

Some Speculations on the Nature of Agreement

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0. Introduction*

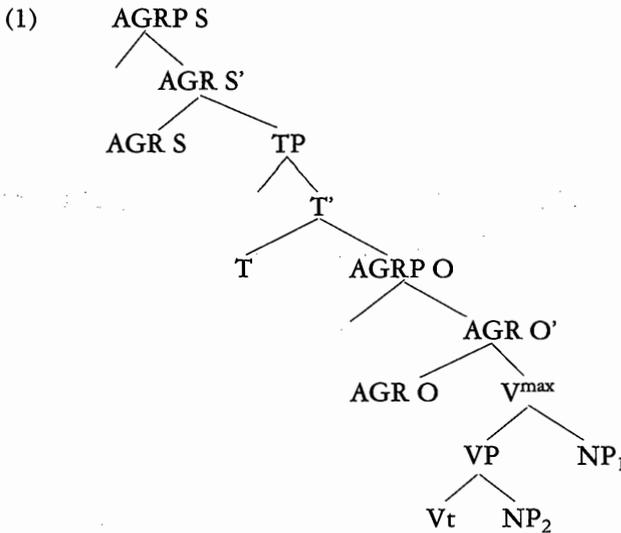
Chomsky (1989) has suggested that transitive sentences may contain two (or more) AGR projections: an AGR S(subject) and an AGR O(object), a possibility made available by UG for all languages, even for those with no overt morphology to indicate agreement between the V and its internal argument in a transitive structure. Whether we make use of functional (AGR) projections to account for agreement facts or whether all kinds of agreement can be reduced to a Spec-Head relation, with subject agreement in [SPEC, IP], object agreement in [SPEC, VP], etc. (see Georgopoulos 1991) is a matter of current controversy in the literature, which we do not intend to enter into here. We are simply exploring the possibility of having an AGR S and an AGR O involved in the processes of subject and object agreement, respectively, in order to account for certain agreement facts in the languages we are concerned with here (namely, Romance and English, with some references to Basque).

The purpose of this work is two-fold: (i) to examine the 'double' function of AGR S as an assigner of nominative Case and as a category containing agreement features, and to see if there is any relation between these two functions, and (ii) to see whether the conclusions reached for AGR S can be extended to AGR O, a projection present in transitive structures even in those languages with no overt V-Object agreement morphology, such as Spanish.

The relative order of the functional projections in a transitive structure assumed here is as in Chomsky (1989) and Belletti (1990):¹

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(1) The structure in (1) contrasts with the proposal made by Pollock (1989), with an AGR head associated with the subject position intervening between TP and V^{\max} (the position of AGR O above) and no AGR head over TP. Evidence for the need of an intermediate AGR (O) projection between TP and V^{\max} , distinct from the AGR projection involved in subject agreement concern, among others, instances of participial agreement in French (see Kayne 1989a), and languages showing overt object agreement morphology (see Chomsky 1989).



We are also following the hypothesis postulated by Kuroda (1988) and Koopman & Sportiche (1988) that the external argument of a transitive structure is base-generated within the V^{\max} projection (NP_1). This hypothesis has been developed by Roberts (1990), who claims that in Romance languages the external argument of a transitive structure (NP_1) is base-generated within V^{\max} to the right of the VP, which, in turn, contains the transitive $V(Vt)$ and its internal argument (NP_2). In a canonical transitive structure, which has the structure in (1), such as that in (2), structural nominative Case is assigned to the NP_1 (*los bomberos* 'the firemen' in (2)) and structural accusative Case is assigned to the NP_2 (*el incendio* 'the fire' in (2)).²

- (2) Los bomberos apagaron el incendio.
 the firemen put-out-pret.3rd.p.pl the fire
 'The firemen put out the fire.'

It is commonly assumed that AGR S plays a crucial role in the assignment of nominative Case to an NP in a language like Spanish. If the features of AGR O are at all similar to those of AGR S, it is to be expected that AGR O should play a role in accusative Case assignment, as well. This is the hypothesis that we are going to explore here.

In section 1 we examine the nature and the function of AGR S. In particular, we review ideas in the literature concerning 'rich' AGR (Rizzi 1982) and 'strong' AGR (Pollock 1989) and the role played by AGR S in nominative Case assignment. We conclude that the properties of AGR S in a particular language determine the way(s)

(2) The nominal elements involved in these structures, *los bomberos* 'the firemen' and *el incendio* 'the fire', are in fact DPs, following Abney's (1987) DP-hypothesis. It has been claimed by Rigau (1991) following ideas in Torrego (1983) and Belletti (1988) that only DPs receive structural (nominative and accusative) Case, while NPs (bare plurals or nominal phrases introduced by an indefinite article) must receive inherent partitive Case. Since the distinction between inherent Case and structural Case is not crucial for our purposes here, we are using the more general denomination for nominal phrases (NP).

in which nominative Case is assigned in that language. In languages in which nominative Case assignment is linked to the feature [person], nominative Case can only be assigned under [SPEC-HEAD] agreement. This is the case for Italian and Spanish, but not for English, where nominative Case assignment is a coindexing relation between an NP in [SPEC, AGRP S] and an AGR S, which can be in a [SPEC-HEAD] relation or in a governing relation with that NP.

In section 2 we examine the properties of AGR O in Spanish to see whether the conclusions reached in section 1 about the nature and properties of AGR S can be applied to AGR O. We will see that, contrary to what has been claimed (see Belletti 1990), Spanish AGR O may have a [person] feature, as well as [gender] and [person] features. The features of AGR O in Spanish are only triggered, however, in the right syntactic context, and are not always overtly realized. In this Spanish contrasts with Basque, where the features of AGR O are always morphologically realized, but also with English, which lacks AGR O features. Due to the nature of its features, AGR O cannot assign Case by itself, although it has a Case feature. Accusative Case is assigned under government by the complex head V + AGR O, after incorporation of the V into AGR O (following Baker 1988), except when a clitic is present.

1. The role and features of AGR S.

1.1. *Some generalization about AGR S*

Let us start by looking at the role and the features of AGR S, which have been explored in detail in the literature. AGR S is assumed to have a 'double' function: (i) to provide the V with number and/or person and/or gender features and (ii) to assign nominative Case. The way in which these processes take place is a question of parametric variation. The aim of this section is simply to present ideas that have been put forward in the literature in order to provide a framework for the discussion of the features of AGR O in section 2.

1.1.1. *The features of AGR S*

We are going to look at the first role of AGR S mentioned above: to provide the V with morphological features. The features of AGR S are going to be discussed in relation to certain structural processes that have been recently a matter of discussion and controversy in the literature such as V-raising and the N(ull) S(ubject) Parameter.

It is assumed that in Romance languages like Spanish, Italian and French, a finite V raises to AGR to get its morphological features, in the way that has been described by Pollock (1989) for French. These languages are said to have 'strong' AGR. 'Strong' AGR should be distinguished from 'rich' AGR (or INFL) in the sense of Rizzi (1982). The concept of 'rich' AGR has been directly related to the possibility of having *pro* in the subject position of a tensed clause, a possibility allowed to languages belonging to the NS parameter.³ In Rizzi's (1982) account the INFL (or

(3) For a thorough examination of the properties of the NS Parameter in general see Jaeggli and Safir (1989). For Spanish, see Fernández Soriano (1989).

AGR) of these languages were said to contain the morphological features needed to 'recover' the content of *pro*.

That 'strong' AGR is not the same as 'rich' AGR is clear in the fact that languages like French lack a rich AGR in the sense that they do not allow for NS's (except for stylistic inversion), but have a strong AGR in the sense that they trigger V-raising, following Pollock (1989) (see (3), (3a) from Pollock 1989: 367). In this, French contrasts with languages like Spanish that allow for both possibilities (4), and English that does not allow for any (except for V-raising with *have* and *be* and auxiliary Vs) (5):⁴

- (3) a. Jean embrasse souvent __ Marie. (French)
 Jean kisses often __ Marie
- b. **pro* embrasse souvent __ Marie
pro kisses often __ Marie
- (4) a. Juan besa a menudo __ a María. (Spanish)
 Juan kisses often __ to María
- b. *pro* besa a menudo __ a María
pro kisses often __ to María
 'He/She often kisses María.'
- (5) a. John __ often kisses Mary. (English)
- b. **pro* often kisses Mary

What Pollock means by strong AGR has to do with θ -assigning properties, i.e. only a sufficiently rich AGR allows the V to assign its θ -roles. Thus, French AGR being richer morphologically than English AGR, is transparent for θ -role assignment, while English 'weak' AGR is opaque to θ -role assignment.⁵

The AGR features of French are, then, sufficiently rich to trigger V-raising, but not to allow NS's. The AGR features of English, on the other hand, do not allow for any of the two processes. At the other end of the scale, we have Romance languages like Italian and Spanish, whose AGR S features are sufficiently rich to allow both. Another example of a language that allows both V-raising and NS's is Basque (see Laka 1990). In (6) the V-root *kar* 'to take' has been raised to the different functional heads containing the inflectional suffixes for the different forms of agreement (A

(4) In Spanish, it is more difficult to test the V-raising hypothesis than in languages like French and Italian, due to the fact that adverbs seem to have a freer distribution and that there is no overt negative adverb such as French *pas*.

(5) French, for example, has some person features (see (i) from Jaeggli & Safir 1989: 30), which are lacking in English, if we follow Kayne (1989b) in that the -s found in 'He/She walk-s' is a number feature, and not a person feature.

(i) [parl] present 1sg., 2sg., 3sg., 3pl.
 [parl-o] present 1pl.
 [parl-e] present 2pl.

stands for absolutive case, D for dative case and E for ergative case), as well as for mood (potential) and tense (present):⁶

- (6) pro pro pro d-a-kar-kio-ke-t
 pro-E pro-D pro-A 3A-Pres.-take-3D-Pot.-1E
 'I can take it for him/her.'

