

Force, negation and imperatives¹

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Abstract

This article presents an account of the cross-linguistic variation in the availability of negative imperatives. By imperatives, I refer to sentences with a distinctive imperative morphology on the main verb and/or a distinctive syntax. In many languages (e.g., Italian, Modern Greek, and Spanish), imperatives cannot be negated. Instead, negative commands are expressed with negative subjunctives and/or infinitivals. However, in German, French, English, Bulgarian and Serbo-Croatian, imperatives can be negated. I argue that some languages rule out negative imperatives because the syntax of the language derives a structure which maps onto an incoherent interpretive representation. The analysis I propose builds on the intuition that the directive force contributed by the imperative mood cannot be negated. The negative imperative Don't call! means I require that you not call; it does not mean I do not require that you call. This judgment was already noted by Frege, consequently positing that illocutionary force operators cannot be negated. Pursuing this idea further, I propose that negative imperatives are unavailable in some languages because the syntax derives a structure in which the operator encoding directive force arrives within the c-command domain of negation, where it is interpreted as being negated. As this is incoherent, the structure is ruled impossible. The proposed analysis has implications for the mapping between syntax and semantics of imperatives in particular. In general, it provides evidence that the set of available syntactic structures in a language is restricted by uniform mechanisms for semantic interpretation across languages.

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1. Introduction

Much work on the syntax of imperatives in Romance and Slavic languages notes that while some languages have negative imperatives, others do not, instead expressing negative commands through the use of suppletive subjunctives or infinitives (Joseph and Philippaki-Warbuton 1987; Zanuttini 1991, 1994, 1997; Rivero 1994a, b; Rivero and Terzi 1995). The purpose of this article is to provide a novel account for the cross-linguistic variation in the compatibility of imperatives and negation. I argue that some languages rule out negative imperatives because the syntax derives a structure which maps onto an incoherent interpretation. This article mainly considers data from Italian, Spanish, French, Modern Greek, Bulgarian, Serbo-Croatian, German and English.

By imperatives, I refer to sentences with distinctive imperative morphology on the verb and/or distinctive imperative syntax. They canonically express the directive illocutionary force associated with commands and requests. Consequently, the term *imperative* has often been used to refer to a sentence's function rather than its form. However, I use the term *imperative* to refer exclusively to a sentence's form. For referring to a sentence's function, I use terms such as *command* and *request*.

The main claims of this article are that there is an illocutionary force operator (i.e., imperative operator) in the syntax of imperatives, which canonically contributes directive force, and that this operator is universally in C^0 in the clause structure. The idea that there is a formal means to express force of sentences is hardly new. Frege (Frege 1960; Dummett 1973) already put forth the idea that logical forms of sentences include a component that expresses force which dictates the conventions of their use in discourse. More recently, some even argue for the presence of a force projection in the periphery of a clausal structure (Rizzi 1997; Cinque 1999). I argue in this article that at least for imperatives across languages there is empirical evidence to suggest that force is formally represented, yielding interesting syntax-semantics interface problems.

The analysis I propose builds on the intuition that illocutionary force operators cannot be in the scope of negation in logical forms of sentences, an intuition shared by Frege and also noted in Lee (1988). That is, negation cannot operate on the illocutionary force of a sentence. It can only operate on their propositional content. Pursuing this idea further, I propose that negative imperatives are unavailable in some languages because the syntax derives a structure in which the operator encoding the illocutionary force arrives within the c-command domain of negation, where it is interpreted as being negated. As this is incoherent, the structure is ruled impossible.

This article is organized as follows. In section 2, I discuss the data and the issues they raise. In section 3, I review previous studies that provide syntactic accounts of the relation between negation and imperatives. This section also discusses a puzzle concerning the non-availability of negative imperatives, which previous studies did not take into account. In section 4, I establish that C^0 is the locus of an imperative

operator which attracts the imperative verb, and I discuss its semantic contribution. In section 5, I show how my proposal accounts for the cross-linguistic variation in the availability of negative imperatives. I also discuss and account for a potential counterexample to the proposed analysis – namely, the existence of negative imperatives in Bulgarian and Serbo-Croatian. In section 6, I address the issue of why languages that do not allow negative imperatives choose suppletive infinitives or subjunctives to express negative commands.

2. Data and issues

In Modern Greek and Spanish,² imperatives are not compatible with negation. Negative commands must instead be expressed by subjunctives.³

- (1) Modern Greek
- a. **Mi grapse to!*
Neg write-2sg.Imp it
'Don't write it!'
 - b. (*Na mi to grapsis!*)
NA Neg it write-2sg.Subj
'Don't write it!'
 - c. **Mi grapsete to!*
Neg write-2pl.Imp it
'Don't write it!'
 - d. (*Na mi to grapsete!*)
NA Neg it write-2pl.Subj
'Don't write it!'
- (2) Spanish
- a. **¡No lee lo!*
Neg read-2sg.Imp it
'Don't read it!'

2. In Spanish, infinitivals can be used to express negative commands in limited domains, such as in short directions or notices to the public.

- (i) Spanish
- a. *¡No leer lo!*
Neg read-Inf it
'Don't read it!'
 - b. *¡No hablar!*
Neg talk-Inf
'Don't talk!'

3. In Modern Greek, many imperative verbs in the 2nd person plural have the same forms as corresponding subjunctive verbs. One way to distinguish the two forms is through the use of pronominal clitics. In imperatives, clitics encliticize onto the verb, whereas in subjunctives, they procliticize.

- b. *¡No lo leas!*
Neg it read-2sg.Subj
'Don't read it!'
- c. **¡No hablad le!*
Neg talk-2pl.Imp her
'Don't talk to her!'
- d. *¡No le habléis!*
Neg her talk-2pl.Subj
'Don't talk to her!'

In Italian, imperatives in the 2nd person singular cannot be negated, though imperatives in the 2nd person plural can be. Negative commands in the 2nd person singular is expressed through the use of suppletive infinitives.

(3) Italian

- a. *Non telefonale!*
Neg call-2sg.Imp-her
'Don't call her!'
- b. *Non telefonarele!*
Neg call-Inf-her
'Don't call her!'
- c. *Non telefonatele!*
Neg call-2pl.Imp-her
'Don't call her!'

Imperatives in the 2nd person singular have verbal forms unique to the imperative paradigm, whereas imperatives in the 2nd person plural have verbal forms morphologically identical to the corresponding indicative form. For this reason, Zanuttini 1991 refers to 2nd person singular imperatives as *true imperatives* and 2nd person plural imperatives as *suppletive imperatives*.⁴

In French, German, Bulgarian, Serbo-Croatian and English, imperatives are compatible with negation.

(4) French

- a. *Ne chante pas!*
NE sing-2sg.Imp Neg
'Don't sing!'

4. Although Italian imperatives in the 2nd person plural have verbal forms morphologically identical to the corresponding indicative form, they do not have the syntax of indicatives. For instance, pronominal clitics procliticize onto verbs in indicative sentences, but they encliticize in both affirmative and negative imperative sentences. French resembles Italian in that many verbs in the 2nd person plural imperative have verbal forms morphologically identical to the 2nd person plural indicative and in that clitics procliticize in indicative sentences, but encliticize in affirmative imperatives. However, French differs from Italian in that clitics procliticize in negative imperatives (cf. Schmerling 1975).

- b. *Ne chantez pas!*
NE sing-2pl.Imp Neg
'Don't sing!'
- (5) German
- a. *Schreib nicht!*
write-2sg.Imp Neg
'Don't write!'
- b. *Schreibt nicht!*
write-2pl.Imp Neg
'Don't write!'
- (6) Bulgarian
- a. *Ne četi!*
Neg read-2sg.Imp
'Don't read!'
- b. *Ne četete!*
Neg read-2pl.Imp
'Don't read!'
- (7) Serbo-Croatian
- a. *Ne čitaj!*
Neg read-2sg.Imp
'Don't read!'
- b. *Ne čitajte!*
Neg read-2pl.Imp
'Don't read!'

Table 1 summarizes the data so far. The check indicates that negative imperatives are available and the asterisk indicates that they are not available in the language.

Table 1. Summary

| Language | Negative imperatives |
|----------------|----------------------|
| Spanish | * |
| Modern Greek | * |
| Italian (sg.) | * |
| French | ✓ |
| German | ✓ |
| English | ✓ |
| Bulgarian | ✓ |
| Serbo-Croatian | ✓ |

The data considered here raise the following issues.

- (a) Why are imperatives compatible with negation in some languages but not in others?

This question is addressed from sections 3 to 5. I will argue that negative imperatives are unavailable in some languages because the syntax derives a structure in which the operator encoding directive force is within the scope of negation, where it is interpreted as being negated. As this is incoherent, the structure is ruled impossible.

