

Verb movement: The contrast between English and Italian^{*}

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This paper discusses V features, nominative case checking and V movement in Chomsky's (1995, 2001) minimalist program, explains certain facets of the English subjunctive and imperative, and contrasts the difference of V movement between English and Italian. I propose the V feature specifications [-Tense, +Agr] and [+Tense, -Agr] for the English subjunctive and imperative respectively. Under this analysis, the auxiliary *do* can be inserted solely into [+Tense], which is an independent case checker, while [+Agr] is a dependent case checker which must be activated by another head under adjacent head-to-head relation (Raposo 1987).

It is further illustrated that the finite V carries [+Tense, +Agr] in present-day English, but [+Tense, +Agr, +Mood] for earlier English and other European languages such as Italian. The claim is that the diachronic change of V movement should not be attributed to any impoverishment of agreement morphology but to the demise of mood morphology, and that V raising can be accounted for in terms of the strength of I by counting the number of positive features: *the more, the stronger*. The peculiar behavior of inflected verbs in Italian negative imperatives can be explained by setting up NegP which blocks imperative V raising from I to C.

1. Introduction

This paper offers a solution of V (Verb) movement for English and Italian, on the basis of syntactic features deriving from morphological verbal inflections in the sense that such syntactic features (or categories) as Tense and Agreement originally stem from verbal morphology. In Chomsky's (1995, 2001) minimalist program, I will discuss the peculiarity of English verbal behavior, including two 'idiosyncratic' constructions: the subjunctive and the imperative.

The claim is that, contrary to widely held belief (e.g. Vikner 1997; Rohrbacher 1999 among many others), the diachronic change of V movement should not be attributed to any version of the impoverishment of agreement morphology, but to the loss of mood morphology which started in the period of Middle English as

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contended by Murakami (1992). I will pursue this argument by referring to some historical evidence in English and comparing English with Italian, the most direct descendent from Latin of all Romance languages in the Indo-European family.

2. V movement in English

2.1. V features

V features are essentially based on verbal morphology. Table 1 illustrates a verb paradigm of regular inflection in Old English (OE, c.700-1100), adapted from Mitchell and Robinson (2007: 46):

Table 1: Weak inflection of the Old English verb *fremman* ‘do’

		Indicative	Subjunctive	Imperative
Present				
1st Sg	<i>ic</i>	fremme	fremme	
2nd Sg	<i>þu</i>	fremest	fremme	freme
3rd Sg	<i>he</i>	fremeþ	fremme	
1st Pl	<i>we</i>	fremmaþ	fremmen	
2nd Pl	<i>ge</i>	fremmaþ	fremmen	fremmaþ
3rd Pl	<i>hi(e)</i>	fremmaþ	fremmen	
Past				
1st Sg	<i>ic</i>	fremede	fremede	
2nd Sg	<i>þu</i>	fremedest	fremede	
3rd Sg	<i>he</i>	fremede	fremede	
1st Pl	<i>we</i>	fremedon	fremeden	
2nd Pl	<i>ge</i>	fremedon	fremeden	
3rd Pl	<i>hi(e)</i>	fremedon	fremeden	

This paradigm demonstrates that the past morpheme is *ed*, that the subjunctive morpheme is *e*, and that the second singular forms for indicative, subjunctive, and imperative are distinct from each other (*fremest*, *fremme*, and *freme* respectively). There was thus a positive V feature ‘Mood’ (M) in OE. In addition to T (Tense) and Agr (Agreement), OE finite verbs carried [+M], the value of which can be either indicative, subjunctive, or imperative. The V feature matrices for OE must therefore be as follows:

Table 2: V features for earlier English

	T	Agr	M
Indicative	+	+	+
Subjunctive	+	+	+
Imperative	+	+	+

In the period of Middle English (ME, c.1100-1500), however, subjunctive morphology ceased to constitute part of verbal inflection. The verbal inflections which encoded the subjunctive or indicative distinction had ceased to exist in later ME (Traugott 1972: 148-149). As a matter of course, what followed the loss of

mood morphology was the loss of Mood as a positive V feature, yielding the hypothetical system represented in Table 3:

Table 3: Hypothetical stage in the history of English V features

	T	Agr	M
Indicative	+	+	-
Subjunctive	+	+	-
Imperative	+	+	-

*I do not assume that this stage actually existed, but I rather suppose that the features in Table 2 and those in Table 4 overlapped for a considerable time, covering the period of Early Modern English (EModE, c. 1500-1700). We will see some historical evidence for this in §2.2.

English could never have maintained three different moods at this stage of identical feature matrices. With the demise of Mood, the inevitable consequence was a reaction to conserve the mood distinction – namely, the change of feature matrices for the subjunctive and imperative, as depicted in Table 4:

Table 4: V features for present-day English

	T	Agr	M
Indicative	+	+	-
Subjunctive	-	+	-
Imperative	+	-	-

Put differently, the V feature specifications underwent this change for the three moods respectively, as shown in Table 5:

Table 5: V feature reinterpretation in English history

Indicative: [+Tense, +Agr, +Mood] → [+Tense, +Agr, -Mood]
 Subjunctive: [+Tense, +Agr, +Mood] → [-Tense, +Agr, -Mood]
 Imperative: [+Tense, +Agr, +Mood] → [+Tense, -Agr, -Mood]

The motivation for this feature reduction is that syntax compensated for the disappearance of mood morphology at the expense of finiteness in the subjunctive and imperative. That is to say, as long as the English verb was positively specified for Mood, it could be recognized as either indicative, subjunctive, or imperative by that positive feature. After this feature was lost, however, by making the subjunctive [-T] and the imperative [-Agr], it became possible to distinguish these from each other and from the indicative, but only at the cost of their finiteness in terms of the number of positive V features. I will argue for the specifications of their respective V features for the following four reasons:

Firstly, there is no tense concord in subjunctives; a subjunctive *that*-clause never undergoes the sequence of tenses when embedded in its preceding main clause in the past tense:

- (1) I demanded that he leave/*left.

Even the past subjunctive *were* cannot be employed in this context:

- (2) The chairperson decreed that the meeting be/*were adjourned.

This is because of the absence of Tense in English subjunctives.

Secondly, the crucial criterion for either positive or negative Tense is *do*-support: by definition, [+T] allows *do* to be inserted, while [-T] prohibits it because the auxiliary *do* is a dummy tense carrier. In other words, it is Tense and nothing else that the auxiliary *do* actually has to support. Thus, indicatives and imperatives can accommodate *do*, while subjunctives and infinitives cannot:¹

- (3)a. Indicative: I did pass the exam.
b. Subjunctive: I demand that he (*do) leave.
c. Imperative: Do come to our new house.
d. Infinitive: You make me (*do) feel happy.

