

# Encoding the addressee in the syntax: Evidence from English imperative subjects

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## Abstract

Imperative subjects in English are puzzling in several respects: null subjects are possible with a definite interpretation, unlike in other clause types; quantificational subjects are often restricted to range over a set containing the addressee and exhibit binding possibilities not readily available to them in declaratives and interrogatives; and third person referential subjects are for most speakers limited to bare noun phrases. On the empirical side, this paper provides a comprehensive discussion of these properties that makes sense of the sometimes contradictory observations found in the literature. On the theoretical side, it argues that the syntactic representation of imperatives contains a functional projection not present in other clause types. This projection plays a role both in preventing the instantiation of a predication relation between the subject and the predicate, and, when sufficiently local, in licensing the special syntactic properties of the subject. This proposal differs from those that view the properties of imperative subjects as deriving uniquely from the semantic or pragmatic component; it can be seen as building on the general intuition of the old performative hypothesis, though recasting it at a level of abstraction that captures more adequately the properties of imperatives.

## 1 Subjects and addressees

The interpretation of imperative clauses typically involves an individual that corresponds to the addressee in the given context, or a set of individuals that coincides or overlaps with the set of addressees.<sup>1</sup> The literature on imperatives has pointed out the existence of two sub-cases: the case in which the addressee(s) is/are asked to do something himself/herself/themselves, and the case in which the addressee(s) is/are asked to see to it that someone else brings about a certain state of affairs (within the syntactic literature, cf. Potsdam (1998), Rupp (1999, 2003), Jensen (2003b)). To illustrate this distinction, consider the examples in (1), in which the addressee(s) is/are being asked to be here at 3 o'clock, stand up, or keep right:

- (1) a. Be here at 3 o'clock!
- b. Everyone please stand up!
- c. Slow traffic keep right!

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<sup>1</sup>This is not surprising given that the function of an imperative can be seen, informally, as that of asking the addressee(s) to do something, or to bring about a certain state of affairs. In the words of Hamblin (1987, 53), "The addressee is expected to pass the imperative on, by some appropriate means, and perhaps persuade, threaten or cajole the intended agent [into initiating an event]."

These are what I will call CORE cases of imperatives in English: cases that are accepted by all speakers (examples with null subjects like (1a) are also generally accepted cross-linguistically). In the other case, the addressee is asked to see to it that a certain state of affairs comes to hold:

- (2) a. Nobody leave the hall, sergeant!
- b. Maitre d', someone seat these guests!
- c. Your guards be the diversion while we sneak in!

Example (2a) is from Hamblin (1987), the others from Potsdam (1998). Examples of this kind are accepted by some but not all speakers of English. Cross-linguistically, sentences with directive force and a subject that does not refer to, overlaps with or quantifies over the addressee(s) are often (though not always) expressed by clauses that employ verbal forms from paradigms other than the imperative.

In this paper, I take these examples as representative of imperatives in English. The focus of my investigation is on the relation that holds between the notion of addressee and the subject of imperatives. I make two main hypotheses: The first is that the syntactic representation of imperatives encodes the notion of addressee by means of a functional projection with 2nd person features; I label this functional projection a JUSSIVE PHRASE. The second hypothesis is that, in core imperatives in English, the head of Jussive Phrase enters a syntactic relation with the subject that results in the sharing of person features. My main goal in this paper is to show that a set of hypotheses along these lines allows us to account for the intriguing range of restrictions exhibited by imperative subjects in English in a principled and uniform way, while also covering more empirical ground than previous proposals.

The paper is organized as follows. In section 2, I lay out the empirical puzzle that this paper aims to resolve: focusing on core imperatives, i.e. those imperatives that are accepted by all speakers of English, I discuss the unique properties that their subjects exhibit and point out the need to provide a uniform solution to account for them. In section 3, I put forward my proposal, which allows us to account for these unique properties by invoking the presence of a Jussive Phrase, a functional projection with 2nd person features that holds a special semantic and syntactic relation with the subject. In section 4, I turn my attention to those imperative subjects that are accepted by some, but not all speakers of English, offering some speculations on how they differ from core imperatives. In sections 5 and 6, I discuss how my proposal relates to the previous literature on the topic and offer some concluding remarks.