We have the following paradigm in (7):

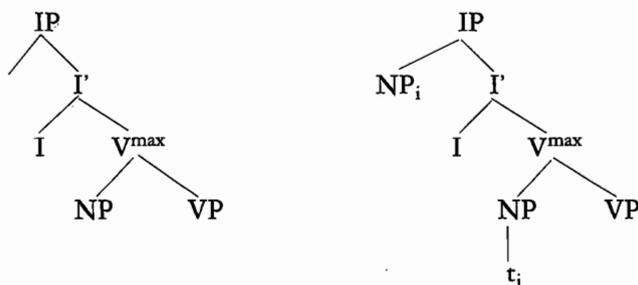
(7)	'STRONG' AGR (θ -theory)	'RICH' AGR (Morphological features)
English	-	-
French	+	-
Spanish/Italian/ Basque.	+	+

As for how agreement of features between a V (+AGR S) and its subject takes place, the standard assumption is that it is a SPEC-HEAD relation, in the sense of Chomsky (1986). That is, feature sharing takes place under SPEC-HEAD agreement between the element occupying the position SPEC-AGRP S (a lexical subject, an expletive pro, a NS pro, etc.) and AGR S, to which the V raises in Romance, and which is lowered to the V by the rule of Affix-Hopping in English (see Chomsky 1981).

1.1.2. AGR S as a Case-assigning head.

Koopman & Sportiche (1988) have put forward the idea that nominative Case can be assigned by (former) INFL (containing AGR) in two basic ways: (i) under government (a relation between a Head and its Complement or the Specifier of its Complement) or (ii) under SPEC-HEAD agreement (a relation between a Head and its Specifier following Chomsky 1986), as in (8):⁷

- (8) a. By Government b. By SPEC-HEAD Agreement



(6) On the relative order of the different functional projections in Basque see Laka (1990).

(7) As Roberts (1990: 24) points out, agreement here should be understood as a purely structural relation, independent from morphological agreement.

Whether in a language nominative Case is assigned as in (8a) and/or as in (8b) is a question of parametric choice. According to Koopman & Sportiche (1988), both procedures exist in languages like Spanish and Italian. Thus the possibility of the so-called 'free inversion' of the subject, when INFL assigns Case by government to the element occupying the position [SPEC, V^{max}] at SS. English and French, on the other hand, only allow the possibility in (8b), thus, the obligatory raising of the subject to [SPEC, IP], where it can be assigned nominative Case under SPEC-HEAD agreement. The contrast between Italian and Spanish, on the one hand, and French and English, on the other hand, is illustrated below.⁸

- (9) a. Ha telefonato María. (Italian)
has phoned Mary
- b. Ha telefonado María. (Spanish)
has phoned Mary
'María has phoned.'
- (10) a. *has phoned Mary (English)
b. *a téléphoné Marie (French)

Roberts (1990) has adapted the ideas in Koopman & Sportiche (1988) to a framework in which INFL is split into different functional projections. Both AGR S and T may have the feature [+nom]; they are both potential nominative Case assigners. Since [SPEC, TP] is an A'-position (a position for operators in which no θ -marked NP can be licensed), Roberts (1990: 1.2.) claims that T can only assign Case by government, while AGR can assign Case either by government or by SPEC-HEAD agreement.

In languages such as Spanish and Italian AGR must assign nominative Case under SPEC-HEAD agreement after raising of the VP-internal subject to [SPEC, AGRP S]. Also, T assigns Case by government to the VP-internal subject in [SPEC, V^{max}] in sentences showing free-inversion like those in (9). The ungrammaticality of (10a) suggests that T is not a nominative Case assigner in English. As for French, in spite of the ungrammaticality of (10b), there is a limited class of structures that allow free inversion, the so-called stylistic inversion constructions (see fn.8; see (11) below). It seems that, in principle, T is [+nom] in French, but the theory will have to specify why government of a postverbal NP by T is not generally available in the language (see (10b)), except for structures like (11):

- (11) Je me demande quand *pro*_i partira ton ami_i
I me wonder when *pro* will-leave your friend
'I wonder when your friend will leave.'

Having T assigning nominative Case to a postverbal subject allows for a situation in which the properties of bearing nominative Case and sharing AGR features with the V could be dislocated as pointed out by Roberts (1990). This is true for

(8) The possibility of inverted subjects exist in French for those instances of stylistic inversion, as studied by Kayne & Pollock (1978) and Kayne (1983).

some Celtic languages like Welsh (12) (from Roberts 1990: 29) and in instances of quirky agreement in Italian dialects like Trentino (T) and Fiorentino (F) (13) (from Brandi & Cordin 1989: 115) and Genoese (14) (from Battye 1990: 2):

- (12) Canodd [y plant] bob dydd (Welsh)
 sing-past-sg. [the children] every day
 'The children sang every day.'
- (13) a. Gli é venuto della ragazze. (F)
 there is come-masc./sg. some girls-fem./pl.
 b. E vegnú qualche putela. (T)
 is come-masc./sg. some girls-fem./pl.
 'Some girls have come.'
- (14) se inversou due barke (Genoese)
 se is-capsized two boats
 'Two boats have capsized.'

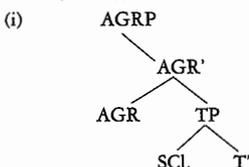
In Spanish (and Italian), however, assignment of nominative Case by T involves feature sharing between the V and the 'inverted subject' as the ungrammaticality of (15) shows:

- (15) *Ha telefonado los chicos
 has phoned the boys

Let us assume with Roberts (1990) that AGR S is never entirely divorced from the assignment of nominative Case in languages like Spanish (and Italian): it can assign nominative Case to the element in its Specifier (under [SPEC- HEAD] agreement) and it is co-superscripted with T when T assigns Case under government (Case is assigned by the complex head T + AGR S).⁹ The possibility of showing some kind of free inversion (and V-raising) seems to suggest that French is closer to other Romance languages such as Italian and Spanish, than to English, with respect to the features of AGR and the ways in which nominative Case is assigned. A crucial difference pointed out by Roberts (1990) between Romance and English concerns the contrast between (16) and (17) (examples from Roberts 1990: 30, 69):

- (16) a. When has Mary phoned?
 b. What film is John seeing?

(9) The fact that AGR always plays a role in nominative Case assignment has been observed by Fernández Soriano (1989), who goes further than Roberts (1990) in that she claims that T and AGR always assign Case together. This is due to the fact that there is a Subject Clitic in [SPEC, TP] (an A-position in Fernández Soriano's framework) in which T discharges its features, which then incorporates into AGR, making explicit the relation between T and AGR, as in (i)



- (17) a. A quelle heure a téléphoné Marie? (French)
 When has phoned Mary?
 'When did Mary phoned?
- b. ¿A qué hora ha llamado María? (Spanish)
 When has phoned Mary
 'When did Mary phoned?
- c. Che film ha visto Gianni? (Italian)
 what film has seen Gianni
 'What film did Gianni see?

In the English examples in (16), the auxiliary verb (e.g. *has*, or *is*) has risen from its DS position in T (through AGR S) to C. Similarly, the DS subject NP in [SPEC, V^{max}] has moved to [SPEC, AGRP S], where it can be assigned nominative Case. Roberts (1990) claims that nominative Case is assigned to the subject NP by AGR S (or rather by the complex head C+AGR S+T) under government.

Raising of the Romance auxiliary to C parallels raising of the English auxiliary, a requirement of the Wh-Criterion, as formulated by Rizzi (1991). However, no raising of the DS subject to [SPEC, AGRP S] seems to take place in Romance questions; the subject remains in its DS position in [SPEC, V^{max}]. So far we have said that in Romance languages the subject can either remain in its DS position or move to [SPEC, AGRP S]. But in questions like those in (17) movement of the DS subject to [SPEC, AGRP S] is blocked, as we can see in (18):

- (18) a. * A quelle heure a Marie_i téléphoné t_i? (French)
 When Marie has phoned ?
- b. * ¿A qué hora ha María_i llamado t_i? (Spanish)
 When María has phoned
- c. * Che film ha Gianni_i visto t_i? (Italian)
 what film has Gianni seen

Movement of the DS subject to [SPEC, AGRP S] in (18) is blocked under the assumption that AGR S cannot assign Case under government in Romance (Roberts 1990). In Romance languages, with a 'richer' morphology than English, AGR S can only assign Case under SPEC-HEAD agreement.¹⁰

The discussion above leaves two questions unanswered: (i) why cannot English AGR S assign nominative Case under government to the DS subject in [SPEC, V^{max}]? and (ii) why cannot Romance T assign Case under government to the SS subject in (18)? That is, the ungrammaticality of the examples in (19) is left unexplained:

(10) An exception to the pattern in (16) is mentioned by Rizzi (1991: 12) and it concerns French questions like the one in (i):

(i) [Qui_i a-t [elle t_i rencontré t_i]?
 who has she met?

The structure in (i) shows *elle* intervening between the auxiliary and the participle, as in the English gloss. (i) is possible because French *elle* is a subject clitic, whose position in the sentence and the way in which nominative Case is assigned to it are different from those of a full NP.

