1. Introduction

Throughout the Romance languages, enclitic ordering in positive imperatives is obligatory. Romance languages in which the verb moves up to the agreement projection in infinitives also display enclitic ordering (Kayne 1991). In this paper, we will first restate this descriptive generalization as a property of the agreement morphemes associated with [-realized] tense: the imperative agreement morphology in C° and the infinitival agreement morphology in AGR-S° force the clitics to stay behind in the lower morphological head. We claim that this property of imperative and infinitival agreement morphology derives from their status as anaphors defined in the sense of the Binding theory. Since clitics are also defined in terms of the Binding theory (as pronouns or anaphors), the anaphoric infinitival and imperative agreement morphemes would block the government relation between the clitic and its trace in the sense of Rizzi’s (1990) Relativized Minimality. The agreement morphemes in (nonimperative, noninfinitival) tensed clauses are not defined in terms of Binding and therefore lack this blocking property. In this way, the striking generalization involving enclitic ordering in Romance can be explained by general principles of the grammar.

In all Romance languages, clitics have to follow a non-negated imperative. This is illustrated for French, Italian and Spanish and European Portuguese in (1):

(1) a. Fais-le! (Fr.)/ Falo! (It.)/ Hazlo! (Sp.)/ Fá-lo! (Port.)
   ‘Do2pers.sg. itcl!’
The observation also holds for Catalan, Romanian, Sardinian (Jones 1988:337), Rhaeto-Romance (Haiman 1988:377), and Corsican (Albertini 1972:45) in (2):

(2) a. Fes-ho! (Cat.) / Pune-o! (Rom.) / Pikalu (Sard.) /
   ‘Do2pers.sg. itcl! / ‘Set2pers.sg. itcl!/ Take2pers.sg. itcl!/
   Do m! (Rh. Rom)
   ‘Give2pers.sg. mecl!'

b. Dálluli / Dállulu (Cors.)
   ‘Give2pers.sg. itcl to-himcl / Give2pers.sg. to-himcl itcl’

The enclitic ordering in positive imperatives is not restricted to Romance, but also extends to other genetically unrelated languages: Albanian (3ab), (Newmark et al. 1982 quoted by Rivero 1988), Modern Greek (3c), and Modern Macedonian (Joseph 1983):

(3) a. Digi- e!
   ‘Burnimp2sg itcl’ Rivero (1988: fn10(ia))

b. Mos e digi!
   ‘Neg itcl burnimp2sg.’ Rivero (1988: fn10(ib))

c. Grapse to!
   ‘Writeimp2sg itcl’ Rivero (1988:(45))

Surprisingly, the observation holds even for languages which never allow clitics to follow the verb otherwise. In French for instance, the only case where clitics follow the verb is in the positive imperative. It is well known for instance

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1 The observation also extends to those Romance dialects which are diachronically of the 'langue d'oil' type. Rézean (1976:69) gives examples from Vendéen: dun mæ la 'give2pers.sg. to-meci itcl!', and Remacle (1952:250) for Walloon: prinds-è 'take2pers.sg. of-itcl'. For Occitan, Sauzet (1986:153) observes that imperatives display enclitic ordering: Dona-li de pan 'Give2pers.sg. himcl some bread'. This observation is confirmed for the different Occitan dialects by data attested in the versions of the Parabole de l'enfant prodigue cited in Bec (1967), e.g. Auvergnat:

(i) Partatjatz vôstre ben e bailatz-me çò que deve aver
   ‘Divide2pers.HON your goods and give2pers.HON, mecl that what I should have’

For Gascon, these data are confirmed by Rohlfs (1977:185): da m’oc ‘give2pers.sg. to-mec1 itcl’. Interestingly, as illustrated in (2b), the respective ordering of accusative and dative clitics in Corsican is free (Albertini 1972:44-45).
that in Spanish and Italian (8a) the clitics follow the infinitive (see Kayne 1991a for an analysis of this phenomenon), but in French this option is excluded:

(4) a. *Quiero hacerlo/ Voglio farlo
   ‘I want to do itcl’
   b. Je veux le faire/ * faire le
   ‘I want to itcl do/ do itcl’

This striking generalization is a major puzzle for contrastive linguistics: why do so many languages exhibit this particular ordering of clitics with imperatives? It could of course be claimed that there is a rule postponing clitics in positive imperatives, but such a solution would fall short of explaining why this specific ordering is required across languages in the first place. If the postverbal ordering were rule-governed or subject to some low level grammatical constraint, one would expect much more variation crosslinguistically than what is actually the case. The issue is an interesting one when viewed from the perspective of a modular grammar in which modules and principles interact to generate acceptable sentences. In such a framework, the postverbal ordering of clitics with positive imperatives is likely to involve a very general principle of the grammar. It is likely that the same principle which is responsible for enclitic ordering in imperatives is also responsible for enclitic ordering in Spanish and Italian infinitives. We would like to show that the position of clitics in both imperatives and infinitives follows from such a very general principle operating in the syntax which involves the core relation of government, Relativized Minimality (Rizzi 1990). Relativized Minimality can be defined as follows (Rizzi 1990):

(5) X α-governs Y only if there is no Z such that
    (i) Z is in a base-generated position
    (ii) Z is a typical potential α-governor for Y
    (iii) Z c-commands Y and does not c-command X

   where α-government ranges over A, A’, and Xο government

This means that in a linear syntactic string X - Y - Z, X cannot govern Z if an element Y intervenes which is in the same type of phrase structure position (argument, non-argument or head position) as X and Z. Let us take an example from Rizzi (1990:11(24)) to make this clear:

(6) a. *Have they could t left
   b. *Could they t have left
   c. *Have they could t left

   Xοcould --- Yοhave
   * Xοhave --- Yοcould --- Zο have
In (6c), have has moved to a position (C°) from which it cannot govern its trace, since another head, the modal could, intervenes between have and its trace. Since the trace of have is not governed, the sentence is ruled out by the Empty Category Principle which states that every trace should be governed. We would like to show that the grammatical mechanism which excludes (6c) also excludes (1b). It is our purpose to show how a modular theory of syntax can explain the at first sight puzzling generalization involving clitic ordering in imperatives. In order to achieve this goal, we will assume the groundbreaking work of the last few years on the multi-layered nature of functional categories (Pollock 1989, Belletti 1990), and the incorporation of clitics (Kayne 1989).