Thirdly, the claim that imperatives are tensed with no Agr can be supported by somewhat peculiar constructions, in which the imperative *do* never inflects for agreement even in the presence of an overt subject like a third person singular one or archaic *thou* (Shakespearean examples are borrowed from Ukaji 1978: 79, 89):

- (4)a. Everybody do/*does sit down.
b. Don't/*Doesn't anybody touch this wet paint.
c. Now do/*dost thou watch, for I can stay no longer.
– Shakespeare (1591: I.iv.18) *King Henry VI*
d. Do/*Dost not thou, when thou art king, hang a thief.
– Shakespeare (1597: I.ii.69) *King Henry IV*

Due to syncretism, nominative *you* is identical in form to accusative *you*, but (4c) and (4d) illustrate that in EModE, nominative *thou*, instead of accusative *thee*, was employed as an imperative subject, sometimes with the auxiliary *do* carrying no agreement morpheme. Contrary to the commonly held view (e.g. Potsdam 1998), imperatives are not tenseless but tensed for present, and this Tense – sometimes embodied as *do* – may check off the nominative case of its subject. In Chomsky's (2001: 3-6) discussion, case checking is also a process of feature checking where a category with uninterpretable features called a Probe checks them against the same interpretable features of another category called a Goal during the operation Agree. A Probe with uninterpretable features looks down in the c-command domain for a Goal with interpretable features, and gets the uninterpretable features checked, valued and deleted.

¹ If the auxiliary *do* is inserted in *that*-clauses at all, this means that they are not subjunctive but indicative. So the following example is an indicative clause, even if it seems subjunctive in the context:

- (i) We recommend that you do not go there alone.

Fourthly, given that (not Agr but) Tense is an independent case checker as shown in (4), the subjunctive Agr must be responsible for its nominative subject in the absence of Tense. Following Raposo (1987), who discussed nominative Case assignment in European Portuguese (EP) inflected infinitives, Agr is arguably a dependent case checker which has to be activated by another head under head-to-head adjacency. I maintain here that nominative case in the English subjunctive is analogous to that in the EP inflected infinitive, the I of which visibly consists of [-T, +Agr] with agreement morphology but no tense. In both the constructions, the C position that introduces an English subjunctive or an EP agreeing infinitive must be filled with something overt – *that* in English or raised V in EP – in order to activate Agr:

- (5) I asked [C that/* ϕ] he take the medicine.
 (6)a. *O Manel pensa [C ϕ] os amigos [I ter-em] levado o livro.
 b. O Manel pensa [C ter-em] os amigos [I t] levado o livro.
 the Manel thinks have-Agr his friends taken the book
 ‘Manel thinks that his friends have taken the book.’

Raposo (1987) proposed that nominative Case in the EP inflected infinitive (6b) should be assigned as follows with *terem* in C:

- (7) O Manel pensa [CP[C ter+Agr] [IP os amigos [I t] levado o livro]].
-

In much the same manner, Agr activation in the English subjunctive is as follows with *that* in C (updated from GB theory to Minimalist Program):

- (8) I asked [CP[C that] [IP he [I +Agr] take the medicine]].
-

If *that* is missing in (8), the empty C breaks the head-to-head chain of Agr activation. This system of nominative case checking theoretically explains why *that* in subjunctives is not so readily omitted as *that* in indicatives in present-day English. Murakami (2000) statistically confirmed at a significant frequency that *that* could have been dropped in EModE subjunctives with [+T, +Agr, +M], while the presence of *that* is quite obligatory in present-day subjunctives with [+Agr] alone.²

² Incidentally, Belletti (2009: 75-78) maintains that an Italian past participle with only Agr cannot check case unless it raises to C. Hence (i) is ungrammatical:

- (i) *Maria arrivata, Gianni tirò un sospiro di sollievo.
 (ii) Arriva-t-a Maria, Gianni tir-ò un sospiro di sollievo.
 arrive-pstptl-f Maria.nom, Gianni.nom draw-pst.3sg a sigh of relief
 ‘When Maria arrived, Gianni was relieved.’

Indeed, there are several similarities between English subjunctives and EP agreeing inflectives, as summarized in Table 6:

Table 6: Parallelism between English subjunctives and EP inflected infinitives

	Eng. Subjunctive	EP Inflected Infinitive
Clause status	subordinate	subordinate
Subject DP	nominative	nominative
V feature	+Agr	+Agr
C position	<i>that</i>	V
Case checker	'activated' Agr	'activated' Agr
Agr activation	adjacent head-to-head relation thru lexically filled C	

I therefore assume the following feature matrices for the three English moods in present-day English: [+T, +Agr, -M] for the indicative, [-T, +Agr, -M] for the subjunctive, and [+T, -Agr, -M] for the imperative.³ Recall here that [+T, +Agr, +M] characterizes the OE finite clause. The number of positive V features – whether one, two, or three – must have something to do with V movement.

2.2. V raising as feature raising

V movement has been much discussed in the split I hypothesis originally advocated by Pollock (1989), but the English subjunctive and imperative constructions have seldom been considered for any version of the hypothesis, except by Pollock (1997). The differences of V movement among the English moods, however, can be explained by the feature-oriented principle of language in the single I system as stated in Table 7. As pointed out by Murakami (1992), the dichotomy of V features – either strong or weak – does not work; instead there must be three degrees of strength involved in V movement. I therefore propose the following hypothesis on the strength of I, thereby insisting that the number of positive V features is literally to be counted with respect to V movement:

Table 7: Strength of I

T	Agr	M	# of +	
+	+	+	3	All Vs raise in older English
+	+		2	Only <i>be</i> and perfective <i>have</i> raise in English
	+		1	No Vs raise in English subjunctives
+			1	No Vs raise in English imperatives

It is true that the participle *arrivata* raised into C in (ii), but outside the CP there is nothing that should activate [+Agr] on *arrivata*. We therefore cannot conclude that this is further evidence for nominative case checking through 'activated' Agr.

³ An anonymous reviewer pointed out that the argument for these matrices in fact enforces the assumption in which AgrP and TP are distinct projections and act as independent probes. It is true that we can dub IP with only [+Agr] as AgrP and that with only [+T] as TP – this is a matter of labeling. In this article we adopt the most general term 'IP', a bundle of features as originally proposed by Chomsky (1986).

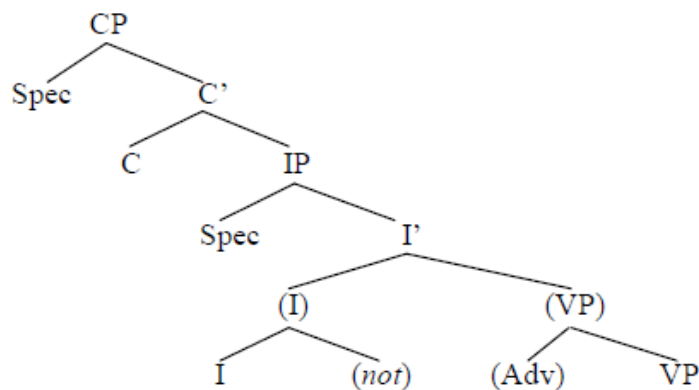
*The featural positiveness per se must not be confused with the strength of I. A singleton positive feature such as [+Agr] or [+T] is not strong itself. Rather, I with one positive feature is weaker than I with two positive features, which in turn is weaker than I with three positive features.

