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ROMANCE ENCLITIC ORDERING AND UNIVERSAL GRAMMAR

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1. INTRODUCTION*

In all¹ Romance languages, clitics have to follow an nonnegated imperative. This is illustrated for French, Italian and Spanish and European Portuguese in (1):

- (1) a. Fais-le! (Fr.)/ Falo! (It.)/ Hazlo! (Sp.)/ F  lo! (Port.)
do-2SG it(CL)
b. *Le fais!/*Lo fa!/*Lo haz!/*O faz!
it(CL) do-2SG

The observation also holds for Catalan, Romanian, Sardinian (Jones 1988: 337), Rhaeto-Romance (Haiman 1988: 377), and Corsican (Albertini 1972: 45) in (2):²

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1 See   5 for some apparent counterexamples involving imperatives with subjunctive form.

2 The observation also extends to those Romance dialects which are diachronically of the 'langue d'o  l' type. R  zean (1976:69) gives examples from Vend  en: *dun m    l  * (give2SG. to-meCL itCL), and Remacle (1952:250) for Walloon: *prinds-  * (take-2SG of-it(CL)). For Occitan, Sauzet (1986:153) observes that imperatives display enclitic ordering: *Dona-li de pan* (give-2SG him(CL) 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) Partatzatz v  tre ben e bailatz-me     que deve aver.
divide-2:HON your goods and give-2:HON. me(CL) that what should-1SG have.'

- (2) a. Fes-ho! (Cat.)/ Pune-o! (Rom.)/ Píkalu (Sard.)/ Do m! (Rh. Rom)
do-2SG it(CL)/ set-2SG it(CL)/ take-2SG it(CL)/ give-2SG me(CL)
b. Dálluli/ Dállilu (Cors.)
give-2SG it(CL) to-him(CL)/ give-2SG to-him(CL) it(CL)

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

- (3) a. Digj- e! Rivero (1988, fn.10(ia))
burn-IMP:2SG it(CL)
b. Mos e digi! Rivero (1988, fn.10(ib))
NEG it(CL) burn-IMP:2SG
c. Grapse to! Rivero (1988, ex.(45))
write-IMP:2SG it(CL)

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 that in Spanish and Italian (4a,b) the clitics follow the infinitive (see Kayne 1991a for an analysis of this phenomenon), but in French this option is excluded, (4c):

- (4) a. Quiero hacerlo.
want-1SG do it(CL)
b. Voglio farlo.
want-1SG do it(CL)
c. Je veux le faire/*faire le.
I want {it(CL) do/do it(CL)}

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 postposing 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

For Gascon, these data are confirmed by Rohlf's (1977:185): *da m' oc* (give-2SG to-me(CL) it(CL)). Interestingly, as illustrated in (2b), the respective ordering of accusative and dative clitics in Corsican is free (Albertini 1972:44-45).

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 X⁰ government.

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

- (6)
- a. They could have left. X⁰_{could} — Y⁰_{have}
 - b. Could they *t* have left. X⁰_{could} — Y⁰ *t*_{could} — X⁰_{have}
 - c. *Have they could *t* left. *X⁰_{have} — Y⁰_{could} — Z⁰ *t*_{have}

In (6c), *have* has moved to a position (C⁰) 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). The analysis is interesting because it shows how a modular analysis can capture syntactic generalizations such as the one expressed in (1–3) on the basis of independently motivated principles and properties.

2. FRAMING THE PROBLEM

In this section, we will first take a closer look at the variation of clitic ordering in Romance. We will furthermore try to establish how the problem of enclitic ordering has to be framed. At first sight, two options are open: either the verb moves over the base-generated clitics, or the clitics are left behind by the verb on its way up to the relevant functional categories. We will show that the problem at hand really involves the question why clitics are left behind by the verb, and that in principle, nothing seems to prevent the verb from moving up with its clitics. Finally, we will formulate the conjecture that the nature of the Agr⁰ morphemes in imperatives and infinitives forces clitics to be left behind.

Contrary to the generalized enclitic ordering in positive imperatives, Romance exhibits a great deal of variation with respect to clitic ordering in negated imperatives. 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 negative imperatives (8) of these dialects:

- (7) a. Non lo fate! (=Kayne 1991b, ex. (47))
 NEG it(CL) do-INF
 b. Non fatelo! (=Kayne 1991b, ex. (48))
 NEG do-2PL it(CL)
- (8) a. Non farlo! (=Kayne 1991b, ex. (4))
 NEG do-INF it(CL)
 b. Non lo fare! (=Kayne 1991b, ex. (5))
 NEG it(CL) do-INF

The possibility for clitics to precede or follow the negated imperative is also reported for Rhaeto-Romance (Haiman 1988: 377). Spanish, Catalan, and Portuguese negated imperatives which use the subjunctive morphology do not allow for the enclitic option. The following are from Spanish:

- (9) a. Hazlo! / Hágalo!
 do-2SG:IMP it(CL) / do-2SG:HON:SUBJ it(CL) (honorific you) /
 Hagámoslo!
 do-1PL it(CL) (exhortative)
 b. No lo hagas! / *No lo haz!
 NEG it(CL) do-2SG:SUBJ (not honorific)
 c. *No hágaslo / *No hágalo
 NEG do-2SG:SUBJ it(CL) / NEG do-3SG:SUBJ it(CL) (honorific you)

In Spanish infinitival imperatives, clitics cannot precede the verb in any dialect that we are aware of:

- (10) a. No *hacerlo*!
 NEG to do it(CL)
 b. *No *lo hacer*!
 NEG it(CL) to do

Outside of the imperative system in Romance, clitics do not necessarily precede the verb either. We have already pointed out the fact that clitics follow infinitives in Spanish and Italian. Besides the variation in clitic ordering in negated imperatives in Romance, the position of the clitics exhibit a great deal of variation even in tensed clauses across Romance languages, despite the fact that the core position is proclitic. In Portuguese, clitics precede or follow the verb in tensed clauses according to a very complex rule system. In European Portuguese, clitics have to follow the verb in root clauses whereas they mostly precede the verb in embedded clauses. However, in root clauses, the presence of quantifiers on the subject or negation forces proclitic ordering. With infinitives, the choice of the embedding preposition seems to be relevant (12) (see Pizzini 1981 for an analysis of these data).

- (11) a. *Disseram-me que ele te escreveu.*
 tell-PAST:3PL me(CL) that he to-you(CL) write-PAST:3SG
 b. *Contaste-lhe a historia?*
 tell-PAST:2SG him(CL) the story
 c. *Vi-o.*
 see-PAST:1SG {it/him(CL)}
 d. *Não o vi./ Ninguém o viu.*
 NEG {it/him(CL)} see-PAST:1SG/ nobody it/him(CL) see-PAST:3SG
 e. *Todos me disseram que ele te escreveu.*
 all me(CL) tell-PAST:3PL that he to-you(CL) write-PAST:3SG
- (12) a. *Começou a vê-lo.*
 begin-PAST:3SG to see it/him(CL)
 b. *Vieram para lá escrever.*
 come-PAST:3PL to it(CL) write

Brazilian Portuguese has different rules for clitic-verb ordering, which mostly indicate a shift towards the proclitic position. These examples may suffice to indicate the variation of clitic ordering in those cases which do not involve positive imperatives.

