# ON THE FEATURES OF LITTLE *pro*

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**Abstract.** This paper argues that at least in some cases the traditional view on *pro* as having interpretable φ-features can be maintained, even for null subject languages that have φ-features on Infl, such as Spanish, Greek and Romanian. The evidence is drawn from surrogate imperative clauses in the subjunctive mood in these languages.

**Keywords:** subjunctive, imperative, speech event, feature transmission, interpretability and valuation.

## 1. BACKGROUND AND AIM

The literature is divided as to whether little *pro* exists at all. For example, Manzini and Roussou (1999), Manzini and Savoia (2002), Platzack (2003), (2004) claim that null subject languages do not have a subject at any level of representation, other than the interpretable φ-features on Infl, which are realized on the verb or on the auxiliary. Holmberg 2005 convincingly shows that this view makes false predictions for Finnish, a partial null-subject language[2]. In this paper I will assume that null subject languages do have *pro*.

There are two views in the literature on the morpho-syntactic features of null pronouns (little *pro*). According to the traditional view − Chomsky (1982), Rizzi (1986), etc. − little *pro* is not inherently specified for φ-features and is instead identified by the φ-features of Infl. Holmberg (2005), (2010) point out that the traditional view on *pro* is incompatible with the assumption that Infl has uninterpretable φ-features, which is common in more recent developments in syntactic theory, particularly the feature theory of Chomsky (1995: ch. 4), and subsequent work by Chomsky and others. If neither Infl nor *pro* have valued φ-features, it is unclear how the derivation survives, given that there is no way to value these feature. The only situation in which a φ-less view on *pro* would be valid would be if Infl had no φ-features at all. This could be a viable option therefore in languages like Chinese, Japanese and Korean, in which there is no φ-features at all on Infl. In null subject languages that do have φ-features on Infl (either consistent null subject languages, like Spanish, Greek, Romanian or partial null subject languages, like Finnish), the alternative would be to assume that *pro* has inherently valued φ-features, and that Infl checks its own uninterpretable φ-features by Agree with *pro* (Holmberg 2005, 2010)[3].

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[2] 1st and 2nd person pronouns are optionally null, in any environment, but 3rd person definite subject pronouns can be null only when bound by a higher argument.

[3] Fassi Fehri (1993), Platzack (2004), Holmberg (2010) assume that a *pro* with φ-features is generated in the subject position but then it gets incorporated in Infl.

In this paper I will claim that at least in some cases the traditional view on *pro* can and probably should be maintained, even for null subject languages that have φ-features on Infl, such as Spanish, Greek and Romanian. The evidence I present is drawn from imperative clauses in these languages.

## 2. THE SUBJECT OF IMPERATIVES

From the point of view of their morpho-syntactic properties, imperatives can be divided into two types: *true* imperatives and *surrogate* imperatives. There are several differences between the two types (related to verb movement, position of object clitics, and negation, among other things), but one of the most striking difference has to do with the kind of subjects that the two types can take: true imperatives can only take 2nd person subjects, while suppletive ones can take both 2nd and 3rd person subjects.

(1)    Diavase              to!                    (Greek, true imperative, 2nd person subject only)
       read.Imp.2s          it
       'Read it!'

(2)    a.    Na   (min) plinis    ta piata!  (Greek, suppletive imper., 2nd person subject)
             sbj.prt (neg) wash.2s the dishes
             'You should (not) wash the dishes!'
       b.    Na   (min) plini     ta piata!  (Greek, suppletive imper., 3rd person subject)
             sbj.prt (neg) wash.3s  the dishes
             'He should (not) wash the dishes!'

The examples above are from Greek, but similar examples can be found in Romanian and Spanish. However, in certain contexts suppletive imperatives are just as restrictive as true imperatives and they allow only 2nd person subjects. Such restrictions can be observed in Greek, Romanian, and Spanish.
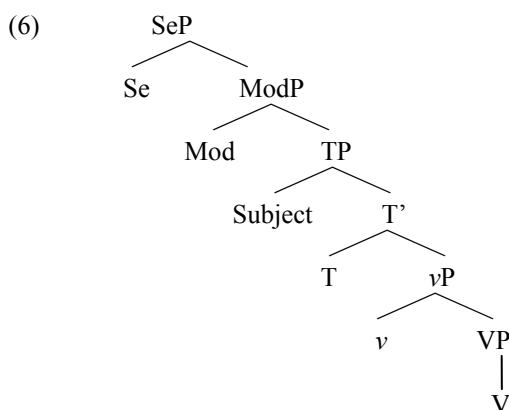
(3)    a.    Min   plinis        ta piata!                  (Greek)
             neg   wash.2s   the dishes
             'Don't wash the dishes!'
       b.    *Min plini          ta piata!
             neg   wash.3s   the dishes
             *'Don't he wash the dishes!'

(4)    a.    Nu    speli           vasele!                  (Romanian)
             neg   wash.subj.2s dishes.def
             'Don't wash the dishes!'
       b.    *Nu   spele           vasele!
             neg   wash.subj.3s dishes.def
             *'Don't he wash the dishes!'

(5)    a.    No   te   calles!                              (Spanish)
             neg  you  shut.up.2s
             'Don't shut up!'
       b.    *No  se   calle!
             neg  refl.  shut.up.3s
             'He/she should not shut up! Make him/her go on!'

These contexts in which the subject shows a restricted (2nd person) interpretation have two properties: they contain a negative marker, and they include subjunctive verbs that normally co-occur with a subjunctive particle, but in these contexts the particle has to be 'dropped'. Compare in this sense (3a) with (2a). Subjects of suppletive imperatives, including the observed restrictions in contexts like (3), are problematic for the view on *pro* as a null pronoun with inherently valued φ-features. If indeed null pronouns had inherently valued φ-features, as proposed by Holmberg (2005), (2010), there is no reason why intrinsically specified 3rd person subjects could not be able to occur in contexts like (3).

I will show that the traditional view on *pro* (in a slightly modified form) can account for these restrictions.

### 3. SYNTAX OF SUBJUNCTIVE IMPERATIVES

I will start from the assumption that suppletive imperatives and true imperatives have a unified syntax that includes a Modality projection and a Speech Event projection. The rest of this section offers more details about the functional projections in this tree.