## 2 Core imperative subjects: empirical observations and puzzles

### 2.1 The unique properties of imperative subjects

Let us start our investigation of the properties of imperative subjects in English by examining those that are accepted by all speakers. In English they consist of four types: null subjects, the overt pronoun *you*, certain quantificational subjects, and bare noun phrases. I will discuss them in turn, pointing out in each case how their behavior in imperatives differs from their behavior in declaratives and interrogatives.

1. Null subjects. It is well known that null subjects are possible in imperatives. Interestingly, they are possible across languages (Zhang (1990)), irrespective of the traditional divide between null subject and non-null subject languages.<sup>2</sup> Null subjects in imperatives in English have 2nd person features.

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<sup>2</sup>Mauck (2005) offers a typological survey of imperatives in fifty six languages. All these languages allow null subjects in

This is shown by the fact that they can bind 2nd person pronouns and anaphors, as in (3), and confirmed by the fact that, when they are followed by a tag question, the subject pronoun in the tag is a 2nd person pronoun, as shown in (4):

- (3) a. Raise your hand!  
b. Wash yourselves!
- (4) a. Raise your hand, won't you?  
b. Wash yourselves, won't you?

It has been observed that it is not uncommon for the verbal morphology of the imperative paradigm to have a minimal number of forms.<sup>3</sup> When the imperative morphological paradigm has only one form, as in English, the null subject is interpreted as 2nd person, as in the examples just given. This is puzzling for at least two reasons:

- (a) A non-pro-drop language like English allows null subjects in non-finite clauses, where they have either generic (5a) or controlled interpretation (5b). But in imperatives, the interpretation of the null subject is typically neither generic nor controlled; rather, it refers to a (possibly singleton) set of addressees, or set containing the addressee(s):<sup>4</sup>

- (5) a. PRO hiking is popular.  
b. He likes PRO to hike.
- (6) a. Eat!  
b. Don't leave now!

This suggests that the null subject of imperatives is not the same as the null subject of non-finite clauses.<sup>5</sup> Its interpretive properties make it similar to the null subject of finite clauses in pro-drop languages, despite the fact that English is not a pro-drop language.

- (b) A pro-drop language like Italian allows null subjects in finite clauses, with a definite interpretation. The most widely held assumption is that it is the "richness of inflection", and person marking in particular, that allows the licensing and identification of a null subject. But, as mentioned above, it is very often the case that the verbal morphology of the imperative paradigm is *not* rich in agreement specifications. Italian is a case in point: the verbal form that is unique to

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imperatives, including those that are not generally pro-drop (Tuvaluan, Ndyuka, Babungo and Mbili). Zhang (1990) claims that two languages in his sample, Hawai'ian and Luo, exhibit obligatory subjects in imperatives but not in other clause types. There must be some disagreement in the grammars about this, because the ones consulted by Mauck for his survey, Judd (1939) for Hawai'ian and Stafford (1967) for Luo, say that overt subjects may be present in imperatives but are not obligatory. The same observation is also made in Potsdam (1998, 254, note 29).

<sup>3</sup>Mauck (2005) shows that very few languages exhibit a complete paradigm in imperatives, similar to the one they have in other moods. Most languages in his survey have special verbal forms for 2nd person imperatives only; a number have special forms for 2nd person and 1st person plural imperatives, inclusive of the addressee; a few have 2nd and 3rd person imperative forms, and some have imperatives that inflect for all persons (Evenki, Yidin, Dyirbal, Sinaugoro, Hixkaryana, Caddo, Classical Sanskrit and Bhojpuri).