The description given above concerns overt syntax from SATISFY through SPELL-OUT in Chomsky's (1995) terminology. I assume that these three features are specified on V in the lexicon from the beginning, and then checked off against I through V movement. Following Chomsky's (1995: 264) notion of "generalized pied-piping," Roberts (1998) refines V raising as Move F or feature raising. By the operation of Move F, it is not V per se but V features that raise and check themselves against I, pied-piping V when they are strong enough to attract it. If they are weak, only features invisibly raise in syntax before SPELL-OUT, leaving V behind.

This concept of feature raising seems to comply with the Chomskyan Probe-Goal relationship adequately. Taking a radical version of the lexicalist hypothesis in which a fully inflected form appears under V, its V features should be interpretable as a Goal with overt, concrete suffixes of tense, mood, and agreement. On the other hand, I is a bundle of abstract, uninterpretable features, which serves as a Probe looking for the corresponding Goal that is c-commanded by the Probe. Thus in V-to-I movement, uninterpretable I features may 'probe' for its interpretable V features in order to check themselves against the identical features in their c-commanding relationship from head to head. Unless both features 'match,' the derivation will crash, resulting in ungrammaticality (Chomsky 1995, 2001). Let us adopt this concept of Roberts (1998) here along with Chomsky (2001).


We assume the following clausal structure with the non-split, unitary I system for English (as for the position of *not*, see Murakami 2007 for a full discussion):⁴

(9)

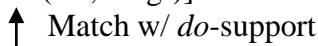


⁴ The architecture concerning *not* in (9) is based on Radford (1988: 66-69), but Murakami (2007) argues for it quite independently. I would rather not go any further into this issue because of the lack of space. In the case of Italian negation, I will admit the status of a maximal projection for *non* in §3.2.

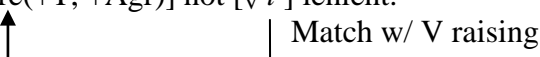
Below are concrete examples of derivation. No main verbs raise in English with two positive features:

- (10)a. *John loves always Mary.
 b. John [_I +T, +Agr] [_{VP} always loves(+T, +Agr) Mary].


The auxiliary *do* should be base-generated, checking features simultaneously, rather than being inserted later (Murakami 1993):

- (11) John [_I does(+T, +Agr)] not love Mary.


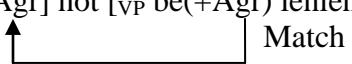
With two plus features, strong enough for auxiliaries, *be* moves overtly in indicatives:

- (12) You [_I are(+T, +Agr)] not [_V t] lenient.


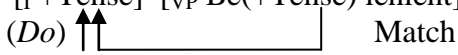
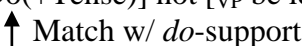
On the other hand, even *be* cannot raise to the weaker I with only one plus feature in either subjunctives or imperatives:

- (13)a. I insist that you not be lenient.
 b. *I insist that you be not lenient. (obsolete)
 (14)a. Do not be lenient.
 b. *Be not lenient. (obsolete)

Subjunctive derivation does not allow *do* in its untensed I, hence [+Agr] raises:

- (15) I insist that you [_I +Agr] not [_{VP} be(+Agr) lenient].


In the affirmative, an imperative may optionally employ *do* in its tensed I, while in the negative, it must always do so:

- (16)a. [_I +Tense] [_{VP} Be(+Tense) lenient].
 (Do) ↑↑  Match
 b. [_I Do(+Tense)] not [_{VP} be lenient].


Looking back to historical English, the facts of V movement indicate that not only *be* and perfective *have* but also main verbs unexceptionally moved from V to I in earlier English.

Table 8: Weak inflection of the Italian verb *pagare* ‘pay’

		Indicative	Conditional	Subjunctive	Imperative
P	1st Sg <i>io</i>	pago	pagherei	paghi	
r	2nd Sg <i>tu</i>	paghi	pagheresti	paghi	paga
e	3rd Sg <i>lui</i>	paga	pagherebbe	paghi	paghi
s	1st Pl <i>noi</i>	paghiamo	pagheremmo	paghiamo	paghiamo
n	2nd Pl <i>voi</i>	pagate	paghereste	paghiate	paghiate
t	3rd Pl <i>loro</i>	pagano	pagherebbero	paghino	paghino
I	1st Sg <i>io</i>	pagavo		pagassi	
m	2nd Sg <i>tu</i>	pagavi		pagassi	
p	3rd Sg <i>lui</i>	pagava		pagasse	
e	1st Pl <i>noi</i>	pagavamo		pagassimo	
r	2nd Pl <i>voi</i>	pagavate		pagaste	
f	3rd Pl <i>loro</i>	pagavano		pagassero	
R	1st Sg <i>io</i>	pagai			
e P	2nd Sg <i>tu</i>	pagasti			
m a	3rd Sg <i>lui</i>	pagò			
o s	1st Pl <i>noi</i>	pagammo			
t t	2nd Pl <i>voi</i>	pagaste			
e	3rd Pl <i>loro</i>	pagarono			
F	1st Sg <i>io</i>	pagherò			
u	2nd Sg <i>tu</i>	pagherai			
t	3rd Sg <i>lui</i>	pagherà			
u	1st Pl <i>noi</i>	pagheremo			
r	2nd Pl <i>voi</i>	pagherete			
e	3rd Pl <i>loro</i>	pagheranno			

*The verb *pagare* is conjugated regularly except for the orthographic appearance of *h* between *g* and front vowels.

As illustrated in Table 8, in Italian there are basically six different verb endings for so many person/number agreement combinations. Putting aside any aspectual complex tense composed of an inflected form of *avere/essere* ‘have/be’ and a past participle, there are four tenses: present, imperfect, remote past, and future. There are some discernible morphemes: *-[a]v-* for imperfect tense, *-er-* for future tense and conditional mood, and *-[a]ss-* for imperfect subjunctive. With these agreement, tense, and mood morphemes, Italian retains three other moods besides indicative: subjunctive in the present and imperfect tenses, and conditional and imperative in the present tense. The Italian finite verb is thus positively specified for Mood as well as Tense and Agreement.