Let us first try to show how the problem of enclitic ordering in positive imperatives can be formulated in the framework assumed here. Following Baker (1988) and Kayne (1989, 1991a), it will be assumed that the core position of clitics in Romance is obtained by adjunction (incorporation) of the X° clitics to the left of the verb. The verb then subsequently moves to its functional projections where it adjoins first to the left of T° and subsequently to AGR-S° (Belletti 1990). Adjunction to the left of the functional projections ensures that the verbs picks up tense features in T° before receiving agreement features, following Belletti (1990) in assuming that AGR-S° selects TP.2 Furthermore, we will accept with Rivero (1988) that positive imperatives as in (1-2) involve head movement of the V-T-AGR complex to C°. This movement to C° can be motivated. First of all, imperatives express a modality (close to the classical grammarian’s definition of irrealis/potentialis) that can be associated with the temporal/modal C° morpheme. Rivero (1988) claims that the imperative C° makes the verb function as a performative operator. Moreover, several languages have specific morphemes for imperatives which differ from indicative or subjunctive morphology and which must be associated with a distinct functional category. Rivero (1988) labels this type of imperatives ‘true’ imperatives for the languages of the Balkans, as opposed to ‘surrogate’ imperatives which correspond to morphologically existing tenses in the system (cfr (3)). In this respect, Rivero (1988) claims that negation prevents the verb from moving beyond AGR-S° and T° to its specific morphology in C° beyond NegP. This is an important argument in favor of movement to C° in imperatives, since it allows for an explanation of the contrast in (7ab).3

2 Bernstein (1991) has suggested that this is not the case in nominal projections in Romance.
3 The behavior of clitics in negated imperatives is subject to variation. Kayne (1991b) observes that in Northern Italian, the enclitic ordering in negative imperatives (7b) is by far preferred to the proclitic ordering which is common in the dialects of the Center. This distribution is paralleled in the infinitival imperatives (8) of these dialects:
Spanish, Catalan, and Portuguese negated imperatives which use the subjunctive morphology do not allow for the enclitic option. The following are from Spanish:

(7) a. Hazlo! / Hagalo! / Hagamoslo
   'Do2sgIMP itcl/ do2sg.HON.SUBJ itcl! (honorific)/Do1pers.pl itcl! (exhortative)'

b. No lo hagas! / * No lo haz!
   'Neg itcl do2sgSUBJ (not honorific)'

c. * No hagaslo / * No hagalo
   'Neg do2sgSUBJ itcl/ Neg do3Sg SUBJ itcl(honorific you)'

In (7a), the verb moves all the way to its specific morphology in C°. In (7b), however, it does not move any farther than AGR-S°, since negation blocks movement of the verb to C°. It can be assumed that the imperative morphology in C° which cannot be expressed in negative imperatives functions in many Romance dialects as an operator triggering the subjunctive morphology in the lower AGR-S° and T° (7b). The ‘true’ imperative morphology in C° and the subjunctive morphology in AGR-S° and T° then behave as allomorphs which are triggered by the relative position of the verb. The subjunctive morphology appears in the same way as in embedded clauses which are

(i)a. Non lo fate! (=Kayne 1991b:(47))
   'Neg itcl doinf'

(ii)a. Non farlo! (=Kayne 1991b:(4))
   'Neg doinf itcl'

The possibility for clitics to precede or follow the negated imperative is also reported for Rhaeto-Romance (Kaiman 1988: 377).

4 Zanuttini (1991:75-79) argues against Rivero’s (1988) analysis of negation blocking movement to C°. Zanuttini (1991) argues that if negation were to block movement to C°, negative gerundival adverbial clauses such as (i) in Italian should be out, since they involve V° to C° movement under Rizzi's (1982) classical analysis.

(i) Non avendo Mario accettato di aiutarci, non potremo risolvere il problema
   'Mario not having accepted to help us, we won't be able to solve the problem.'

However, it might be that the movement-blocking capacity of negation does not apply to the auxiliaries essere 'be' and avere 'have' which more closely resemble functional categories. It could be that negation only blocks 'strong' verbs which are fully lexical categories. Restricting our attention to imperatives, it is certainly true that the order negation + imperative + clitic exists in Romance, as in (7b). Kayne notes that this order is attested only in those Romance dialects that have the order infinitive + clitic. If blocking of V to C by negation were simply constrained language specifically, there would be no explanation for this correlation. In the analysis adopted below, this correlation can be explained by the assumption that languages with the order negation + imperative + clitic do not have an anaphoric AGR (cfr infra) in C°, but (optionally) realize this anaphoric AGR° as an AGR°(-S) selecting [-tensed] T° in both infinitives and imperatives (See § 3 for the analysis of this case).
governed by a verb ruling the subjunctive: in these cases, the value of $C^o$ which is lexically determined by the governing $V$ also triggers the subjunctive in the embedded $T^o$. Rivero's (1988) claim that the morphology of 'true' imperatives is located in $C^o$ hence seems to be well motivated.