- (19) a. * (It) has phoned Mary
 b. * ¿Ha María llamado?
 has María phoned

Roberts (1990) claims that (19a) is ungrammatical in English because a T head intervenes between AGR S and the 'inverted' subject *Mary* in [SPEC, V^{max}]. Since T is [- nom] in English, it blocks assignment of Case by AGR S under government.¹¹

As for (19b), its ungrammaticality has to do with the way in which complex heads (AGR + T) assign Case. For Roberts (1990) a complex head is the result of incorporation following Baker (1988). In a structure like that in (19b) T incorporates into AGR and the complex head AGR + T incorporates into C. The DS subject has raised to [SPEC, AGRP S] from its DS position, thus destroying the environment in which it could be assigned Case by T (co-superscripted with AGR) as in sentences showing 'free inversion' and questions. In [SPEC, AGRP S], the SS subject can only be assigned Case under agreement with AGR S, but AGR S has moved to C in (19b) destroying the environment in which it can assign Case to a subject, as pointed out by Roberts (1990: 1.3.1.). Thus, we have the following pattern for nominative Case assignment by AGR S in Romance and in English:¹²

(20)	Nominative Case assignment by AGR S:		
		Government	SPEC-HEAD Agreement
	Romance	-	+
	English	+	+

(11) The answer given by Roberts (1990) for the impossibility of 'free inversion' in English due to an intervening T head between AGR S and the DS subject, poses a problem for the corresponding (grammatical) sentences in Romance, where an AGR O head intervenes between T and the subject in [SPEC, V^{max}] in transitive structures. The solution to this problem could be that AGR O is involved in the assignment of accusative Case and thus it does not count as an 'intervening head' for the assignment of nominative Case to the inverted subject.

(12) In fact, it is not clear how Roberts (1990) would account for structures like those in (i), which may in principle involve movement of the DS subject to [SPEC, AGRP S]:

- (i) a. ¿Compró_i Juan_k t_i las manzanas t_k?
 bought Juan the apples
 'Did Juan buy the apples?'
 b. ¿Está_i Juan_k estudiando t_i la propuesta t_k?
 'Is Juan studying the proposal?'

The structure in (ia) involves movement of the V root to C after incorporation into AGR S and T. As for (ib) the auxiliary moves to C, in the same way as its English counterpart. It appears to be the case that in the structures in (i) the DS subject has moved to its SS position in [SPEC, AGRP S]. If that is not a position where the NP *Juan* can be assigned Case under government, as argued by Roberts (1990), how does Case-assignment take place? We could argue that Case-assignment can take place under SPEC-HEAD agreement, prior to the movement of the complex head V + T + AGR S to C to satisfy the Wh-Criterion. The same structure is not possible with the auxiliary *haber*, because nothing can intervene between the auxiliary *haber* and the participle in modern Spanish. It is possible that both *haber* and the auxiliary may move to C in structures like (17b), repeated below as (ii):

- (ii) ¿A qué hora [_{CP} ha llamado] [_{AGRP S} María]...?
 at what time has called María
 'When did María call?'

The structure in (ii) would be analogous to (i) with the V in C and the subject in [SPEC, AGRP S], contrary to what Roberts (1990) claims. The problem is that if AGR S can assign Case prior to movement to C in Romance, what stops it from assigning Case in the same way in English structures like (16a) (repeated as (iii))?:

- (iii) When has Mary phoned?

1.2. *The relation between the two roles of AGR S and the structure of AGRP S in Spanish.*

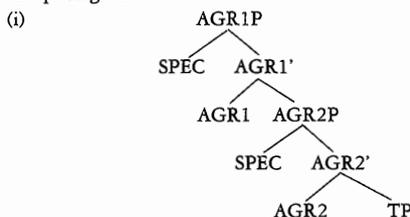
So far, we have sketched some of the characteristics of the feature composition of AGR S and the ways in which it assigns nominative Case. It remains to be seen if there is any relation between the two functions of AGR S: assignment of morphological features and the assignment of nominative Case.¹³ What this relation is, in principle, a matter of speculation, rather than a matter of empirical consequences. In what follows, we are going to concentrate on the difference between English and Spanish.

It could be claimed that the 'content' of the morphological features of AGR S determines how Case is assigned by AGR. Thus, in Italian and Spanish, with 'rich' morphological systems AGR can only assign Case under SPEC-HEAD agreement, and not under government, as claimed by Cardinaletti & Roberts (1991: 37). This requirement does not hold in English with a 'poorer' morphological system. The question is in what way morphological features condition the way in which nominative Case is assigned. For example, Kayne (1989b) has argued that what is different between English AGR S and Spanish/Italian AGR S is that English AGR S lacks the feature [person], with 3rd.p. -s being a specification for [number], but not for [person].¹⁴

Similar ideas are found in Rigau (1991), who has argued that for some dialects of Catalan (Noroccidental), when AGR is specified as [-person] it cannot assign

If sentences like (iii) are possible in English because AGR S (in C) can assign Case under government, but not in Romance, where AGR S can only assign Case under [SPEC, HEAD] agreement, according to Roberts (1990) and now we say that AGR S can assign case under [SPEC- HEAD] agreement, prior to movement to C, there seems to be no fundamental difference between Romance and English AGR S. Clearly, if AGR S assigns Case under [SPEC-HEAD] agreement prior to movement into C in Romance, we would have to find a mechanism that stops English AGR S from doing so in structures like (iii) if we want to maintain the distinction in the way AGR S can assign nominative Case in English and in Romance. We leave this question open here.

(13) Cardinaletti & Roberts (1991) have actually suggested that the two roles of AGR (providing the V with morphological features and assigning nominative Case) may be performed by different AGR S heads. In a structure like the one in (i) AGR1 would be concerned with the assignment of nominative Case and AGR2 with the assignment of morphological features



Motivation for a structure like that in (21) comes from some X-second effects: V2 in Icelandic, Old French and Yiddish and Clitic-second in German and medieval Romance.

(14) The special status of the feature [person] is pointed out by several authors. Kenstowicz's (1989) shows that in Bani-Hassan Arabic participial verb forms fail to inflect for person, showing only tense distinctions. Consequently, no NS are found in constructions involving a participle, in contrast with the perfect forms of the verb, which have person inflection and allow NS. Similarly, the special status of the feature person with respect to V-raising is pointed out by Platzack & Holmberg (1989) for Scandinavian languages, in which V-raising correlates strongly with person agreement. Of course, the presence of person morphology is not a guarantee that these two processes are allowed. Raposo (1989) analyses some structures that do not allow NS in European Portuguese, in spite of having person and number agreement, the so-called 'prepositional infinitival construction'. Clearly, other processes are intervening to block the general property of European Portuguese to allow NS. The case of Chinese (and Japanese), which allows NS, with no tense and person agreement in the inflection, is also well-known. The option of having NS's is available thanks to processes such as operator binding or control (see Huang 1989).

nominative Case and only partitive Case is available. This happens for example when the clitic *hi* 'inhibits' the [person] feature of verbal inflection, which shows 'default' 3rd.p.sg. features, as in (21) (from Rigau 1991):

- (21) a. Hi haurà pocs hòmens.
 there will-be-sg. few men-pl
 'There will be few men.'
- b. *Hi hauran pocs hòmens
 'there will-be-pl few men-pl'

A similar process is observed in Spanish in configurations containing the clitic ARB(itratry) SE. It is claimed in Mendikoetxea (1992) that the clitic SE is the realization of the feature [person] in AGR S in constructions like those in (22):

- (22) a. SE bebe mucho en las fiestas. (Unerg.)
 SE drinks a-lot in the parties
 'One (SE) drinks a lot at parties.'
- b. Con estos atascos, SE llega siempre tarde. (Unacc.)
 with these traffic-jams, SE arrives always late
 'With these traffic-jams, one (SE) is always late.'

Absorption of the feature [person] by ARB SE involves absorption of nominative Case, once we have claimed that the feature [person] is responsible for nominative Case-assignment. Once absorbed by ARB SE, nominative Case cannot be reassigned to a nominal element, hence the ungrammaticality of (23) with the relevant ARB SE interpretation:

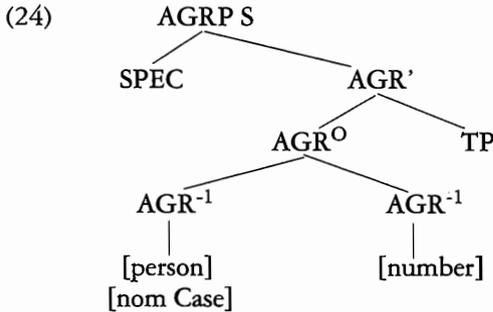
- (23) a. *SE bebe mucho en las fiestas Juan
 SE drinks a-lot in the parties Juan
- b. *SE llega siempre tarde Juan
 SE arrives always late Juan

This seems to suggest that [person] and [number] are to be considered independent features within AGR (see Rigau 1991), or even, different functional projections, a proposal suggested by several authors (Rouveret 1991, Ritter 1991).¹⁵ A way of representing the less radical view suggested by Rigau (1991) that [number] and [person] should be considered independent features within AGR S (and not independent functional heads) is to make use of sublexical categories of the kind discussed by Belletti (1990) and Roberts (1990) (following Selkirk 1982).

(15) Rigau (1991) argues that [person] and [number] express different grammatical relations: the feature [person] is directly related to nominative Case assignment, while the feature [number] indicated the prominent argument in predication. A similar view is held by Rouveret (1991) who argues that the different behaviour of [number] and [person] has to do with their different origin in the derivation: [person] is a specification inherent to finite Vs, generated under AGR, while [number] is generated under the functional system associated with nominal categories and then incorporates into [person].

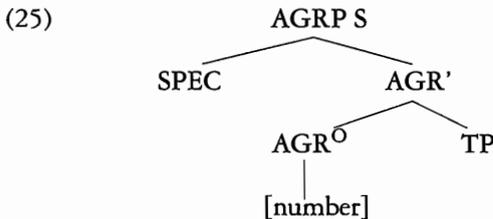
According to this proposal there is a projection below the lexical (X^0) level, i.e. an X^{-1} level, where the elements that occupy the X^{-1} position are affixes.

Roberts (1990) claims that languages vary in the composition of the functional head AGR, which can have affixes at the X^0 level or at the X^{-1} level. What we would like to claim here is that in Spanish and in Italian [person] and [number] are X^{-1} features and the possibility of having null subjects is related to the possibility of having an X^{-1} [person] feature which can only assign nominative Case under SPEC-HEAD agreement. The structure for AGR S in Spanish and Italian is therefore as in (24):



Romance finite Vs would move into a subcategorized position at the AGR^{-1} level, according to Roberts (1990).