We do not want to go into the specifics of clitic ordering outside of the

imperative and infinitival system in Romance here. The variation in clitic ordering attested in Portuguese must be due to language specific factors which we will not investigate here (see Rouveret 1989). However, it is not likely that language specific factors are responsible for enclitic ordering in imperatives, since this ordering seems exceptionless even across language families (cf. *supra* (3a)). In view of the attested variation of clitic ordering in nonimperative contexts, the absence of variation in clitic ordering with positive imperatives is all the more surprising. It seems worthwhile to investigate whether this enclitic ordering in imperatives can be made to follow from general principles of the grammar.

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^0 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^0 and subsequently to $AgrS^0$ (Belletti 1990). Adjunction to the left of the functional projections ensures that the verbs picks up tense features in T^0 before receiving agreement features in (14), following Belletti (1990) in assuming that $AgrS^0$ selects TP. 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^0 . This movement to C^0 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^0 morpheme. Rivero (1988) claims that the imperative C^0 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 morphologically existing tenses in the system (cf. (3)). This imperative morphology then forces movement of the verbal complex to C^0 in the case of positive imperatives.

With respect to negative imperatives, Rivero (1988) claims that negation prevents the verb from moving beyond $AgrS^0$ and T^0 to its specific imperative Agr morphology in C^0 which lies beyond NegP. This is an important argument in favor of movement to C^0 in imperatives, since it allows for an explanation of the contrast in (9ab). In (9a), the verb moves all the way to its specific Agr morphology in C^0 . In (9b), however, it does not move any farther than $AgrS^0$, since negation blocks movement of the verb to C^0 .³

3 Zanuttini (1991: 75–79) argues against Rivero's (1988) analysis of negation blocking movement to C^0 . Zanuttini (1991) argues that if negation were to block movement to C^0 , negative gerundival

- (13) a. Hazlo !
do it(CL)
[_{CP} Ha - z AgrC⁰ [_{IP} lo [VP]]]
b. No lo hagas!
NEG it(CL) do
[_{CP} AgrC⁰ [_{IP} no lo hagas [VP]]]

It can be assumed that the imperative morphology in C⁰ which cannot be expressed in negative imperatives functions in many Romance dialects as an operator triggering the subjunctive morphology in the lower AgrS⁰ and T⁰ (9b–13b). The subjunctive morphology then appears in the same way as in embedded clauses which are governed by a verb ruling the subjunctive: in these cases, the value of C⁰ which is lexically determined by the governing V also triggers the subjunctive in the embedded T⁰. Rivero's (1988) claim that the morphology of 'true' imperatives is located in C⁰ and forces movement of the verbal complex hence seems to be well motivated.

In itself, head movement of the verbal complex to C⁰ cannot explain why clitics have to stay behind in AgrS⁰. In principle, the complement clitics should move with the V⁰ - T⁰ - AgrS⁰ complex to C⁰. After all, in declarative sentences the cl-V⁰ complex successively moves to T⁰ and AgrS⁰, yielding (14a) with the structure in (14b).⁴

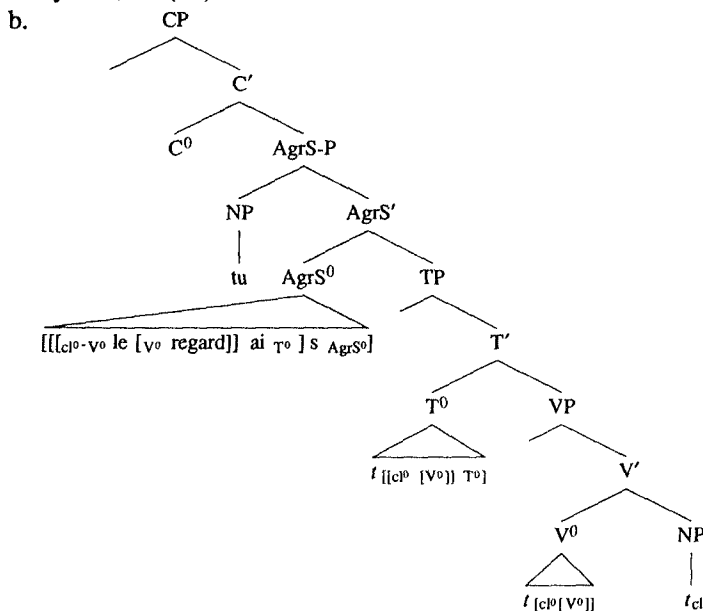
adverbial clauses such as (i) in Italian should be out, since they involve V⁰ to C⁰ movement under Rizzi's (1982) classical analysis.

- (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, the correlation Inf + Cl and Imp + Cl can be accounted for (See §3 for the analysis of this case).

4 In this structure, we assume that movement of complex head clusters leaves behind internally structured traces. This representation simply takes seriously the idea that movement must be completely 'transparent'. The representation of the amalgamated verb under AgrS⁰ 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 AgrS⁰ in (14b) would have to reflect this different relation. For Roberts (1991), cliticization involves adjunction at the X⁰ 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

- (14) a. Tu le regardais
you it/him(CL) watched



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^0 , since this obviously is the exceptional case.

At this point, it might be objected that the problem should not be framed in this way. Adapting Jaeggli (1986), it may be claimed *contra* Kayne (1989) that clitics are not base-generated in object position, but that they are base-generated in $AgrS^0$. It would then suffice to say that clitics never move with the verb, and that the Romance verb simply moves beyond the clitics to C^0 in imperatives. For the problem to arise in the way we claim it does, it must first be shown that this simpler hypothesis is not tenable. We would like to show that this simpler analysis raises several problems. First of all, there is a problem with respect to adjunction, since the verb would have to move from its base position to $AgrS^0$ and nestle itself in between the clitic and the verbal agreement. It is not clear

governors for the trace of incorporated V^0 . Pursuing the logic of Roberts (1991) analysis, X^{-1} affixes must also be intervening governors for the traces of incorporated X^0 clitics which are sisters to V^0 . For our analysis of the postverbal ordering of clitics in imperatives, this means that the $AgrC^0$ imperative morphology can act as an intervening governor for the relation between the clitic incorporated under $AgrC^0$ and the trace of the clitic in $AgrS^0$. The simplification in (14) and in the other representations in this paper is justified since it has no direct consequences for the analysis to be developed (but see §4, *in fine*).

how this can be done without *ad hoc* stipulations on adjunction. A second and more important problem for this approach concerns a factual matter. Let us briefly go into the problem of the position of verbs and adverbs in Romance. 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 AgrS⁰ beyond the adverb *souvent* 'often' in (15a). Infinitives stay put in their base position, or in a position below the adverb (15b).