In itself, head movement of the verbal complex to $C^o$ cannot explain why clitics have to stay behind in AGR-$S^o$. In principle, the complement clitics should move with the $V^o$ - $T^o$ - AGR-$S^o$ complex to $C^o$. After all, in declarative sentences the cl-$V^o$ complex successively moves to $T^o$ and AGR-$S^o$, yielding (8a) with the structure in (8b):

\[(8) \quad \text{a. } Tu \ le \ regardais
\]

\['You it/ him_{cl} watched'\]

\[
\text{b. } [\text{CP } C^o \ [\text{AGR-S-P } Tu \ [\text{AGR-S'} \ [\text{AGR-S0}[T^o[t^o-v^o le}
\]

\[
[V^o \ regard]] \ ai \ T^o] s ] [TP ... [VP]]]]
\]

Within the general framework sketched so far, the question with clitic ordering in positive Romance imperatives is to understand why the verb alone moves to $C^o$, since this obviously is the exceptional case. We would like to say that this is due to the nature of $C^o$ in imperatives. Imperatives not only have specific truth conditions that may be determined by $C^o$, they also have specific agreement properties which are restricted to second person singular and plural (honorific or not), or to first person plural for the exhortative (cfr (9a)). Extending to root clauses Rizzi's (1990) suggestion that embedded $C^o$s in English can either contain either the complementizer that or a nonovert AGR-$C^o$, we would like to suggest that these restricted AGR features are due to an

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5 The representation of the amalgamated verb under AGR-$S^o$ is simplified for purposes of illustration. As it stands, the representation is not very intuitive since it suggests that the clitics are more closely connected to the verbal stem than the verbal affix. Taking into account Roberts' (1991) discussion of the difference in incorporation of clitics and verbal affixes, the proper representation under AGR-$S^o$ in (14b) would have to reflect this different relation. For Roberts (1991), cliticization involves adjunction at the $X^o$ level, while affixation takes place at a sublexical level $X^{-1}$. This difference of incorporation captures the difference of connectivity between clitics and affixes. Roberts' (1991) analysis does not have major consequences for the analysis which will be developed here in terms of Relativized Minimality. For Roberts (1991), $X^{-1}$ affixes do count as intervening governors for the trace of incorporated $V^o$. Pursuing the logic of Roberts (1991) analysis, $X^{-1}$ affixes must also be intervening governors for the traces of incorporated $X^o$ clitics which are sisters to $V^o$. For our analysis of the postverbal ordering of clitics in imperatives, this means that the AGR-$C^o$ imperative morphology can act as an intervening governor for the relation between the clitic incorporated under AGR-$C^o$ and the trace of the clitic in AGR-$S^o$. The simplification in (14) and in the other representations in this paper are justified since it has no direct consequences for the analysis to be developed.
imperative AGR morpheme in C°. Let us call this imperative C° with agreement features AGR-C°. The fact that AGR° features are present in C° is particularly plausible in view of the observations by Rivero (1988) and Zanuttini (1991) that languages which display specific imperative morphology do not allow this morphology to show up in negative imperatives.

Interestingly, the hypothesis that an AGR° morpheme is in some way responsible for enclitic ordering can be extended to the postverbal ordering of clitics in Spanish and Italian infinitives. There is evidence from the position of temporal adjuncts that the verb moves up to AGR-S° in Spanish and Italian, but not in French. The ordering of adverbs with respect to tensed verbs and infinitives has allowed Pollock (1989) to argue that tensed verbs in French move up to AGR-S° beyond the adverb souvent ‘often’ in (9a). Infinitives stay put in their base position, or in a position below the adverb (9b).

(9) a. Marie (*souvent) parle (souvent) de lui
   ‘Mary (often) talks (often) about him’

   b. Marie prétend [(souvent) parler (*souvent) de lui]
   ‘Mary claims to (often) talk (often) about him’

   Belletti (1990) argues that Italian differs from French in that infinitives moves up to AGR-S° in the same way as tensed verbs. The main argument for this is the position of adverbs, which is the same in both cases:

(10) a. Maria (*spesso) parlava (spesso) di lui
    ‘Mary (often) talks (often) about him’

    b. Maria sostiene di (*spesso) parlare (spesso) di lui
    ‘Mary claims to (often) talk (often) about him’

This description has been further refined by Kayne (1991). Kayne (1991a) claims that in French, V° moves up with its clitics to an INF projection containing the infinitival morphology which is added to the verbal stem. This projection is preceded by adverbs of the souvent ‘often’ type, exemplified in (11b). Sardinian moves the clitic + infinitival V° complex up to T° and has an order clitic + infinitive + adverb as in (11b) (Kayne 1991a). In Italian and Spanish, following Belletti (1988), the infinitival V° moves up to AGR-S°, leaving behind its clitics in T° (cfr (4a) and (11c)).

(11) a. ...AGR-S°... T°... ADV ...[[CL° [ V°]] INF°]...t[cl° [V°]] (French)
Again, it seems that the infinitival AGR-$S^o$ somehow forces clitics to be left behind in Italian and Spanish. In French, the verb does not move up to AGR-$S^o$. Consequently, clitics remain in their left-adjointed position to the verb. We may then formulate the following approximative generalization:

(12) Whenever a verb is related through movement with the AGR$^o$ morphemes associated with imperative or infinitival morphology, it must leave clitics behind.