On the contrary, English finite Vs seem to lack features at the AGR^{-1} level. Kayne (1989b) suggests that English finite Vs lack a [person] feature. However, they have a [number] feature that is realized by the suffix *-s* for 3rd.p.sg. subjects in the present. Let us assume that the structure of AGR S for English finite Vs is as in (25):



We said at the beginning of this work that the role of AGR S was two-fold: (i) to assign nominative Case and (ii) to provide the V with agreement features. The two functions are, in principle, independent of each other, though they normally coincide. Feature sharing (morphological agreement) is a SPEC-HEAD relation in the sense of Chomsky (1986), while assignment of nominative Case by AGR S may take place under government or under SPEC-HEAD agreement.¹⁶ In languages like Spanish and Italian, where AGR S can only assign Case under SPEC-HEAD agreement,

(16) We are using the term feature-sharing to denote morphological agreement between a V (+AGR S) and an NP. Morphological agreement is in this sense different from the kind of structural agreement involved in the assignment of nominative Case. Although the two kinds of agreement normally coincide: Case being assigned from X to XP and agreement from XP to X, this is not always the case. Georgopoulos (1991) mentions examples in Palauan, a language showing overt morphological object agreement in which the XP that receives Case is the complement of X and the XP in agreement is the specifier (by definition).

feature-sharing and nominative Case-assignment by AGR S always coincide. When it is T (or rather AGR S + T) that assigns Case to the 'inverted' subject, coindexation between the inverted subject and an expletive *pro* in a Spec-Head relation with AGR S (to which the V raises) ensures the correct agreement pattern, assuming a feature-transmission mechanism, as in (26) (where X^k indicates nominative Case-assignment and X^i feature-sharing):

$$(26) \quad [\text{pro}^i \text{V} + \text{T}^k + \text{AGR S}^i k] \dots [\text{VP } t \text{ (NP)}] [\text{NP}]^{ki}$$

Let us now turn to English. To be licensed (i.e. assigned Case) a subject NP in English must occupy the position in SPEC-AGRP S at SS, where it can be assigned nominative Case under SPEC-HEAD agreement with AGR S, as in Spanish and Italian; or under government in questions. It is also under SPEC-HEAD agreement that sharing of features (morphological agreement) between the subject NP and AGR S takes place. Feature-sharing must then be prior to the rule of Affix-Hopping at (PF) (see Chomsky 1981), which lowers AGR S to the verbal root, destroying the environment in which nominative Case and feature-sharing between the lexical subject and AGR S takes place. The process is illustrated in (27):

$$(27) \quad \text{John}_{ik} \text{ AGR } s^k \text{ T like- } \text{fun } t^i$$

Assignment of nominative Case in (27) is then the result of SPEC-HEAD coindexing between an NP in [SPEC, AGRP S] and AGR S.

Let us now move to questions like those in (28) below, where we have said that AGR S (or rather C+AGR S+T) assigns Case under government, a possibility not available for Romance languages:

- (28) a. When has Mary phoned?
b. What film is John seeing?

Auxiliaries, as opposed to verb roots, do raise in English to pick up their inflection (Tense + AGR S) suffixes. The contrast is illustrated in (29):

- (29) a. *Mary phones not ___ / Mary has not ___ phoned.
b. *John sees not a film / Mary is not ___ seeing a film.

If it is true that V-raising is associated with the presence of the feature [person], as we have been suggesting here following Kayne (1989a) (see also fn. 14 here), it seems that the feature [person] must be part of the feature composition of auxiliaries in English. Thus, AGR S for English auxiliaries must be similar to Spanish AGR S for finite Vs in (24). However, structures like (28) are ungrammatical in Spanish, but not in English.

What is different is that in English whatever feature [person] there is in the auxiliary system, this feature is not linked to nominative Case assignment. If it was there would be no way of explaining how nominative Case is assigned by AGR S when no such feature is present. Also, we have said that the feature composition of

AGR S determines the way in which nominative Case is assigned. The fact that nominative Case is linked to the feature [person] in Spanish in AGR S means that AGR S can only assign Case under SPEC-HEAD agreement, and not under government, as in English.

The questions in (28) above illustrate movement of AGR S to C in order to satisfy the Wh-Criterion (see Rizzi 1991), a position where AGR S governs [SPEC, AGRP S], where the subject requiring nominative Case is. Feature matching between AGR S and the subject NP takes place because the auxiliary moves through AGR S on its way to C. Feature matching however does not involve assignment of nominative Case in English, as we said above. Assignment of nominative Case in English is simply a coindexing relation between AGR S and an element occupying the position in SPEC-AGRP S. That coindexation process can take place under government or under SPEC-HEAD agreement.

Thus, in languages in which the feature [person] in AGR S is responsible for nominative Case assignment (such as Spanish), feature-sharing involves assignment of nominative Case to the element occupying SPEC-AGRP S. In English, where the [person] feature (if at all present) is divorced from the process of nominative Case assignment, feature-matching under SPEC-HEAD agreement does not necessarily involve assignment of nominative Case under SPEC-HEAD agreement. Nominative Case assignment to the element in SPEC-AGRP S in English is a coindexing relation between the element in [SPEC, AGRP S] and AGR S, either under government, or under SPEC-HEAD agreement. Nominative Case assignment to the element in AGRP S in Spanish, on the other hand, is a coindexing relation that can only obtain under SPEC-HEAD agreement, since feature-sharing between AGR S and the element in [SPEC-AGRP S] involves the assignment of nominative Case, with the feature [person] being linked to nominative Case. The question is, if feature sharing in Spanish involves assignment of nominative Case and we have argued that in English feature sharing is prior to movement of AGR S to C, why can't we have structures like (28) in Spanish? Could not nominative Case be assigned to the NP in [SPEC, AGRP S] (*Juan* in (30) below) by AGR S under SPEC-HEAD agreement, on its way to C?

- (30) *¿Ha_j [_{AGRP S} Juan_k t_i] t_i visto la película t_k?
Has John seen the film?

The assumption here is that Case assignment takes place at SS. The structure is correct in English because AGR S can assign Case under government at SS, but not in Spanish where AGR S can only assign Case under agreement, an environment that has been destroyed after raising of AGR S to C (but see fn. 12 here for a different interpretation).

A final remark about Spanish: We have claimed following Roberts (1990) that both AGR S and T can assign nominative Case in Spanish, i.e. that they are both [+nom]. There must be some way, however, of preventing both functional heads

from discharging their Cases at the same time, since there cannot be two lexical NPs bearing nominative Case in the same structure as in (31) (irrelevant details omitted):

- (31) Juanⁱ [ha AGR Sⁱ + T^k] visto la película [María^k]
 Spec-Head government

Let us assume that since T always incorporates into AGR S in Spanish, it is always the Complex Head AGR S + T that assigns Case in this language (see fn. 9). Let us further assume that the unmarked strategy for nominative Case assignment in Spanish is SPEC-HEAD agreement, given that Spanish is considered to have a 'rich' inflectional system. Thus, if there is an NP requiring nominative Case in SPEC-AGRP S, AGR S will block the [+nom] feature of T after incorporation, preventing T from assigning nominative Case under government. The grammatical result of this process is as in (32a) and the ungrammatical result as in (32b) (where neither AGR S, nor T can assign nominative Case)

- (32) a. Juan ha visto la película.
 'Juan has seen the film.'
- b. *Ha Juan visto la película
 Has Juan seen the film

On the other hand when there is no NP requiring nominative Case in SPEC-AGRP S, the Case-assigning property of T is not blocked after incorporation, giving the so-called 'free-inversion' structures as in (33a) below. Also, T is able to assign nominative Case under government in Aux-to-Comp structures (Rizzi 1982), where there is no AGRP in the construction, and therefore, the feature [+nom] of T is not blocked, as in (33b):

- (33) a. Ha visto la película Juan.
 has seen the film John
 'John has seen the film.'
- b. Habiendo Juan recibido la noticia...
 having Juan received the news...
 'Once Juan received the news...'

The conclusion to be drawn from this section is that assignment of nominative Case and feature-sharing (morphological agreement) are, in principle, independent features. Case-assignment may take place under government or under agreement, while feature-sharing can be reduced to a SPEC-HEAD relation. The feature composition of AGR S plays a role in determining how nominative Case is assigned in languages like Spanish and English. In particular, whether the feature [person] is linked to nominative Case assignment determines whether Case is assigned under government or under SPEC-HEAD agreement. Not much has been said about the relation between the features of AGR S and V-raising, but it seems possible that an

analysis along the lines of the one sketched here could give us a clue about what determines V-raising.¹⁷

In the next section we are going to see whether the conclusions for subject agreement can be extended to object agreement. That is, whether all kinds of agreement can be reduced to a SPEC-HEAD relation and what is the relation between accusative Case assignment and object agreement.

2. The role and the features of AGR O.

The initial hypothesis is one in which AGR O has the same features and the same role as AGR S: (i) to provide the V with the morphological features for object agreement and (ii) to assign accusative Case to the V's internal argument. In this section we are going to see whether this is true even for languages in which there is no overt morphological object agreement. As in the case of AGR S, we first look at the features of AGR O and then at the way in which Case is assigned.

2.1. *The feature of AGR O.*

Let us first examine the role of AGR O as the head that contains the features needed for object agreement. The hypothesis that AGR O provides the V with the morphological features involved in object agreement encounters two initial problems. First, if morphological agreement is a SPEC-HEAD relation, as we have been maintaining, and an object is the complement of the V it agrees with, how does feature-sharing take place? Second, if object agreement parallels subject agreement, why is it that it is less common cross-linguistically than subject agreement?