- (b) Why do languages that do not allow negative imperatives choose infinitives or subjunctives as suppletive forms?

Spanish and Modern Greek suppletive forms are discussed in section 6.1. I will argue that subjunctives do not have an operator that encodes illocutionary force, expressing negative commands through pragmatic inference, and so the question of the availability of the negative forms does not come up. Some issues concerning Italian suppletive forms will be addressed in section 6.2.

3. Previous studies

3.1. Zanuttini 1997

Zanuttini (1991, 1994, 1997) provides an account for Romance of the incompatibility of negation and true imperatives. Her basic claim is that imperatives are defective in that they lack a certain functional category required by a certain type of negation. Hence, languages with this type of negation do not have negative imperatives. Here, I discuss the proposal presented in Zanuttini (1997) in more detail.

Zanuttini (1997) assumes the presence of MoodP as well as TP in the phrase structure of a sentence in Italian, with TP higher than MoodP and that preverbal negation is lower than TP, but higher than MoodP. She further proposes that the preverbal negation *non* subcategorizes for a MoodP. This yields the following structure for negative sentences in Italian:

- (8) [CP ... [TP ... [NegP [Neg non] [MoodP ... [VP ...]]]]]

Zanuttini argues that the verbs in both true and suppletive imperatives in Italian move higher than Mood⁰, up to C⁰. Furthermore, following Kayne (1992), she assumes that the negative infinitival in Italian that expresses 2nd person singular negative commands contains an empty modal auxiliary verb. Supporting evidence comes from northern Italian dialects that have an overtly realized verbal form specific to the negative infinitives that express negative commands. In Paduan, for example, a negative command is expressed with the modal auxiliary verb *stá* followed by the infinitive. In the non-negative form, the presence of this verb is impossible.

- (9) Paduan
- a. *No stá parlare!*
 Neg aux to-talk
 ‘Don’t talk!’ (Kayne 1992: 17)
- b. **Stá parlare!*
 aux to-talk
 ‘Talk!’ (Kayne 1992: 18)

Zanuttini proposes that both true and suppletive imperatives in C^0 hosts an imperative feature [Imp] which has to be checked: it is checked by the verb in positive imperatives and by *non* in negative imperatives. Zanuttini also argues that the morphological make-up of verbs in true imperatives is defective: true imperative verbs lack a mood feature, whereas suppletive imperative verbs have this feature. The requirement that the preverbal negation subcategorizes for MoodP is implemented by either checking the [Mood] feature in Mood⁰ with a verb that has a mood feature, or by lexically realizing the [Mood] feature with an empty or an overt modal. In suppletive imperatives with negation, and the verb in the indicative form, [Imp] in C^0 is checked by negation, and [Mood] in Mood⁰ is checked by the verb. In suppletive imperatives with negation and an infinitive verb, [Imp] is checked by negation and [Mood] is checked by an empty or overt modal. Negative true imperatives are ruled out because [Mood] cannot be checked due to the morphologically defective nature of true imperative verbs. In affirmative true imperatives, MoodP is not subcategorized because Neg⁰ is absent. This means that [Mood] needn’t be checked and hence needn’t be lexically realized, and the imperative verb can move up to C^0 and check the [Imp] feature.

Although Zanuttini’s analysis works well for Romance, it does not easily extend to Balkan languages such as Modern Greek, Bulgarian, and Serbo-Croatian. These languages all have preverbal negation, but they differ in that Modern Greek does not allow negative true imperatives, whereas Bulgarian and Serbo-Croatian do. One would have to argue that while Bulgarian and Serbo-Croatian imperative verbs can check [Mood], Modern Greek imperative verbs cannot. Another way out would be to claim that the selectional properties of preverbal negation differ in Modern Greek and in Bulgarian and Serbo-Croatian, even though they have similar morphosyntactic properties. That is, the preverbal negation of Modern Greek would subcategorize for MoodP, while that of Bulgarian and Serbo-Croatian would not. This, however, is doubtful. Jespersen (1917) first observed the generalization that if a language expresses sentential negation by means of a preverbal negative marker, it has negative concord.⁵ On the other hand, if a language employs a

5. Negative concord allows the co-occurrence of the negative marker with a negative quantifier within VP with the semantic result of one instance of negation.

postverbal negative marker, it does not have negative concord.⁶ Zanuttini (1991) has shown that this generalization is valid for Romance. It turns out that it is also valid for Modern Greek, Bulgarian and Serbo-Croatian: negative concord is attested in these languages as well. This suggests not only that the properties of preverbal negation in the three languages are alike, but also that they are identical to those of Romance. Zanuttini does not claim that her analysis extends to all languages, but given that the three languages have similar type of preverbal negation as in Romance, it seems reasonable to expect the analysis to be extendable to at least the three languages.

3.2. *Rivero 1994b; Rivero and Terzi 1995*

The accounts given in Rivero (1994b) and Rivero and Terzi (1995) start from the assumption that Neg⁰ projects to NegP in Modern Greek, Spanish, Bulgarian and Serbo-Croatian, and that these languages share a phrase structure in which CP dominates NegP, which in turn dominates IP.

$$(10) \quad [CP \dots [NegP [Neg] [IP [I] [VP [v]]]]]$$

According to Rivero and Terzi, the cross-linguistic variation in the availability of negative imperatives depends on where the imperative feature is located in the clause structure. In imperatives in Modern Greek and Spanish, the root C⁰ hosts a strong imperative mood feature that must be checked by the verb before Spell-out. Hence, the imperative verb has to move up to C⁰ in overt syntax. Negative imperatives however are unavailable in these languages because Neg⁰ blocks imperative verb movement to C⁰.

As for the imperatives in Bulgarian and Serbo-Croatian, Rivero and Terzi propose that the strong imperative mood feature is located in I⁰, rather than in C⁰. They argue that negative imperatives are available in these languages because imperative verbs do not cross Neg⁰, only moving up to I⁰. They further argue that C⁰ cannot be the position associated with directive force of imperatives in Bulgarian and Serbo-Croatian (or any other illocutionary force, for that matter) because C⁰ serves as the last-resort position to rescue clause-initial clitics. These languages have a phonological constraint called the Tobler-Mussafia law against clause-initial clitics. And so, although clitics usually precede the verb, they must occur postverbally when they would otherwise be in a clause-initial position. The verb-clitic word order in the imperatives in (11) is a reflex of this phonological constraint.

6. There are a few exceptions to Jespersen's generalizations such as Yiddish and Bavarian, whose proper analysis is still uncertain.

- (11) a. Bulgarian
 Četi *ja!*
 read-2sg.Imp it
 ‘Read it!’
- b. Serbo-Croatian
 Čitaj *je!*
 read-2sg.Imp it
 ‘Read it!’

Rivero and Terzi claim that when there are no other constituents preceding clitics, the verb moves to C^0 as a last resort to prevent the clitics from appearing in a clause-initial position. I will get back to this issue in section 5.3.2.⁷

A drawback of Rivero and Terzi’s account is that it neglects that in both Spanish and Modern Greek, the morphosyntax of negation is similar to that of clitics. In negative sentences in Modern Greek, Spanish and Italian, negation always precedes the verb, and nothing (except for pronominal clitics and a small set of monosyllabic adverbs) can intervene between them. That is, just like pronominal clitics, negation is very closely associated with the verb, and it is treated as a unit with the verb in the overt syntax. It must be noted, however, as Rivero and Terzi (1995) point out, that negation in these languages, unlike pronominal clitics, can be modified by adverbs ((12a), (13a)), receive stress ((12b), (13b)), and stand in isolation ((12c), (13c)).

- (12) Modern Greek
- a. *O Yannis shedon den efage.*
 the Yannis almost Neg eat-Past
 ‘Yannis almost didn’t eat.’
- b. *Aftos DEN tha figi.*
 he Neg Fut leave-Pres
 ‘He will not leave.’
- c. *Mi!*
- (13) Spanish
- a. *Juan casi no comió.*
 John almost Neg eat
 ‘John almost didn’t eat.’

7. Bulgarian and Serbo-Croatian do not behave identically in avoiding clause-initial clitic pronouns. In Bulgarian, clitic pronouns can occur between Neg^0 and the verb, and are not restricted to second position. On the other hand, in Serbo-Croatian, clitic pronouns cannot occur between Neg^0 and the verb, and must occupy second position. As a result, Rivero (1994b) classifies Bulgarian as a Tobler-Mussafia language and Serbo-Croatian as a Wackernagel language. No matter what the differences may be, what is important here is that the two languages have a phonological constraint that rules out clitic pronouns in a clause-initial position.

- b. *Juan NO viene.*
 John Neg come-Pres
 'John will not come.'
- c. *No!*

But the crucial point here is that when a sentence contains a verb and a negation, the negation must function together with the verb in overt syntax.