(6)

```
            SeP
           /   \
         Se     ModP
               /    \
            Mod      TP
                    /   \
              Subject    T'
                        /   \
                       T     vP
                            /  \
                           v    VP
                                |
                                V
```

### 3.1. The Modality Head

The modal nature of subjunctives has been extensively discussed, but mostly for embedded subjunctives. A subjunctive embedded clause, for example, as in (7), is assumed to express a proposition ('Mary leaves') that is evaluated with respect to the set of Gianni's wishes. I will assume that the same type of modal analysis can be extended to the subjunctives in main clauses, in particular to subjunctives used as surrogate imperatives[4].

(7)   Gianni        vuole che  Maria        parta.        (Italian − Giorgi, Pianesi, 1997)
      Gianni        wants that  Maria        leaves.subj
      'Gianni wants Maria to leave'

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[4] For more arguments for a modal analysis of imperatives, see Isac (2012), Kaufmann (2012). For an opposing view, see Portner (2007).

(8)   Che   Mario      vada!                    (Italian − Giorgi, Pianesi 1997)
      that   Mario      go.subj
      'Let Mario go!'

From a syntactic point of view, I will assume that subjunctive imperatives, and in fact all imperatives, project a Modality Phrase, and that the head of this projection always triggers verb movement. Following Barbosa (1996), Alexiadou and Anagnostopoulou (1998), I will implement this by positing an EPP feature on the Mod head.

### 3.2. The Tense Head: Feature inheritance

Following Chomsky (2008), I will assume that T has uninterpretable φ-features and Case features in finite clauses, but that T does not bear these inherently. Rather, T inherits its phi-features and its Case feature from C. Given that the C related category in imperatives is Mod, I will assume that T inherits its φ-features and its Case feature from Mod.  The features of Mod are thus: [Mod], [EPP], [$u$ φ], [$u$Case].

### 3.3. The Speech Event head

The Speech Event phrase is meant to capture the fact that all imperatives are oriented towards the addressee. In true imperatives the subject is always 2nd person singular and therefore always identical with the addressee. In suppletive subjunctive imperatives, one the other hand, the subject can be 2nd or 3rd person, but crucially, even when the subject is 3rd person the obligation to fulfil the order is put on the addressee, rather than on the subject, so the addressee plays a role in subjunctive imperatives as well.

This orientation towards the addressee is captured in the tree in (6) by positing a Speech Event head that bears 2nd person singular features. The label for this projection is borrowed from Speas and Tenny (2003), but differs slightly in its properties from what Speas and Tenny (2003) proposed. While Tenny and Speas (2003)  represent the addressee as an argument of the Speech event head, in the present proposal, the addressee is encoded as a 2nd person feature of the Speech event head. The present proposal also differs from Zanuttini (2008) and Zanuttini, Pak and Portner (2012) who propose a Jussive head hosting a 2nd person feature. Compared to the Jussive phrase, a Speech event head is more general in that it can account not only for the orientation of imperatives towards the addressee, but also for the temporal anchoring of imperatives to the speech time. Moreover, the Speech Event head is present with all types of (matrix) clauses. The Speech Event phrase  can  have 2nd person features, as in imperative clauses, but its person feature can vary across various clause types, depending on whether it is the addressee or the speaker that is the `Seat of knowledge' in the respective type of clause.

### 4. THE NULL SUBJECT OF SUBJUNCTIVE IMPERATIVES

In this section I will argue that the hypothesis that *pro* has valued φ-features cannot account for both the variability in the interpretation of *pro* in affirmative contexts (where both 2nd and 3rd person interpretations are available) and for the restrictions on the

interpretation of *pro* in negative contexts like (3), where only the 2nd person interpretation is possible. Instead, I will argue that the more traditional view on pro, i.e. the view according to which *pro* has unvalued φ-features, makes better predictions.

Chomsky (2004) assumes a biconditional relation between (un)interpretability and valuation: features that are valued are interpretable and viceversa, while features that are unvalued are uninterpretable and viceversa.

(9)     Valuation / Interpretability Biconditional (Chomsky 2004: 5)
        A feature F is uninterpretable iff F is unvalued.
        "Uninterpretable features, and only these, enter the derivation without values, and are
        distinguished from interpretable features by virtue of this property"

However, valuation and interpretability of features can also be conceived of as independent concepts, as in Pesetsky and Torrego (2007). Under this view, there would be two more possible combinations of features: (i) uninterpretable but valued features and (ii) interpretable but unvalued features. In what follows I will adopt this more refined feature structure and I will argue that the properties of the null subjects of suppletive subjunctive imperatives (including their restrictions in negative contexts) can be accounted for under the assumption that *pro* has *interpretable* but *unvalued* φ-features.

**Hypothesis 1: *pro* has interpretable and valued φ-features.** If *pro* had *interpretable and valued* φ-features, the uninterpretable and unvalued φ-features on T (inherited from Mod) would enter an Agree relation with the subject DP, and as a result would get valued. The uninterpretable Case feature on *pro* would be eliminated by agreement with the Case feature on T. Both 2nd person and third person null pronouns are predicted to be possible in suppletive subjunctive imperatives under this view. This prediction is borne out for contexts such as (2), but not for cases in which we observe restrictions on the interpretation of the subject, such as (3)[5].

**Hypothesis 2: *pro* has uninterpretable and valued φ-features.** Given the tree in (6), and under the hypothesis that *pro* has uninterpretable φ-features, the only way to eliminate the uninterpretable φ-features on *pro* would be by agreement with the φ-features on the Se head (given that the Se head is the only one hosting interpretable φ-features with which the uninterpretable φ-features on *pro* could agree[6]). However, if *pro* enters agree with the Se head, the result would be not only the elimination of the uninterpretable φ on *pro*, but also a similar value of the φ-features in Se and *pro*. The prediction is thus that only the 2nd person singular value should be acceptable on *pro*, since only this value would agree with the 2nd person singular value of the φ-features on the Se head. As shown in (2), this prediction is not borne out. Both 2nd person and 3rd person values are possible for the null subjects of subjunctive imperatives.

[5] In principle, there is no reason to assume that all *pro*'s will have the same properties. It could be that 1st and 2nd person *pro*'s are different from 3rd person ones. In particular, it could be that 1st and 2nd person *pro*'s have interpretable and valued φ-features, and only 3rd person ones are different. For the purposes of this paper I will make the simpler assumption that all *pro*'s are alike.
[6] The T head, which also has φ-features by inheritance from the Mod head, has uninterpretable φ-features, and thus cannot check the uninterpretable φ-features on *pro*.