The first problem is solved if we assume that for an XP to show morphological agreement with the V it must occupy the position of [SPEC, AGRP O].¹⁸ As for the rarity of morphological object agreement, Georgopoulos (1991: fn 10) notes that object agreement is a highly redundant mechanism. This is under the assumption that agreement systems are recovery mechanisms, from a functional point of view. The need for recovery of the features of the subcategorized complement of the V, to which the V assigns the internal θ -role, is comparatively much lower than the need for the recovery of an element which is external to the θ -grid of the V (for transitives and unergatives). Thus in French, for example, agreement between an object and a participle only takes place when the object has been extracted (with clitics and *wh*-phrases) (see Kayne 1989a). Similarly, in Spanish agreement only obtains when there is a *pro* element in the object position that needs to be identified and when an object moves out of its position as complement of the V (e.g. with passives), as we shall see.

(17) In this respect, see Belletti (1990: sec. 1) who claims that differences between French and Italian with respect to V-raising can be the result of the different nature of the verbal inflectional morphology in AGR S in the two languages. Belletti (1990: Ch.I, fn. 83) suggests that if the feature composition of AGR S determines whether languages can have Null Subjects as well, the two fundamental properties of Italian (V-raising and Null Subjects) would turn out to be linked to each other.

(18) But see Georgopoulos (1990) for an account of object agreement that does not make use of AGR projections. In this account morphological agreement between the XP(object) and the V is triggered by the XP object in [SPEC, VP].

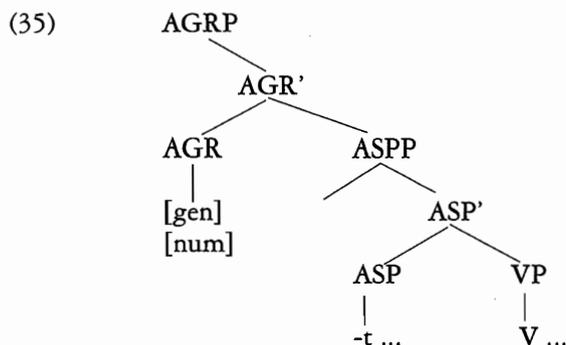
Here we are going to concentrate on the kind of agreement systems in languages that show no overt morphological object agreement. In particular we are going to look at the properties of AGR O in Spanish. It should be clear that we are considering object agreement as a property of UG, available, in principle, to all languages. Also, when we talk about object agreement, we are referring to 'structural' agreement and not to 'morphological' agreement (which we have been referring to as feature-sharing, unless otherwise specified).

In section 1 we looked at the special status of the feature [person] with relation to subject agreement. Let us now examine the status of the feature [person] in AGR O. It appears to be the case that in those languages that show no overt morphological agreement, AGR O lacks the feature [person]. Belletti (1990), for instance, has claimed that Italian (and Spanish) AGR O contains the features [number] and [gender] (unlike English), but not the feature [person].

Evidence for the assumption that AGR O contains the features [number] and [gender] comes from sentences that show participle agreement, such as the passive structure in (34a) and the A(bsolute) S(mall) C(lause) (see Belletti 1990: Ch. II) in (34b):

- (34) a. *Los pirómanos fueron detenidos ayer.*
 the pyromaniac-masc.-pl. were-3rd.p.pl.
 arrested-masc.-pl. yesterday
 'The pyromaniacs were arrested yesterday.'
- b. *Llegados los bomberos todo el mundo se alejó del lugar.*
 arrived-masc.-pl. the fireman-masc.-pl. all the world
 themselves left of-the place
 '(Once) the firemen arrived, everybody left the place.'

Belletti (1990: 2.1.1.) has argued that a past participle can be viewed as the AGR O projection of Chomsky (1989), as independently proposed by Chomsky (1989) and Pollock (1989) (see also Kayne 1989a). In particular, in the structure proposed by Belletti there is a further functional projection, an Aspectual Phrase (ASPP), which contains the past participial affix (-t in Italian, -d in Spanish, etc.), while the AGR head contains typical agreement features such as [gender] and [number], as in (35) (from Belletti 1990: 34):



The AGR features in (35) can be either overtly realized (as in the examples in (34) or 'default', depending on the syntactic context. In a passive structure (34a) and in structures with ASCs (34b) agreement of [num] and [gen] features takes place between the participle and the SS subject. On the contrary, no such agreement takes place in complex tenses with the auxiliary *haber* (roughly 'have'), irrespective of the DS position of the SS subject in the unaccusative structure (36a), and in the unergative structure (36b):

- (36) a. Los bomberos han llegado/(*-os) tarde.
 the firemen-masc.-pl. have-3rd.p.pl. arrived-masc.-sg.
 (def)/(*-masc.-pl.) late
 'The firemen arrived late.'
- b. Los bomberos han trabajado/(*-os) toda la noche.
 the firemen-masc.-pl. have-3rd.p.pl. worked-masc.-sg.
 (def)/(*-masc.-pl.) all the night
 'The firemen worked all night.'

Although the participle seems to manifest [number] and [gender] features in the appropriate syntactic contexts, it does not seem to manifest any [person] features. This feature seems to be lacking in AGR O. Morphologically, an (object) [person] feature is never manifested in the V. Syntactically, if the feature [person] in AGR S plays a crucial role in identifying NS's (i.e. assigning some 'content', in the sense of Rizzi 1986), the fact that structures with N(ull) O(bjects) like those in (37) are not possible in Spanish seems to confirm that there is not a person feature in Spanish AGR O:¹⁹

- (37) a. *He llevado pro
 have-1st.p.sg. carried pro
- b. *He puesto pro en las baldas
 have-1st.p.ag. put pro on the shelves

That [person] feature is, however, present in Basque, with a 'rich' AGR O morphology, which allows NOs in standard transitive structures, such as those in (38):

- (38) a. (Zuk) (Jon) egunero ikusten duzu dendan.
 (you-E) (Jon-A) every-day see aux/3rd.p. sg.-2nd.p.sg.
 in-the-shop
 'You see Jon in the shop every day.'
- b. (Zuk) (ni) egunero ikusten nauzu dendan.
 (you-E) (me-A) every-day see aux/1st.p. sg.-2nd.p.sg.
 in-the-shop
 'You see me in the shop every day.'

(19) Dialects of Spanish in the Basque Country may allow for structures with NOs like those in (37), if the NO has a clear pragmatic reference. Structures like those in (37) have parallel (grammatical) Basque counterparts.

Differences in the feature composition of AGR O can be reduced to parametric differences, as we did with AGR S. The pattern would be as follows:

(39)	The features of AGR O			
		[number]	[gender]	[person]
	English	-	-	-
	Spanish/Italian	+	+	-
	Basque	+	-	+

Thus, Spanish and Italian AGR O have [number] and [gender] features, as shown by the fact that they can have V-participle agreement in some contexts, and lack a [person] feature, as shown by the fact that they do not allow NOs. In what follows, we are going to see that this simple pattern cannot be maintained when we examine the facts related to the possibility of NOs more closely.

2.1.1. Null Objects

The statement that languages like Spanish and Italian lack NOs is not altogether true. Fernández Soriano (1989: ch. 6) distinguishes three types of NOs in Spanish, illustrated in (40):

- (40) a. Esto lleva ___ a la siguiente conclusión.
 'This leads ___ to the following conclusion.'
- b. -¿Tomaste cerveza?
 had-you beer
 -Sí, tomé ___
 yes, had-I
- c. Este niño no come ___
 'This kid doesn't eat ___'

(40a) illustrates the kind of NOs analyzed by Rizzi (1986) for English and Italian, with a generic (arbitrary) interpretation. Structures like (40b) have been analysed by Campos (1986) (see Fernández Soriano 1989: 6.3.2.), with a NO with partitive content in discourse. Finally, (40c) shows implicit NOs, as analysed by Fernández Soriano (1989: 6.3.3.).

The examples relevant for the purpose of showing that AGR O in Spanish (and Italian) has a [person] feature are those discussed by Rizzi (1986). Rizzi (1986) has claimed that the missing object in (40a) in Italian, is syntactically realized in the structure as a phonetically null element, namely *pro*. In this, Italian contrasts with English where the missing object is absent from the structure (not projected syntactically). Such evidence concerns structures in which the NO can act as a controller (41a), a binder (41b) and a subject of predication (41c), illustrated below for Spanish (compare with the English glosses):

- (41) a. Esto lleva *pro* a [PRO concluir lo siguiente]
 this leads *pro* to [PRO conclude what follows]
 'This leads *(one) to conclude what follows.'

- b. La buena música reconcilia *pro* con uno mismo
 the good music reconciles *pro* with oneself
 'Good music reconciles *(one) with oneself.'
- c. Esta música pone [*pro* contento]
 this music renders [*pro* happy- 3rd.p.sg.]
 'This music makes *(you) happy.'

Following Rizzi (1986), an analysis of NOs would have to specify (i) the conditions that allow a NO to occur in a given environment: the formal *licensing* of the NO, and (ii) the way in which the content of the NO is recovered: the *identification* of the NO, where content involves minimally its phi-features.

As far as (i) is concerned object *pro*, as well as subject *pro*, have to be licensed by a governing head that can assign Case to it. This governing head belongs to a language-specific set of licensers. Thus, in view of what we have seen in Section 1.1.1, in Spanish, Italian and Basque, but not in English and French, AGR S can license a NS (Rizzi 1986: 519). For an object *pro*, the only possible licenser is the V. Thus, Rizzi (1986: sec. 3) argues that in Italian and Spanish, V belongs to the set of possible licensers, while in English it does not.

As for (ii), the following convention is adopted by Rizzi (1986: 520):

- (42) Let X be the licensing head of an occurrence of *pro*: then *pro* has the grammatical specification of the features on X coindexed with it.

Thus, in the case of subject *pro*, its licensing head, AGR S, provides subject *pro* with the features that allow it to function as a pronominal with referential value, among which the feature [person] plays a crucial role. Object *pro*, on the other hand, lacks referential value; it has arbitrary interpretation. Since the V (its licenser) lacks phi-features, its content is recovered via an independent rule like that in (33) (from Rizzi 1986: 521):

- (43) Assign *arb* to the direct θ -role.