- (15) 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 AgrS⁰ in the same way as tensed verbs. The main argument for this is the position of adverbs, which is the same in both cases:

- (16) 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.'

Let us now see how this analysis of Italian infinitives raises a problem for the base-generation of clitics in AgrS⁰. In Romance languages such as Italian and Spanish, clitics are postposed to infinitives as illustrated in (10). If both infinitives and tensed verbs move to the same structural position in Italian, we would be hard put to explain why clitics are postverbal in the case of infinitives and preverbal in the case of tensed verbs. This problem would remain even if clitics were base-generated as adjuncts to AgrS⁰.

We may conclude that the problem of postverbal ordering of clitics in Romance positive imperatives does arise in the way we claim it does. The question why the verb complex does not take its clitics with it while moving to C⁰ is a relevant one. We will moreover show that our analysis of the postverbal position of clitics in positive imperatives in Romance can be extended to explain the position of clitics in Spanish and Italian infinitives, given the movement of infinitives to AgrS⁰ in these languages.

If it is accepted with Kayne (1989) that clitics incorporate into the verb and then move further up with the verb through the functional projections, the question remains why they do not move up with the verb all the way to C⁰. We would like to say that this is due to the nature of C⁰ in imperatives. Imperatives not only have specific modal (*irrealis/potentialis*) properties that are determined by C⁰, 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 (cf. (9a)). Extending to root clauses Rizzi's (1990) suggestion that embedded C^0 s in English can contain either the complementizer *that* or a nonovert $\text{Agr}C^0$, these restricted Agr features can be attributed to an imperative Agr morpheme in C^0 . In example (13), we have labeled this imperative C^0 with agreement features $\text{Agr}C^0$. The fact that Agr^0 features are present in C^0 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. Recall that where negation is present the verbs is prevented from moving to C^0 and attaching to the imperative morphology.

Interestingly, the hypothesis that an Agr^0 morpheme is in some way responsible for enclitic ordering can be extended to the postverbal ordering of clitics in Spanish and Italian infinitives. As pointed out in the preceding section, there is evidence from the position of temporal adjuncts that the verb moves up to $\text{Agr}S^0$ in Spanish and Italian, but not in French. This description has been further refined by Kayne (1991). Kayne (1991a) claims that in French, V^0 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 (17b). Sardinian moves the clitic + infinitival V^0 complex up to T^0 and has an order clitic + infinitive + adverb as in (17b) (Kayne 1991a). In Italian and Spanish, following Belletti (1988), the infinitival V^0 moves up to $\text{Agr}S^0$, leaving behind its clitics in T^0 (cf. (4a) and (17c)).

- (17) a. ... $\text{Agr}S^0$... T^0 ... Adv ...[[Cl^0 [V^0]] Inf 0]... $t_{[Cl^0 [V^0]]}$ (French)
 b. ... $\text{Agr}S^0$...[[[Cl^0 [V^0]] Inf 0] T^0] ... Adv ...
 $t_{[[Cl^0 [V^0]] Inf^0]} \dots t_{[Cl^0 [V^0]]}$ (Sardinian)
 c. ...[[[t_{Cl^0} [V^0]] Inf 0] T^0] $\text{Agr}S^0$] ... $t_{[[Cl^0[V^0]] Inf^0] T^0]} \dots$ Adv ...
 $t_{[Cl^0 [V^0]] Inf^0]} \dots t_{[Cl^0 [V^0]]}$ (Italian, Spanish)

Again, it seems that the infinitival $\text{Agr}S^0$ somehow forces clitics to be left behind in Italian and Spanish. In French, the verb does not move up to $\text{Agr}S^0$. Consequently, clitics remain in their left-adjoined position to the verb. We may then formulate the following approximative generalization:

- (18) Whenever a verb is related through movement with the Agr^0 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 AgrS⁰, 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.

3. THE ANAPHORIC NATURE OF INFINITIVAL AGRS⁰ AND IMPERATIVE AGRC⁰

Infinitives and imperatives are similar in many respects: both imperatives and infinitives do not license overt subjects. For Beukema and 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 and 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:

- | | | | | |
|------|----|-------------------|----|------------------|
| (19) | a. | ama | b. | amato |
| | | love-IMP:PRES:2SG | | love-IMP:FUT:2SG |
| | c. | amate | d. | amatote |
| | | love-IMP:PRES:2PL | | love-IMP:FUT:2PL |

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 seem to exist. 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 and 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 Agr⁰ morphemes that are associated with [–realized] T⁰ 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 AgrS⁰) cannot be bound by the subject of a superordinate clause:

- (20) You said that Harry promised to shave himself/*yourself.

Borer (1989) has argued that the AgrS⁰ of infinitives is what is anaphoric in nature rather than the PRO subject of infinitives. Let us assume that this is indeed the case.⁵ To say that the infinitival AgrS⁰ is anaphoric in nature is tantamount to saying that it is morphologically identical to the overt clitic *se/si*, which is the anaphoric clitic in Romance.

- (21) Giovanni si vede.
Giovanni self(CL) sees
'Giovanni sees himself.'

We may conclude that the infinitival T⁰ can be characterized as [–realized], and is associated with an anaphoric AgrS⁰.

It is important to point out that tensed AgrS⁰ should not be defined as an anaphor in terms of the Binding Theory: it is nor an anaphor, nor a pronoun, but simply subject to SpecHead agreement with whatever is the subject at S-structure. Tensed T⁰ can only be associated with an AgrS⁰ that is not defined in terms of the Binding Theory, since embedded tensed sentences are never subject to control in Romance. The absence of control in tensed sentences shows

5 Contra Borer (1989), Rooryck (1991) argues that AgrS⁰ does not move to C⁰ in order to extend its Binding domain to the matrix clause (cf. Manzini 1983). Following Kayne (1991a), Rooryck (1991) assumes that the infinitival AgrS⁰ (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 AgrS⁰. 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] C⁰ with aspectual subevents in the event structure of the matrix verb. This lexical coindexation of the infinitival C⁰ restricts Binding of the anaphoric infinitival AgrS⁰ in the matrix clause. Since the infinitival AgrS⁰ is coindexed with the infinitival C⁰, anaphoric AgrS⁰ can only be bound by those arguments which are lexically represented in the subevent the infinitival C⁰ is coindexed with. In other words, partial coindexation of C⁰ with the governing control verb restricts the Binding antecedents for anaphoric AgrS⁰. This analysis of control eliminates control theory, since control arises through a modular interaction of general principles of the grammar.

that tensed AgrS^0 is fundamentally different from the AgrS^0 associated with [-realized] tense. This difference is further corroborated by the difference in the actual morphemes for both types of AgrS^0 . Overt agreement morphemes for tensed T^0 (e.g. 1PL / δ /, 2PL / e / in French) always appear in the context of tensed T^0 morphemes (e.g. imperfective / j / for 1PL and 2PL in French *nous mangions* 'we were eating'). These tensed agreement morphemes never co-occur with the infinitive / e / morphology associated with untensed T^0 of *manger* 'eat'. Conversely, the infinitival Agr^0 , which remains morphologically unexpressed in Romance, will always cooccur with [-realized] T^0 . Functional agreement and tense categories with the same 'settings' always co-occur.