In Italian, the behavior of negation in Aux-to-Comp constructions indicates that negation and the verb function as a unit in overt syntax. In these constructions, a participle or infinitive auxiliary (or, marginally, a subjunctive form) inverts around a subject, as in (14a) (Rizzi 1982). According to Rizzi, in these constructions, the subject occupies [Spec, IP] and the auxiliary has moved to C^0 . In negative Aux-to-Comp constructions, negation together with the verb inverts with the subject, as in (14b), indicating that the two items have moved to C^0 as a unit.

- (14) Italian
- a. *Avendo Gianni fatto questo, ...*
 having Gianni done this, ...
- b. *Non avendo Gianni fatto questo, ...*
 Neg having Gianni done this, ...

Alternatively, as suggested in Rivero (1994a), the auxiliary in (14a) and (14b) might occupy not C^0 , but a functional head lower than C^0 and Neg^0 , and the subject NP might be lower in the tree. But Cinque (1999: 148) has shown with adverb placement that the verb is indeed in C^0 in Aux-to-Comp constructions. Based on the assumption that different classes of adverbs occur each in a fixed position in the specifier of a different functional projections in the IP space, and that the functional projections are hierarchically structured, he shows that the auxiliary in Aux-to-Comp constructions precede all types of adverbs, even the ones that arguably occupy the specifier of the highest functional projection. These adverbs include evaluative adverbs such as *fortunatamente* ('fortunately'), and evidential adverbs such as *evidentemente* ('evidently').

- (15) Italian
- a. *Arrivato fortunatamente anche Gianni, potemmo partire subito.*
 arrived fortunately even Gianni, we-could arrived
subito.
 immediately
 'Even Gianni having luckily arrived, we could leave immediately.'
- b. **Fortunatamente arrivato anche Gianni, potemmo partire subito.*
 fortunately arrived even Gianni, we-could leave
subito.
 immediately
 'Even Gianni having luckily arrived, we could leave immediately.'

- (16) Italian
- a. *Arrivato evidentemente anche Gianni, hanno deciso di*
 arrived evidently even Gianni, they-have decided to
partire.
 leave
 'Even Gianni having evidently arrived, they decided to leave.'
- b. **Evidentemente arrivato anche Gianni, hanno deciso di*
 evidently arrived even Gianni, they-have decided to
partire.
 leave.
 'Even Gianni having evidently arrived, they decided to leave.'

According to Cinque, in negative Aux-to-Comp constructions, the auxiliary moves to C^0 followed by a cliticization of negation. But given Rivero and Terzi's analysis, Neg^0 cannot incorporate onto nor be bypassed by a verb, and so the example in (14b) is incorrectly expected to be ungrammatical. On the other hand, given the behavior of negation and the auxiliary in Aux-to-Comp constructions, we expect Neg^0 and the verb to move to C^0 as a unit in negative imperatives as well. Thus, it is not surprising that the verb cannot move across Neg^0 in negative imperatives, as Rivero and Terzi claim. But what is puzzling is that negative imperatives are ruled out in a language that allows verb movement to C^0 along with negation in other constructions.

For Spanish and Modern Greek, it is difficult to come up with independent examples that have V-C movement. In particular, it has been convincingly shown by Suñer (1994) and Ordóñez (1997) for Spanish, and Alexiadou and Anagnostopoulou (1998) for Modern Greek that in sentences with Verb-Subject-Object (VSO) order, the verb moves to the highest functional head in the IP space and the subject stays in a VP internal position. However, according to Zanuttini (1997) and Cinque (1999), $NegP$ is not the highest functional projection in Romance (and presumably in Modern Greek as well). If they are correct, then we have evidence for negation functioning as a unit with the verb in the overt syntax in these languages as well. In negative sentences in Spanish and Modern Greek, negation always immediately precedes the main verb. This suggests that when the verb moves to the highest functional head, negation moves along with it, pro-cliticizing to the verb. Rivero and Terzi's analysis then raises the following question: If in general the verb can move to a functional head along with negation, why can't it move to C^0 along with negation in imperatives?

4. Establishing an imperative operator in C^0

In this section, I establish that imperatives have CP structures and that C^0 contains the imperative operator across languages. I establish this indirectly by presenting

various arguments from the literature that imperative verbs move to C⁰ because C⁰ hosts an imperative operator. This result is based mainly on data from English, German, French, Spanish, Italian and Modern Greek.

4.1. Subject position

In German, when an imperative has an overt subject, the verb precedes the subject, as shown in (17).⁸

- (17) German
- a. *Schreib du den Aufsatz!*
write-2sg.Imp you the paper
'You write the paper!'
 - b. **Du schreib den Aufsatz!*
you write-2sg.Imp the paper
'You write the paper!'

In *yes-no* questions, the verb also precedes the subject, as in (18).⁹

- (18) German
- a. *Schreibst du den Aufsatz?*
write-2sg. you the paper
'Are you writing the paper?'
 - b. **Du schreibst den Aufsatz?*
you write-2sg. the paper
'Are you writing the paper?'

The fact that the verb must precede the subject in both imperatives and *yes-no* questions suggests that the verb in imperatives is located wherever the verb in *yes-no* questions is.

Where is the verb in *yes-no* questions in German? Den Besten (1989) observes that in German, weak object pronouns preferably occur immediately to the right of the complementizer as in (19a), but that they can also occur immediately after the subject as in (19b).

- (19) German
- a. ..., *daß ihm Karl ein Buch geschenkt hat.*
..., that to-him Karl a book given has
'... that Karl has given a book to him.' (den Besten 1989: Ch. 1, 71a)

8. (17b) is acceptable if *du* ("you") is considered to be a vocative pronoun. In this case, the sentence is pronounced with a pause after *du*.

9. (18b) is acceptable as an echo question.

- b. ..., *daß Karl ihm ein Buch geschenkt hat.*
 ..., that Karl to-him a book given has
 '..., that Karl has given a book to him.' (den Besten 1989: Ch. 1, 71b)

He then shows that in *yes-no* questions, weak object pronouns occur either immediately after the verb (as in (20a)) or immediately after the subject (as in (20b)).

- (20) German
- a. *Werden sich diese Leute verteidigen?*
 will themselves these people defend
 'Will these people defend themselves?'
- b. *Werden diese Leute sich verteidigen?*
 will these people themselves defend
 'Will these people defend themselves?'

Assuming that the complementizer *daß* is in C^0 , and that the possible positions for weak object pronouns are constant across all clause types, den Besten concludes that the preposed verb in *yes-no* questions is in C^0 .

It turns out that weak object pronouns in imperatives pattern just like those in *yes-no* questions: i.e., they can occur either immediately after the verb or immediately after the subject.

- (21) German
- a. *Schreib es du heute!*
 write-2sg.Imp it you today
 'You write it today!'
- b. *Schreib du es heute!*
 write-2sg.Imp you it today
 'You write it today!'

Thus, we can conclude that the verb in imperatives is located wherever the verb in *yes-no* questions is located, namely C^0 .

In English, imperative verbs follow the subject in affirmative imperatives as in (22a). But in imperatives with *do*-support, i.e., negative and emphatic imperatives, *do* precedes the subject as in (22b, c, d).¹⁰

10. According to Henry (1995), imperatives with an overt subject in Belfast English can have verb-subject order.

(i) *Go you away.* (Henry 1995: Ch. 3, 47a)

(ii) *Run somebody to the telephone.* (Henry 1995: Ch. 3, 48b)

Henry takes such sentences as instances of generalized imperative verb movement to C^0 . Imperatives in the history of English also show verb-subject order until Early Modern English (Han

- (22) a. *You open the door!*
 b. *Don't anybody move!*
 c. *Don't you talk back to me!*
 d. *Do at least some of you have a try!* (Davies 1986: Ch. 3, 88)

If the imperative subject occupies [Spec, IP] in overt syntax, then the fact that *do* precedes the subject allows us to conclude that *do* is located in a functional head which projects higher than IP. However, if the subject is in [Spec, VP] in overt syntax, then we cannot draw such a conclusion. Potsdam (1998) provides evidence that the subject in imperatives is indeed in [Spec, IP] and not in [Spec, VP]. I review his evidence, which is based on the behavior of subject-oriented floating quantifiers and on adverb placement in imperatives.

Subject-oriented floating quantifiers have been used to argue that a sentential subject starts out lower in the clause before ending up in [Spec, IP] (Sportiche 1988). For instance, in (23), the subject *all the rebels* starts out together lower in the clause, presumably in [Spec, VP], and *the rebels* moves up to [Spec, IP], stranding *all*.¹¹

- (23) *The rebels might all have fled.*

Potsdam shows that subject-oriented floating quantifiers are allowed in imperatives.