When (43) applies on the syntax, object *pro* gets the usual specifications corresponding to *arb*, which in Spanish are: [+human, +masculine, +singular, +generic].

With this, Rizzi (1986) establishes an analogy between the processes of licensing and identification of subject *pro* and object *pro*. Feature recovery is done, in both cases, through non-standard binding by (features on) the licensing head, represented in (44) (from Rizzi 1986: 521):

- (44) pro_i Infl V pro_j
 Agr_i θ_j

However, a closer examination of Rizzi's (1986) account reveals that we are, in fact, dealing with different processes. In the case of subject *pro*, its licenser (AGR S), provides the features needed for the recovery of its content. On the contrary, in the case of object *pro*, the licenser (V) has no features that make the recovery of the content of *pro* possible. Also, to say that V is the licenser and the category that

identifies a NO poses a problem for languages in which there are referential NOs, such as Basque (see (38) above). If V has no features, how is the content of a referential *pro* recovered?

A process that would make formal licensing closer to the recovery procedure is mentioned (and disregarded) by Rizzi (1986: fn. 25) himself. He suggests that it could be the case that all possible licensors should have the feature [+pronominal]; *pro* could then occur coindexed with the feature [+pronominal] of a Case-assigning head in subject position or in object position. Rizzi (1986: fn. 25) dismisses this suggestion because it has no immediate consequences for his analysis. However, the proposal has obvious advantages in a system that makes use of two AGR projections.

In a language in which object *pro*-drop occurs freely, such as Basque, AGR O can act as the licensor of object *pro* (it can assign Case to it) and as its binder in terms of feature recovery. The same should apply to languages like Spanish and Italian. The difference is that in Spanish and Italian, where object *pro*-drop is only possible in generic contexts with arbitrary interpretation, the licensor AGR O should contain the features of *arb* interpretation [3rd.p., masculine, singular].

Thus, we can establish a parallelism between the *licensing* and the *identification* of *pro* in subject position and the licensing and the identification of *pro* in object position. Furthermore, the differences observed in the licensing/identification of object *pro* between languages like Basque, on the one hand, and languages like Spanish/Italian, on the other hand, are the result of parametric differences concerning the nature of the phi-features in AGR O.

It seems that AGR O should be specified as in (45) for Spanish and Italian:²⁰

- (45) AGR O
 (def)
- | | |
|--------|----------|
| person | [3rd.] |
| number | [+sg.] |
| gender | [+masc.] |
| | [+Case] |

But we have seen that a past participle can agree in number and gender with the SS subject in certain contexts (see (34)). In passive structures and ASCs, [number] and [gender] are not default; they show morphological agreement with an NP. Similarly, in those cases in which a missing object co-occurs with an argument SC, the reference, which is *arb* in nature, can be made explicitly feminine or plural, as in (46):

(20) Having an AGR O with 'default' features does not explain why sentences with NO's of this kind can only appear in generic contexts. With specific time reference, NOs of the kind we are discussing are disallowed, as we can see in (i):

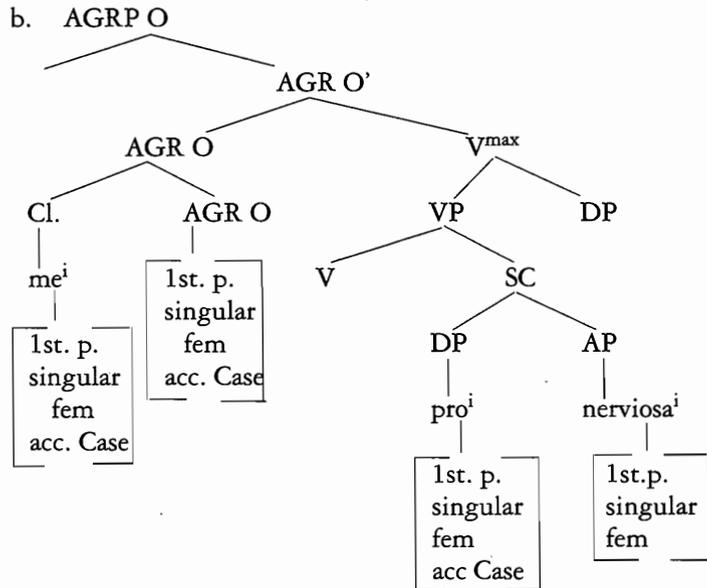
- (i) * Esta música puso *pro* contento
 this music rendered *pro* happy

We believe that the ungrammaticality of (i) has to do with some incompatibility between a 'default' AGR O and the features of T in contexts with specific time reference. Perhaps, a 'default' AGR O is only possible when it is bound by an unselective operator of the kind found in generic contexts binding a variable in T and AGR O (thanks to K. Sainz for suggesting this to me).

- (46) a. Esta bebida pone [*pro* nerviosa].
 this drink renders *pro* nervous-fem
 'This drink makes you nervous.'
- b. ??Tanto ejercicio deja [*pro* cansados].
 so-much exercise leaves *pro* tired-masc-pl.
 'So much exercise makes you tired.'

As far as the feature [person] is concerned, there are also cases in which the default value of this feature is obviated. Rizzi (1986: Sec. 4) follows Sportiche (1983) in that the trace left by a clitic after movement is *pro*. Also, supporters of the 'base-generated' hypothesis for cliticization (see Jaeggli 1986a) argue that the clitic is co-indexed with a *pro* occupying the argument position. If we further adopt Kayne's (1990a) analysis of cliticization in which Romance object clitics like *me* 'me', *te* 'you' etc. adjoin to the left of a functional head, we have a situation in which the clitic (whether at DS or at SS) is governed by AGR O and the amalgamation of clitic + AGR O fulfills the licensing properties and the properties concerning the recovery of the content of *pro*, as in (47) (irrelevant details omitted).²¹

- (47) a. Esta bebida *me*_i pone [*pro*_i; nerviosa_i]



In Spanish only 3rd.p. clitics are specified for gender. Thus, the clitic *me* can have a [masc.] or a [fem.] referent. The fact that the clitic *me* is not overtly specified for gender does not mean that it lacks gender features. Its gender features are triggered

(21) Similar ideas are found in Fernández Soriano (1989: 1.5.3.), who argues that AGR O is a head that contains an object clitic that licenses and identifies the element *pro* in argument position.

in the right syntactic contexts, which in (47) involves the presence of the adjective *nerviosa* 'nervous-fem'. The way the AGR O features surface, then, depends on the syntactic context.

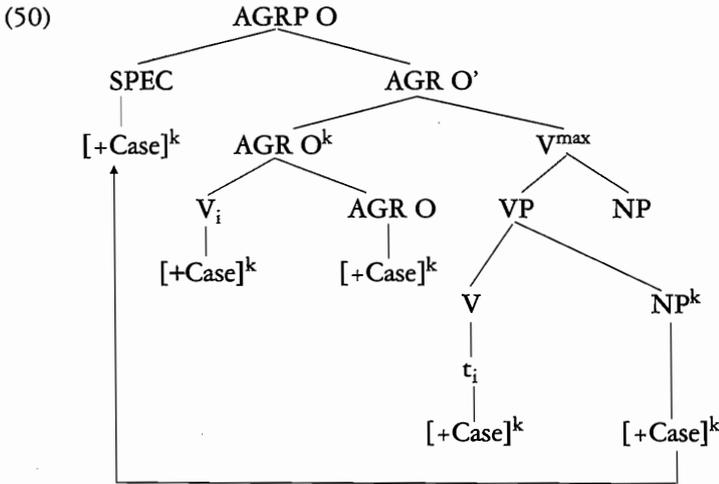
How does feature-sharing obtain? We have said that feature-sharing is a SPEC-HEAD relation. Let us then assume that in constructions like that in (47) there is an expletive *pro* in [SPEC, AGRP O] which is coindexed with AGR O (+ Cl.) and with *pro* in the subject position of the SC. When no clitic is adjoined to AGR O as in (46), coindexing is a relation between *pro* in [SPEC, AGRP O] and an AGR O, with the subsequent feature-transmission process to the NO. A similar mechanism of feature-transmission was adopted for examples of free inversion in section 1.

The hypothesis we want to pursue here is one in which Spanish AGR O can be [\pm gender] and [\pm number]. When AGR O is positively marked for [number] and [gender], these features are realized as [\pm masc.] and [\pm sing.] (e.g. with passive participles) (see (48a)) or as default [+ masc.] [+sing.] (e.g. with active participles in complex tenses with the auxiliary *haber* 'have') (see (48b)). There is also a third possibility: one in which AGR O gender features do not surface at all (not even in a default form). This happens in transitive contexts not involving complex tenses with the participle, nor clitics, such as (48c) below. In examples like (48c) AGR O will be negatively marked for the features [gender] and [number]:

- (48) a. *Los pirómanos* fueron *detenid-os/-(*o)* *ayer*.
 the pyromaniac-masc.-pl. were-3rd.p.pl
 arrested-masc.-pl./-(*-masc./sg.) yesterday
 'The pyromaniacs were arrested yesterday.'
- b. *Los bomberos* han *apagad-o/-(*as)* *las llamas*.
 the fireman-masc.p. have-3rd.p.pl. put-out-
 masc.-sg.(def.)/*fem.pl.) the flames- fem.pl.
 'The firemen have put out the flames.'
- c. *Los vecinos* trajeron *mantas*.
 the neighbours-masc.pl. brought-3rd.p.pl.
 blankets-fem.pl.
 'The neighbours brought blankets.'

As for the feature [person], we have seen that it only surfaces with clitics. However, we have seen that in the case of AGR S, the feature [person] played a crucial role in nominative Case assignment and the identification of NS. The role of AGR O as an accusative Case assigner will be examined in the following section, but something needs to be said now.