The common word order in Italian is SVO, and the position of medial adverbs is between V and O, while the position between S and V is ungrammatical, in the same way as French, another Romance language (cf. Emonds 1978; Pollock 1989). This is true of all the four moods; the (a)-versions below are grammatical while the (b)-versions are ruled out:⁶

- (18)a. Indicative: Rita pag-a sempre t_V tutto.
 Rita pay-prs.ind.3sg always all
 ‘Rita always pays all.’
 b. ?*Rita sempre pag-a tutto.
 always pay-prs.ind.3sg
- (19)a. Conditional: Rita pagh-er-ebbe sempre t_V tutto, se
 Rita pay-cond-prs.3sg always all if
 av-ess-e tant-i sold-i.
 have-impf.sbj-3sg many-m.pl money-m.pl
 ‘Rita would always pay all, if she had a lot of money.’
 b. ?*Rita sempre pagh-er-ebbe, se avesse tanti soldi.
 always pay-cond-prs.3sg
- (21)a. Subjunctive: Pens-o che Rita pagh-i sempre t_V tutto.
 think-prs.ind.1sg that Rita pay-prs.sbj.3sg always all
 ‘I think Rita would always pay all.’
 b. ?*Penso che Rita sempre pagh-i tutto.
 always pay-prs.sbj.3sg
- (22)a. Imperative: Pag-a sempre t_V tutto.
 pay-prs.imp.2sg always all
 ‘Always pay all.’
 b. *Sempre pag-a tutto.
 always pay-prs.imp.2sg

Researchers agree that finite Vs may move up to the highest inflectional head in Italian (Belletti 1990, 1994, 2009; Cinque 1999; Zanuttini 1997a, 1997b). For Belletti (1990, 1994, 2009), it is AgrsP, which can even multiply in her AgrsP recursion. Let us, however, maintain the non-split I/C system, in which *sempre* ‘always’ modifies VP at its left boundary, and all finite Vs raise from V to I in all the four moods in Italian. Take (18a) as an example:

⁶ Some native speakers say that the (b)-versions sound better if *sempre* is stressed. But even so (21b) is still ungrammatical, perhaps because imperative verbs raise higher than other inflected forms (see §3.3). On the other hand, Belletti (1990: 61) in her analysis refers to (i) below, in which the subject is left-dislocated and *spesso* is exceptionally topicalized, as grammatical:

- (i) Gianni spesso sbagli-a.
 Gianni often mistake-prs.3sg
 ‘John often makes a mistake.’

- allegri-a.
cheerful-f.sg
'I think Rita would always be cheerful.'
- b. ?*Penso che Rita sempre si-a allegra.
always be-prs.sbj.3sg
- (26)a. Imperative: Si-i sempre t_V allegr-a.
be-prs.imp.2sg always cheerful-f.sg
'Always be cheerful.'
- b. *Sempre si-i allegra.
always be-prs.imp.2sg

Just as in the examples of the main verb, the imperative in (26b) is the worst in grammaticality of all, and the other (b)-examples improve if *sempre* is stressed.⁸

Indeed, the range of distributional possibilities is wider in sentences containing a complex tense (Belletti 1990: 46):

- (27)a. Probabilmente Gianni ha sbaglia-to.
Probably Gianni have.prs.ind.3sg mistake-pastptl
'Gianni probably made a mistake.'
- b. Gianni probabilmente ha sbagliato.
- c. Gianni ha probabilmente sbagliato.
- d. Gianni ha sbagliato, probabilmente.

The following sentences are cited from Cinque (1999: 49):

- (28)a. Mi ero francamente purtroppo evidentemente formato
me be-past.ind.1sg frankly unfortunately clearly form-pastptpl
una pessima opinione di voi.
a worst opinion of you
'Frankly I unfortunately had clearly formed a very bad opinion of you.'
- b. Francamente mi ero purtroppo evidentemente formato una pessima
opinione di voi.
- c. Francamente purtroppo mi ero evidentemente formato una pessima
opinione di voi.
- d. Francamente mi ero purtroppo evidentemente formato una pessima
opinione di voi.

Assuming his multiple layers of functional heads with adverbs in their respective specifiers, Cinque (1999) argues that all examples in (28) are derived by raising

⁸ Emilio Servidio (p.c.) cited this pair of examples, saying that (ii) is quite fine if *sempre* 'always' is focalized:

(i) Rita è spesso allegra.

(ii) No, Rita SEMPRE è allegra.

SEMPRE might then be located in (the specifier of) FocP in Rizzi's (1997 among others) cartography, and this analysis could be applied to (i) in fn. 6. Suffice it to say that this Adv – V word order does not result from V remaining in situ. We leave this matter still open.

(*mi*) *ero* ‘(me) was’ step by step from head to head; in other words, while positions of adverbs are fixed, finite V moves and stops in various heads to the right of adverbs.

(29) Mi ero francamente t_V purtroppo t_V evidentemente t_V formato

Belletti (p.c.) would now like to extend this analysis for (27) as well, but we will not go into Cinque’s (1990) hypothesis any further in this article. Limiting the number of maximal projections to the minimum in the spirit of Iatridou (1990), I traditionally assume that adverbs can adjoin to (any level of) these maximal projections (Murakami 2007). No matter how adverbs are analyzed and/or ordered, we agree on the point that all finite Vs raise in Italian. (See also fn. 6 and 8.)

In the interrogative construction, inversion does not usually take place, but rising intonation conveys the speaker’s intention of asking (Ichinose 2001: 90):

- (30)a. Lei parl-a italiano?
 you.hon speak-prs.ind.2hon Italian
 ‘Do you speak Italian?’
- b. Parl-a italiano?
 speak-prs.ind.2hon Italian

As is well-known since Rizzi (1982), Italian is a null subject language in which an overt subject is not required as in (30b). We assume that either in (30a) or (30b), the derivation is exactly the same as that in declaratives; with respect of V movement, V raises to I with three plus features, that is [+T, +Agr, +M].

In *wh*-questions, the subject is located at the end of a sentence (Ichinose 2001: 91):

- (31)a. Dove abit-a tua sorella?
 where live-prs.ind.3sg your sister
 ‘Where does your sister live?’
- b. Che cosa prendi tu?
 which thing take-prs.ind.2sg you.nom
 ‘What will you have?’