This formulation captures both the case of Italian - Spanish where clitics follow the verb since the verb has moved up to AGR-$S^o$, and the case of French - Sardinian where the verb has not moved high enough for it to leave its clitics behind. Why is this the case? What properties of this morphology enable it to force clitics to be left behind when the verb moves up? Let us therefore analyze in some detail the feature composition of the functional categories involved in imperatives and infinitives.

2. The infinitival AGR-$S^o$ and the imperative AGR-$C^o$ as anaphors

Infinitives and imperatives are similar in many respects: both imperatives and infinitives do not license overt subjects. For Beukema & Coopmans (1989), this is due to the [- tensed] value of the temporal morphemes in imperatives and infinitives which do not allow nominative case to be assigned to the subject position. This claim has to be modified to the extent that the temporal value of imperatives certainly is not characterized by the absence of tense. Contrary to the suggestion by Beukema & Coopmans (1989), it cannot be the case that imperatives have a [-tensed] feature which would be more or less identical to that of infinitives: Latin has a temporal morpheme for the future imperative:

(13) a. ama
    ‘loveIMP.PRES.2pers.sg.’

b. amato
    ‘loveIMP.FUT.2pers.sg.’

c. amate
    ‘loveIMP.PRES.2pers.pl.’

d. amatote
    ‘loveIMP.FUT.2pers.pl.’

It is more accurate to say that the tense of imperatives is restricted to non past tense. It remains true however that past imperative morphology does not
It might therefore be useful to characterize the temporal/modal value of imperatives as [-realized], a temporal/modal value which is compatible with future, but not with past interpretation. This characterization has been proposed for the tense of infinitives by Stowell (1982). This definition of the tense of infinitives is not new. It has long been noted that the semantic interpretation of the infinitival morphology corresponds to a temporal/modal notion. Bresnan (1972) observes that infinitival complements refer to ‘something hypothetical or unrealized’. Guillaume (1929) had already defined the infinitival tense as a tense ‘in posse’: it expresses ‘potential’ time, or eventuality, which is opposed to tense ‘in esse’, a ‘real’ or finite time reference linked to the time axis. Stowell (1982) makes a similar observation stating that the tense of infinitives must be semantically interpreted as unrealized or as a ‘possible future’. Reinterpreting Beukema & Coopmans (1989), we then propose that imperatives and infinitives have the temporal feature [-realized] in common rather than the feature [-tensed].

How can this common [-realized] property of infinitives and imperatives be related to the position of clitics in these cases? In order to offer an answer to this question, we have to take a closer look at the AGR° morphemes that are associated with [-realized] T° morphemes. During the 1980's it has repeatedly been argued that control theory can be partially reduced to Binding theory, since the infinitival PRO takes the sentence in which the infinitive is embedded as the domain in which its antecedent is to be found. In the following sentence, the infinitival subject (the anaphoric AGR-S°) cannot be bound by the subject of a superordinate clause:

(14) You said that Harry promised to shave himself! *yourself

Borer (1989) has argued that the AGR-S° of infinitives is what is anaphoric in nature rather than the PRO subject of infinitives. Let us assume that this is indeed the case. To say that the infinitival AGR-S° is anaphoric in nature is

6 Contra Borer (1989), Rooryck (1991) argues that AGR-S° does not move to C° in order to extend its Binding domain to the matrix clause. Following Kayne (1991a), Rooryck (1991) assumes that the infinitival AGR-S° (PRO for Kayne) cannot be bound in its own X^max because there is no position which might contain a potential binder. Hence, the next category up is the Binding domain for AGR-S°. Extending insights of Stowell (1982), Rooryck (1991) develops a modular analysis of control in which the matrix verb determines control via aspectual coindexation of the [-realized] C° with aspectual subevents in the event structure of the matrix verb. This lexical coindexation of the infinitival C° restricts Binding of the anaphoric infinitival AGR-S° in the matrix clause. Since the infinitival AGR-S° is coindexed with the infinitival C°, anaphoric AGR-S° can only be bound by those arguments which are lexically represented in the subevent the infinitival C° is coindexed with. In other words, partial coindexation of C° with the governing control verb restricts the Binding antecedents for
tantamount to saying that it is morphologically identical to the overt clitic *se/ si*, which is the anaphoric clitic in Romance.

(15) *Gianni si vede*
   Giovanni selfCl sees
   ‘Giovanni sees himself’

Importantly, now, normal ‘tensed’ AGR cannot be described in terms of the Binding theory: it is nor an anaphor, nor a pronoun, but simply subject to Spec-Head agreement with whatever is the subject at S-structure. We may conclude that the infinitival T° can be characterized as [-realized], and is associated with an anaphoric AGR-S°.

Let us now see how this characterization can be extended to imperatives. From a formal point of view, it is tempting to say that the imperative agreement morphology is at least partly identical to that of infinitives. The reason for this is simplicity: if T° morphemes with [-realized] temporal features are associated with anaphoric AGR-S° in infinitives, it is conceptually simpler to assume that some anaphoric AGR° morpheme is also associated with the [-realized] T° of imperatives: c-selectional properties between functional categories should be identical. At first sight, this cannot be the case: the imperative morphology is certainly distinct from the infinitival morphology. The imperative agreement morphology lacks a complete inflectional paradigm, but shows first and second person endings, unlike infinitives. The imperative tense morphology does not show [+past] markings, like the infinitival morphology, but unlike the infinitival morphology it can exhibit morphemes for the future and subjunctive endings. It is likely that the subjunctive agreement and temporal morphemes are present in the imperative AGR-S° and T°. Recall that we have assumed with Rivero (1988) that negation blocks movement of the verb to C°, triggering subjunctive morphology in most Romance languages. Since the verb does not move beyond AGR-S°, AGR-S° and T° must contain the relevant subjunctive and agreement morphemes. Only when the verb moves to AGR-C° can it receive the properly imperative morphology. For reasons of simplicity, it may then be assumed that the imperative AGR-S° and T° are identical in every respect to ‘normal’ tensed morphology, since the imperative AGR-S° (2nd person sg. and pl., 1st person. pl.) and T° (subjunctive) morphemes are identical to the morphology of the verb in a tensed sentence. We would like to propose that it is the imperative AGR-C° which bears the [-realized] tense features in an imperative. This actually allows one to make sense of the fact that