Let us assume that [+ person] is triggered by object clitics in a position adjoined to AGR O, which can show overt 1st., 2nd. and 3rd. person morphology, and in those cases where identification of a *pro* makes it necessary for AGR O to contain a [person] feature. When the feature [person] is present (either overt in a clitic or default), it must be associated with accusative Case, as the licenser of *pro*. Otherwise,



We said in section 1 that it is a characteristic of languages with ‘rich’ AGR S that AGR S can only assign Case under SPEC-HEAD agreement and never under government. This was related to the fact that in those languages the Case feature of AGR S was linked to the feature [person]. Since feature-sharing (morphological agreement) is a SPEC-HEAD relation, it follows that Case-assignment by AGR can only take place in that configuration (although the language may have other alternative mechanism for Case-assignment). This must be the case in Basque, with overt V-Object agreement, so we assume that AGR O can only assign accusative Case under SPEC-HEAD agreement in Basque.

An example of Case assignment by AGR O under government is found in Italian ASCs in (51), where AGR O in C can assign accusative Case to the element in [SPEC, AGRP O], as we shall see. That accusative Case is assigned to *Maria* in (51a) is clear in (51b), where instead of a full NP we have an accusative clitic: (examples from Belletti 1990: 102-103):

- (51) a. *Conosciuta Maria, Gianni ha subito cambiato il suo stile di vita.*
known Maria, Gianni immediately changed his lifestyle
- b. *Conosciuta me, hai cominciato ad apprezzare il mare.*
known me(acc), you started liking the seaside

The ungrammaticality if the corresponding syntactic structure in (52) appears to suggest that Spanish AGR O cannot assign accusative Case in Spanish:²²

- (52) **Conocida* [_{AGRP O} me...]
known me...

We are going to see here that, contrary to what the ungrammaticality of (52) seems to suggest, Spanish AGR O plays a part in the assignment of accusative Case.

(22) For a different analysis of Absolute Small Clauses in Spanish, see de Miguel (1990).

It follows that when the internal argument remains in its DS position at DS, AGR O cannot assign Case to it unless V-raising takes place, voiding minimality. In English, where no V-raising takes place in finite contexts (except with the Vs *be* or *have*) accusative Case must be assigned by the V *in situ*. This is also coherent with the hypothesis that English AGR O lacks features.

Spanish AGR O may contain [number], [gender] and [person] features in the appropriate syntactic context. In Spanish both the V and AGR O have the feature [+acc]. Accusative Case is assigned after the Case feature of AGR O is 'strengthened' by the incorporation of V [+acc]. The complex head V + AGR O inherits certain properties of the incorporated head; government relations remain the same so V (+ AGR O) can assign its Case feature to the DS internal argument under government.²³

The ungrammaticality of (52) suggests that [SPEC, AGRP O] is not a position where accusative Case is assigned under government. Accusative Case can be assigned, though, in [SPEC, AGRP O] under SPEC-HEAD agreement. This should be the only possibility when a clitic is present, since clitics provide AGR O with the feature [person], according to the hypothesis we are developing here, rendering 'rich' AGR O. Thus we can explain instances of clitic doubling such as that in (53), where the doubled NP has to move to [SPEC, AGRP O] to get Case:²⁴

- (53) a. Lo vi a Juan.
 to him saw-I Juan
 'I saw Juan.'
- b. [_{AGRP O} a Juan lo + V + AGR O] .. [_{VP t t}]

Let us now see how assignment of Case relates to number and gender agreement. We retake here the examples in (34) above that proved the existence of [number] and [gender] features in AGR O, repeated here as (54):

- (54) a. Los pirómanos fueron detenidos ayer.
 the pyromaniac-masc.-pl. were-3rd.p.pl. arrested-masc.-pl.
 yesterday
 'The pyromaniacs were arrested yesterday.'
- b. Llegados los bomberos todo el mundo se alejó del lugar.
 arrived-masc.-pl. the fireman-masc.-pl. all the world themselves
 left of-the place
 '(Once) the firemen arrived, everybody left the place.'

(23) See Baker (1988) for the Government Transparency Corollary.

(24) The account above does not explain why clitic doubling is not possible in standard Spanish in structures like (i):

(i) * Lo tengo_i [_{AGRP O} el libro t_i]

A. Eguzkitza has suggested to me that a [-animate] *lo* may not contain the feature [person] that allows a 'doubled' NP to receive Case in [SPEC, AGRP O]. The differences in behaviour between [-animate] and [+animate] clitics has also been pointed out by Torrego (1990). For an analysis of clitic doubling in Spanish in which the clitic is a Case-assigner, see Fernández Soriano (1981: 6.4.).

(54a) is a passive structure, in which the DS object must move out of the VP to get Case. The same is true for ASCs like (54b) as we shall see below. If morphological agreement (feature-sharing) is a SPEC-HEAD relationship *los pirómanos* in (54a) and *los bomberos* in (54b) must be in a SPEC-HEAD relation with AGR O at some point at the derivation.

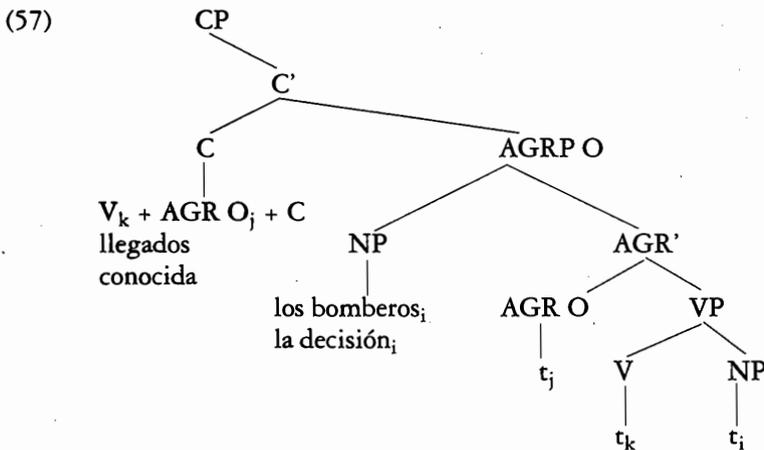
Let us look at ASCs like those in (55), first:

- (55) a. *Llegados los bomberos, empezaron a apagar el fuego.*
 Arrived-masc./sg. the firemen-masc./sg. began to put-out the fire
 'Once the firemen arrived, they began to put out the fire.'
- b. *Conocida la decisión, comenzaron las protestas.*
 known-fem./sg. the decision-fem./sg., started the complaints
 'Once the decision was known, protest started.'

No accusative Case can be assigned to *los bomberos* 'the firemen' in (55a) because *llegar* 'to arrive' is an unaccusative V, thus [-acc]. As for (55b), the V *conocer* is a transitive V, but (55b) is a passive construction and not an active construction. If we replaced the NP *la decisión* 'the decision' for an animate NP requiring the presence of the 'dummy' preposition *a* in an active transitive structure, the result would be an ungrammatical structure, as in (56) (compare with its Italian equivalent in (51a), where accusative Case is assigned to the NP *Maria*):

- (56) **Conocida a María, Juan ha cambiado su estilo de vida*
 known (to) Mary, Juan has changed his style of life

Thus in constructions like those in (55) agreement obtains between the participle and an NP receiving nominative Case in the following configuration (see Belletti 1990: ch.2):



Since neither AGR S, nor T are present in the structure, assignment of nominative Case to the NP in [SPEC, AGRP O] is a marked process. Belletti (1990: Ch. 2) assumes that C° can be a nominative Case assigner in some non-finite contexts.

When the V + AGR O incorporate into C^o, nominative Case can be assigned to [SPEC, AGRP O] under government. If no V-movement takes place, C^o cannot assign nominative Case by itself:

- (58) a. *Los bomberos llegados...
 the firemen arrived
 b. *La decisión conocida ...
 the decision known

Feature-sharing between the participle and the NP obtains in a SPEC-HEAD configuration, prior to movement.

Structures like this are only possible when there is no conflict of Cases between C^o and AGR O. If AGR O was [+acc], as in the ungrammatical structure in (56) there would be a Case conflict between C^o and AGR O. With an unaccusative V like *llegar* 'to arrive', the AGR O required by the presence of the participle morpheme is always [-acc]. As for the transitive V *conocer* 'to know', its (acc) Case feature is 'absorbed' by the passive morpheme in configurations like that in (56b); see Jaeggli (1986b); Baker, Johnson & Roberts (1989).

It seems then that feature sharing must obtain in [SPEC, AGRP O] between the participle and an NP which does not require accusative Case. Agreement can only take place when the Case [feature] of AGR O has been absorbed forcing the movement of the NP object out of its position in the VP. The same is true for passive structures where regular nominative Case assignment takes place, such as (54a). In (54a), the DS object has moved to a position where it can be assigned nominative Case. We have claimed that nominative Case can be assigned in two positions: [SPEC, AGRP S] (under SPEC-HEAD agreement) and in the DS position of the external argument [SPEC, V^{max}] (under government by the complex head T + AGR S).

In a structure like (54a) nominative is assigned in [SPEC, AGRP S]. In order to ensure proper government of its traces, the DP *los pirómanos* 'the pyromaniacs' must move to [SPEC, AGRP O] before it moves to [SPEC, AGRP S] (through [SPEC, TP]).²⁵ Once accusative Case has been absorbed by the passive morpheme, AGR O has no Case to assign, but its [number] and [gender] agreement features have not been absorbed by the passive morpheme, with the consequence that agreement in number and gender can take place between the participle and the NP in [SPEC, AGRP O].

The other possibility for nominative Case assignment is [SPEC, V^{max}], as in (59):

- (59) Fueron detenidos los pirómanos ..
 were arrested the pyromaniacs ..