<sup>4</sup>As pointed out in Rupp (1999, 2003), so-called conditional imperatives are different, in that their null subject may be interpreted as a generic *you*, as in the following examples (from Green (1975, 125) and Davies (1986, 412), respectively):

- (i) Show that air pollution increases oil fertility and General Motors will love you!  
(ii) Make one false step and the world never forgets!

I will not discuss conditional imperatives in this paper.

<sup>5</sup>Zhang (1990) and Potsdam (1998, 224) provide arguments against viewing the null subject of imperatives as PRO.

the imperative paradigm consists exclusively of the verbal root plus a thematic vowel, as we can see in the examples in (7):<sup>6</sup>

- (7) a. Mangia! "Eat!" (Italian)
- b. Bevi! "Drink!"
- c. Vieni! "Come!"

In fact, as mentioned above, it is true across languages that imperative verbal morphology tends to be 'meager' or reduced, as pointed out in Zhang (1990) and confirmed in Mauck (2005).<sup>7</sup> This observation suggests that the mechanism by which a null subject is licensed in imperatives is not always the same as that by which it is licensed in declaratives and interrogatives.

- 2. Overt pronominal subjects.<sup>8</sup> A 2nd person pronoun can be the subject of an imperative, as we see in (8). In contrast, a 1st or 3rd person pronoun is typically not a possible subject of an imperative:<sup>9</sup>

- (8) You do it!
- (9) \*I do it!
- (10) \*He do it!

Notice that the problem is not one of interpretation: if imperatives always involve reference to an addressee, sentences like (9) and (10) could mean something like "(you addressee) make sure that I do it" or "(you addressee) make sure that he does it". Though the first might seem somewhat odd, the second one does not; in other words, an example like (10) could be expected to receive an interpretation similar to that of the examples given in (2), in which the addressee and the subject are distinct. Yet, even the speakers that find the examples in (2) grammatical resist having *he* as the subject of an imperative (cf. Potsdam (1998, 251, note 14)). This calls for an explanation that does not rely purely on semantics.

- 3. Quantificational subjects. As is well known from the literature, certain quantifiers are possible subjects of imperatives in English, for example:

- (11) a. Nobody touch your pencils!
- b. Everyone say hello to the principal!

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<sup>6</sup>The thematic vowel is *-a* for verbs of the first conjugation class, and *-i* for the others.

<sup>7</sup>Mauck's survey shows that lack of person marking (particularly for second person singular) is always an option for imperative verbs, and in such cases the subject (null or overt) is interpreted as second person singular. Among the languages in his sample that normally have verbal inflection marking agreement with the subject, the following exhibit no 2nd person singular marking in imperatives: Biblical Hebrew, Mishnaic Hebrew, Syriac, Palestinian Aramaic, Urmi, Akkadian, Classical Arabic, Modern Egyptian Arabic, Ge'ez, Tigre, Jibbali, Bhojpuri, Hindi, Sinhala, Sanskrit, Nepali, Old Persian, Latin, Italian, Classical Greek, Russian, Polish, Malayalam, Kannada, Tamil, Turkish, Tuvaluan, Finnish, Yidin, Dyirbal, Miya and Comanche. The ones that have person inflection for second person singular imperatives are Evenki, Imbabura Quechua, Hixkaryana, Eastern Ojibwa and Tariana. Of these, only Tariana has an obligatory second person marking on the imperative that is equivalent to the second person marking for other inflections. The other languages have person endings in imperatives that are different from those of other inflections. Many of the languages without person inflection in the second singular form express second person plural imperatives with the addition of a marker that indicates plurality in general, or one that is specific to imperatives; some use the second person plural ending from another inflection.

<sup>8</sup>Flagg (2001) offers an interesting and novel discussion of the difference between null and overt (non-contrastive) 2nd person subjects of imperatives in English. She argues that "when an overt subject is present, the starting point of the action being ordered is explicitly picked out", and that the non-contrastive overt subject is licensed by an aspectual feature in the head of *vP*.