**Hypothesis 3: *pro* has interpretable and unvalued φ-features.** A *pro* with interpretable φ-features would free *pro* from obligatory agree with the Se head (which would be necessary in order to check and eliminate the φ-features on *pro* if these were uninterpretable)  and would thus in principle open the possibility of *pro* acquiring  different values for its φ-features, apart from 2nd person features. However, it is not that obvious where a 3rd person valuation would come from.  In what follows I propose that 3rd person interpretations can be obtained as a default value, by virtue of the fact that *pro* introduces a variable that is bound by an operator that is roughly equivalent to existential closure.

*The contribution of the context: binding of situation variables*. I will assume, together with von Fintel 1994, Percus 2000, and others, that nominal expressions are interpreted relative to a certain context or situation. In (10), for example, 'most people' is understood as 'most Swedes', in spite of the fact that the universe of discourse can also include non Swedes.

(10)     Sweden is a funny place. Every tennis player looks like Bjon Borg, and more men than women watch tennis on TV. But *most people* really dislike foreign tennis players. (von Fintel 1994, p. 29, ex. 20)

Technically, these contextual restrictions could be implemented by positing some syntactically represented variable that is bound. I will adopt Percus's (2000) analysis, who assumes that the relevant variables range over *situations* (i.e. states of affairs, with a certain spatio-temporal specification). There are two types of expressions that project a situation variable in Percus's (2000) view: verbs, which introduce variables that range over situations where the verb is evaluated, and nominal expressions, which introduce a variable ranging over the situations in which the nominal expression is evaluated. These situations variables are bound in the same way normal variables are, i.e. either by quantifiers, or by existential closure. Technically, the latter possibility is implemented by merging a covert operator (λ) into the syntactic tree[7]. In Percus's 2000 system, a λ-operator is initially adjoined to VP and then moves to the IP level. This operator binds both situation variables introduced by verbs and situation variables introduced by nominal expressions.
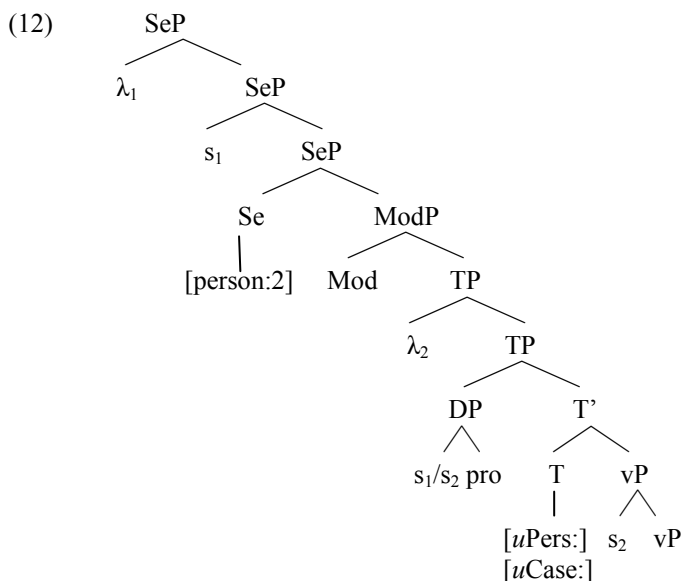
(11)   $[_{TP} \lambda_1 [_{TP}$ John believed$_{s1}$ $[_{TP} \lambda_2$ the student$_{s1/s2}$ fainted$_{s2}$ ] ] ]

The difference is that while situation variables introduced by verbs must be bound locally, situation variables introduced by DPs are not constrained by locality, so that situation variables introduced by nominal expressions are bound either by a local λ-operator, or by a λ-operator associated with a higher VP/IP. Thus, a nominal expression is interpreted either relative to the local event, or with respect to a higher, more distant event.

*The features of pro and the context*. Given the tree in (6), there are two events at stake in an imperative, each of which can be bound by a λ-operator: the event contained in the *v*P, and the Speech event. Now, just like all other nominal constituents, *pro* introduces a

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[7] The λ-operator is similar to existential closure except that it changes the type of its complement. This operator has a double role: it binds the free variables and at the same time it converts the formula containing the free variables into a predicate.

situation variable that can be bound either by the more local, IP-attached, λ-operator, or by the higher one, attached to the Speech Event phrase.

(12)

```
                    SeP
                  /     \
                λ₁       SeP
                       /     \
                     s₁       SeP
                            /     \
                          Se       ModP
                          |       /     \
                   [person:2]   Mod      TP
                                       /     \
                                     λ₂       TP
                                            /     \
                                          DP       T'
                                         /\       /   \
                                  s₁/s₂ pro     T      vP
                                               |      /\
                                          [uPers:]  s₂  vP
                                          [uCase:]
```

If the situation variable introduced by *pro* is bound by the local, IP related, λ-operator, the [person:] feature on *pro* gets a default, 3rd person valuation, the [uPerson:] feature on T will also get a 3rd person valuation, by agree with *pro*[8], and the [uCase] feature on *pro* will be checked against the Case feature on T. If on the other hand *pro* is bound by the higher, Speech Event related, λ-operator, the [person:] feature on *pro* will be valued as 2nd person by agreement with the person feature on Se, the [uPerson:] feature on T will also get a 2nd person valuation, by agree with *pro*, and the [uCase] feature on *pro* is checked against the Case feature on T.

The two interpretations of *pro* are thus due to the fact that the situation variable introduced by *pro* can be interpreted either relative to the situation that the sentence is about or relative to the speech situation. In the former case *pro* gets a default 3rd person, in the latter case its person feature will be valued as 2nd person.

So far, I have argued that assuming interpretable but unvalued φ-features on *pro* can account for the fact that subjunctive imperatives can have either 2nd person or 3rd person null subjects. We still need to account for the restrictions on the interpretation of null subjects in negative subjunctive imperatives like (3). In order to account for these restrictions, I will first provide more details about the syntax of (negative) subjunctive imperatives.

[8] Alternatively, we could assume that T has D feature and hence that it introduces a situation variable, just like DPs (Musan 1995). This situation variable will be bound by a λ-operator, and just like with other DPs, this operator could be the local one (adjoined to TP), or a more remote one (adjoined to the SeP).