Kayne (1990b) has claimed that in a passive structure [SPEC, V^{max}] is not projected at DS level, following the general assumption that the passive morpheme absorbs the external θ -role. That position, however, can be created in the course of

(25) This is according to the Head Movement Constraint in (i):

(i) HMC: Movement of a zero-level category β is restricted to the position of a head α that governs the maximal projection γ of β , where α θ -governs or L-marks, γ if $\alpha \neq C$. (Chomsky 1986: 71).

derivation to allow movement of the DS object out of the VP for Case reasons (see Battye 1990). Once the position has been created nominative Case can be assigned. We have been assuming with Roberts (1990) that an NP in [SPEC, V^{max}] gets nominative Case in Spanish under government by the complex head T + AGR S. Let us then assume that when there is no conflict of Cases between AGR S and AGR O co-superscription for Case assigning purposes involves the three functional heads present in the structure: AGR S, AGR O and T. Since accusative Case has been absorbed by the passive morpheme, it cannot be reassigned to a NP so the NP gets nominative Case from AGR O + T + AGR S

Agreement of features, on the other hand, is a SPEC-HEAD relation. In a structure like (59), what we have is a mechanism for feature-transmission, which operates whenever T is the assigner of Case. There is a *pro* in [SPEC, AGRP S], which is coindexed with a *pro* in [SPEC, AGRP O], which is, at the same time, coindexed with the NP *los pirómanos* in [SPEC, V^{max}]. Feature-sharing obtains between AGR O and the *pro* in [SPEC, AGRP O], and then feature-transmission takes place.

If agreement in number and gender between the participle and the NP in a passive structure is the result of the fact that the NP is in a position where it can enter a SPEC-HEAD relation with AGR O, the explanation for why agreement does not take place in complex tenses with the participle and the auxiliary *haber*, like those in (60) below can be straightforwardly accounted for:

- (60) a. *Los bomberos han apagad-o/(*-as) las llamas.*
 the fireman-masc.p. have-3rd.p.pl. put-out- masc.-sg.(def)/
 (*-fem.pl.) the flames- fem.pl.
 'The firemen have put out the flames.'
- b. *Todos los vecinos han trabajad- o/(*-as) duro para apagar el fuego.*
 all the neighbour- masc.-pl. have-3rd.p.pl. worked-masc.-sg.(def)/
 (*-masc.-pl.) hard for to put-out the fire
 'All the neighbours have worked hard to put out the fire.'

A past participle agrees with the DS object/SS subject of a passive structure (54a), but not with either the DS/SS object of an active transitive structure (60a), nor with the DS/SS subject of a transitive (60a) or unergative (60b) structure. What is crucial is that agreement takes place between the past participle in a passive structure and an NP bearing nominative Case, and not accusative Case, exactly the same as for ASCs, where the element that agrees with the participle receives nominative Case and not accusative Case.

In (60a), the participle does not show number and gender agreement either with the external argument receiving nominative Case, or with the internal argument, receiving accusative Case. We have suggested that accusative Case is assigned by V after incorporation into AGR O. This complex head governs all that was governed by V so that V can still assign its Case feature to the NP *las llamas* 'the flames'. Feature-sharing is, however, a SPEC-HEAD relation. When V (+ AGR O) assign Case under government the internal argument remains in its DS position, instead of

moving into [SPEC, AGRP O]. Thus, no feature-sharing takes place and the participle shows 'default' [masculine, singular] features.²⁶

As for the external argument, *los bomberos* 'the firemen' in (60a), and *todos los vecinos* 'all the neighbours' in (60b), if we assume Koopman & Sportiche's (1988) hypothesis that the external argument is base-generated within the verbal projection, and subsequently moves to its SS position in [SPEC, AGRP S] (an optional movement in Spanish), in order to properly govern its traces it will have to move through [SPEC, AGRP O] (and [SPEC, TP]), in the same way as the internal argument of the passive morpheme. However, in an active transitive sentence [SPEC, AGRP O] is, potentially, a position where accusative Case can be assigned, because the [Case] feature of AGR O has not been absorbed. It follows that feature-sharing cannot take place between an NP requiring nominative Case and an [acc] Case assigning AGR O.

Still, structures like (61) with an unaccusative V like *llegar* in a complex tense with *haber* are a potential problem for our analysis, since the DS internal argument must move out of the VP for Case reasons, as in passive structures:

- (61) a. *Los bomberos han llegado tarde.*
 the firemen-masc./pl. have arrived-def late
 'The firemen arrived late.'
- b. **Los bomberos han llegado tarde.*
 the firemen-masc./pl. have arrived-masc./sg. late
 'The firemen arrived late.'

In (61) the SS subject *los bomberos* is generated as the complement of the V *llegar* and moves to [SPEC, AGRP S] to receive nominative Case and it must do so through all intermediate SPEC positions to ensure proper government of its traces. A possible explanation for why the lack of agreement features in (61) would be to claim that unaccusative Vs lack an AGRP O. This is coherent with the idea that the presence of an AGRP O is linked with the accusative Case-assigning properties.²⁷

The problem with the hypothesis that unaccusative Vs lack an AGRP O is to explain where the participle morpheme *-d* is generated. However, in a structure like that put forward by Belletti (1990) (see (35)), the participle is the head of an ASPP in the complement position of AGR O. We could assume that in complex tenses with the auxiliary *haber* and an unaccusative V all we have is an ASPP containing the participle and not an AGRP O containing [number] and [gender] features. Thus, the NP *los*

(26) Belletti (1990: Ch 2, fn. 27) argues that in some Southern Italian varieties agreement between the participle and the internal argument takes place in active transitive clauses with a past participle and an auxiliary (i). The same is true for older stages of Italian (ii) (from Rohlfs 1969: 725):

- | | | | |
|--------|---|---------|--|
| (i) a. | <i>avimo trovata na borza</i> (Campano) | (ii) a. | <i>aveva rubati danari</i> (Machiavelli, 16th C) |
| | we have found fem.-sg. a purse | | ha had stolen-masc.pl the money |
| b. | <i>a' vinnute lóva</i> (Salentino) | b. | <i>ha presi i marchi</i> (Novellino, 13th C.) |
| | he has sold fem.-pl. the eggs. | | he has taken-masc.pl. the money |

For Belletti (1990) this is an example of head-complement agreement, a marked procedure for accusative Case assignment in standard Italian.

(27) This is the approach in Bartye (1991) to account for transitive/unaccusative alternations in English.

accusative Case is assigned in Spanish (except when a clitic is present), though it may be a position where nominative Case is assigned, as we have seen here.

Some important questions remain concerning accusative Case assignment. Whether accusative Case is assigned by the V *in situ* or after V-raising seems to be of no practical consequence concerning the grammatical output. So, (i) why is it necessary for V to move to AGR O. Can it not assign Case *in situ*? and (ii) why does it move to AGR O anyway?

The answer to these questions can only be theory-internal. As far as (i) is concerned, having AGR O somehow involved in the assignment of accusative Case provides a more coherent model for the assignment of structural Cases, since AGR S plays a crucial role in the assignment of nominative Case. Also, since AGR O seems to be involved in processes of Case absorption (by clitics and the passive morpheme), it is only logical to think that it should be involved in processes of Case assignment, as we pointed out above.

As for (ii) V-raising is associated with movement of the V to pick up its inflectional affixes (Pollock (1989)). Thus, a 'rich' or 'strong' AGR S, like that in Spanish and Italian, attracts the verb, while a 'poor' or 'weak' AGR S (English) does not. Clearly, no inflectional affixes are to be picked up by the verb in AGR O in an active transitive structure in Spanish (unlike Basque). However, the V has to move out of the VP to pick up its T and AGR S affixes. The *Head Movement Constraint* (see fn 26), ensures that the V moves to T and AGR S through AGR O. We have seen here that movement through AGR O is also needed for the purposes of Case-assignment.³⁰

3. Conclusion

The goal of this paper was to provide a unified account of the patterns of subject and object agreement in a framework that makes use of AGR functional heads. We have looked at the roles of the two AGR heads involved in a transitive structure. AGR heads are responsible for structural Case-assignment and for verbal agreement with an NP subject and an NP object. We claimed that the two roles of the two AGR heads are, in principle, independent, although they normally coincide. Case-assignment can be done under [SPEC-HEAD] agreement or under government (depending on parametric variation), while feature-sharing is always a SPEC-HEAD relation. In particular it was claimed that when the feature [person] is linked to [Case], Case-assignment by AGR can only take place under [SPEC-HEAD] agreement. This is how nominative Case is assigned in Spanish, but not in English, where

(30) Nothing has been said as to whether there is an AGR O in English or not. Arguments for the presence of an AGR O in Spanish concerned the identification of NO's and Absolute Small Clauses in which AGR O moves to C. These two structures are lacking in English:

- (i) a. * This leads to conclude what follows
- b. * Arrived the firemen...

Also, the participle in English never shows number and gender agreement features. It could be claimed that English has an ASPP where the participle is generated but not an AGRP O associated with it. Alternatively, if we want to maintain that the possibility of having an AGR O associated with the assignment of accusative Case is a UG property, we would have to postulate the existence of an AGR O in English which is lacking in features. For arguments in favour of an AGR O involved in the assignment of accusative Case in English see Battye (1991).

assignment of nominative Case is a coindexing relation between an NP in [SPEC, AGRP S] and an AGR S which may enter either a SPEC-HEAD relation or a government relation with it.

The same conclusions applied to AGR O. We claimed that Spanish AGR O may have number and gender features (when a past participle was present) and may also have a person feature (with clitics). Unless a clitic was present, we claimed that it is the complex head V + AGR O that assigns accusative Case in Spanish. To do so V must combine with the [Case] feature of AGR O by incorporating into that position. The examination of participle agreement patterns in Spanish, suggested that number and gender agreement can only take place when there is not a Case conflict between the [Case] feature of AGR O and the Case required by the NP triggering agreement.

Nothing has been said about 'nominal' agreement (e.g. agreement between a head and its specifier). Since the feature [Case] is not involved in this kind of process, it is logical to think that other mechanisms are working here. However, it would be interesting to see whether what has been discussed here can be extended to other agreement processes found in other languages.

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