<sup>9</sup>We'll return to these data later (in section 4), mentioning a context in which a 3rd person pronoun is marginally possible for some speakers.

- c. Someone come up to the blackboard and do this problem!

Interestingly, these subjects differ from quantificational subjects in other clause types in two respects:

- (a) Interpretive possibilities. In imperatives, the interpretation of quantificational subjects is restricted to ranging over the set of addressees:<sup>10</sup>

- (12) Nobody touch your pencils until we start timing the test!  
 (13) Everyone do your homework!

In contrast, in declaratives and interrogatives, they may, but don't have to, range over the set of addressees; they can also range over a domain provided by the context. For example, given a context in which a teacher is addressing a class, the quantifiers in (14) and (15) are naturally interpreted as ranging over the set of addressees. But given a context in which a teacher is addressing another teacher without the class being present, the same quantifiers are naturally interpreted as ranging over some relevant set of students who are *not* addressees:

- (14) Nobody should touch their pencils until we start timing the test.  
 (15) Did everyone do their homework?

- (b) Binding possibilities. In imperatives, quantificational subjects can not only bind 3rd person pronouns and anaphors, but also, remarkably, 2nd person ones:<sup>11</sup>

- (16) a. Everyone<sub>i</sub> raise (his<sub>i</sub>/her<sub>i</sub>/their<sub>i</sub>)/**your**<sub>i</sub> hand!  
 b. Someone<sub>i</sub> raise (his<sub>i</sub>/her<sub>i</sub>/their<sub>i</sub>)/**your**<sub>i</sub> hand!

In declaratives and interrogatives, in contrast, they can only bind 3rd person anaphors and pronouns:<sup>12</sup>

- (17) a. Everyone<sub>i</sub> should raise his<sub>i</sub>/her<sub>i</sub>/their<sub>i</sub>/\***your**<sub>i</sub> hand.  
 b. Should everyone<sub>i</sub> raise his<sub>i</sub>/her<sub>i</sub>/their<sub>i</sub>/\***your**<sub>i</sub> hand?  
 (18) a. Someone<sub>i</sub> should raise his<sub>i</sub>/her<sub>i</sub>/their<sub>i</sub>/\***your**<sub>i</sub> hand.  
 b. Should someone<sub>i</sub> raise his<sub>i</sub>/her<sub>i</sub>/their<sub>i</sub>/\***your**<sub>i</sub> hand?

Quantificational subjects of declaratives and interrogatives can typically bind a 2nd person pronoun or anaphor in only one context: when the quantifier is followed by an overt *you*:

- (19) a. Everyone of you should raise (his/her/their)/**your** hand.  
 b. Some of you should raise (his/her/their)/**your** hand.

<sup>10</sup>A reviewer pointed out to my attention the following cases discussed in Schmerling (1982) and Potsdam (1998):

- (i) a. Someone help me!  
 b. Please, nobody steal my bike!

When said to no one in particular, these quantificational subjects can range over the set of "intended hearers", a notion slightly different from that of addressee. I will continue to use the term "addressee" in my discussion, bearing this caveat in mind.

<sup>11</sup>This was also noted in Bolinger (1967), Cohen (1976), Davies (1986), Zhang (1990), Platzack and Rosengren (1998), Potsdam (1998) and Rupp (1999, 2003).

<sup>12</sup>A 2nd person pronoun is possible in these cases, but not with the relevant, bound interpretation.