Let us now see how the characterization of anaphoric Agr^0 associated with [-realized] T^0 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^0 morphemes with [-realized] temporal features are associated with anaphoric AgrS^0 in infinitives, it is conceptually simpler to assume that some anaphoric Agr^0 morpheme is also associated with the [-realized] T^0 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 AgrS^0 and T^0 . Recall that we have assumed with Rivero (1988) that negation blocks movement of the verb to C^0 , triggering subjunctive morphology in most Romance languages. Since the verb does not move beyond AgrS^0 , AgrS^0 and T^0 must contain the relevant subjunctive and agreement morphemes. Only when the verb moves to AgrC^0 can it receive the properly imperative morphology. For reasons of simplicity, it may then be assumed that the imperative AgrS^0 and T^0 are identical in every respect to 'normal' tensed morphology, since the imperative AgrS^0 (2SG and 2PL, 1PL) and T^0 (subjunctive) morphemes are identical to the morphology of the verb in a tensed sentence. We would like to propose that it is the imperative AgrC^0 which bears the [-realized] tense features in an imperative. This actually allows one to make sense of the fact that 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 AgrC^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] AgrC⁰?⁶ We know that there are specific agreement morphemes for imperatives in some Romance languages (cf. *supra*). Moreover, since we have assumed that the imperative AgrS⁰ and T⁰ morphemes are identical to those of the tensed morphology, we have to derive the fact that imperatives are restricted to 2SG, 2PL and 1PL. It is likely that the imperative AgrC⁰ 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 AgrC⁰. 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 (21), 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 (22a). The impersonal *si* ‘self’ can however also refer to third person if context is supplied (22b).

- (22) a. Si è contenti in Italia.
 SELF is happy-PL in Italy
 ‘One is happy in Italy.’
 b. Tutti lo dicevano. Si è contenti in Italia.
 all it(CL) said. SELF is happy-PL in Italy
 ‘Everyone said it. One is happy in Italy.’

Rooryck (1991) has argued that the same is true for anaphoric AgrS⁰ in certain infinitival clauses. In the cases where the infinitival clause is a complement of a matrix verb, the infinitival anaphoric AgrS⁰ is bound in its Binding domain, the matrix clause (cf. (20)).

When infinitives are not complements of the verb and hence lack theta-marking, there is no Binding domain for the infinitival AgrS⁰. In these cases, the infinitival clause will not only act as a barrier for extraction, but also for

6 We will not go into the question whether the [–realized] temporal/ modal features of the imperative AgrC⁰ 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 AgrC⁰ bears both the imperative temporal and agreement features. Beukema and Coopmans (1989) and Zanuttini (1991) have suggested that no nominative Case can be assigned to the imperative subject, since the imperative T⁰ is [–tensed]. We would like to reinterpret this suggestion and say that the presence of a [–realized] temporal value in C⁰ prevents Case assignment to the SpecIP position.

Binding. This is the case for sentential subjects and infinitival adjuncts. The sentential subject in (23) is preferably interpreted as *our/your making noise*.

- (23) 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 (24):

- (24) '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 (1990: 216) have pointed out that the infinitival subject can be interpreted as referring to a third person if context is supplied:

- (25) 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 (20). Despite examples such as (25), it is striking that the unexpressed subject PRO in infinitival and gerundial 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.⁷ Clark (1985) has claimed on the basis of (26) that control in infinitival adjuncts is subject to locality. This claim is based on a rule of prescriptive grammar stipulating that the subject of the matrix clause should be a controller in adjunct infinitivals and gerunds. When making abstraction of this prescriptive reflex, sentences such as those in (27) can be construed which 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:⁸

⁷ Rooryck (1991) shows that subject control in infinitival adjuncts does not come about via Binding of the infinitival AgrS⁰ in the matrix clause, but through a different mechanism. In infinitival adjuncts, the anaphoric AgrS⁰ has the option of coindexing with the subject through the temporal linking (Hornstein 1990) of the T⁰ morphemes between the matrix and the adjunct clauses.

⁸ It should be added that these sentences receive quite diverging acceptability judgments from various speakers.

- (26) Mary thought that Bill had died after seeing *herself/himself in the mirror.
- (27) a. So you think now that Bill might have died right after shaving yourself on June 6. Why would that be?
 b. We have interviewed several people living in the neighborhood of the robbed bank. One person claimed the bank was attacked right after shaving himself at eight o'clock.
 c. Bill will only come home after calling him repeatedly
 d. Mr. Freckletweeter_i was a very disorderly person at times. I_j see you_k have realized now that without PRO_{i/j/k} classifying them properly, his_i's papers would have been irremediably lost for posterity.

Rooryck (1991) has pointed out that the interpretation of impersonal *si* 'self' in (22) 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 AgrS⁰ in subject sentences and infinitival adjuncts also share a syntactic context: in both cases, the anaphor does not have a governing category. We will assume here that gerunds and infinitives have the same type of anaphoric AgrS⁰. The similarity between the overt reflexive/impersonal *si* 'self', and the infinitival AgrS⁰ warrants an analysis of this infinitival AgrS⁰ along the same lines: the infinitival AgrS⁰ is an anaphor which can receive a 'default' pronominal interpretation if there is no governing category for it. Importantly, the infinitival AgrS⁰ is defined in terms of the Binding Theory.

The simplest hypothesis with respect to the nature of AgrC⁰ 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 AgrC⁰, and it will forcibly take a default first or second person pronominal interpretation.^{9,10} In this way, the imperative AgrC⁰ effectively

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:

(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

restricts the normal tensed morphology in the lower imperative AgrS⁰ and T⁰ to the attested 'defective' imperative morphology: 2SG and 2PL, and 1PL. This analysis can be reinforced by the observation that infinitives can be used as imperatives in Romance languages and in many languages not directly related to Romance.¹¹

- (28) Ne pas faire du bruit!
NEG 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 AgrS⁰ 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 AgrC⁰ is anaphoric, however paradoxical at first sight, can be properly motivated. The default

analysis developed here, the anaphoric status of the imperative AgrC⁰ 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.

10 A reader for TLR points out that the referentiality of the anaphoric element in imperatives is more restricted than that of non-sententially bound infinitival Agr and *se/si*. In imperatives, it always takes a 'default' 1st or 2nd person interpretation, but infinitival Agr and *se/si* can take either a 'default' interpretation or a generic interpretation.