anaphoric AGR-S°. This analysis of control eliminates control theory, since control arises through a modular interaction of general principles of the grammar.
the imperative $T^0$ can be subjunctive (Spanish, Portuguese, Italian...) or future (Latin): both the subjunctive mood and the future tense, but not past, are compatible with the feature [- realized] in the imperative AGR-C$^0$. In infinitives, however, $T^0$ itself bears the temporal [- realized] feature and can never exhibit subjunctive, past, or future morphology. We thus derive the fact that the imperative and infinitival tense morphology are syntactically and semantically similar, but not identical.

What is the nature of the agreement features associated with the [- realized] AGR-C$^0$? We know that there are specific agreement morphemes for imperatives in some Romance languages (cfr supra). Moreover, since we have assumed that the imperative AGR-S$^0$ and $T^0$ morphemes are identical to those of the tensed morphology, we have to derive the fact that imperatives are restricted to 2nd person sg. and pl. and 1st person pl. It is likely that the imperative AGR-C$^0$ is responsible for this restriction, but we have to find independent motivation for this conjecture. We would like to claim that this restriction is due to the basically anaphoric nature of the imperative AGR-C$^0$. Let us therefore return to the possible interpretations of clitic anaphors in Romance.

In recent work on the properties of reflexive se/ si ‘self’ clitic anaphors in Romance (15), Burzio (1989) and Pica (1987, 1991) suggest that these reflexives are ‘defective’ morphemes in that they do not have φ-features at DS. Burzio (1989) and Pica (1987, 1991) suggest that the absence of φ-features is a morphological defining property of anaphors. Burzio (1989) moreover proposes that impersonal si ‘self’ in Italian is equally featureless, but lacks an antecedent since there is no governing category for it. Burzio (1989) proposes that impersonal si ‘self’ therefore receives a ‘default’ first person plural interpretation as in (16a). The impersonal si ‘self’ can however also refer to third person if context is supplied (16b).

(16) a. Si è contenti in Italia
   SELF is happyPL in Italy
   ‘One is happy in Italy’

We will not go into the question whether the [- realized] temporal/ modal features of the imperative AGR-C$^0$ and its agreement features are to be dissociated in two distinct projections or not. Since this problem is not relevant for the analysis at hand, we will simply assume that AGR-C$^0$ bears both the imperative temporal and agreement features. Beukema & Coopmans (1989) and Zanuttini (1991) have suggested that no nominative case can be assigned to the imperative subject, since the imperative $T^0$ is [- tensed]. We would like to reinterpret this suggestion and say that the presence of a [- realized] temporal value in C$^0$ prevents case assignment to the Spec, IP position.
Rooryck (1991) has argued that the same is true for anaphoric AGR-Sº in certain infinitival clauses. In the cases where the infinitival clause is a complement of a matrix verb, the infinitival anaphoric AGR-Sº is bound in its Binding domain, the matrix clause (cfr (14)).

When infinitives are not complements of the verb and hence lack theta-marking, there is no Binding domain for the infinitival AGR-Sº. In these cases, the infinitival clause will not only act as a barrier for extraction, but also for Binding. This is the case for sentential subjects and infinitival adjuncts. The sentential subject in (17) is preferably interpreted as our/ your making noise.

(17) PRO making noise at midnight will frighten Sue

The fact that PRO in these sentences is preferably interpreted as first or second person has been pointed out by Thompson (1973:377) for adjectival arguments as in (18):

(18) ‘Bill, tearing up my new paper dolls was mean,’ cried Sue

This referential property of PRO in sentential subjects has led Van Haaften (1982:118) to claim that arbitrary PRO in these cases cannot be interpreted as third person. Bresnan (1982:328) and Vanden Wyngaerd (1994:216) have pointed out that the infinitival subject can be interpreted as referring to a third person if context is supplied:

(19) a. Tom felt sheepish. Pinching those elephants was foolish. He shouldn’t have done it
    b. Frankly, I’m worried about Mary. What has she gotten herself into? Don’t get me wrong: I think it was fine to join the group. But getting herself photographed with those starving wolves was dangerous.

It is important to underscore that control of the infinitival subject in all these cases is not subject to locality restrictions as in (14). Despite examples such as (19), it is striking that the unexpressed subject PRO in infinitival subjects is preferably interpreted as a discourse first or second person referent. Rooryck (1991) shows that the same is true in infinitival adjuncts when the subject of the
infinitive does not correspond to the matrix subject. Clark (1985) has claimed on the basis of (20) that control in infinitival adjuncts is subject to locality. This claim can be easily falsified. The sentences in (21) show that a nonlocal argument can control the unexpressed subject of a lower adjunct if it is second person, or properly introduced in the discourse:

(20) Mary thought that Bill had died after seeing *herself/ himself in the mirror

(21) a. So you think now that Bill might have died right after shaving yourself on June 6. Why would that be?
   b. Mr Freckletweeter was a very disorderly person at times. I see you have realized now that without PROijijk classifying them properly, his papers would have been irremediably lost for posterity.