It might seem intuitive to attribute the interpretive restrictions on quantificational subjects to a constraint of semantic nature. But the binding possibilities are not as easily attributable to a semantic constraint. An attempt in that direction is made in Potsdam (1998, 238-249). Building on ideas found in Farkas and Zec (1993) and Pollard and Sag (1994), Potsdam's work accounts for cases in which a quantificational subject binds a 2nd person pronoun or anaphor by invoking the notion of SEMANTIC AGREEMENT, which refers to cases in which the agreement features of a noun phrase are determined not by its syntactic antecedent, but by its discourse referent. In the case of imperative subjects, when the discourse referent of the subject is the addressee, the subject agreement features can be 2nd person. Though plausible, this approach doesn't answer the following question: why is semantic binding perfect in imperatives, but not as easily available in declaratives and interrogatives, even when the discourse referent of the subject is the addressee?<sup>13</sup>

4. Finally, are non-pronominal, non-quantificational noun phrases possible as subjects of English imperatives? The literature exhibits a range of positions on this matter, from the most conservative (Beukema and Coopmans (1989)), which does not include referential subjects,<sup>14</sup> to the most liberal (Davies (1986), Potsdam (1998), Rupp (1999, 2003)), which allows a rather wide range of possibilities. One of my goals in this paper is to shed light on the apparent contradictions found in the literature; I believe that they arise from the fact that the judgments of different sets of speakers have been collapsed. To make sense of the situation, we need to separate the cases that are accepted by all speakers from those that are accepted by some speakers only; once we do that, the picture becomes much clearer and can be understood. On the basis of a close examination of the literature, as well as many discussions with speakers and colleagues on the acceptability of the data, I offer the following generalization:

(20) Empirical observation:

Two kinds of non-pronominal non-quantificational subjects in English imperatives are accepted by all speakers: proper names and bare nouns.

Proper names accepted as imperative subjects by all speakers pick out individuals from the set of addressees.<sup>15</sup> As pointed out in Downing (1969), Davies (1986) and Potsdam (1998), they occur preferably in coordinated structures:

- (21) a. Dani sit by the tree, Gabriel stand by the door!  
 b. John come here, Mary stay where you are!

Interestingly, in imperatives and only in imperatives, proper names as subjects can bind a 2nd person element. This is clearly not possible in declaratives or interrogatives, with the same bound reading:

- (22) a. Gabriel<sub>i</sub> comb your<sub>i</sub> hair, Dani<sub>j</sub> put on your<sub>j</sub> shoes!  
 b. John<sub>i</sub> raise your<sub>i</sub> hand, Mary<sub>j</sub> wiggle your<sub>j</sub> fingers!

<sup>13</sup>Potsdam (1998, 248) claims that quantificational subjects in declaratives and interrogatives may bind a 2nd person element, given the right context (cf. his examples "Somebody should lend me ?your/his handkerchief if you don't want this wine to spill on the white carpet.", "The manager says that everyone is to pick up ?your/his bill on the way out."). But speakers in general perceive a real difference between them and imperatives: while declaratives and interrogatives with 3rd person subjects binding a 2nd person element are marginally acceptable (to varying degrees depending on the speaker), imperatives are perfect to everyone's ear.

<sup>14</sup>Beukema and Coopmans (1989) discuss null subjects, overt *you* and quantificational subjects; they mention three examples of referential subjects (pointed out to them by Radford), all in negative imperatives, but do not take them to be representative of imperative subjects ("We wish to maintain, however, that most lexical subjects other than *you* can be given some sort of quantificational interpretation or rendered as 'collective' you." p. 421).

<sup>15</sup>One might wonder whether these proper names are vocatives, rather than subjects; I address this issue in section 2.2.

- (23) a. \*Gabriel<sub>i</sub> combed your<sub>i</sub> hair, while Dani<sub>j</sub> put on your<sub>j</sub> shoes.  
 b. \*Did Gabriel comb your<sub>i</sub> hair, while Dani<sub>j</sub> put on your<sub>j</sub> shoes?
- (24) a. \*John<sub>i</sub> raised your<sub>i</sub> hand, while Mary<sub>j</sub> wiggled your<sub>j</sub> fingers.  
 b. \*Did John<sub>i</sub> raise your<sub>i</sub> hand, while Mary<sub>j</sub> wiggled your<sub>j</sub> fingers?

Proper names as subjects of imperatives thus exhibit the characteristic properties of elements with 2nd person features, both from the point of view of interpretation and of binding.