- (i) En aquel país se trabaja demasiado. (Spanish)
in that country SELF works to much
'In that country, people work to much.'
- (ii) PRO_{arb} to know her is PRO_{arb} to love her.

The possibility of a generic interpretation for infinitival Agr and *se/si* can be explained independently, however. Following Lebeaux (1984), we assume that the generic reading of (ii) arises from the presence of generic tense which acts as a universal operator unselectively binding PRO. This generic tense then provides PRO with its generic meaning. This analysis has been extended to unexpressed objects by Authier (1989), and can be equally applied to *pro* in the generic (i). The imperative anaphoric Agr will never be able to receive such a generic reading, since the imperative tense can never be generic.

11 In these cases, we have to assume that the infinitival C⁰ takes on an imperative value in addition to its [-realized] temporal feature. This additional imperative value of C⁰ explains why interrogative infinitives such as *que faire* 'what to do', with an interrogative C⁰, cannot be interpreted as imperatives, since imperative and interrogative values are mutually exclusive.

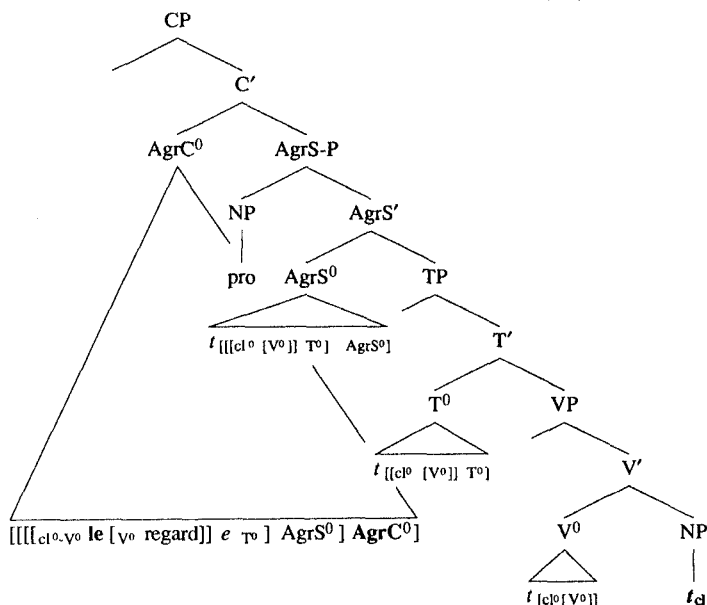
pronominal interpretation of the anaphoric AgrC^0 can explain why imperatives are restricted to first and second person. Moreover, the minimal hypothesis with respect to the distribution of anaphoric and nonanaphoric Agr^0 in the context of other functional categories suggests that anaphoric Agr^0 should manifest itself in the context of $[-\text{realized}] \text{ T}^0$. Functional categories have co-occurrence restrictions expressible in terms of c-selection. Consequently, an infinitival $[-\text{realized}] \text{ T}^0$ should be accompanied by an infinitival Agr^0 which we have argued to be anaphoric in nature. 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 $[-\text{realized}] \text{ T}^0$ is always associated with an anaphoric Agr^0 morpheme. This hypothesis is also the simplest, since it assumes a minimal set of possible interpretations for Agr^0 morphemes in the grammar. Agr^0 morphemes are only definable in terms of the Binding Theory in the context of $[-\text{realized}] \text{ T}^0$ (basically anaphoric with the possibility of a default pronominal interpretation). They are not definable in terms of Binding in normal tensed clauses where Agr^0 is only subject to SpecHead agreement. A last question that needs to be answered in this context is why Agr^0 morphemes would only be anaphoric in the case of $[-\text{realized}]$ tense. We would like to suggest that this is due to the fact that $[-\text{realized}]$ tense is in some sense an 'anaphoric' tense. Unlike embedded tensed clauses, embedded infinitives are dependent for the interpretation of their tense on the matrix verb (cf. Stowell 1982; Rooryck 1991). The properties of the Agr^0 morphemes associated with T^0 then simply mirror this 'anaphoric' nature.

4. ANALYSIS: ANAPHORIC $\text{AGR}^0(-\text{S}/-\text{C}^0)$ AS AN INTERVENING GOVERNOR FOR RM

Coming back to (18) and reinterpreting it, we would like to argue that the definition of the imperative AgrC^0 and the infinitival AgrS^0 in terms of the Binding Theory, is responsible for clitics being left behind in the lower functional category. We have claimed that the infinitival AgrS^0 and the imperative AgrC^0 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 AgrC^0 . Within the resulting complex, the imperative anaphoric AgrC^0 would dominate the clitics which are more deeply embedded in the morphological complex.

- (29) a. Regarde-le
watch it/him(CL)
c. CP
- b. *Le-regarde
it/him(CL) watch



Exactly the same situation obtains with infinitives in Spanish and Italian (cf. (4a)), but this time it is the anaphoric nature of the infinitival AgrS⁰ which is involved. As noted before, the verb in these languages moves up all the way to AgrS⁰ in infinitival constructions (Belletti 1990). Since the infinitival AgrS⁰ is an anaphor, it acts as an intervening governor for Relativized Minimality, thus forcing the clitics to stay behind in the infinitival T⁰. We are in the presence of the same situation as with imperatives, with the difference that everything

happens 'one notch down'.¹² In French (4b), no such configuration involving Relativized Minimality can arise since the verb stays down in a projection lower than AgrS⁰. 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):

- (5) (iv) Z is semantically definable in the same terms as X and Y. (Where 'semantically defined' refers to the way in which the feature content of X, Y, Z is interpreted by different modules of the grammar.)

This means that if a potential governor Z intervenes between X and Y which is not semantically 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 the core cases to be excluded by Relativized Minimality.¹³ In (6c), which is also excluded by Relativized Minimality applying to a case of X⁰ antecedent government, the intervening modal *could* clearly shares verbal AUX features with *have* and its trace, and hence counts as an intervening governor. In the case studied here, the semantic referential properties of Binding Theory are involved. The content of both anaphoric Agr(C⁰/S⁰) and clitics is semantically definable in terms of the Binding Theory, so the former can count as an intervening governor for the latter.

This approach of further semantically relativizing Relativized Minimality is in line with the modification proposed by Baker and Hale (1990). Baker and 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

12 This raises a problem for an analysis for clitic climbing along the lines of Kayne (1989), see § 3 for a possible solution.

13 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 SpecCP and an intermediate trace in a lower SpecCP to block antecedent-government. Negation being an A' governor, Relativized Minimality rules out a sentence such as (i):

(i) *_{[CP} How didn't you think _{[CP} *t_i* Mary fixed the car *t_i*]]

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 of a number of counterexamples to (i) in French, Rooryck (to appear) has shown that negative islands as in (i) should not be explained by Relativized Minimality. Rooryck (to appear) argues that the appropriate principles ruling out (i) have to do with operator - variable scope relations.

block antecedent-government by another functional head. The modification of Relativized Minimality proposed here and Baker and Hale's (1990) proposal share the intuition that Relativized Minimality should take into account the content of intervening categories.