- (24) a. *You be both waiting for me promptly at 3!*
 b. *Don't you all spend the whole time fighting!*

This suggests that subjects of imperatives undergo a similar derivation. They start out together with the quantifier lower in the clause, and then the quantifier is stranded as the subject moves up to [Spec, IP].

Following Jackendoff (1972), Potsdam further observes that adverbs such as *simply* and *just* occur between the subject and the main verb, and proposes that these adverbs left-adjoin to *I'*, or to VP or *V'*. This is illustrated in (25).

- (25) a. *He simply/just is incapable of it.*
 b. *He is simply/just incapable of it.*
 c. **Simply/just he is incapable of it.*

In imperatives, these adverbs cannot precede the subject either, as shown in (26) and (27).

2000a). These facts render some support to the claim that auxiliary *do* is in C^0 in Present-day English.

11. Examples from (23) to (27) are from Potsdam (1998).

- (26) *There's plenty of room.*
 a. *Everyone simply move to his right a little!*
 b. **Simply everyone move to his right a little!*
- (27) a. *Don't you just stand there like a bump on a log!*
 b. **Don't just you stand there like a bump on a log!*

If the subject in imperatives occupies [Spec, VP], then the examples in (26b) and (27b) should be grammatical, contrary to fact. Potsdam therefore concludes that imperative subjects occupy [Spec, IP], just like the subjects in other clause types.¹²

Given that imperative subjects occupy [Spec, IP], we can conclude that at least *do* and *don't* in imperatives are in C⁰, since they precede the subject, as shown in (22b, c, d).¹³ But lexical verbs are lower in the clause, as they must follow the imperative subject, as in (22a), undergoing feature movement to C⁰ at LF.

4.2. Clitic placement

In French, Italian, Spanish and Modern Greek, a direct object clitic must follow the verb in imperatives, whereas it must precede the verb in other types of constructions, such as indicatives and subjunctives. This is illustrated from (28) to (31).

- (28) French
 a. *Faites le!*
 do-2sg.Imp it
 'Do it!'
 b. **Le faites!*
 it do-2sg.Imp
 'Do it!'
- (29) Modern Greek
 a. *Diavase to!*
 read-2sg.Imp it
 'Read it!' (Rivero and Terzi 1995, 4a)
 b. **To diavase!*
 it read-2sg.Imp
 'Read it!'

12. See Platzack and Rosengren (1997) for a different analysis of the syntax of the imperative subject.

13. See Potsdam (1997, 1998) for further evidence for the proposal that *do* and *don't* in imperatives are in C⁰. Similar proposals include Emonds (1970), Beukema and Coopmans (1989), and Zanuttini (1991). See Zhang (1990) and Rupp (1998) for different views on the syntax of *do* and *don't* in imperatives.

- (30) Spanish
- a. *¡Lee lo!*
 read-2sg.Imp it
 'Read it!' (Rivero and Terzi 1995, 4b)
- b. **¡Lo lee!*
 it read-2sg.Imp
 'Read it!'
- (31) Italian
- a. *Telefonale!*
 call-her
 'Call her!'
- b. **Le telefona!*
 her call
 'Call her!'

According to Kayne (1991, 1994), a clitic adjoins to a functional head which projects above I^0 . In subjunctives or indicatives, the verb moves to I^0 , resulting in clitic-verb order. Adopting Kayne's analysis, Rivero (1994b) and Rivero and Terzi (1995) take the verb-clitic order in imperatives to indicate that the imperative verb moves to C^0 , bypassing the functional head to which the clitic is adjoined.

4.3. *Adverbial placement*

As supporting evidence for imperative verb movement to C^0 in Italian, Zanuttini (1997) shows that the verb must precede the adverbial *di sicuro* ("definitely"), which is assumed to occur quite high in the clause structure.

- (32) Italian
- a. *Fallo di sicuro!*
 do-2sg.Imp-it of sure
 'Definitely do it!'
- b. **Di sicuro fallo!*
 of sure do-it
 'Definitely do it!'

Further evidence concerning the position of the imperative verb comes from the placement of *ben* and *pure* ("indeed"). In Aux-to-Comp constructions, these adverbs can occur either between the subject and the participle (as in (33a)), or between the auxiliary and the subject (as in (33b)).

- (33) Italian
- a. *?Avesse Gianni pur/ben capito il problema, ...*
 had Gianni indeed understood the problem, ...
 'Even if Gianni had understood the problem, ...'

- b. *Avesse pur/ben Gianni capito il problema, ...*
 had indeed Gianni understood the problem, ...
 'Even if Gianni had understood the problem, ...'

Given that in Aux-to-Comp constructions, the subject is in [Spec, IP] and the auxiliary is in C⁰ (Rizzi 1982, Cinque 1999), (33b) indicates that the adverbs can occur at the left periphery of IP.

Zanuttini shows that imperative verbs in Italian obligatorily precede the adverbs *pure* and *ben*. This is consistent with the assumption that the imperative verb ends up as high as the auxiliary in Aux-to-Comp constructions, namely in C⁰.¹⁴

(34) Italian

- a. *Dagli ben una risposta!*
 give-2sg.Imp-him indeed an answer
 'Do give him an answer!' (Zanuttini 1997: Ch. 4, 80a)
 b. **Ben dagli una risposta!* (Zanuttini 1997: Ch. 4, 80b)

(35) Italian

- a. *Fallo pure!*
 do-2sg.Imp-it indeed
 'Go ahead and do it!' (Zanuttini 1997: Ch. 4, 81a)
 b. **Pure fallo!* (Zanuttini 1997: Ch. 4, 81b)

4.4. Implications for the interpretation of imperatives

If there is an imperative operator in the syntax of imperatives, what is its interpretive effect? I assume that the imperative operator is a place holder at LF for illocutionary force, which gets filled in by pragmatics. In other words, the fact that imperatives have an illocutionary force is not the result of pragmatic inference, but of its direct encoding in their logical forms. And pragmatic reasoning and inference contribute in determining the exact content of the illocutionary force expressed by the imperative. This way of looking at things is consistent with the fact that although imperatives canonically express directive force, it can also express non-directive forces such as permissions, wishes, dares and threats depending on the discourse context.¹⁵

14. As the reviewer points out, we cannot be sure that the adverbs *ben/pure* are in the same position in the examples in (34a) and (35a), as they are in (33b). In fact, the examples in (33) indicates that they can occur at least in two different positions. The crucial point here is that if the imperative verb were low in the clause, we should be able to put *ben/pure* after the imperative verb as well as before it. But the fact that they obligatorily occur before the imperative verb strongly suggests that the imperative verb is high enough that the adverbs can never occur before it.

15. This way of characterizing the semantics of the imperative operator is in spirit very similar to the semantics of modality given in Kratzer (1991). For instance, the modal verb *must* is associated

An important interpretive effect we get for free by positing an imperative operator in syntax is the possibility of interaction between the imperative operator and other scopal elements, e.g., negation, at LF. I explore this scopal interaction to account for the variation in the availability of negative imperatives, as will be spelled out in section 5.

At this point, I will make a brief digression to clarify my views on the interpretive contribution of the imperative operator. The imperative operator is responsible for associating an imperative sentence with an illocutionary force, thereby allowing a speaker to use the sentence to perform a speech act. I take the imperative operator as a function that takes a proposition (p) and turns it into a “directive action”. I use the concept of *instruction* to define “directive action”. I propose that by performing a directive action, the speaker instructs the hearer to update a particular module which I call the *plan set*. A hearer’s plan set is a set of propositions that specifies his/her intentions which represents the state of affairs the hearer intends to bring about. Thus, an imperative is an instruction to the hearer to add p to his/her plan set. The notion of plan presupposes that the planner has the ability to carry out the plan. In imperatives, since the speaker is instructing the hearer to update the plan set, the hearer is, in effect, the planner. Hence, issuing this instruction implies that the speaker believes that the hearer has the ability to bring about p . If the hearer updates the plan set with p , then the hearer intends to bring about the situation described by p . Moreover, a plan is a future-oriented notion: if you are planning to bring about the situation described by p , then the situation is not realized at the time that p is planned and it can be realized in the future. Further, if the speaker tells the hearer to plan to bring about the situation described by p , the implication is that the speaker wants the situation described by p to be brought about, hence giving rise to the directive illocutionary force. More on the interpretation of imperatives is in Han (1999a, 2000b).