Rooryck (1991) has pointed out that the interpretation of impersonal si ‘self’ in (16) is very close to the preferential interpretation of PRO in subject sentences and infinitival adjuncts: in both cases, the interpretation of the subject involves a discourse referent, but it can refer to third person given an appropriate context. The reflexive/ impersonal si ‘self’ and the AGR-S° in subject sentences and infinitival adjuncts also share a syntactic context: in both cases, the anaphor does not have a governing category. The similarity between the overt reflexive/ impersonal si ‘self’, and the infinitival AGR-S° warrants an analysis of the infinitival AGR-S° along the same lines: the infinitival AGR-S° is anaphor which can receive a ‘default’ pronominal interpretation if there is no governing category for it. Importantly, the infinitival AGR-S° is defined in terms of Binding theory.

The simplest hypothesis with respect to the nature of AGR-C° in imperatives then is to assume that it is also basically anaphoric in nature. Since imperatives cannot be embedded, there will never be a governing category for the imperative anaphoric AGR-C°, and it will forcibly take a default first or second person pronominal interpretation. In this way, the imperative AGR-C°

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8 Rooryck (1991) shows that subject control in infinitival adjuncts does not come about via Binding of the infinitival AGR-S° in the matrix clause, but through a different mechanism. In infinitival adjuncts, the anaphoric AGR-S° has the option of coindexing with the subject through the temporal linking (Hornstein 1990) of the T° morphemes between the matrix and the adjunct clauses.

9 The fact that the imperative agreement morphology is restricted to first or second person is by no means a necessary property of the grammar. In fact, the value of the imperative for third person can very well be expressed in French by a root subjunctive clause with a spelled out complementizer.
effectively restricts the normal tensed morphology in the lower imperative AGR-S° and T° to the attested 'defective' imperative morphology: 2nd person sg. and pl., and 1st person pl. This analysis can be reinforced by the observation that infinitives can be used as imperatives in Romance languages and in many languages not related to Romance.

(22) Ne pas faire du bruit!
'Not to make noise!'

In the analysis developed here, this interpretation arises from the specific feature contents of the functional categories in the infinitive: the tense features of the infinitive are [-realized], and the infinitival AGR-S° receives a default pronominal 1st or 2nd person interpretation since no governing category is present. The semantic properties of the functional categories in nonembedded infinitives bring them very close to the semantic properties present in the functional categories of imperatives.

We may conclude that the claim that the imperative AGR-C° is anaphoric, however paradoxical at first sight, can be well motivated. The default pronominal interpretation of the anaphoric AGR-C° can explain why imperatives are restricted to first and second person. Moreover, the minimal hypothesis with respect to the distribution of anaphoric and nonanaphoric AGR° in the context of other functional categories suggests that anaphoric AGR° should manifest itself in the context of [-realized] T°. Finally, nonembedded infinitives can receive the interpretation of imperatives, a property which would go unexplained if their agreement morphemes had nothing in common. We are then allowed to adopt the strongest hypothesis, and claim that [-realized] T° is always associated with an anaphoric AGR° morpheme. This hypothesis is also the simplest, since it assumes a minimal set of possible interpretations for AGR° morphemes in the grammar. AGR° morphemes are only definable in terms of

(i) Qu'il parte s'il n'est pas content!
'That he leave, if he is not pleased!'

It should be stressed that these sentences are not to be analyzed as embedded clauses with a suppressed matrix clause, since it is not clear which verb this supposedly suppressed matrix clause should contain. They should be viewed as performative subjunctive clauses. Importantly, in the analysis developed here, the anaphoric status of the imperative AGR-C° allows us to derive this otherwise unmotivated restriction of imperatives to first and second person.

The only element that remains unexplained under this analysis is why imperatives cannot refer to contextually introduced third person referents. This problem might be more general, however. In root sentences with impersonal si such as (22), the third person interpretation can only be obtained in context. In imperatives, the performative interpretation may play a role in excluding third person referents.
the Binding theory in the context of [-realized] T° (basically anaphoric with the possibility of a default pronominal interpretation). They are not definable in terms of Binding in normal tensed clauses where AGR° is only subject to Spec-Head agreement.

3. The anaphoric AGR°(-S/-C°) as intervening governors

Coming back to (18) and reinterpreting it, we would like to argue that the definition of the imperative AGR-C° and the infinitival AGR-S° in terms of the Binding theory, is responsible for clitics being left behind in the lower functional category. We have claimed that the infinitival AGR-S° and the imperative AGR-C° are anaphoric in nature, and can have a default pronominal interpretation. As such, they are identical in every respect to the Romance reflexive clitic se/ si. Since these functional categories are defined in terms of the Binding theory, they strongly resemble clitics. Clitics are either anaphors (se/ si ‘self’) or pronouns (French le ‘him/ it’, lui to-him/ her’ etc.).