Crucially, the lower, nonimperative tensed AgrS⁰ 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 AgrS⁰ is different from both the imperative AgrC⁰ and the infinitival AgrS⁰ in that the 'normal' tensed morphology is not definable in terms of the Binding Theory. Tensed AgrS⁰ only acquires its nominal features through SpecHead Agreement. Since (29) does not apply to tensed AgrS⁰, tensed AgrS⁰ does not count as a potential X⁰ governor: that is, tensed AgrS⁰ is not 'visible' for a chain relating elements definable in terms of Binding their traces.

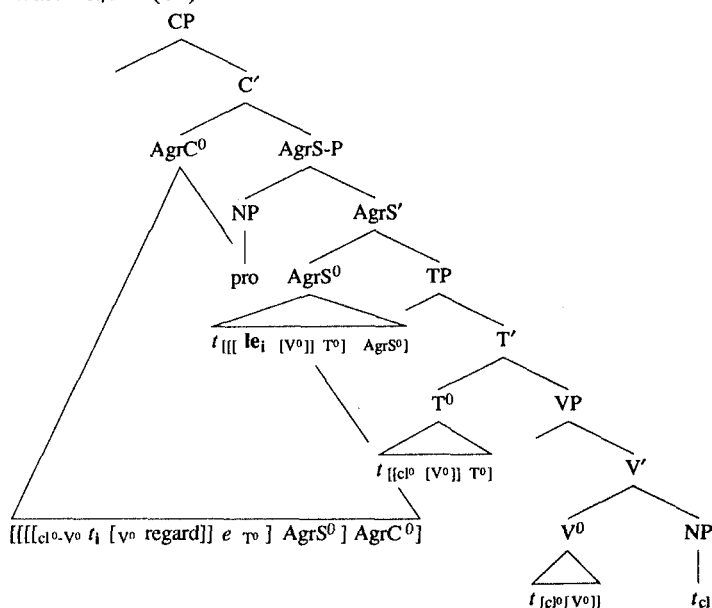
The analysis developed here claims that the notion 'potential α -governor' within Relativized Minimality crucially involves the distinction between Agr⁰ morphemes definable in terms of the Binding Theory and Agr⁰ morphemes which are not so definable. This simply means that the contents of potential intervening 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 some exceptions to Rizzi's (1990) account of negative islands in terms of Relativized Minimality (Rooryck, to appear).

We still need independent evidence that AgrC⁰ is the relevant head involved here. In languages such as French where the imperative morphology is nondistinct from either the indicative (*regarde* 'watch-2SG' *regardez* 'watch-2PL') or the subjunctive (*sache* 'know-2SG' *sachez* 'know-2PL') morphology, it could be claimed that it is in fact AgrS⁰ which is the relevant anaphor preventing clitics from moving up with the verb. This solution would then yield the same results in terms of Relativized Minimality without the assumption of AgrC⁰, since the whole structure would just be moved one notch down, with the clitics left behind in T⁰ instead of in AgrS⁰. This is in fact what happens in infinitives in Italian and Spanish. This hypothesis runs into several problems. First of all, it would be difficult to explain why negative imperatives, which presumably are in AgrS⁰ since they exhibit the morphological number distinctions, can and very often must have the clitics precede the imperative. If AgrS⁰ is the functional head involved in positive imperatives, we do not expect it to behave differently in negative imperatives. In our analysis, this is not a problem since the imperative AgrS⁰, being nonanaphoric, cannot function as a potential X⁰ governor for the clitics. Hence we derive the fact that the unmarked position of clitics in negative Romance imperatives is in front of the verb. Recall that the verb has to stay in AgrS⁰, since the negation prevents it from raising to C⁰ (Rivero 1988). This is what happens in French, Spanish, Portuguese, and

In other words, positive imperatives are in different syntactic environments in (31a) and in (31b,c). For the sake of simplicity, then, it must be assumed that the clitic-internal type of liaison is triggered by the amalgamation of the verb with the nonovert imperative morphology in AgrC^0 , but not by the morphology in AgrS^0 in declaratives and negative imperatives. In order to make this argument, it is sufficient to assume a phonological theory of liaison which accepts that liaison is sensitive to specific syntactic environments. Tranel's (1981) work on French liaison offers a framework in which such a relation is assumed for various types of liaison in French. For Tranel (1981), French liaison is triggered by various syntactic environments. Since the relevant liaison facts only occur in the syntactic environment of positive imperatives, we may safely assume that this environment is a different one from the one involved in tensed clauses and negated imperatives. In the analysis developed here, this is an additional argument that AgrC^0 , and not AgrS^0 , is the functional head to which the verb moves in Romance positive imperatives.

The resulting structure of positive imperatives followed by clitics as in (32a) is then as in (32b):

- (32) a. Regarde-le
watch it/him(CL)
b.



In this structure, the clitic trace in the verb complex in AgrC^0 is properly governed by the verb. A first problem with this representation concerns the status of the element subject to movement in (32). In the representation (32),

movement of the verb cluster does not respect the constituent condition on movement, since a part of the verb cluster is left behind. However, this problem is entirely a result of the simplification we have introduced in our representation. Recall that for reasons of clarity we have assumed in fn.4 a simplified bracketed representation for the complex head clusters. This representation did not represent the difference in connectivity between clitics which are moved by adjunction and X^0 morphemes which are moved by substitution (Roberts 1991). Under this analysis, it can be assumed that the part of the verb cluster moved in (32) does comply with constituenthood: in this case, movement only applies to the V^0 - T^0 - AgrS^0 part of the verb cluster which has arisen through substitution, excluding the adjoined clitic. The analysis presented here then actually provides support for Roberts' (1991) analysis of the difference between incorporation of clitics and incorporation into functional categories.

At first sight, this structure also seems to violate Baker's (1988: 73) ban on traces within an X^0 element, a constraint which he considers a morphological part of the Head Movement Constraint. Baker (1988) states this ban as follows:

- (33) $*[X_0 \dots t_i \dots]$ (= Baker 1988: 73, ex. (76))

The structure in (32b) clearly does not comply with this constraint. However, the constraint (33) was primarily designed by Baker (1988) to prevent a Z^0 incorporated to X^0 to successive cyclically move to a higher Y^0 as in (34):

- (34) $[Y^0 Z^0] \dots [X^0 t'_{Z^0}] \dots t_{Z^0}$

This configuration clearly does not obtain in (32b). Consequently, we feel justified in weakening Baker's (1988) principle by stating that the configuration (33) is allowed iff all the elements of the chain of the Z^0 incorporating into the governing X^0 are dominated by this X^0 . This is clearly the case in (32b), where the V^0 in AgrC^0 clearly dominates both the clitic and all its traces. This interpretation of Baker (1988: 73) still rules out the relevant structure (34), and is compatible with the exclusion of (34) via the Minimality Condition (Baker 1988: 451, fn.9): In this footnote, Baker (1988) attributes to Chomsky (p.c.) the idea that (34) may be ruled out by the ECP under an extension of the Minimality Condition, since XP would be a Barrier between t'_{Z^0} and its antecedent in Y^0 .