Then what about imperatives that have non-directive force, such as permissions, wishes, and threats? Sentences in general can be used by speakers to perform *indirect speech acts*, by virtue of conversational implicatures arising from Gricean inference in discourse contexts (see Grice 1975; Searle 1975). Since interpreting the imperative operator is the job of pragmatics, the canonical force associated with it can be cancelled and it can instead generate non-canonical force depending on the discourse context. In a context in which a person A has expressed the desire and intention to perform p , the implication is that A already has p in her plan set. For instance, if A knocks on your door, then A is expressing her desire and intention to come in. That is, by knocking on your door, A is implying that her plan is to come in. By uttering *Come in!* in this context, you are acknowledging

with two functions that each returns a *modal base*, and an *ordering source*. These functions are evaluated against a conversational background, which determines whether the modal verb has epistemic reading or deontic reading. That is, the semantics provides the place holders for modal base and ordering source, and pragmatics fills them in.

A's plan, rather than instructing A to update her plan set. It may be that if an imperative is uttered in a context in which it is already known that the hearer has *p* in the plan set, then it performs the speech act of permission as an indirect speech act.

An alternative to the present approach is to argue that imperatives merely denote a certain type of proposition. Bolinger (1977) argues that imperatives are a type of bare infinitival that denotes hypothetical situations. Huntley (1984) and Davies (1986) argue that imperatives denote propositions that specify potential situations. Wilson and Sperber (1988) argue that imperatives denote propositions that specify possible and desirable situations, where the situation is either desirable to the speaker or the hearer. According to all these studies, the illocutionary force (both directive and non-directive force) expressed by imperatives is the result of pragmatic reasoning and inference based on discourse contexts. Under this approach, "imperative" becomes a purely pragmatic category. If, however, "imperative" is a pragmatic category, the fact that so many languages have special morphosyntactic forms for the canonical expression of directives remains unexplained.

5. Interaction between force and negation

The analysis I propose for the cross-linguistic variation in the compatibility of negation and imperatives builds upon the intuition that the directive force contributed by the imperative mood cannot be negated by a negative marker. That is, negative imperatives have only a reading in which the directive force has scope over negation, never one in which negation has scope over the directive force. I illustrate this point in (36) with the closest possible paraphrases I could think of for the reading in which negation takes scope over the directive force as well as for the reading in which the directive force takes scope over negation.¹⁶

- (36) a. *Don't call!*
 ≈ I require that you not call.
 ≠ I do not require that you call.
- b. *Nobody leave!*
 ≈ I require that not anybody leave.
 ≠ I do not require that anybody leave.

This fact is not specific to imperatives, but holds of interrogatives and declaratives as well. Just as the directive force of an imperative cannot be negated, neither can the question force of an interrogative nor the assertive force of a declarative:

16. One may argue that since a paraphrase for the reading in which negation takes scope over the directive force is possible, languages should allow force to be negated. However, note that the paraphrase is not in the imperative form, but is in the declarative form. In this declarative form, negation is negating the propositional content, and not the illocutionary force itself.

i.e., a negative interrogative cannot be a non-question, and a negative declarative cannot be a non-assertion. This intuition was already noted by Frege (Frege 1960; Dummett 1973), consequently positing that illocutionary force operators cannot be negated.¹⁷

I propose an account of the cross-linguistic variation in the availability of negative imperatives based on the intuition that the illocutionary force cannot be negated and on the assumption that the imperative operator encoding the illocutionary force is located in C^0 . The proposal is that negative imperatives are unavailable in some languages because they instantiate a syntactic configuration in which negation would take scope over the imperative operator in C^0 . This configuration is ruled out because it maps onto an inappropriate interpretive representation in which the illocutionary force is negated. Under the proposed analysis, negative imperatives are ruled out for interpretational rather than for purely syntactic reasons.

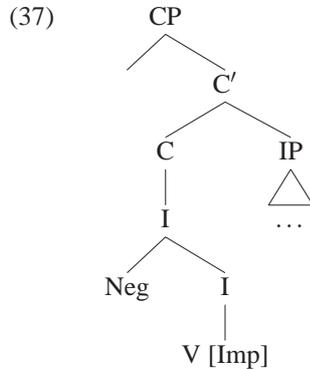
5.1. *Languages without negative imperatives*

Recall that negative imperatives are not available in Modern Greek, Spanish or Italian (in the 2nd person singular). As was shown in section 4, in all these languages, the imperative verb moves to C^0 . I take this to mean that the imperative operator in C^0 attracts the [Imp] feature on the imperative verb, pied-piping the verb. I further assume that when the imperative verb moves to C^0 , the [Imp] feature on the verb is unified with the imperative operator. This in effect means that the [Imp] feature on the verb assumes the role of the imperative operator as it moves to C^0 .

In all three languages, sentential negation is expressed by a preverbal element with the status of a clitic on the verb. This means that the negative marker is treated as a unit with the verb in overt syntax. As in Zanuttini (1991, 1997), Rivero (1994b), and Cinque (1999), among others, I assume that negation in these languages heads NegP, which is located quite high in the IP space. I further assume, following Cinque (1999), that when a verb moves to C^0 , as in Aux-to-Comp constructions, negation moves along with the verb in the overt syntax, due to a morphological constraint on negation in these languages according to which it must immediately precede the main verb.

Thus, in negative imperatives, we would expect the verb to move to C^0 followed by the cliticization of negation. However, in the resulting configuration in (37), the imperative verb, which assumes the role of the imperative operator when it moves to C^0 , would end up within the scope of negation.

17. Since Frege first put forth the idea that illocutionary force operators cannot be in the scope of negation, there have been not only strong supporters, but also challengers of this idea within the speech act literature. See Horn (1989: 74–79) for a review of the literature on this issue.



I illustrate this point using the definition of *c-command* in Reinhart (1976), Chomsky (1986), and Kayne (1994).

- (38) Definition of *c-command*
 X *c-commands* Y iff X and Y are categories and X excludes Y (i.e., no segment of X dominates Y) and every category that dominates X dominates Y.

Under the definition of *c-command* in (38), when negation and the verb move to C^0 , negation *c-commands* the verb because no segment of Neg^0 dominates V^0 and every category that dominates Neg^0 dominates V^0 , as shown in (37). The categories that dominate Neg^0 include C^0 and CP. These categories also dominate V^0 . But I^0 does not count because only a segment of I^0 dominates Neg^0 . On the other hand, the verb does not *c-command* negation because I^0 does not dominate Neg^0 (only a segment of I^0 dominates Neg^0), while it dominates V^0 .

Negation thus asymmetrically takes scope over the imperative verb, which assumes the function of the imperative operator as it moves to C^0 . The other scope possibility, where the imperative verb takes scope over negation, is ruled out by the syntax. Consequently, the directive force would end up being negated, resulting in an incoherent interpretation.

5.2. Languages with negative imperatives

Languages with negative imperatives include English, French and German. In German, the verb in imperatives moves to C^0 , but negation never forms a unit with the verb, and so it never ends up in C^0 . Since Neg^0 stays low in the clause, it does not take scope over the imperative operator of C^0 .

In French, the imperative verb and the negative marker *ne* form a unit, and so when the imperative verb moves to C^0 , *ne* ends up there as well. Thus, the proposed analysis seems to predict incorrectly that imperatives should be incompatible with negation in French. A closer look reveals why imperatives and negation

are compatible in French after all. French forms sentential negation with *ne ... pas*, where *ne* is a proclitic on the verb. In informal registers, *ne* is optional, indicating that *ne* is pleonastic and that sentential negation is expressed by *pas*. This, then, is why negative imperatives are available in French: the imperative verb moves to C^0 with the pleonastic *ne*, but the true negation *pas* stays low in the clause, as in German.

Further, the proposed analysis predicts that *ne* can never be a true negation in imperatives. In French, some verbs can be negated without *pas* in declaratives: they include *oser* “dare”, *savoir* “know”, *pouvoir* “be able to” and *cesser* “stop”. A negative sentence with these verbs can be formed with *ne ... pas* or *ne* alone, as shown in (39).

- (39) French
- a. *Il ne cesse de parler.*
He NE stops-2pl.Imp to speak
'He does not stop speaking.'
 - b. *Il ne cesse pas de parler.*
He NE stops-2pl.Imp Neg to speak
'He does not stop speaking.'

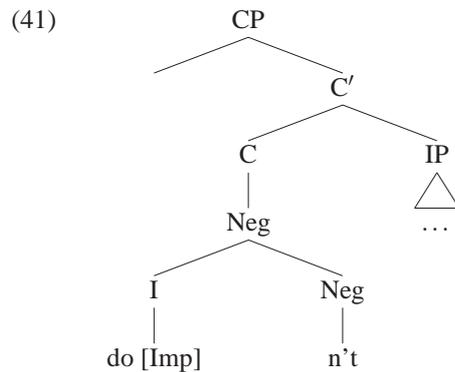
This means that in negative sentences without *pas*, as in (39a), *ne* is forced to be the true negation. The prediction then is that negative imperatives with these verbs can only be formed with *ne ... pas*. This is borne out by the facts, as shown in (40).