Let us see what happens if the entire clitic-V-T-AGR complex would move to AGR-C° as in (23b). Within the resulting complex, the imperative anaphoric AGR-C° would dominate the clitics which are more deeply embedded in the morphological complex. This is illustrated in (23c):

\[(23)\]
\[
a. \text{Regarde-le} \quad \text{‘Watch it/ him\textsc{cl}’} \\
b. \ast \text{Le-regarde} \quad \text{‘It/ him\textsc{cl} watch’} \\
c. [\text{CP [AGR-C°[[[cl°-V° le [V° regardl] e T°] AGR-S°] AGR-C°] AGR-S-P t°[[[cl° [V°]] T°] AGR-S°] [TP [VP]]]]}
\]

As such, AGR-C° would intervene between the clitic in AGR-C° and that part of the complex trace which corresponds to the clitic. The relevant elements are highlighted in the structure (23c). We would like to claim that the fact that both clitics and the imperative AGR-C° and infinitival AGR-S° morphology are definable in terms of the Binding theory enables these AGR° morphemes to function as intervening governors for a relation between verb-adjoined clitics and their traces in a lower functional category. More concretely, in (23c), the anaphoric AGR-C° is a potential X° governor for the trace of the clitic in the nonanaphoric AGR-S°. Consequently, the trace of the clitic in AGR-S° would not be governed by the clitic in the anaphoric AGR-C°, and the structure is ruled out by the Empty Category Principle, since the trace of the clitic is not governed. The only way for the verb to acquire the imperative morphology in C° is to leave its clitics behind in AGR-S° so as to prevent an ECP violation from arising for its clitic subpart.

Exactly the same situation obtains with infinitives in Spanish and Italian (cfr (4a)), but this time it is the anaphoric nature of the infinitival AGR-S° which is
involved. As noted before, the verb in these languages moves up all the way to AGR-S° in infinitival constructions (Belletti 1990).

\[(24)\]
\begin{enumerate}
   \item \textit{Quiero hacerlo} \quad \text{I want to do it}'
   \item * \textit{Quiero lo hacer} \quad \text{*I want to itcl do'}
   \item \text{[CP Quiero [CP C° [AGR-S-P [[[cl°-V° lo[V° hac]} er T°] AGR-S°] [TP t°[[cl° [V°]} T°] [VP]]]]}
\end{enumerate}

The structure (24c) represents the ungrammatical (24b). Since the infinitival AGR-S° is an anaphor, it acts as an intervening governor for Relativized Minimality in (24bc), thus forcing the clitics to stay behind in the infinitival T°. We are in the presence of the same situation as with imperatives, with the difference that everything happens 'one notch down'. In French (4b), no such configuration involving Relativized Minimality can arise since the verb stays down in a projection lower than AGR-S°. Consequently clitics are allowed to stay attached to the verb.

This move requires a slight modification of the definition of Relativized Minimality as it is proposed by Rizzi (1990), in the sense that the semantic contents of intervening governors is made more prominent than in Rizzi’s original account. More specifically, we would like to add the following condition to the definition of Relativized Minimality in (5):

\[(25)\]
\begin{enumerate}
   \item \text{Z is morphologically definable in the same terms as X and Y.}
\end{enumerate}

This means that if a potential governor Z intervenes between X and Y which is not definable in the same terms as X and Y, it will not block government of Y by X. This modification of Relativized Minimality does not change anything for

10 This raises a problem for an analysis for clitic climbing along the lines of Kayne (1989), since it is not clear how clitics will be able to move over the infinitival anaphoric AGR-S° in order to move to the matrix verb in (i):

\[(i)\] \text{Lo voglio fare}
\text{[itc° I want to do}
\text{I want to do it’}

However, it might simply be that Kayne's analysis can be reconciled with an analysis invoking reanalysis for 'clitic climbing' verbs, following Rizzi (1982). See Rosen (1990) for a recent analysis along these lines. An alternative would be to assume with Rochette (1988) that the set of verbs involving clitic climbing select a VP instead of a CP: in that case, there will be no embedded (and controlled) AGR-S° that might function as a potential X° governor for the trace of the climbed clitics in the embedded VP. In any case, the assumption that 'clitic climbing' constructions are bona fide control structures needs to be amended, since otherwise it remains mysterious why clitic climbing is restricted to a lexical class of epistemic verbs.
the core cases to be excluded by Relativized Minimality. In (6c), which is also excluded by Relativized Minimality applying to a case of $X^\circ$ antecedent government, the intervening modal could clearly shares verbal features with have and its trace, and hence counts as an intervening governor. The approach of further semantically relativizing Relativized Minimality is in line with the modification proposed by Baker & Hale (1990). Baker & Hale (1990) argue that a distinction between functional and lexical categories should be built into the definition of Relativized Minimality: only lexical heads block antecedent-government by another lexical head, and only functional heads block antecedent-government by another functional head. The modification of Relativized Minimality proposed here and Baker & Hale's (1990) proposal share the intuition that Relativized Minimality should take into account the content of intervening categories.

Crucially, the lower, nonimperative tensed AGR-S$^\circ$ does not have this blocking capacity for government in terms of Relativized Minimality. In the analysis developed here, this is because of the fact that tensed AGR-S$^\circ$ is different from both the imperative AGR-C$^\circ$ and the infinitival AGR-S$^\circ$ in that the 'normal' tensed morphology is not definable in terms of the Binding theory. Tensed AGR-S$^\circ$ only acquires its nominal features through Spec - Head Agreement. Since (24) does not apply to tensed AGR-S$^\circ$, tensed AGR-S$^\circ$ does not count as a potential $X^\circ$ governor: that is, tensed AGR-S$^\circ$ is not ‘visible’ for a chain relating elements definable in terms of Binding their traces.