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 AgrC^0 would clearly c-command both the clitic in the amalgamated verbal complex in AgrC^0 and its trace in AgrS^0 (cf. 29c). 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^0 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^0 complex, it must be accepted in any case that they are somehow on the same hierarchical level as the functional X^0 elements they are adjoined to together with the verb. Even if AgrC^0 c-commands and governs the clitic in (29c), 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 AgrC^0 and the clitic in (29c), since for all other purposes they are supposed to be on the same hierarchical level. Since the X^0 -complex in AgrC^0 does c-command its complex trace and hence the trace of the clitic, Relativized Minimality does apply to (29c).

5. SOME FURTHER PROBLEMS AND CONSEQUENCES

The descriptive generalization that clitics follow imperatives does not extend to cases where the subjunctive is used as an imperative: in these cases, the clitics can precede the verb, as in Italian:

- (35) Gli scriva quella lettera che siamo in ritardo!
 'To-him(CL) write-3SG:SUBJ that letter since we are late!'

Proclitic ordering with the imperative proper can occur in Albanian, given proper intonation (Aleksander Murzaku, p.c.):

- (36) Ua shkruaj ate leter se jemi vone!
 'To-them(CL) write-2SG:IMP that letter since we are late!'

However, the forms used for the imperative in Albanian are identical to the first person singular and second person plural forms of the subjunctive for these verbs. It seems that the generalization only applies to those cases where the imperative morphology is independent of the subjunctive. In terms of the analysis we have developed, this means that in (36) the verb does not move up to C^0 whereas in (3a) with enclitic ordering, the verb does move up to C^0 . These cases are then parallel to the cases of those languages where the subjunctive is used in negative imperatives: in both cases, the imperative value in C^0 functions as an operator triggering the subjunctive morphology in T^0 . In the case of Albanian, the subjunctive in positive imperatives may move up to the nonovert imperative morphology in AgrC^0 which will function as a potential X^0 governor.

Another apparent exception to the enclitic ordering in positive imperatives seems to be Brazilian Portuguese (Leslie Gabriele, p.c.):

- (37) Dame! / Me da!
give-2SG me(CL) / me(CL) give-2SG

The imperative with clitics preceding the verb has the present indicative morphology and is considered to be more polite. It also often requires the subjunctive morphology. This makes us suspect that these cases involve subjunctive or indicative root sentences which receive the illocutionary force of an imperative, much in the same way of English *You be quiet!*, where it can be assumed that an archaic subjunctive morphology functions as an imperative, perhaps as abbreviations of sentences such as *I demand that you be quiet*. A similar pattern also occurs in French, where the future indicative *Vous nous laisserez tranquille* 'You will leave us alone' receives the illocutionary force of a polite imperative. Since the languages involved in (35–37) are *pro*-drop, the subject can be left unexpressed. We will disregard these cases here, assuming an explanation along the lines suggested.

Pernot (1934: 189) mentions the existence of two dialect zones in Modern Greek with respect to the placement of personal pronouns, one type of dialects which have preposed pronouns in most forms except imperatives (cf. (3) and participles, and another type of dialect in which 'weak pronouns' are postposed in all verbal forms except the imperative (Brian Joseph, p.c.). Tsakonian is of the latter type:¹⁵

- (38) a. Eipe mou
tell-2SG me(CL)
- b. Mou pe
me(CL) tell-2SG

The distribution of these facts in Tsakonian suggests however that if the ‘weak pronouns’ in (38) are clitics, they are not clitics of the X^0 type. It may be that these elements are in fact X^{\max} pronouns which undergo cliticization at PF, along the lines suggested by Kayne (1983) for French subject clitics and English *it* (**He gave Mary it* vs. *It was given to Mary*). Preposing of clitics in the case of the imperative might be due to movement the internal argument XP clitic to [Spec, CP] in order to allow PF cliticization in the domain of C^0 . This movement triggered by the imperative in C^0 then resembles V2 phenomena.

We have already mentioned that clitic climbing is a problem for the approach to enclitic ordering advocated here. If the infinitival anaphoric AgrS⁰ is to intervene between the clitic and its trace in the case of enclitic ordering, the

15 Brian Joseph furthermore informs me that present-day Tsakonian exhibits the same clitic placement as Modern Greek, probably under the influence of the standard language.

same situation should obtain in (39), where the clitic must have moved over the infinitival AgrS⁰ in order to end up in the matrix clause:

- (39) Lo voglio/ so fare.
 it(CL) I want to/ can do
 'I want to/can do it.'

One way out of this problem 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) AgrS⁰ that might function as a potential X⁰ governor for the trace of the climbed clitics in the embedded VP, allowing clitics to move freely to the matrix V⁰.¹⁶ This analysis does not explain cases such as (40) with a *wh*-element in the embedded clause (Rizzi 1982; Kayne 1989):

- (40) ?Non ti saprei che dire.
 NEG to-you (I) would-know what to say (Kayne 1989, ex. (16))

However, it seems that these cases are very restricted: my informants rule out the following:¹⁷

- (41) *Non ti saprei come dire che la macchina era rotta.
 NEG to-you (I) would know how to tell that the car was broken

Nevertheless, we would like to show that clitic climbing constructions as in (40) are not a problem for the analysis presented here. In order to make this argument, we would like to adapt Bouchard and Hirschbühler's (1986) analysis of French *que* 'what' to Italian. Bouchard and Hirschbühler (1986) show that French *que* 'what' is a clitic on the verb which forces movement to C⁰ of the clitic verb complex. It seems that the same is true for the clitic allomorph of Italian *che* 'what', to the extent that *che* cannot be separated from the verb by the subject in root clauses.

16 Alternatively, 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.

17 Rizzi (1982: 36) quotes examples involving left dislocation contexts:

- (i) ?Mario, non lo saprei a chi affidare, durante le vacanze.
 Mario, I him wouldn't know to whom to entrust __ during the holidays
 (ii) ?Un simile problema, proprio non lo saprei come risolvere.
 such a problem, I really wouldn't know how to solve __

In view of (41), however, it is clear that the left dislocation context is what saves these sentences. It seems that an analysis along the lines of Cinque (1991) is indicated for these cases.

- (42) a. [_{CP} Que fait [_{IP} il]]?
 what does he
 b. *Il fait que
 c. Che fa Gianni?/ *Che Gianni fa?