## 5. RESTRICTIONS ON NULL SUBJECTS OF NEGATIVE SUBJUNCTIVE IMPERATIVES

### 5.1. More about the syntax of imperatives

*Items in Mod in subjunctive imperatives.* There are several types of items that can occur in the Mod head in subjunctive imperatives: subjunctive particles, subjunctive verbs (as in German or Icelandic, for instance), and possibly null items as well. The languages that show restrictions on the interpretation of the null subject in negative subjunctive imperatives are languages that use subjunctive particles. These languages show a division of labour between the subjunctive particle and the verb: the subjunctive particle carries the Mod feature, while the verb carries other inflectional features and φ-features. Syntactically, it is the subjunctive particle that instantiates the high Mod head and the verb remains in a lower position.

(13)   a.   Să      nu       închidă        uşa!                (Romanian)
            Subj.prt neg     close.subj.3s   door.def
            'Don't let him close the door!'
        b.  Na      min      tu        to          stilis! (Greek)
            Subj.prt neg     CL.3.s.Dat CL.3.s.Acc send.Subj.2.s
            'Don't send it to him!' (Philippaki-Warburton, 1998)
        c.  Que   no   lo    escribáis!                          (Spanish)
            that  neg  it    write.subj.2pl.
            'You just don't write it!'

*Syntax of subjunctive particles.* Subjunctive particles do not have an identical syntax across languages. Previous analyses of Greek and Romanian subjunctive particles identify the location of the subjunctive particle as (i) C$^0$ (Agouraki 1991, Dobrovie-Sorin 1994 and Tsoulas 1993); as (ii) I$^0$ (Philippaki-Warburton 1988, Rivero 1994); or as (iii) both C$^0$ and I$^0$ (Motapanyane 1991, Roussou 2000, Dobrovie Sorin 2001).

The position adopted here is of type (iii). I share with Motapanyane (1991), Roussou (2000), Dobrovie Sorin (2001) the assumption that subjunctive particles are merged in a low position and then they move to a higher one, but I differ from these authors in my analysis of these particles as clitics. The view that subjunctive particles are clitics in Greek and Romanian is motivated mainly by the fact that these particle cannot be separated from the verb in these languages, except by pronominal clitics and Negation.

(14)   a.   Na       milisi    i Maria!
            subj.prt speak.3s   the Maria
            'Have Maria speak!'
        b.  *Na      i Maria    milisi!
            subj.prt  the Maria speak.3s
            'Have Maria speak!'
        c.  Na       mi   to    grapsis!
            subj.prt  neg  it    write2sg
            'Don't write it!'

(15)  a.      Să        vorbească  Maria!
              subj.prt  speak.3s   Maria
              'Have Maria speak!'
      b.   *Să        Maria       vorbească!
              subj.prt  Maria       speak.3s
              'Have Maria speak!'
      c.    Să          nu   le arunci!
              subj.prt  neg  them        throw.out.2s
              'Don't throw them out!'

The analysis I propose is that in both Greek and Romanian the subjunctive particle has uninterpretable Mod features and it cliticizes onto the verb. The definition of clitics that I adopt relies on Chomsky (1995). In this view clitics are ambiguous $X^0$/XP elements and as such they do not branch and they do not take complements. More specifically, following Bošković (2001), I will assume that clitics cannot be generated as heads but as specifiers (if clitics were assumed to be heads which take complements, then clitics would be branching, hence by definition no longer a clitic). From the Spec position clitics then undergo movement and they adjoin as heads to their host. In accordance with Kayne (1994), head adjunction proceeds to the left and this occurs only after the host moves to a position c-commanding the clitic.

Assuming that subjunctive particles in Greek and Romanian are clitics amounts to saying that they are initially merged in the Spec of a functional projection F (which I assume to be higher than T) and then the head adjoin to the left of their host when the latter comes to be in a c-commanding position. Thus in (16) the complex head including the verb and the subjunctive particle end up in the higher Mod head[9].

(16)  a.      $[_{ModP} \text{Mod}^0 [_{FP} \text{să} [_{F'} \text{F}^0 [_{TP} \text{T}^0 [_{vP} \text{v}^0 ... ] ] ] ]$
      b.      $[_{ModP} \text{Mod}^0 [_{FP} \text{să} [_{F'} \text{v}^0 - \text{F}^0 [_{TP} \text{T}^0 [vP \text{v}^0 ... ] ] ] ]$
      c.      $[^{ModP} \text{v}^0 - \text{F}^0 - \text{Mod}^0 [_{FP} \text{să} [_{F'} \text{v}^0 - \text{F}^0 [_{TP} \text{T}^0 [_{vP} \text{v}^0 .. ] ] ] ]$
      d.      $[_{ModP} \text{să} + \text{v}^0 - \text{F}^0 - \text{Mod}^0 [_{FP} \text{să} [_{F'} \text{v}^0 - \text{F}^0 [_{TP} \text{T}^0 [_{v}P \text{v}^0 ... ] ] ] ]$

Spanish differs from Greek and Romanian in that the particle that occurs in subjunctive imperatives (*que*) does not have to be adjacent to the verb. *Que* can be separated from the verb by an intervening subject, for example.

(17)  a.      Que  todos  se       levanten!                         (Spanish)
              that  all    refl    rise.subj.3pl
              'Let all rise!'
      b.   Que  nadie    se   quede          atrás!
              that   nobody  refl  leave.subj.3s  behind
              'Let no one be left behind!'

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[9] Greek and Romanian are not completely identical in the derivation of their subjunctives. The differences though have to do with the Mod features on the verb, rather than with the features and syntax of the subjunctive particle per se. I will thus gloss over these differences.

I will thus propose that Spanish *que* is not a clitic and is merged instead as a head in a position that is higher than TP. More specifically, I will assume that *que* is merged in Mod.

(18)  $[_{ModP}$ *que* $[_{NegP}$ neg $[_{TP}$ T $[_{vP}$ v $[VP\ V\ ]\ ]\ ]\ ]\ ]$

*Negative Subjunctives*. In languages like Greek and Romanian, if a negative marker is merged with a subjunctive form containing a particle, as in (19), the subjunctive particle head adjoins to the left of the negative head rather than to the verb, given that the Neg head c-commands the FP where the subjunctive particle is merged. I am assuming that Neg has Modality features and is thus a suitable host for the subjunctive clitic.