The analysis developed here claims that the notion ‘potential $\alpha$-governor’ within Relativized Minimality crucially involves the distinction between AGR$^\circ$ morphemes definable in terms of the Binding theory and AGR$^\circ$ morphemes which are not so definable. This simply means that the contents of potential intervening governors does play a role in Relativized Minimality. The application of Relativized Minimality is restricted by the fact that the semantic content of an intervening head must be sufficiently similar to the content of elements of the chain it interrupts. A similar observation has been made for

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11 This approach has a number of consequences for the analysis Rizzi (1990) offers of Inner Islands. For Rizzi (1990), negation can intervene between a Wh- element in Spec, CP and an intermediate trace in a lower Spec, CP to block antecedent-government. Negation being an A' governor, Relativized Minimality rules out a sentence such as (i):

\[(i) * \{\text{CP How didn't you think [CP t; Mary fixed the car t;] t} \}
\]

In the approach advocated here, negation would not be able to intervene as an A' governor because it does not share any semantic features with the Wh- chain it is supposed to block. On the basis a number of counterexamples to (i) in French, Rooryck (1992) has shown that negative islands as in (i) should not be explained by Relativized Minimality. Rooryck (1992) argues that the appropriate principles ruling out (i) have to to with operator - variable scope relations.
some exceptions to Rizzi's (1990) account of negative islands in terms of Relativized Minimality (Rooryck 1992).

The resulting structure of positive imperatives followed by clitics as in (26a) is then as in (26b), and the structure of Spanish enclitic infinitivals (27a) is as in (27b):

(26) a. Regarde-le
    'Watch it/ him/c' 

    b. [CP [AGR-C°[[c°-V° ti [V° regard]] e T°] AGR-S°] AGR-C°] 
      [AGR-S-P t°[[[ le [V°]] T°] AGR-S°] [TP [VP]]]

(27) a. Quiero hacerlo
    'I want to do it/c' 

    b. [CP Quiero [CP C° [AGR-S-P [[[c°-V° ti [V° hacer]] er T°] 
       AGR-S°] [TP t°[[lo [V°]] T°] [VP]]]]

At first sight, these structures violate Baker's (1988:73) ban on traces within an X° element, a constraint which he considers a morphological part of the Head Movement Constraint. Baker (1988) states this ban as follows:

(28) *[X° ... ti ... ]

(= Baker 1988:73 (76))

The structures in (25-26) clearly do not comply with this constraint. However, the constraint (28) was primarily designed by Baker (1988) to prevent a Z° incorporated to X° to successive cyclically move to a higher Y° as in (29):

(29) [Y° Z° ] ... [X° t°Z° ] ... tZ°

This configuration clearly does not obtain in (26-27). Consequently, we feel justified in weakening Baker's (1988) principle by stating that the configuration (28) is allowed iff all the elements of the chain of the Z° incorporating into the governing X° are dominated by this X°. This is clearly the case in (26-27), where the V° in AGR-C° clearly dominates both the clitic and all its traces. This interpretation of Baker (1988:73) still rules out the relevant structure (29), and is compatible with the exclusion of (29) via the Minimality Condition (Baker 1988:451fn9): In this footnote, Baker (1988) attributes to Chomsky (p.c.) the idea that (29) may be ruled out by the ECP under an extension of the Minimality Condition, since XP would be a Barrier between t°Z° and its antecedent in Y°.
Another theoretical problem with the analysis of the enclitic ordering of imperatives in terms of Relativized Minimality has to do with the original definition of Relativized Minimality itself. Rizzi (1990:7) characterizes this principle in hierarchical terms stipulating that an α-governor Z intervening between X and Y must c-command Y and not c-command X. In the case of enclitic imperatives, the intervening AGR-C° would clearly c-command both the clitic in the amalgamated verbal complex in AGR-C° and its trace in AGR-S° (cfr 23c). It could then be objected that Relativized Minimality cannot apply to this structure, since the hierarchical clause of its definition is not fulfilled. However, we would like to argue that the hierarchical relations between the elements amalgamated in an X° by adjunction are of a different nature from those expressed in a full-fledged configuration. For one thing, in order for a clitic to c-command its traces out of an X° complex, it must be accepted in any case that they are somehow on the same hierarchical level as the functional X° elements they are adjoined to together with the verb. Even if AGR-C° c-commands and governs the clitic in (23c), this c-command relation does not have the hierarchical property that was essential for Rizzi (1990) in determining intervention of a potential α-governor hierarchically in terms of c-command. We would like to say that c-command in the strong hierarchical sense does not apply between AGR-C° and the clitic in (23c), since for all other purposes they are supposed to be on the same hierarchical level. Since the X°- complex in AGR-C° does c-command its complex trace and hence the trace of the clitic, Relativized Minimality does apply to (23c).

6. Conclusion

Our analysis of enclitic ordering in Romance imperatives and infinitives in terms of Relativized Minimality strongly suggests that amalgamated categories are not an unordered bunch of features, but that the morpheme boundaries within the amalgamated complex are preserved. It shows that a purely syntactic principle such as the ECP applies to morphologically amalgamated categories.

The analysis of clitic ordering in Romance imperatives advocated here offers strong evidence for Kayne's analysis of X° amalgamation as involving a general left adjunction process. It is also worthwhile to note that the enclitic ordering in Romance imperatives can be considered a case of reverse excorporation (Roberts 1991): instead of the clitic 'passing through' the V-T-AGR complex, here the verb excorporates into C° because of general principles of the grammar which determine that it cannot take its clitics with it. The

12 For another exploitation of the idea that features in amalgamated V-T-AGR complexes are distinctly visible in causatives, see d'Hulst & Rooryck (1989).
analysis presupposes that the grammar makes a distinction between AGR° morphemes that are defined in terms of the Binding theory and AGR° morphemes that are not so defined.

The analysis strongly suggests that Relativized Minimality applies to the morphosyntactic complexes of clitics, verbs and affixes, and has to integrate a more precise definition of potential X° governors which takes into account their semantic content.

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