The second type of third person, non-quantificational subject that is widely possible in English imperatives is bare nouns. All speakers allow bare plurals as subjects of imperatives (cf. Culicover (1971)), and even a bare singular like (25c) is clearly better than one with an overt determiner (25d), as pointed out in Schmerling (1982):

- (25) a. Boys be the cops and girls be the robbers.  
 b. Passengers with tickets go to their seats, passengers without be patient!  
 c. Slower traffic keep right.  
 d. ?The slower traffic keep right.

From the point of view of the interpretation, bare nouns as subjects of imperatives lack the generic interpretation that bare nouns may have in other clause types:

- (26) Boys love cops and girls are fascinated by robbers.

While (26) means that boys, in general, love cops and girls, in general, are fascinated by robbers, (25a) is not interpreted as a request that boys, in general, be the cops and girls, in general, be the robbers. Rather, *boys* and *girls* in the imperative refer to a subset of the set of addressees.<sup>16</sup>

As with proper names and quantificational subjects, bare plural subjects of imperatives can bind a 2nd person element:

- (27) a. Boys<sub>i</sub> raise your<sub>i</sub> hands; girls<sub>j</sub> wiggle your<sub>j</sub> fingers!  
 b. Boys<sub>i</sub> be your own<sub>i</sub> judges; girls<sub>j</sub> be your own<sub>j</sub> bosses!

This is clearly in contrast with their behavior in declarative and interrogative clauses, where they can only bind a 3rd person element:

- (28) a. Boys<sub>i</sub> are often \*your<sub>i</sub>/their<sub>i</sub> own worst enemy.  
 b. Are boys<sub>i</sub> are often \*your<sub>i</sub>/their<sub>i</sub> own worst enemy?
- (29) a. Girls<sub>i</sub> can often take care of \*yourselves/themselves<sub>i</sub> at this age.  
 b. Can girls<sub>i</sub> often take care of \*yourselves/themselves<sub>i</sub> at this age?

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<sup>16</sup>As Carson Schütze pointed out to me, bare nouns as subjects of imperatives also lack the existential interpretation that bare nouns may have in other clause types:

- (i) Boys were pretending to be cops and girls were acting as robbers.

While (i) means that there were some boys who were pretending to be cops, (25a) does not mean that. The bare plural as the subject of an imperative in (25a) is interpreted as referring to the set of addressees, and in fact as exhausting the set of addressees: the boys in the set of addressees are being asked to be the cops and the girls in the same set are being asked to be the robbers.

This concludes the description of the four kinds of subjects that my investigation found to be acceptable to all speakers of English.<sup>17</sup> Now I would like to raise the following questions:

1. Why are these subjects all possible in English imperatives?
2. Why do they all license a 2nd person element in object position, in contrast with their counterparts in declaratives and interrogatives?

Before I turn to answering these questions, however, I need to address another issue likely to have arisen in the reader's mind: how do we know that the overt noun phrases just discussed are subjects and not vocatives?

## 2.2 Distinguishing imperative subjects from vocatives

In order to strengthen the claim that proper names and bare noun phrases can serve as imperative subjects in English, we need to show that, in the relevant contexts, they cannot be analyzed as vocatives. If they could, they would not constitute another instance of the pattern I am claiming to be uncovering, where a 3rd person subject licenses a 2nd person element; this is because the vocative would co-occur with a null subject with 2nd person features, which would license the 2nd person element (*Gabriel<sub>i</sub>, pro<sub>i</sub> comb your<sub>i</sub> hair!*).