(19)  a.  $[_{ModP}$ Mod$^0$ $[_{NegP}$ nu $[_{FP}$ să $[_{F'}$ F$^0$ $[_{TP}$ T$^0$ $[_{vP}$ v$^0$ ... $]\ ]\ ]\ ]\ ]\ ]$
      b.  $[_{ModP}$ Mod$^0$ $[_{NegP}$ nu $[_{FP}$ să $[_{F'}$ v$^0$-F$^0$ $[_{TP}$ T$^0$ $[_{vP}$ ~~v~~$^\theta$ ... $]\ ]\ ]\ ]\ ]\ ]$
      c.  $[_{ModP}$ Mod$^0$ $[_{NegP}$ să +nu $[_{FP}$ ~~să~~ $[_{F'}$ v$^0$-F$^0$ $[_{TP}$ T$^0$ $[_{vP}$ ~~v~~$^\theta$ ... $]\ ]\ ]\ ]\ ]\ ]$
      d.  $[_{ModP}$ să+nu- Mod$^0$ $[_{NegP}$ ~~să +nu~~ $[_{FP}$ ~~să~~ $[_{F'}$ v$^0$-F$^0$ $[_{TP}$ T$^0$ $[_{vP}$ ~~v~~$^\theta$ ... $]\ ]\ ]\ ]\ ]\ ]$

The EPP feature on the Mod head is checked by the subjunctive [clitic+Neg] complex, which raises to Mod to check the Mod feature on Neg[10].

In contrast with Greek and Romanian, in Spanish, if a negative marker is merged with a subjunctive form including a particle, the subjunctive particle and Neg are disjoint and do not form a complex head, given that the subjunctive particle in Spanish is not a clitic and it is merged higher than Neg, as in (18).

### 5.2. Restrictions in Negative subjunctives

We are now ready to address the restrictions on the interpretation of the null subject in negative subjunctives. Remember that these restrictions can be observed only in contexts in which the subjunctive particle is absent. Notice first that the result of `dropping' the subjunctive particle from subjunctive imperatives is ungrammatical, but the grammaticality of a particle-less subjunctive imperative is restored under negation.

(20)  a.  *To grapsis! (Greek)
          it  write2sg
          'Write it!'
      b.  Mi to grapsis!
          neg it write.2sg
          'Don't write it!'

---

[10] The same intuition is captured in Dobrovie Sorin (2001), who proposes that in Romanian the subjunctive particle and the negation merge into one complex head that is merged with the VP. This is an option open to functional categories in Dobrovie Sorin's view; functional heads do not have to merge with a phrasal complement and they can instead merge with another functional head and only then merge with a phrasal complement. The net result in our analysis is the same- the subjunctive particle and negation form one complex head, but unlike Dobrovie Sorin (2001), we do not posit a restructuring rule or a special option available for functional heads. Our analysis relies on independently needed assumptions about clitics.

(21) a.  *Lo escrib'ais!
      it  write.subj.2pl.
      'You just write it!'
     b. No  lo escribáis!
       neg  it write.subj.2pl.
       'Don't write it!'

(22) (Să)  pleci!        (Romanian)
   subj.prt  leave.subj.2s
   'Leave!'

At first glance, Romanian seems to differ from Greek and Spanish in this respect, in the sense that particle-less subjunctives seem to be possible even in the absence of negation, as shown in (22). However, it turns out that the subjunctive forms are homophonous with present indicative forms, at least for 1st and 2nd persons. So it's not obvious whether the form in (22), which is a 2nd person form, is a subjunctive or a present indicative form.

(23)

| Să  plec<br>sbj.prt leave.subj.1s | Plec<br>leave.indic.1s | Să plecăm<br>sbj.prt leave.subj.1pl | Plecăm<br>leave.indic.1pl |
|---|---|---|---|
| Să pleci<br>sbj.prt leave.subj.2s | Pleci<br>leave.indic.2s | Să plecați<br>sbj.prt leave.subj.2pl | Plecați<br>leave.indic.2pl |
| Să plece<br>sbj.prt leave.subj.3s | Pleacă<br>leave.indic.3s | Să plece<br>sbj.prt leave.subj.3pl | Pleacă<br>leave.indic.3pl |

The only way to test whether subjunctive verbs can occur without the subjunctive particle in affirmatives in Romanian is to test it with 3rd persons. (24) shows that an affirmative subjunctive without a particle is ungrammatical in Romanian. I will conclude that Romanian is similar to Greek and Spanish, in that particle-less subjunctives are ungrammatical in the affirmative.

(24) a. Să   plece!    b. *Plece!     (Romanian)
    subj.prt  leave.subj.3s   leave.subj.3s
    'See to it that he leaves!'  'See to it that he leaves!'

The question now is why these particle-less subjunctives like (20a), (21a), and (24b) are ungrammatical. The answer I will propose has to do with the EPP feature on Mod. The Mod head must be filled in imperatives (including subjunctive imperatives). Since there is nothing in these examples that sits in Mod, the derivation crashes. If negation is added to these particle-less subjunctive examples, as illustrated in (2a), (4a), and (5a), the result is grammatical. Informally, Neg takes over the role of the subjunctive particle. I propose that in these negative examples it is the negative marker itself that checks the EPP feature on Mod, and that this is possible because the negative head has Modality features. The restrictions on the interpretation of the subject can be explained by the fact that Neg blocks the transfer of the φ-features and Case features from Mod to the inflectional head[11].

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[11] I take both F and T to be instantiations of Infl.

Chomsky (2006) and Richards (2007) show that the transfer of φ-features is phase based: uninterpretable φ-features are obligatorily transmitted from the phase head to its proxy head. In other words, an Infl head will have φ-features only if it is selected by C, but could lack such features otherwise. Under a view in which the periphery of a CP phase can contain several projections, such as CP, ModP, NegP (Butler 2004, Svenonius 2004, etc), the question is whether the transmission of φ-features from C to Infl can still go through. I propose that the presence of an additional projection in the periphery of the phase blocks this transmission. In our particular case, transmission of φ-features from Mod to Infl is blocked by the presence of the intervening Neg. Mod will still `donate' its φ and Case features, but instead of transmitting them to Infl, it will transfer them to Neg (its proxy head).