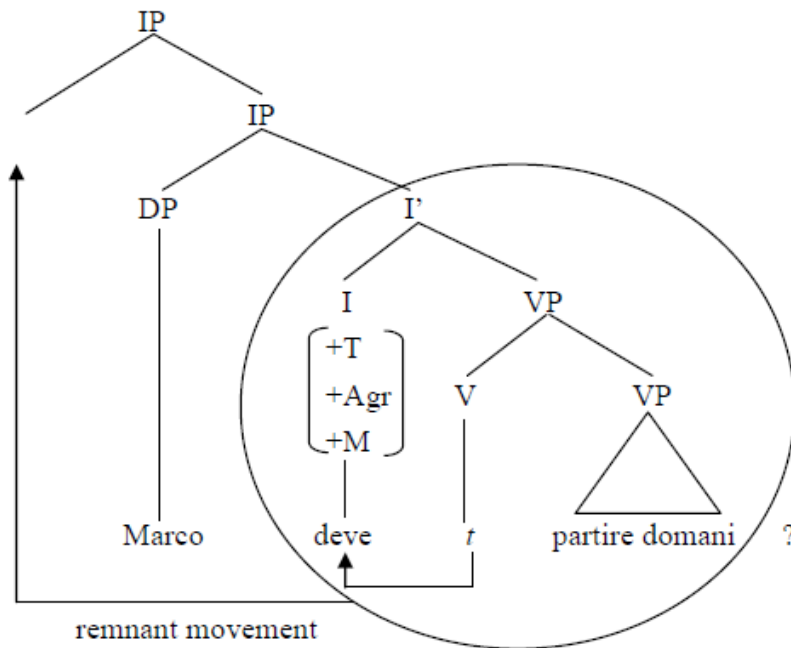
Since Italian is a null subject language, overt subjects make an indexing effect, so that (31a), for example, sounds like ‘How about your sister?’ compared with the other people in the context (Emilio Servidio, p.c.). Putting aside the pragmatic effect, as deduced from the *wh* VS order, V has further moved from I to C in (31), confirming the strength of three V features again.

Italian subjects may come at the end of *yes/no*-questions, too, and whether in *yes/no*- or *wh*-questions, when the subject does not immediately follow the verb, it looks ‘extraposed’ at the end of a sentence:

- (32)a. Dev-e partire domani Marco?
 must-prs.ind.3sg depart tomorrow Marco.nom
 ‘Does Marco have to leave tomorrow?’
- b. Marco, dev-i partire domani?
 Marco, must-prs.ind.2sg depart tomorrow
 ‘Marco, do you have to leave tomorrow?’
- c. Devi partire domani, Marco?
 ‘Do you have to leave tomorrow, Marco?’

In (32a), *Marco* is nominative, not vocative like (32b) and (32c), since the verb is inflected for third person singular and there is no pause between *Marco* and its preceding word. Here, however, I do not assume that the subjects are actually ‘extraposed,’ nor that the V is located in C position in (32a). Rather, following Wiland (2010) who discussed the VOS/OVS order for Polish, remnant movement of the I’ predicate should have applied after head movement in (32a).⁹ So the sentence should be derived as follows:

(33)



Thus in (32a), *deve* ‘has to’, once its features are checked, remains in I with its subject *Marco* in Spec/IP.

⁹ One might wonder whether an incomplete or intermediate projection such as I’ can ever move in syntax. One point I can defend is that constituents at one-bar level are not so incomplete as they appear, considering the fact that *one* is a pro-form for N’ and *do so* for V’ in English (Radford 1988). Otherwise, following the mainstream, I should introduce *vP* just above VP, so that I could move *vP* around as remnant movement. I will leave this matter open.

3.2. *Negation*

In Italian negation, the sentential negative adverb *non* appears in front of a finite verb or auxiliary:

- (34)a. Rita non pag-a tutto.
Rita not pay-prs.ind.3sg all
'Rita doesn't pay all.'
b. *Rita paga non tutto.
pays not
- (35)a. Rita non ha pag-ato tutto.
Rita not have.prs.ind.3sg pay-pastptpl all
'Rita didn't pay all.'
b. *Rita ha non pagato tutto.
has not
- (36)a. Rita non è allegr-a.
Rita not be.prs.ind.3sg cheerful-f.sg
'Rita is not cheerful.'
b. *Rita è non allegra.
is not

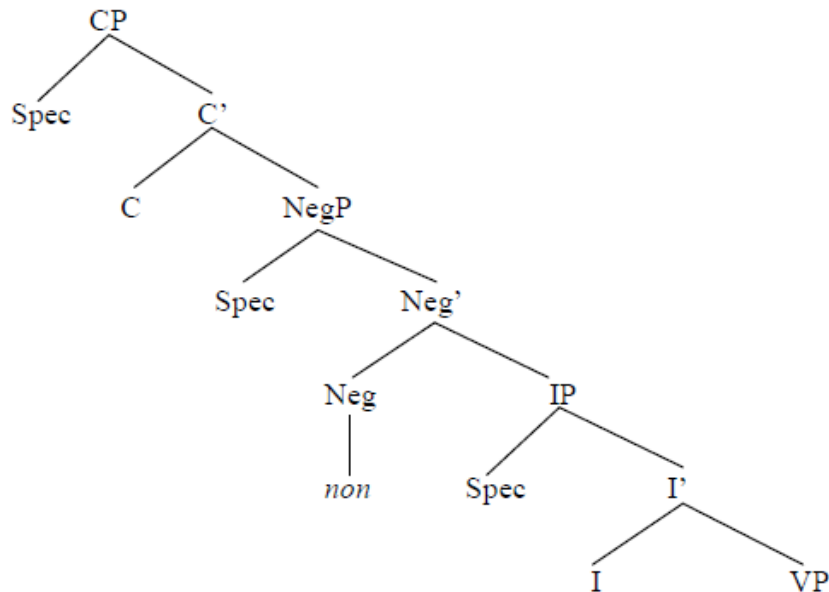
Unlike some other European languages such as Polish and Lithuanian (Murakami 2011a; c), pronominal clitics may intervene between *non* and the following finite verb or auxiliary:

- (37)a. Non ci sono tant-e person-e in questa aula.
not here be.prs.ind.3pl many-f.pl person-f.pl in this classroom
'There are not many people in this classroom.'
b. *Ci non sono tante persone in questa aula.
here not
- (38)a. Non mi ricord-o.
not me.rflx remember-prs.ind.1sg
'I don't remember.'
b. *Mi non ricordo. c. *Non ricordo mi.
- (39)a. Non lo so.
not it.m.sg know.prs.ind.1sg
'I don't know it.'
b. *Lo non so. c. *Non so lo.
- (40)a. Non te lo do.
not you.dat it.acc give.prs.ind.1sg
'I won't give it to you.'
b. *Te lo non do. c. *Non do te lo.
- (41)a. Non me ne import-a nulla.
not me.dat that matter-prs.ind.3sg nothing
'I don't care at all.'
b. *Me ne non importa nulla. c. *Non importa me ne nulla.

Neither finite Vs (as in the (b)-examples from (34) to (36)) nor clitic pronouns (as in those from (37) to (41)) can come in front of *non*.