- (40) French
- a. **Ne cessez de parler.*
NE stop-2pl.Imp to speak
'Don't stop speaking.'
 - b. *Ne cessez pas de parler.*
NE stop-2pl.Imp Neg to speak
'Don't stop speaking.'

English has two types of negative imperatives: *do not* imperatives, as in *Do not call*, and *don't* imperatives, as in *Don't call*. The explanation for why *do not* imperatives are available is simple: *do* alone moves to C^0 , and *not* stays low in the clause. As a result, negation does not take scope over the imperative operator of C^0 .

In the case of *don't* imperatives, negation forms a unit with *do*. Moreover, as was argued in section 4.1, *don't* occupies C^0 . Just as in Spanish, Italian and Modern Greek, in *don't* imperatives, negation and the imperative verb form a unit and move to C^0 , the locus of the imperative operator. However, unlike Spanish, Italian and Modern Greek, *don't* imperatives are ruled in. My account of the possibility of *don't* imperatives depends on the assumption that syntactic adjunction is always

left-adjunction, following Kayne (1994). This means that the head of the complex *don't* is negation *n't*. We can derive this result with no problem by adopting an extended clause structure for English proposed in Zanuttini (1991) and Baltin (1993). In such extended clause structures, there are two positions for negation, *n't* occupying the higher position, and there is an intervening functional projection between the two negation projections. *Do* is inserted in the head of this intervening functional projection, and then left-adjoins to *n't*, yielding *don't*. The structure of *don't* imperatives after all the movements have taken place is as in (41).



In (41), *do* c-commands Neg^0 because every category that dominates I^0 dominates Neg^0 , and no segment of I^0 dominates Neg^0 . But Neg^0 does not c-command *do* because Neg^0 does not exclude I^0 (i.e., a segment of Neg^0 dominates I^0). That is, *do* asymmetrically c-commands Neg^0 . Given that *do* assumes the function of the imperative operator as it moves to C^0 , negation does not take scope over the imperative operator, and so the directive force encoded in the imperative operator is not negated. Thus, *don't* imperatives are not ruled out.

Table 2 summarizes the analysis so far. In all the languages I have looked at up till now, the imperative verb moves to C^0 . The table shows that negative imperatives are not available in languages where negation c-commands the imperative verb. I have argued that this is because such configuration ends up with an interpretive representation in which negation takes scope over the imperative operator.

5.3. Clitic negation on imperatives: When can this happen?

In languages like Bulgarian and Serbo-Croatian, pronominal clitics encliticize onto the imperative verb, negative sentences are formed with clitic-like preverbal negation, and yet negative imperatives are possible, as shown in (42) and (43).

- (42) Bulgarian
- a. *Četi ja!*
 read-2sg.Imp it
 'Read it!'

Table 2. Summary

| Language | V-C movement | Neg c-commands V | Negative imperatives |
|-----------------------|--------------|------------------|----------------------|
| Spanish | ✓ | ✓ | * |
| Modern Greek | ✓ | ✓ | * |
| Italian (sg.) | ✓ | ✓ | * |
| French | ✓ | * | ✓ |
| German | ✓ | * | ✓ |
| English (<i>do</i>) | ✓ | * | ✓ |
| Bulgarian | | | ✓ |
| Serbo-Croatian | | | ✓ |

- b. *Ne ja četi!*
 Neg it read-2sg.Imp
 'Don't read it!'

(43) Serbo-Croatian

- a. *Čitaj je!*
 read-2sg.Imp it
 'Read it!'
- b. *Ne čitaj je!*
 Neg read-2sg.Imp it.
 'Don't read it!'

These facts appear to be counterexamples to the proposed analysis because they suggest that although the imperative verb moves to C^0 and negation c-commands the imperative verb, negation and imperatives are compatible.

5.3.1. *No imperative verb movement to C^0 in overt syntax.* On a closer look, Bulgarian and Serbo-Croatian are not counterexamples because the imperative verb is not in C^0 in overt syntax in these languages. Following Rivero and Terzi (1995), I take the fact that clitics can appear preverbally in imperatives when they are not clause-initial as evidence that the imperative verb is low in the clause. This is shown in (44).

- (44) a. Serbo-Croatian
Knjige im čitajte!
 books to-them read-2pl.Imp
 'Read books to them!' (Rivero and Terzi 1995: 17a)
- b. Bulgarian
Ela i mi kaži!
 come-2sg.Imp and me tell-2sg.Imp
 'Come and tell me!' (Rivero 1994c: 35)

I assume that Bulgarian and Serbo-Croatian imperatives also have an imperative operator in C^0 and that the [Imp] feature on the imperative verb moves to C^0 at LF. As in Chomsky (1995), feature movement at LF pied-pipes other formal features, but not interpretive features. This means that the interpretive feature on Neg^0 is left behind. Consequently, Neg^0 does not take scope over the imperative operator, and so negative imperatives are not ruled out.¹⁸

If, however, imperative verbs do not move to C^0 in overt syntax, how can we explain the fact that clitics encliticize in some imperatives as in (42) and (43)? An answer will be given in section 5.3.2.

5.3.2. *C^0 as the locus of illocutionary force operators.* Recall from section 3.2 that Rivero and Terzi argue that C^0 cannot host an operator which encodes directive or question force in Bulgarian and Serbo-Croatian. Their claim is that C^0 is the locus for last-resort verb movement to prevent clitics from occupying the first position. This claim can be contradicted on two grounds: (i) it can be shown that verbs do not move to C^0 to prevent clitics from occurring in the first position, and (ii) it can be shown that C^0 does have a role in the encoding of illocutionary forces.

5.3.2.1. *No last resort verb movement to C^0 .* If we adopt the account of participle-aux orders in Slavic given in Embick and Izvorski (1997), which they extend to verb-pronominal clitic orders, we can do away with the claim that C^0 is reserved for verb movement to prevent clitics from appearing in the first position. In Slavic, some sentences show participle-aux orders, as in (45).

- (45) Slovak
Napísal som list.
 written am letter
 'I have written a letter.' (Embick and Izvorski 1997: 1)

According to Embick and Izvorski (1997), some auxiliaries in Slavic are like clitics, and cannot occur in a sentence-initial position. They show that when clitic

18. This can be reformulated in terms of AGREE between GOAL and PROBE as in Chomsky (1998). The imperative operator is a PROBE, and AGREES with the imperative verb, which is the GOAL, by matching their features, without any movement. I will not be using the AGREE mechanism, since it makes no difference to the analysis developed here. As for the purposes of the proposals I am making in this paper, AGREE is just a notational variant of LF feature movement. The real question that I don't really have a good answer for is why the imperative operator in Bulgarian and Serbo-Croatian can trigger feature movement, while other languages such as Italian, Spanish and Modern Greek require overt movement of the verb. Perhaps a close study of the morphological system can give us a hint as to why there should be this cross-linguistic variation, as some correlation between rich morphology and overt verb movement has been established (cf. Emonds 1970; Pollock 1989; Platzack and Holmberg 1989). Note that it is not so strange to see overt/feature movement variation in the domain of imperatives, given that similar variation is attested in interrogatives as well as declaratives across languages.

auxiliaries are stranded by the syntax in sentence-initial position, Morphological Merger (Marantz 1988, 1989) operates at a post-syntactic level to invert the stranded clitic auxiliary with an adjacent element, i.e., the participle, satisfying the clitic's need for a host, and yielding participle-aux orders. They extend the account to verb-clitic orders, and argue that clause-initial clitics affix onto the adjacent verb at a post-syntactic level, eliminating the motivation for last-resort verb movement to C^0 .

Given this analysis, we immediately have an explanation for imperatives in which clitics have encliticized onto the imperative verb, as in (42a) and (43a): the clitics have affixed onto the verb in I^0 at a post-syntactic level. Also, clitics procliticize in negative imperatives in Bulgarian, as in (42b), because the presence of *ne* renders Morphological Merger unnecessary.

I still need to explain why clitics encliticize in Serbo-Croatian negative imperatives, as shown in (43b). As pointed out by Rivero and Terzi (1995), in Serbo-Croatian, pronominal clitics cannot intervene between negation *ne* and the verb. This is exemplified by the indicative sentences in (46).

- (46) Serbo-Croatian
- a. *Ne čitate je.*
 Neg read-2pl.Pres.Ind it
 'You are not reading it.'
- b. **Ne je čitate.*
 Neg it read-2pl.Pres.Ind
 'You are not reading it.'

Thus, the fact that clitics encliticize in negative imperatives in Serbo-Croatian is simply due to an independent constraint of the language.

