks like a passive, though the D-Structure subject takes the ergative case as it does in ordinary transitive sentences. However, it is not a transitive sentence, because the auxiliary is [-ERG], and agrees only with the zero-case marked DP, which is the S-Structure subject. The ergative DP can be omitted, and in some dialects ergative case can be substituted by instrumental case. The past participle receives a suffix (-*ak*). I analyze the latter as a resultative aspect marker.⁴⁶ This suffix corresponds to the article, and agrees in number with the zero case marked DP (nominative in (46)). As (47) shows, suffixation of resultative is compulsory in passives.

One can not analyze the resultative as a passive affix, because it can be used in

(45) The prefix *b-* is sometimes listed together with *d-*, *z-* and *l-*. It is used in imperative forms. I do not look upon it as a tense-mood marker, but rather as a complementizer.

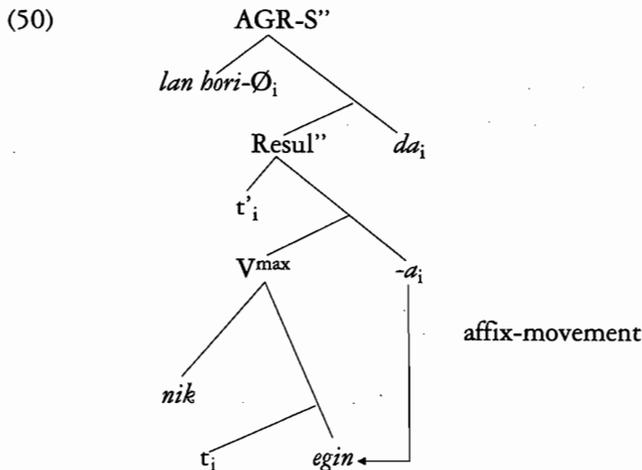
(46) Ortiz de Urbina & Uribe-Etxebarria (1990) offer another analysis for these sentences, assuming they are biclausal and consist of a participial clause predicated of the subject DP. For reasons of space, I will not discuss this proposal here.

transitive resultative sentences, as shown in (48), where the resultative suffix still agrees with the zero-case marked DP, now accusative:

- (48) *Liburuak-Ø Manex-ek erosi-ak ditu*
 book.PL-ACC John-ERG bought-RESUL.PL 3plA.AUX.3E
 John bought the books

I suggest that Basque passives are sentences where V movement to AGR-S neither occurs at S-structure nor at LF. Therefore, the resultative affix is joined to the past participle (affix movement), an option restricted to the sole resultative aspect marker. This analysis is illustrated in (50) below:

- (49) *Lan bori-Ø nik egin-a da*
 work.this-NOM me.ERG made-RESUL 3A.AUX
 This work has been done by me



Following the condition on inherent Case-marking (17), inherently Case marked DPs must remain in their D-structure position. Thus, the DPerg in (51a) cannot move out of V^{\max} . This is why the DPerg-V order in passive sentences cannot be changed; (compare with the transitive resultative sentence):

- (51) a. **Manex-ek liburuak-Ø erosi-ak dira*
 -ERG book.PL-NOM bought-RESUL.PL 3plA.AUX.3E
 The books have been bought by John
- b. *Manex-ek liburuak-Ø erosi-ak ditu*
 -ERG book.PL-ACC bought-RESUL.PL 3plA.AUX.3E
 John has bought the books

(47) One could also propose that V movement can stop in the aspectual projection RESUL''. This would permit to avoid affix-lowering. Observe that in both cases Condition (17) has to be modified in order to permit inherent Case realization in situ after V-movement to RESUL'', either at LF, within the affix-movement hypothesis, or at S-structure, under the alternative option. Admitting that V^{\max} is not a barrier, inherent Case realization after movement of the inherent Case assigner would have to be allowed under government.

As shown in (51a), the unmarked Erg-Abs-V order is not available in passive sentences. In the same way, the ergative DP can not appear after V in passives (52a), whereas it can in ordinary transitives (52b):

- (52) a. **Liburuak-Ø erosi-ak dira Manex-ek*
 book.PL-NOM bought-Resul.PL 3plA.AUX. -ERG
 The books have been bought by John
- b. *Liburuak-Ø erosi-ak ditu Manex-ek*
 book.PL.ACC bought-RESUL.PL 3plA.AUX.3E -ERG
 John has bought the books

Dative DPs, just like ergative DPs, must remain within V^{\max} . Thus, dative agreement is not available in passive sentences, while transitive resultative sentences can display dative agreement:

- (53) a. **Liburuak-Ø Manex-ek eni eman-ak*
 book.PL-ACC John-ERG me.DAT given-RESUL
zaizkit
 3plA.AUX.3E
 The books have been given to me by John
- b. *Liburuak-Ø Manex-ek eni eman-ak*
 book.PL-ACC John-ERG me.DAT given-RESUL.PL
dizkit
 3plA.AUX.1D.3E
 John gave me the books

(53a) shows that passives do not allow dative agreement, unlike ordinary transitives (53b). This is directly accounted for by the analysis proposed, since dative DP-movement too has to occur under (17) and is associated to V-movement.

5. Conclusion

Given the analysis we have proposed, Basque sentences illustrate ergaccusative constructions as defined in (2): ergative is an inherent case, and absolutive is structural Case. Structural Case corresponds either to accusative or nominative, depending on whether the sentence is transitive or unaccusative. Since inherent case is theta related, D-subject arguments are generated within V^{\max} . In this view, case assignment and case realization for inherently case marked DPs occur in different positions whenever V-movement toward functional projections occurs (cf. (17)). We have also been assuming that the Basque option regarding structural Case marking has two main components: i) it is only assigned by functional heads, ii) it is not assigned more than once. This analysis accounts for the most salient features of Basque sentences: on the one hand, obligatory ergative and object agreement in finite sentences; on other hand, nominative Case assignment in unaccusative and detransitivized sentences. Besides, Basque passive sentences are analyzed as illustrating inherent case marking within V^{\max} , an option left open when V-movement does not occur.

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