Considering the two facts that finite Vs never move over *non* and that pronouns may intervene between *non* and V, it seems reasonable to place Italian *non* under the head of NegP (unlike English *not*; see (9) above):

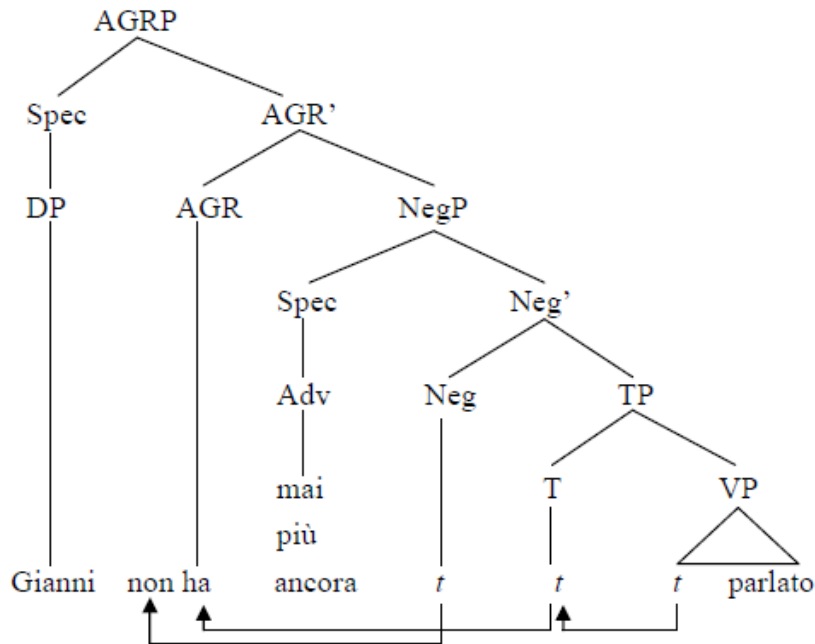
(42)



This structure partially follows Belletti (1990; 1994; 2009) and Zanuttini (1997a; b) in that they regard *non* as the head of NegP. Belletti (2009: 20-27; 92-100; originally 1990; 1994) further analyzes *non* as a syntactic clitic which left-adjoins to V at the end of derivation, so that the Head Movement Constraint (Rizzi 1990) can be avoided in her structure as in (44):

- (43) Gianni non ha mai/più/ancora parla-to.
 Gianni not avere.prs.ind.3sg never/no longer/yet talk-pastptpl
 ‘Gianni did not talk at all/any more/yet.’

(44)



As is seen in (44), nominative subjects must occupy a certain position in front of *non*. Here are a couple of pronominal examples.

- (45)a. Io non lo so.
 I not it know.prs.ind.1sg
 'I don't know it.'
- b. Lui non ci dic-e niente.
 he not us say-prs.ind.3sg nothing
 'He doesn't say anything to us.'

Assuming the structure in (42), the question that immediately arises is where these subjects should be. The position which looks readily available for them is the specifier of NegP.¹⁰ However, we would not address this issue any further in this article.

To summarize, *non* is a fixed head rather than a movable clitic, projecting its own maximal projection which prevents V from raising over *non*. The NegP is thus located immediately above IP (or any highest inflectional projection) in Italian.

3.3. Imperatives

Looking back into the paradigm in Table 8, the only imperative form that is morphologically distinct from the other indicative, conditional, and subjunctive

¹⁰ Adriana Belletti (p.c.) rejected this possibility because she insists that negative adverbs such as *mai* and *più* occupy Spec/NegP as in (44). I would still put emphasis on the flexible distribution of adverbs, considering the fact that they can also come at the end of a sentence:

(i) Gianni non ha parlato mai/più/ancora.

forms for the same person is *paga*, i.e., the second person singular imperative. The remaining four forms of the imperative are identical to those of the subjunctive. Following Zanuttini (1997a: 105) and others, let us call the distinct form ‘true’ imperative, and the other imperative forms ‘surrogate’ or ‘suppletive’ imperative.

There are two great puzzles in Italian imperative syntax. One is the fact that ‘true’ imperatives cannot be negated. Instead of ‘true’ imperative forms, infinitive forms must be employed with *non*. Hence (46b) is ungrammatical, while (46c) is a good sentence:

- (46)a. Mangi-a quest-a pizza.
eat-prs.imp.2sg this-f.sg pizza
‘Eat this pizza.’
b. *Non mangi-a questa pizza.
not eat-prs.imp.2sg
c. Non mangi-are questa pizza.
not eat-inf this pizza
‘Don’t eat this pizza.’

The other puzzle is the behavior of pronominal clitics in imperatives. If the object DP in (46) becomes pronominal, imperatives pattern as follows: In positive imperatives, the object must be encliticized like (a)-examples, and it cannot be a proclitic as ruled out in (b)-examples:

- (47)a. Mangi-a-la. eat-prs.imp.2sg-it.f.sg ‘Eat it.’
b. *La mangi-a. it eat-prs.imp.2sg
(48)a. Mangi-ate-la. eat-prs.imp.2pl-it.f.sg ‘Eat it.’
b. *La mangi-ate. it eat-prs.imp.2pl

On the other hand, pronominal objects can be either proclitic or enclitic onto a negative imperative V. Both (a)- and (b)-versions below are thus grammatical:

- (49)a. Non mangi-ar-la. not eat-prs.imp.2sg-it.f.sg ‘Don’t eat it.’
b. Non la mangi-are. not it eat-prs.imp.2sg ‘Don’t eat it.’
(50)a. Non mangi-ate-la. not eat-prs.imp.2pl-it.f.sg ‘Don’t eat it.’
b. Non la mangi-ate. not it eat-prs.imp.2pl ‘Don’t eat it.’

In this section, we attempt to find an optimal solution to these two intricate problems in the Italian imperative.

3.3.1. Negative imperatives

Let us first of all answer this question: why cannot ‘true’ imperatives be negated with *non*? Rivero (1994) and Rivero & Terzi (1995), by discussing the same pattern

for negative imperatives in Spanish as in Italian, suggest that ‘true’ imperatives must raise up to C, but this I-to-C raising is prohibited due to the HMC by the intervening negative head, and this is the reason why ‘true’ imperatives are incompatible with negation in most Romance languages.

Recall here that the Adv – V word order of imperatives sounds worse in grammaticality than that of any other mood. To repeat the imperative examples:

- (21)b. *Sempre pag-a tutto.
 always pay-prs.imp.2sg all
- (26)b. *Sempre si-i allegra.
 always be-prs.imp.2sg cheerful

We may suspect that this is because ‘true’ imperative *paga* and *sii* occupy the C position and lower adverbs such as *sempre* may not adjoin so highly as above C. Let us therefore follow Rivero’s (1994: 91) line of reasoning:¹¹

“In languages like Spanish, C is an indicator of Illocutionary force, and holds the Imperative feature that the verb with imperative morphology must reach. ... The negation prevents V from reaching this position, so [‘true’] imperative sentences cannot be negated.”

However, we have a slight modification here. It may be not only the imperative feature, but also all those three positive features, i.e. [+T, +Agr, +M] that exist there in C. These features should be checked off as uninterpretable, after attracting the same interpretable features of ‘true’ imperative V. Interpretable features do not disappear but remain on V, to be often reused for double-checking. (See below. See also Murakami (2011c: §3.3) for the argument of double-checking V features.)