5.3.2.2. *Encoding of illocutionary forces in C^0 .* The facts from interrogatives in Bulgarian and Serbo-Croatian establish that C^0 does indeed have something to do with encoding illocutionary forces. In *wh*-questions, all *wh*-phrases undergo fronting.

- (47) a. Bulgarian
Koj kak udari Ivan?
 who how hit Ivan
 'Who hit Ivan how?'
- b. Serbo-Croatian
Ko gdje spava?
 who where sleeps
 'Who sleeps where?'

Rudin (1988) divides Slavic into two groups with respect to multiple *wh*-movement: in some languages, all *wh*-phrases occupy [Spec, CP], while in others, only

one *wh*-phrase occupies [Spec, CP] and the other *wh*-phrases are adjoined to IP. According to Rudin, Bulgarian belongs to the first group and Serbo-Croatian to the second. The crucial point for our purposes is that at least one of the *wh*-phrases must move to [Spec, CP] in these languages. The question, then, is why at least one *wh*-phrase moves to [Spec, CP] even when there is no clitic (either pronominal or auxiliary) to support. It has been argued that the *wh*-phrases move to [Spec, CP] to be in Spec-head configuration with the question operator in C⁰. Moreover, the Bulgarian particle *li* which occurs in *yes-no* questions is argued to be a complementizer in C⁰ (Rivero 1993; Rudin 1993; Izvorski et al. 1997). If these accounts are correct, then the syntax of interrogatives is another case of C⁰ hosting an operator that has something to do with illocutionary force.

Under the simplest theory, if C⁰ is the locus of an operator that encodes question force in a language, it can also be the locus of the operator that encodes directive force in that language. Within such a simple theory, the fact that a sentence cannot be both an imperative and an interrogative follows without any stipulation. Moreover, type theory would be simplified since operators with the same semantic type would associate with the same syntactic category.¹⁹

5.4. Summary of the analysis

Table 3 summarizes the proposed analysis. It shows that imperatives are not available in a language if (i) the imperative verb moves to C⁰ overtly and, (ii) negation c-commands the imperative verb. Assuming the presence of an imperative operator, I argued that the two facts conspire to derive an incoherent interpretive representation in which negation takes scope over the directive force encoded by the imperative operator.

6. Suppletion and negative commands

6.1. Spanish and Modern Greek

In Spanish and Modern Greek, subjunctive forms are used to express negative commands. The question I address in this subsection is why subjunctives, which are used to express negative commands, are compatible with negation in these languages and why they can be so used.

19. A reviewer points out that just because a language uses C⁰ to encode illocutionary force in interrogatives doesn't necessarily mean that it also uses C⁰ to encode force in imperatives. This is ultimately an empirical issue. The point here is that a system would be the simplest if all force-indicating operators compete for the same position, just as different types of tense might compete for the same position.

Table 3. Summary

| Language | V-C movement | Neg c-commands V | Negative imperatives |
|-----------------------|--------------|------------------|----------------------|
| Spanish | ✓ | ✓ | * |
| Modern Greek | ✓ | ✓ | * |
| Italian (sg.) | ✓ | ✓ | * |
| French | ✓ | * | ✓ |
| German | ✓ | * | ✓ |
| English (<i>do</i>) | ✓ | * | ✓ |
| Bulgarian | * | ✓ | ✓ |
| Serbo-Croatian | * | ✓ | ✓ |

In Modern Greek, the syntax of matrix subjunctives that express negative commands is similar to that of embedded subjunctives: in both, clitics precede the verb.

(48) Modern Greek

- a. *O Yannis se dietakse na min to grapsis.*
 the Yannis you ordered-2sg NA Neg it write-2sg.Subj
 'Yannis ordered you not to write it.'
- b. **O Yannis se dietakse na min grapsis to.*
 the Yannis you ordered-2sg NA Neg write-2sg.Subj to
 'Yannis ordered you not to write it.'

(49) Modern Greek

- a. *Na min to grapsis.*
 NA Neg it write-2sg.Subj
 'Don't write it.'
- b. **Na min grapsis to.*
 NA Neg write-2sg.Subj it
 'Don't write it.'

The facts of Spanish are parallel, as shown below.

(50) Spanish

- a. *Ordeno que no me deis el libro.*
 order that Neg me give-2pl.Subj the book
 'I order you not to give me the book.'
- b. **Ordeno que no deis me el libro.*
 order that Neg give-2pl.Subj me the book
 'I order you not to give me the book.'

- (51) Spanish
- a. *¡No me deis el libro!*
 Neg me give-2pl.Subj the book
 'Don't give me the book!'
- b. **¡No deis me el libro!*
 Neg give-2pl.Subj me the book
 'Don't give me the book!'

I take the fact that subjunctives exhibit clitic-verb order to suggest that the subjunctive verb does not move higher than the functional head to which clitics adjoin. Under this analysis, the subjunctive verb does not move as high as the imperative verb does.

I adopt the proposals in Kempchinsky (1987) and Zanuttini (1991) for the syntax of subjunctives. Kempchinsky (1987) proposes that in Romance, a volitional verb subcategorizes for a subjunctive complement clause with a subjunctive operator, in the same way that a verb subcategorizes for a *wh*-complement with a *wh*-operator. According to Zanuttini (1991), the subjunctive clause selected by a volitional verb contains in C^0 the subjunctive modality feature. The complementizer *that* in English subjunctives is a manifestation of this feature. Along the same lines, I assume that subjunctives have a subjunctive operator in C^0 that selects subjunctive INFL. A similar idea has already been suggested in Rooryck (1992): C^0 hosts an operator that triggers the subjunctive morphology in AgrS^0 and T^0 . I assume that the selection of subjunctive INFL by the subjunctive operator is instantiated through chain formation. Specifically, in embedded contexts, the volitional verb selects a C^0 which hosts the subjunctive operator and this C^0 forms a chain with the subjunctive verb in the embedded clause. In matrix contexts, the subjunctive operator in C^0 simply forms a chain with the subjunctive verb. I take this operator to encode the modality of irrealis (cf. Farkas 1992; Portner 1992; Rooryck 1992; Quer 1998).

I represent the chain between the subjunctive operator and the subjunctive verb by coindexation, as in (52).

- (52) [CP [C Subj-Op_i] [NegP [Neg] [FP [F clitic] [IP [I V_i] [VP ...]]]]]

Crucially, the subjunctive operator does not encode illocutionary force. But it does encode the modality of irrealis. Since subjunctives do not have an illocutionary force operator, the question of the availability of negative forms do not come up. The question that comes up though is why negative subjunctives can express directive force. My answer to this question has to do with the fact that all matrix sentences express a certain illocutionary force, thereby allowing the speakers to use them to perform a certain illocutionary act (Austin 1962; Searle 1969). When subjunctives are used in matrix contexts, the subjunctive operator can generate directive force via pragmatic inference since directive force is compatible with irrealis interpretation.

If 2nd person negative subjunctives can generate directive force through pragmatic inference, their affirmative counterparts should be able to as well. This is indeed the case. In Modern Greek, 2nd person affirmative subjunctives are considered to be a more polite, formal and indirect way of expressing requests than 2nd person affirmative imperatives.

- (53) Modern Greek
- a. *Grapse!*
write-2sg.Perf.Imp
'Write!'
 - b. *Na grapsis.*
NA write-2sg.Perf.Subj
'I request that you write.'

Imperatives have an imperative operator in C^0 that directly encodes directive force. But subjunctives do not. The directive force of subjunctives is indirectly generated through pragmatic inference. Therefore, 2nd person affirmative subjunctives are a more indirect way of expressing requests, and indirectness is generally perceived as politeness.

In Spanish, 2nd person affirmative subjunctives can also have directive force. But in contrast to Modern Greek, they express emphatic commands, rather than polite requests.²⁰

- (54) Spanish
- a. *¡Que te calles!*
that Refl hush-2sg.Subj
'Hush!'
 - b. *¡Que subas!*
that come-up-2sg.Subj
'Come up!'

2nd person affirmative subjunctives cannot express polite requests in Spanish for the independent reason that Spanish does not form polite expressions with 2nd person forms. In general, Spanish uses 3rd person forms to express polite formal expressions. For polite requests, Spanish uses formal imperatives, whose verbal

20. In Spanish, 2nd person affirmative subjunctives that express emphatic commands require the complementizer *que*, but 2nd person negative subjunctives that express negative commands do not. When a 2nd person negative subjunctive occurs with *que*, it is interpreted as an emphatic negative command. The obligatoriness of *que* in 2nd person affirmative subjunctives may be a reflection of a surface licensing constraint on subjunctives: i.e., subjunctives can occur only in subordinate contexts. That is, it may be that for a 2nd person affirmative subjunctive, *que* provides a subordinate context, whereas for a 2nd person negative subjunctive, *que* is not required unless emphatic interpretation is called for because the presence of negation suffices to provide a subordinate context.

forms are identical to 3rd person subjunctive forms, but whose syntax is the same as 2nd person imperatives in that pronominal clitics occur after the verb, as shown in (55a). For formal polite negative commands, Spanish uses 3rd person negative subjunctives, and pronominal clitics occur before the verb, just as with any other subjunctives, as shown in (55b).