As discussed above, the negative head moves to Mod in examples like (20b), (21b), and (22). The uninterpretable φ-features on Neg will be checked and valued as 2nd person singular by agree with the Se head, and *pro* will in turn check and value its φ-features against the Neg head, resulting in a 2nd person singular valuation for pro. The alternative which was available for affirmative subjunctives, namely that of the situation variable of *pro* being bound by the local λ-operator and therefore *pro* getting a default 3rd person value, is not an option in negative subjunctives like (20b), (21b), and (22). This is because *pro* will need to check its Case feature. The only functional head hosting a Case feature which could potentially check and eliminate the Case feature on *pro* is Neg. However, the value of the φ-features on Neg and the value of the φ-features on pro do not match. In particular, Neg will get its φ-features valued as 2nd person singular by agree with the Se, while pro would get a default 3rd person singular valuation, and these two values do not match.

(25)
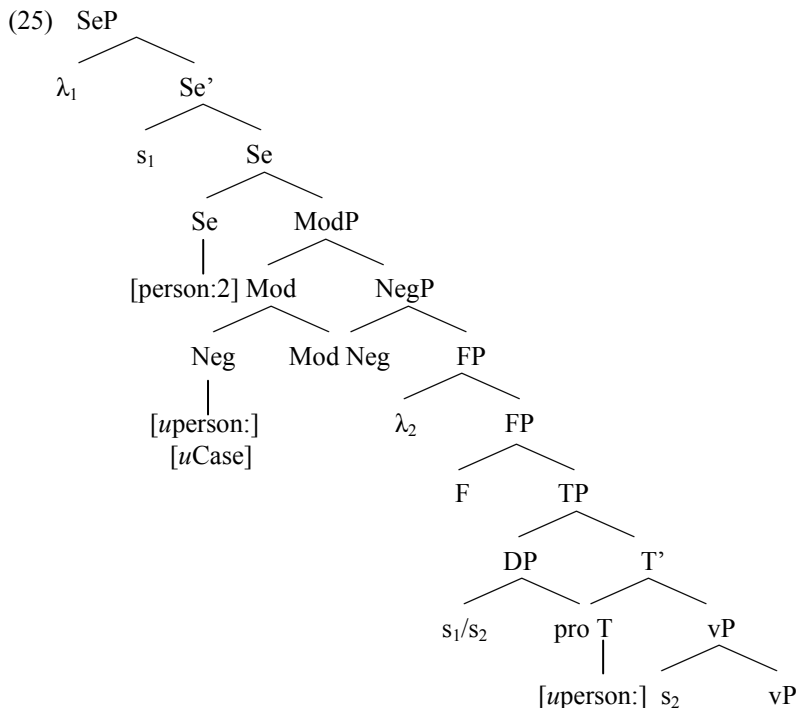
## 6. WAYS OF CIRCUMVENTING THE BLOCKING EFFECT OF NEG

One question that arises is why Neg seems to block transmission of phi/Case features in examples like (20.b), (21.b), and (22) but not in examples like (13a,b,c). The answer is related to the syntax of the subjunctive particles in these languages.

In Greek and Romanian, the subjunctive particle is merged in a projection (FP in the tree in (25)) that is lower than NegP. As described below, the subjunctive particle in these languages is a clitic that head adjoins to Neg and then further raises to Mod together with Neg. This movement creates a chain that ultimately connects the Mod head, the Neg head and the F head of the projection in which the subjunctive particle is merged. The phi/Case features of Mod are thus be transferred from Mod to Neg and then to F via the resulting chain. The resulting configuration is similar to affirmative subjunctives, i.e. the F head ends up with phi/Case features. The closest element with matching Case/φ-features is pro. If pro is bound by the local λ-operator, it gets a default 3rd person singular valuation for its φ-features. This value is then passed on to F, by agree. F will also check and eliminate the Case feature on pro. If on the other hand pro gets bound by the higher, Se related, λ-operator, its φ-features will be valued as 2nd person singular by agree with the Se head. This value is then passed on to F, which will eventually also check the Case feature on *pr*o.

In Spanish on the other hand, *que* is merged higher than Neg, so the proposal above for Greek and Romanian cannot be extended to Spanish. The first observation is that *qu*e subjunctive imperatives are paraphrasable by `I (the speaker) told you (the addressee) that p (the *que* subjunctive)'. I will take this as indicative of an embedded clause status for these subjunctive imperatives. This means that I will analyze que subjunctive imperatives as CPs that do not contain a SeP (SeP is posited only for main clauses). Given that CP is projected in que subjunctive imperatives I will make the unmarked assumption that C has uninterpretable phi/Case features that it transmits to its proxy head, Mod.
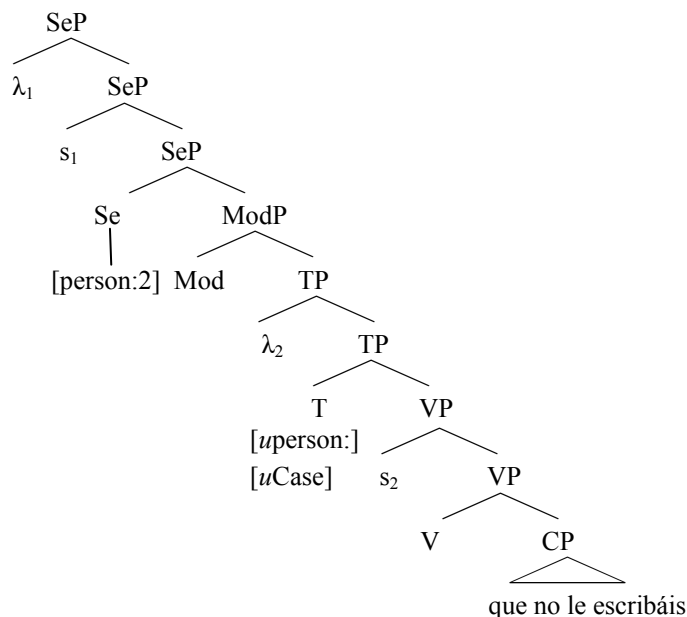
A second important observation is that *que* is obligatory in affirmative subjunctive imperatives, as illustrated in (21.a). I will take this as indicative of the fact that the Mod head has an EPP feature in Spanish (subjunctive) imperatives, just as in Greek and Romanian.

In order to cover both observations above, I will propose that *que* is merged in Mod and then rises to C. The imperative flavour of que subjunctive imperatives comes not from the morpho syntactic properties of the que clause itself, but from the fact that the main clause above the que clause has the morpho syntax of an imperative (i.e. it contains a SeP with 2nd person features, it has a λ-operator related to Infl and another one related to Se).