The second point to consider is why infinitive forms are employed for second person singular imperatives in the negative. Kayne (2000) argues that in that case, there should exist a null modal corresponding to the auxiliary *stare* ‘be’ in this Paduan example (Kayne 2000: 102):

- (51) No sta parl-are!
 not be.imp.2sg speak-inf
 ‘Don’t speak!’

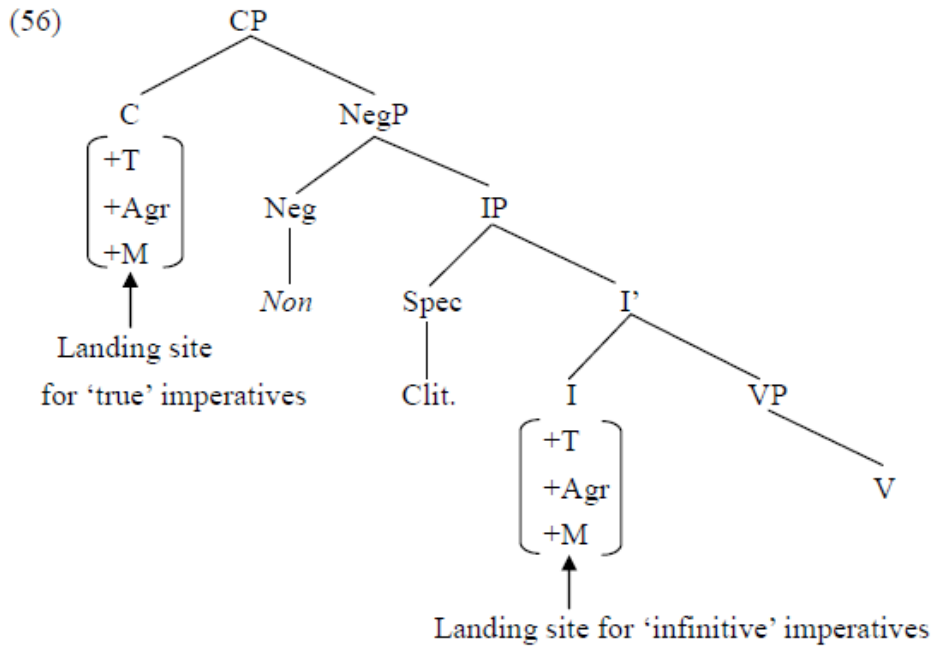
Importantly to his argument, there is a striking contrast between negative imperatives and infinitives. Compare (46c) above with authentic infinitive clauses such as in (52), where proclitics are banned and enclitics are exclusively permitted:

- (52)a. Gianni pensa di non mangi-ar-la da solo.
 Gianni thinks of not eat-inf-it by sole
 ‘Gianni thinks that he shouldn’t eat it by himself.’

¹¹ By adopting Rivero (1994) and Rivero & Terzi (1995), we reject Zanuttini (1994; 1997a). It neither holds true that *non* and ‘true’ imperative V do not compete for the same position (Zanuttini 1994), nor that ‘true’ imperative V cannot raise due to its poor morphology into MoodP immediately below *non* (Zanuttini 1997a).

specified for Tense, Agr, and M, so V raising occurs there due to the strong features. (See §2.2.)

The structure in (56) illustrates what we have so far arguing for:



3.3.2. The position of clitics

Let us next solve the other puzzle: the behavior of clitics. Unlike negative imperatives, both ‘true’ and ‘surrogate’ imperatives pattern as follows with respect to the position of object clitics. To repeat the relevant examples:

- | | |
|--|---|
| (47)a. Mangi-a-la.
eat-prs.imp.2sg-it.f.sg
‘Eat it.’ | b. *La mangi-a.
it eat-prs.imp.2sg |
| (48)a. Mangi-ate-la.
eat-prs.imp.2pl-it.f.sg
‘Eat it.’ | b. *La mangi-ate.
it eat-prs.imp.2pl |

First person plural imperatives exhibit the same pattern as the above examples:

- | | |
|--|---|
| (57)a. Mang-iamo-la.
eat-prs.imp.1pl-it.f.sg
‘Let’s eat it.’ | b. *La mang-iamo.
it eat-prs.imp.1pl |
|--|---|

In the case of third or honorific second persons, however, even positive imperative Vs must follow clitics (Ichinose 2001: 223):

- | | |
|--|-------------------------------------|
| (58)a. *Mang-i-la.
eat-prs.imp.3sg-it.f.sg
‘Eat it.’ | b. La mang-i.
it eat-prs.imp.3sg |
|--|-------------------------------------|

- (59)a. *Mangi-no-la.
eat-prs.imp.3pl-it.f.sg
'Eat it.'
- b. La mangi-no.
it eat-prs.imp.3pl

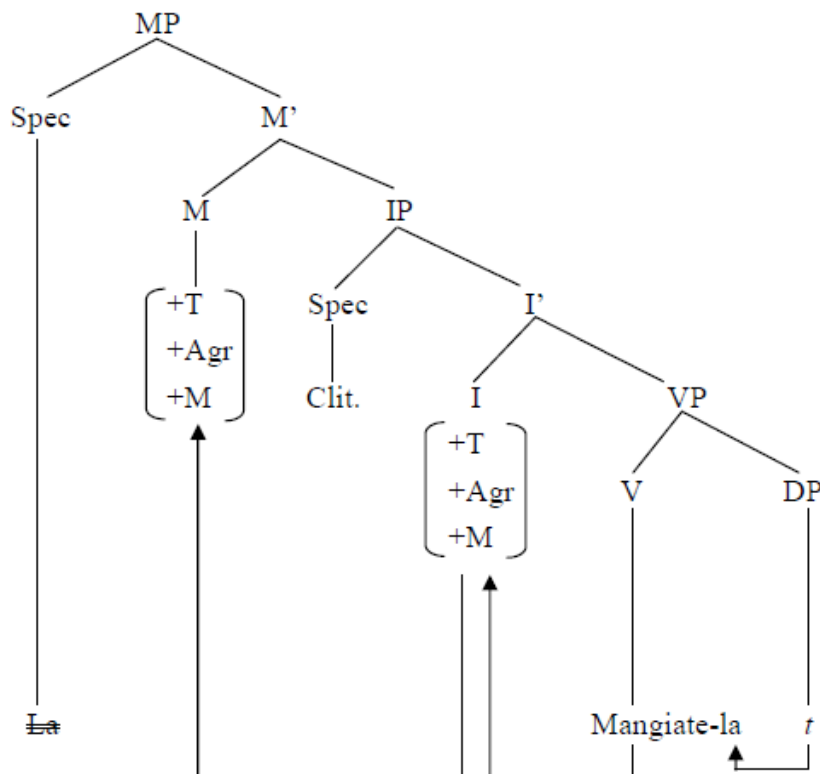
Compare the above examples with indicative sentences, which only allow proclitics:

- (60)a. *Mangi-o-la.
eat-prs.ind.1sg-it.f.sg
'I eat it.'
- b. La mangi-o.
it eat-prs.ind.1sg

It is relatively simple to explain why the pattern in (47b) is ruled out. As argued in the previous section, the 'true' imperative V is located in the C position, and proclitics just cannot climb up to the specifier of CP.