In embedded infinitives, the clitic character of *che* 'what' cannot be verified by the inversion of the subject, of course. However, elements such as negation cannot intervene between *che* 'what' and the verb. If *cosa* 'what', the non-clitic XP allomorph of *che* 'what' is in SpecCP, negation is possible.

- (43) a. *Non sapevo che non dirgli.
 'I did not know what not to say to him.'
 b. Non sapevo che dirgli.
 'I didn't know what to say to him.'
- (44) Non sapevo cosa non dirgli.
 'I didn't know what not to say to him.'

Clitic *wh*-elements such as *que/che* in embedded sentences have to move to the embedded C^0 in order to license their *wh*-property, in accordance with Rizzi's (1991) *Wh*-criterion. We would like to propose that in Italian movement of *che* to C^0 takes place via movement of the *che*-infinitive complex to Agr-S⁰. From the Agr-S⁰ position, which is governed by the [_{wh}]C⁰, the clitic *che* ex-corporates to C^0 and yields (43b). We are now in a position to explain (43a): negation prevents the clitic *che* from ex-corporating into C^0 and thus from verifying its *wh*-properties. In (44) the non-clitic *wh*-element *cosa* can move to SpecCP, unbothered by negation.

Let us come back now to the way in which clitic climbing takes place in (40). In fact, there is another option for *che* to satisfy its *wh*-properties which involves movement of the entire verb complex *che ti dire* to C^0 , rather than ex-corporation of *che* alone out of the infinitival Agr-S⁰ position. In this case, the verbal complex moves with *che* to C^0 in the way of tensed verbs as in (42). Notice that movement of the entire verb complex or ex-corporation of *che* alone carry the same cost. From the position of the embedded verb complex in C^0 , the clitic *ti* 'you' then ex-corporates to the matrix verb, a legitimate trigger for ex-corporation of clitics. This yields the following structure for (40):

- (45) Non t_{ij} saprei [_{CP} che t_j dire [_{IP} [_{VP} t_{dire} t_j]]]

Only when the V^0 -T⁰-AgrS⁰ complex has moved C^0 at S-structure can the clitic escape to the matrix clause. Moreover, clitic movement is obligatory in this case. The clitic *che* will not move any further because of the fact that it has to satisfy

its *wh*-properties in the lower C^0 . The sentence (41) is excluded because of the fact that nothing forces movement of the verb complex to C^0 , *come* 'how' being in the SpecCP. As a consequence, the clitic-verb complex is not high enough for the clitic to excorporate into the matrix verb.¹⁸

What about Relativized Minimality and the quality of AgrS^0 as an intervening governor for the relation between the climbed *ti* 'you' and its trace in the VP? Since the anaphoric AgrS^0 has moved to C^0 with the $V^0\text{-T}^0$ complex, it does not fulfill any longer clause (i) of the definition of Relativized Minimality in (6): Z, *in casu* AgrS^0 , is no longer in a base-generated position and therefore cannot count as an intervening governor for the relation between the climbed clitic *ti* 'you' and its trace in the lower VP.

It is not clear to us why this mechanism is limited to Italian. In any case, clitic climbing involves an exceptional mechanism in that the crossing of a clitic from one sentential domain into another is limited to a subset of verbs. Even though we have been mainly concerned with the more basic question of clitic ordering within a single sentential domain, it is clear that sentences such as (40–45) do not constitute a problem for the approach to enclitic ordering in Romance advocated here.

A last interesting consequence of this approach is that Kayne's (1991a) analysis of the differences between French, Italian, and Sardinian with respect to both clitic and adverb ordering can be preserved without using V^0 adjunction to I' . Kayne (1991a) has formulated the important generalization that Romance languages with infinitive + clitic ordering allow *si* 'if' in C^0 , whereas languages with clitic + infinitive ordering do not allow this construction:

- (46) a. *Marie ne sait pas si aller au cinéma. (= Kayne 1991a. ex. (49))
 'Marie doesn't know whether (if) to go to the movies.'
 b. Gianni non sa se andare al cinema. (= Kayne 1991a, ex. (65))
 'Gianni does not know whether (if) to go to the movies.'

Kayne (1991a) explain this generalization in terms of adjunction of the verb to the I' projection, a rather exceptional kind of head movement. The analysis pursued here commits us to an alternative explanation of this generalization. We would like to suggest that in order to be licensed, the *si* 'if' element expressing Eventuality in C^0 must govern an element that corresponds to this notion. This

18 Notice that the same mechanism could be extended to the usual cases of clitic climbing in (39): if the infinitival complement in (39) is a CP rather than a VP, it could be assumed that the verbal complex moves all the way to the embedded C^0 , allowing the clitic to excorporate into the matrix clause. The trigger for movement to C^0 could then be related to selectional restrictions on C^0 by the set of verbs which allow for clitic climbing in Italian: epistemic, aspectual, modal and movement verbs (see Rooryck 1992). Pearce (1990) notes that in Old French a much wider class of verbs allowed for clitic climbing.

is merely a selectional requirement imposed by *si* 'if' under government. AgrP clearly cannot comply with the selectional properties of *si* 'if', since it is a purely nominal element. Only in languages moving the V-INF-T complex up to AgrS⁰ will this requirement be met, since only V and temporal/modal morphemes can satisfy the selectional 'Eventuality' requirement of *si* 'if'.¹⁹ The notion 'Eventuality' with respect to infinitives corresponds to the modal interpretation of the temporal feature [-realized] (cf. *supra*). We would simply like to observe that the 'Eventuality' selectional requirement of *si* 'if' can be satisfied by the temporally 'hypothetical/unrealized/in posse' properties of the infinitival morphology.

Notice that we are not saying that the infinitive moves to AgrS⁰ in order to satisfy the selectional requirement, because that would not explain why in French-Sardinian the infinitive doesn't move to AgrS⁰. In our analysis, whatever conditions are responsible for moving up the infinitive as far as AgrS⁰ in Italian-Spanish also allow *si* 'if' to satisfy its selectional properties.

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.²⁰ It shows that a purely syntactic principle such as the ECP applies to morphologically amalgamated categories (Baker 1988). Morpheme boundaries are nevertheless different from purely syntactic boundaries in that amalgamated morphemes and their features are visible within the whole complex no matter how many morpheme boundaries intervene.

The analysis of clitic ordering in Romance imperatives advocated here offers strong evidence for Kayne's analysis of X⁰ 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 C⁰ because of general principles of the grammar which determine that it cannot take its clitics with it. The analysis presupposes that the grammar makes a distinction between Agr⁰ morphemes that are defined in terms of the Binding Theory and Agr⁰ morphemes that are not so defined.

19 With respect to the Projection Principle (selectional properties must be satisfied at each level of representation), this analysis of course entails that it is sufficient for nonthematic selectional properties to be satisfied at S-structure.

20 For another exploitation of the idea that features in amalgamated V-T-Agr complexes are distinctly visible in causatives, see d'Hulst and Rooryck (1989).

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^0 governors which takes into account their semantic content.

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