In this structure the two possible interpretations for *pro* can be accounted for by the fact that *pro* can be bound either by the Infl related λ-operator in the main clause (in which case the valuation of the φ-features on pro is a default 3rd person singular), or by the Se related λ-operator in the main clause (in which case the valuation of the φ-features on pro is 2nd person singular). Case identification is from Mod.

The representation in (26) captures Ross's (1970) intuition that clauses have a covert representation of a higher predicate. Even though Ross's (1970) analysis has been challenged by Anderson (1971), Fraser (1974), Gazdar (1979), etc., in the case of Spanish subjunctive imperatives it seems to be supported by the fact that the interpretation of *que* is paraphrasable by 'I told you que subjunctive'.

(26)

```
                    SeP
                   /    \
                 λ₁      SeP
                        /    \
                      s₁      SeP
                             /    \
                           Se      ModP
                           |       /    \
                    [person:2]  Mod      TP
                                        /    \
                                      λ₂      TP
                                             /    \
                                           T       VP
                                    [uperson:]    /    \
                                    [uCase]     s₂      VP
                                                       /    \
                                                     V       CP
                                                             /\
                                                    que no le escribáis
```

## 7. ON THE APPARENT OPTIONALITY OF THE PARTICLE

One of the conclusions that can be drawn from the data above is that in negative subjunctive imperatives the subjunctive particle is optional. In (27), for instance, the negative subjunctive imperative can be expressed with or without the subjunctive particle. The examples below are from Greek, but the same can be observed in Romanian and in Spanish.

(27)  a.  Na       mi  to  grapsis! (Greek)
          subj.prt neg it  write.2s
          'You shouldn't write it!'
      b.  Mi   to    grapsis!
          neg  it    write.2s
          'Don't write it!'

However, on closer inspection, the two sentences in (27) turn out not to be synonymous. A subjunctive directive or prohibitive used with *na/să* is mitigated, whereas subjunctive imperatives without *na* or *să* are more direct. (Chondrogianni 2009, for Greek). We propose that this mitigation effect has a formal correlate: it is related to the way in which the person and Case feature of the subject is checked. In Greek and Romanian, particle-less subjunctives are perceived as more direct because the subject always values its person feature and checks its Case feature against a C related head (Mod), just like true imperatives. In contrast, in subjunctive imperatives with particles, the subject gets its φ-features valued by Infl (the Infl category to which Mod transmits its φ-features and its Case

feature). In Spanish, on the other hand, the mitigation effect observed when the subjunctive particle is present can be accounted for in our analysis by the fact that the que subjunctive imperatives are analyzed as clauses that are embedded under a main imperative clause, rather than as a directly imperative clause. As stated above, the subjunctive imperatives including *que* in Spanish can be paraphrased by `I told you to p' rather than just p.

(28) a.    Que  no   te        calles!
           that neg  you       shut.up.2s
           'I told you not to shut up!/ You just keep talking!'
     b.   No   te    calles!
          neg  you   shut.up.2s
          'Don't shut up!'

## 8. CONCLUSIONS

In this paper I have argued that:

(i) the interpretation of null subjects in subjunctive imperative contexts cannot be accounted for under the assumption that *pro* has uninterpretable and unvalued φ-features, or under the assumption that pro has interpretable and valued features. Instead, we argued for a finer grained feature classification, one that allows for any combination between interpretability and value, as proposed by Pesetsky and Torrego (2007). More precisely, I argued that the subjunctive imperative facts can only be accounted for under the assumption that *pro* has interpretable but unvalued φ-features.

(ii) the restrictions on the interpretation of null subjects in negative subjunctive imperatives can be accounted for under the assumption that the transmission of φ-features and Case features from the highest C related head to an Infl head is blocked if the Infl head is not selected by the donor head. In other words, locality plays a role in the transmission of φ-features. If a Neg head intervenes in between the donor head and the Infl head, the φ-features cannot be transmitted to Infl.

(iii) the blocking effect of negation on φ-feature transmission can by by-passed if (a) the donor is related to the Infl head via a movement chain (as in Greek and Romanian), or if (b) *pro* is bound by an operator in a higher clause (as in Spanish).

(iv) the perceived differences in degree of politeness between negative suppletive imperatives  with vs without subjunctive particles have a formal correlate: if the subject gets its 2nd person value from Mod (as is the case with the subject of negative subjunctives without particle), the effect is that of directness, and if the φ-features of the subject get valued from Infl, the effect if that of a more polite, more mitigated request/interdiction.

## REFERENCES

Agouraki, G., 1991, "A Modern Greek Complementizer and its Significance for Universal Grammar", *UCL Working Papers in Linguistics,* 3, 1−24.
Alexiadou, A., E. Anagnostopoulou, 1998, "Parametrizing AGR: Word order, V-movement, and EPP-checking", *Natural language and linguistic theory,* 16, 491−540.

Anderson, S., 1971, *On the linguistic status of the Performative/Constative distinction,* Indiana University Linguistics Club.

Barbosa, P., 1996, "Clitic Placement in European Portuguese and the Position of Subjects", in: A. Halpern, A. Zwicky (eds), *Approaching second: second position clitics and related phenomenona,* Stanford, CSLI Publications, 1−40.

van Benthem, J. F., 1977, "Tense logic and standard logic", *Logique et Analyse,* 80, 395−437.

Bošković, Ž., 2001, *On the Nature of the Syntax-Phonology Interface: Cliticization and Related Phenomena*, Elsevier.

Butler, J., 2004, *Phase Structure, Phrase structure, and Quantification*, Doctoral Dissertation, University of York.

Chomsky, N.,1982,*Some concepts and consequences of the theory of government and binding*, Cambridge, MA, MIT Press

Chomsky, N., 1995, *The Minimalist Program*, Cambridge, MA, MIT Press.

Chomsky N., 2004, "Beyond Explanatory Adequacy. Structures and Beyond", in: A. Beletti (ed), *The Cartography of Syntactic Structures*, 3, Oxford, Oxford University Press, 104−131.

Chomsky, N., 2008, "On Phases", in: R. Freidin, C. P. Otero, M. L. Zubizarreta (eds), *Foundational Issues in Linguistic Theory*, Cambridge, MIT Press, 133−166.