In much the same line of reasoning, Cardinaletti (1995: 13) suggests that in positive inflected imperatives, proclitics must not climb up to the specifier next to the inflected imperative V, which should have raised higher, perhaps with more features to check, than infinitival imperative Vs. Let us partially adopt this solution and call MoodP or MP the functional phrase to accommodate the higher- positioned imperative V. For (48a), for instance, the derivation should be diagrammed like this:

(61)



Since there is no possibility for clitics to be in the Spec/MP, *la* must attach onto the end of *mangiate* when the V raises further up to M.¹³ The suggestion here is that M, as well as I, carries uninterpretable features [+T, +Agr, +M], which still probe for its corresponding interpretable features, and that the interpretable features [+T, +Agr, +M] remain on the V *mangiate* after V-to-I raising is complete. Following Chomsky (2001), uninterpretable features are to disappear after being checked, but it is only uninterpretable features that are deleted, while interpretable features remain the same until LF. What I propose here is that interpretable features serve the purpose of double-checking (see Murakami (2011c) for a similar discussion on the Polish subjunctive). Essentially the same argument may also apply for ‘true’ imperatives with V in C position after I-to-C raising; if V is found in any head higher than I, it has been triggered to move up there by double-checking the three strong features, perhaps with the imperative illocutionary force (Rivero & Terzi 1995).

In ‘surrogate’ imperatives for third persons as in (58) and (59), the word order ‘clitic – V’ attests that the V is located in I (for reasons unclear to me). Table 9 thus summarizes the positions of V in Italian imperatives:

Table 9. Position of V in Italian imperatives

	Position of V
‘True’ imperative	C
‘Surrogate’ imperative for 1st and 2nd person	M
‘Surrogate’ imperative for 3rd person	I
Negative imperative	I

The behavior of clitics has turned out to be invariant. Rather, the landing sites of imperative Vs are different from one another, depending on the kinds of imperatives. Here it is reasonable to speculate that NegP must always select IP as its complement, hence nullifying MP, just as Zanuttini (1996) suggested that NegP must select TP in Italian negative imperatives. However, we would not pursue this possibility any further in this article.

4. Conclusion

The conclusion that I had drawn earlier for other European languages in Murakami (1992, 2003, 2011a, b, c) has been reached here again with the Italian data adding further support. I have provided a unified account of V movement in English and Italian within essentially the single I system where I is a bundle of features which should be checked against by V features. Whether or not V may raise with the interpretable V features is determined by the number of positive features: the more, the stronger. To repeat Table 7 here, integrating Italian:

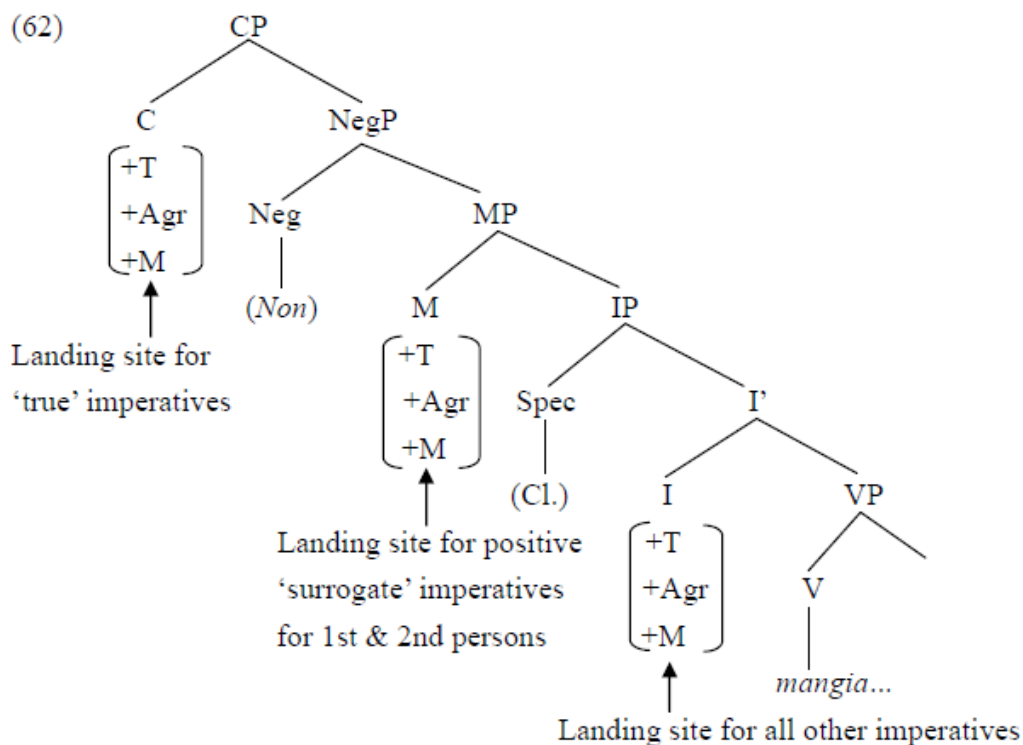
¹³ When and how the clitic object is encliticized onto V is beyond the scope of this article. See Rizzi (2000) for a discussion.

Table 10. Strength of features

T	Agr	M	# of +	
+	+	+	3	All Vs raise in older English and in Italian
+	+		2	Only <i>be</i> and perfective <i>have</i> raise in English
	+		1	No Vs raise in English subjunctives
+			1	No Vs raise in English imperatives

In general, the different behavior of V movement between English and Italian can be accounted for, not by building up numerous maximal projections, but in terms of feature matrices. It has been argued in §2 that the English verb has undergone natural reduction of finiteness after the demise of mood morphology, resulting in the different verbal behavior among the three moods.

By contrast, all finite Vs in Italian raise to I due to three strong features, including ‘infinitive’ imperatives in the negative. ‘True’ imperatives even move up to C, and certain positive imperatives up to M, perhaps due to some imperative illocutionary force. The tree diagram below illustrates the landing sites for Italian imperatives:



Since the sentential negative adverb *non* and proclitics are, if present, fixed in the head of NegP and the specifier of IP respectively, the positions where imperative Vs may land are deduced from them, depending on the kinds of imperatives.

Although the behavior of subjunctive and imperative Vs looks ‘idiosyncratic’ in both English and Italian, the syntactic facts can be explained quite simply and systematically by assuming the feature matrices we have argued for thus far.

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