- (55) Spanish
- a. *Hable* *le*.
 speak-2sg.Imp(formal) her
 'Please, speak to her.'
- b. *No le hable*.
 Neg her speak-3sg.Subj
 'Please, do not speak to her.'

If matrix 2nd person subjunctives can generate directive force through pragmatic inference, then in some contexts, it should be possible to cancel the directive force and to generate some other illocutionary force with irrealis interpretation. This prediction is borne out for affirmative 2nd person subjunctives, which can express wishes, in both Modern Greek and Spanish, as in (56) and (57).

- (56) Spanish
¡Que complas muchos más años!
 that count-2sg.Subj many more years
 'May you have many more years!'
- (57) Modern Greek
Na zisis!
 NA live-2sg.Subj
 'May you live!'

Another prediction is that if 2nd person subjunctives can be used in matrix contexts and receive their illocutionary force via pragmatic inference, then so should subjunctives in other person forms. This also holds. For instance, in both Modern Greek and Spanish, 3rd person subjunctives can be used in matrix contexts to express wishes or deontic modality.

- (58) Spanish
- a. *¡Que viva el rey!*
 that live-3sg.Subj the king
 'Long live the king!'
- b. *Que entre y que se caliente*.
 that enter-3sg.Subj and that Refl get-warm-3sg.Subj
 'He should come in and get warm.'

- (59) Modern Greek
- a. *Na zisi o Yannis!*
 NA live-3sg.Subj the Yannis
 'May Yannis live!'
- b. *Na grapsi kapios.*
 NA write-3sg.Subj somebody
 'Somebody should write.'

6.2. Italian

In Italian, infinitives are used to express 2nd person singular negative commands and indicative forms are used to express 2nd person plural negative commands. The syntactic analysis of these suppletive forms is not so straightforward, however.

Let us first consider 2nd person plural imperatives. Although the verbal form of these imperatives is identical to the 2nd person plural indicative form, they do not share the syntax of indicatives. Rather, they behave more like true imperatives. While 2nd person plural imperatives show verb-clitic order, indicatives show clitic-verb order. This is shown in (60).

- (60) Italian
- a. *Fatelo!*
 do-2pl.Imp-it
 'Do it!'
- b. *Lo fate.*
 it do-2pl.Ind
 'You are doing it.'
- c. *Non fatelo!*
 Neg do-2pl.Imp-it
 'Don't do it!'
- d. *Non lo fate.*
 Neg it do-2pl.Ind
 'You are not doing it.'

What is puzzling is that although 2nd person plural affirmative imperatives resemble true imperatives with respect to verb-clitic order, they differ from true imperatives in that they can be negated.

An analysis consistent with the approach proposed in this paper is that 2nd person plural imperatives have an imperative operator in C^0 and yet the verb does not move up to C^0 in overt syntax. A possible target for verb movement is where the infinitive verb moves to Inf^0 , given that infinitivals also show verb-clitic order. This position has been argued to be lower than C^0 , but higher than the position to which finite verbs move to (cf. Kayne 1991). Then at LF, the imperative verb further undergoes feature movement to C^0 . Under this analysis of the syntax of

2nd person plural imperatives, it follows that 2nd person plural imperatives have verb-clitic order and that, negation does not take scope over the illocutionary force operator in C^0 . The question remains, for which I do not have an answer, as to why the verb in 2nd person plural imperatives moves only up to Inf^0 , whereas the verb in 2nd person singular imperatives moves up to C^0 in overt syntax.²¹

Italian negative infinitivals which express 2nd person singular negative commands constitute another puzzle. In Italian, infinitivals in embedded contexts always show verb-clitic order. However, as pointed out by Kayne (1992) and discussed in detail by Zanuttini (1997), in matrix negative infinitivals which express 2nd person singular negative commands, both verb-clitic order and clitic-verb order are possible, as in (61).

- (61) Italian
- a. *Non farlo!*
Neg do-Inf-it
'Don't do it!' (Kayne 1992: 4)
 - b. *Non lo fare!*
Neg it do-Inf
'Don't do it!' (Kayne 1992: 5)

In Italian dialects like Paduan, an auxiliary verb *stá* occurs in matrix negative infinitivals that express negative commands. Crucially, this auxiliary verb is in the 2nd person singular imperative form, and it cannot occur in infinitives used in any other linguistic context, as was shown in (9).

Kayne's (1992) explanation is that in matrix negative infinitivals that express 2nd person singular negative commands, the negative marker licenses an empty modal (in Italian) or an overt modal (*stá* in Paduan) in the imperative form, and that this modal in turn takes an infinitive. The unusual clitic-infinitive order displayed in Italian matrix negative infinitivals can be seen as an instance of clitic climbing (which is optional), where the clitic is not adjoined to the infinitive but to the phonetically unrealized imperative modal.

If negative infinitivals that express 2nd person singular negative commands contain an empty modal or an overt modal *stá* in the imperative form, then these negative infinitivals must have an imperative operator in C^0 , which attracts the imperative modal in overt syntax. However, the analysis proposed here for the (in)compatibility of negation and imperatives appears to predict incorrectly that such constructions should not be available, since the imperative operator would be in the scope of negation if the imperative modal and the negation move as a unit to C^0 . Although I do not have a full solution to this problem yet, a possible way out can be provided if it can be argued that the imperative modal auxiliary behaves

21. Admittedly, as a reviewer points out, this problem does not arise in an analysis such as Zanuttini's where a verb is considered to be an imperative based on its morphological shape.

similarly to the other modal auxiliaries such as *dovere* (“must”) in terms of scope computation.

In Italian, negative sentences with the deontic modal auxiliary *dovere* are ambiguous between a reading in which negation takes scope over the modal verb and one in which the modal verb takes scope over negation (contrary to the surface c-command relations between negation and the modal).

- (62) Italian
Non devo parlare con te.
 Neg must speak-Inf to you
 ‘I don’t have to speak to you.’ ($\neg\Box$)
 ‘I must not speak to you.’ ($\Box\neg$)

In contrast, in English, the reading in which the deontic modal takes scope over negation is expressed with *mustn’t* or *shouldn’t*, and the reading in which negation takes scope over the modal is expressed with *don’t have to*. Thus, the surface order of negation and the deontic modal verb in English directly reflects scope relations. The fact that negative deontic modal sentences in English have two different forms with distinct scopal interpretations suggests that in languages like Italian, where one form can express two different scopal interpretations, the distinct scope information is represented at the level of LF. This means that in Italian, at LF, there is a representation in which the deontic modal verb scopes over negation, even though in the overt syntax, negation takes scope over the modal verb.

Negative infinitivals with the empty modal or the overt modal *stá* (in the imperative form) are expected to be available if this modal is like *dovere*. The negation and the modal move to C^0 in the overt syntax, just as with any other imperative. However, if the modal is like *dovere*, then at LF, two interpretive representations are available for this string. The representation in which the negation takes scope over the modal will be ruled out because this is the one in which the negation takes scope over the imperative operator. But the representation in which the modal takes scope over the negation is ruled in: the negation does not take scope over the imperative operator in this representation. Since a legitimate interpretive representation is available, negative infinitivals with the empty imperative modal or the overt modal *stá* are not ruled out. Questions still remain as to what exact mechanism allows the derivation of the legitimate LF, and why it is restricted to imperative modals.

7. Conclusion

I have proposed that a language does not allow negative imperatives if the syntax derives a structure in which the imperative operator ends up in the scope of negation. This is because such a syntactic structure maps onto an interpretive representation in which the directive force is negated, which results in an incoherent

interpretation. I have also proposed that subjunctives do not have an illocutionary force operator and that they can be used to express negative commands through pragmatic inference. The conclusions reached in this article have implications for the syntax to semantics mapping in imperatives in particular. In general, the proposed analysis for the cross-linguistic variation in the compatibility of negation and imperatives provides evidence that the set of available syntactic structures in a language is restricted by uniform mechanisms for semantic interpretation across languages. An important issue that must be raised in the context of the approach taken in this article is that if imperatives involve an operator that encodes illocutionary force, other sentence types, most obviously interrogatives, must contain a relevant operator as well, namely an interrogative operator which could interact with negation. This line of inquiry will have interesting implications for a proper characterization of force in the grammar and the way we think about the interaction between syntax and pragmatics.

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