Chondrogianni, M., 2009, "The Pragmatics of the Modern Greek modal particles", in: K. Chatzopoulou, A. Ioannidou, Y. Suwon, (eds.), *Proceedings of the 9th international conference on Greek linguistics*, Chicago, University of Chicago, 322−332.

Cresswell, M. J., 1990, *Entities and Indices*, Dordrecht, Kluwer

Dobrovie-Sorin, C., 1994, *The Syntax of Romanian*, Berlin, Mouton de Gruyter.

Dobrovie Sorin, C., 2001, "Head to Head movement in Balkan Subjunctives and Locality", in: ÂM. Rivero, A. Ralli (eds), *Comparative Syntax of Balkan Languages*, Oxford, Oxford University Press, 44−74.

Farkaş, D., 1992, "On the Semantics of Subjunctive Complements", in: P. Hirschbühler (ed.), *Romance Languages and Modern Linguistic Theory*, Amsterdam, Philadelphia, John Benjamins, 69−105.

Fassi Fehri, A., 1993, *Issues in the Structure of Arabic Clauses and Words*, Dordrecht, Kluwer.

von Fintel, K.,  2004, "A minimal theory of adverbial quantification", in: H. Kamp, B. H. Partee (eds), *Context-Dependence in the Analysis of Linguistic Meaning*, Elsevier, 137−175.

Fraser, B., 1974, "An examination of the Performative Analysis", *Papers in Linguistics,* 7, 1−40.

Gazdar, G., 1979, *Pragmatics: Implicature, Presupposition and Logical Form*, New York, Academic Press.

Giorgi, F., A. Pianesi, 1997, *Tense and Aspect. From Semantics to Morphosyntax*, Oxford, Oxford University Press.

Han, C.H., 1998, *The structure and interpretation of imperatives: mood and force in Universal Grammar*, Doctoral Dissertation, University of Pennsylvania.

Heim, I., A. Kratzer, 1998, *Semantics in Generative Grammar*, Oxford, Blackwell.

Holmberg, A., 2005, "Is There a Little *Pro*? Evidence from Finnish", *Linguistic Inquiry*, 36, 4, 533−564.

Holmberg, A., 2010, "Null subject parameters", in: T. Biberauer, A. Holmberg, I. Roberts (eds), *Parametric Variation. Null subjects in minimalist theory*, Cambridge, Cambrigde University Press, 88−124.

Isac, D., 2012, "Imperatives are Modal", *Bucharest Working Papers in Linguistics*, XIV, 2, 41−55.

Kamp, H., 1971, "Formal properties of `now'", *Theoria,* 37, 227−273.

Kaufmann, M., 2012, *Interpreting Imperatives*, Dordrecht, Springer.

Kayne, R., 1994, *The antisymmetry of syntax*, Cambridge, MA, MIT Press.

Kratzer, A., 1981, "The Notional Category of Modality", in: H. J. Eikmeyer, H. Rieser (eds), *Words, Worlds, and Contexts. New Approaches in Word Semantics*, Berlin, de Gruyter, 38−74.

Kratzer, A., 1991, "Modality", in A. von Stechow, D. Wunderlich (eds), *Semantics: An International Handbook of Contemporary Research*, Berlin, de Gruyter, 639−650.

Motapanyane, V., 1991, *Theoretical implications of complementation in Romanian*, Doctoral diss., University of Geneva.

Musan, R., 1995, *On the Temporal Interpretation of Noun Phrases*, Doctoral diss, MIT.

Ouali, H., 2008, "On C-to-T phi-feature transfer: The nature of agreement and anti-agreement in Berber", in: R. D'Alessandro, G. H. Hrafnbjargarson, S. Fischer (eds), *Agreement Restrictions*, Berlin, Mouton de Gruyter, 159−180.

Partee, B., 1973, "Some Structural Analogies Between Tenses and Pronouns", *The Journal of Philosophy*, 601−609.

Percus, O., 2000, "Constraints on some other variables in syntax", *Natural Language Semantics*, 8, 173−229.

Pesetsky, D., E.Torrego, 2007, "The syntax of valuation and the interpretability of features", in S. Karimi, V. Samiian, W. K. Wilkins (eds), *Phrasal and Clausal Architecture: Syntactic derivation and interpretation*, Amsterdam, Benjamins, 262−294.

Philippaki-Warburton, I., 1998, "Functional Categories and Modern Greek Syntax", *Linguistic Review*, 15 (2-3): 159-186.

Richards, M. D., 2007, "On Feature Inheritance: An Argument from the Phase Impenetrability Condition", *Linguistic Inquiry*, 38, 3, 563−572.

Rivero, M. L., 1994, "Clause structure and V-movement in the languages of the Balkans", *Natural Language and Linguistic Theory,* 12, 63−120.

Rizzi, L., 1986, "Null objects in Italian and the theory of pro", *Linguistic Inquiry*, 17, 501−557.

Ross, J. R., 1970, "On Declarative Sentences", in: R. A. Jacobs, P. S. Rosenbaum (eds), *Readings in English Transformational Grammar*, Waltham, Mass., Ginn, 222–272.

Roussou, A., 2000, "On the left periphery; modal particles and complementizers", *Journal of Greek Linguistics*, 1, 63–93.

Speas, P., C. L. Tenny, 2003, "Configurational Properties of Point of View Roles", in: Di Sciullo, A. (ed.), *Asymmetry in Grammar*, Amsterdam, John Benjamins, 315−344.

Svenonius, P., 2004, "On the edge", in: D. Adger, C. de Cat, G. Tsoulas (eds), *Peripheries: Syntactic Edges and their Effects*, Dordrecht, Kluwer, 259–287.

Tsoulas, G., 1993, "Remarks on the structure and interpretation of NA-clauses", *Studies in Greek Linguistics*, 14, 196–207.

Vlach, F., 1973, `Now' and `Then': A Formal Study in the Logic of Tense Anaphora, Doctoral dissertation, UCLA.

Zanuttini, R., 2008, "Encoding the Addressee in the syntax: Evidence from English imperative subjects", *Natural Language and Linguistic Theory*, 26,185–218.

Zanuttini, R., M. Pak, P. Portner, 2012, "A syntactic analysis of interpretive restrictions on imperative, promissive, and exhortative subjects", *Natural Language & Linguistic Theory*, 30, 1231−1274.