Several criteria have been discussed in the literature to identify vocatives (cf., among others, Downing (1969), Davies (1986, 5.3), Zwicky (1974), Schmerling (1975), Zhang (1990), Potsdam (1998), Jensen (2003a,b), Moro (2003), Rupp (2003)).<sup>18</sup> Not all of them can be applied to English, which does not exhibit special pronunciation or morphological marking for vocatives. But there are three properties that allow us to tell when proper names and bare noun phrases must be analyzed as subjects in English imperatives. One is the lack of an intonational break: whereas vocatives in English are typically separated from the rest of the clause by an intonational break, the noun phrases under discussion are not. Another one is the complexity of the context in which the imperative occurs: as noted in Downing (1969, 578), when a proper name is used as a vocative, the imperative clause can be used in isolation (cf. 30); in contrast, when it is used as a subject, the imperative clause must be followed by at least another clause, as shown by the difference in grammaticality between (31a) and (31b). The same pattern holds for bare noun phrases: when they are used as vocatives, the clause containing them can occur in isolation, as in (32); but when they are used as subjects, it cannot (cf. 33a vs. 33b):

- (30) John, close the door, will you?  
(31) a. \*John close the door, will you?  
      b. John scatter the files, Bill ransack the desk, and I'll watch the door.  
(32) Boys, be quiet!

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<sup>17</sup>Note that my discussion does not include examples with indefinite, partitive or definite subjects, as they are not readily accepted by all speakers of English. The following examples of such subjects are from Potsdam (1998, 204-5):

- (i) a. Whoever saw the incident come forward please! (indefinite)  
      b. The two of you stop fighting and get to work! (partitive)  
      c. The oldest of the girls in this group sing a folk song! (definite)

<sup>18</sup>Building on this body of work, Jensen (2003b, 154) provides the following list of properties: (a) special pronunciation; (b) special intonational contour, usually including a prosodic boundary between the vocative DP and the VP; (c) special vocative case or other morphological marking; (d) inability to trigger 3rd person agreement, even when the vocative DP is 3rd person; (e) clause-external position; (f) reference limited to the addressee.

- (33) a. \*Boys be quiet!  
 b. Boys be quiet, girls be in charge of the orchestra!

A third property distinguishing subjects from vocatives has to do with interpretation: proper names and bare noun phrases used as subjects pick out a member of the set of addressees (cf. Davies (1986, 142-3)), whereas a vocative refers to the (possibly singleton) set of addressees. This difference can be seen quite clearly when a vocative and a subject co-occur. As shown by the examples in (34) and (35), when a proper name is used without an intonational break separating it from the rest of the clause, it picks out a subset of the addressees identified by the vocative, and the clause cannot be used in isolation (hence the ungrammaticality of the examples in (35)). In contrast, when a proper name is used as a vocative, it may introduce a new addressee, and the clause may be used in isolation (cf. 30). The sentences in (36) have a reading in which two sets of addressees are being introduced (the kids and Simon in one case, the guys and Mary in the other), which is not available when there is no intonational break between the noun phrase and the rest of the clause (the same pattern holds if we replace the proper name with a bare noun phrase):

- (34) a. Kids, Gabriel comb your hair; Dani put on your shoes!  
 b. Guys, John raise your hand; Mary wiggle your finger!
- (35) a. \*Kids, Gabriel comb your hair!  
 b. \*Guys, John raise your hand!
- (36) a. Kids, Simon, put on your shoes!  
 b. Guys, Mary, raise your hand!

We can now go back to the noun phrases under discussion ((21), (22), (25) and (27)). We observe that (a) they do not have an intonational break separating them from the rest of the clause, (b) they require that the clause containing them not occur in isolation and (c), in the presence of a vocative, they cannot introduce a different addressee. I conclude that they are not to be assimilated with cases of proper names or bare noun phrases used as vocatives, but are best analyzed as instances of noun phrases used as imperative subjects.<sup>19</sup>

### 3 A uniform account of core imperative subjects

#### 3.1 The Jussive Phrase and the subject

Let us follow Baker (to appear) in assuming that a noun phrase can have 1st or 2nd person features only if it enters a syntactic relation with an element that has 1st person or 2nd person features, respectively. I propose an account of the unique properties of core imperative subjects that is based on this assumption, in combination with the hypotheses outlined in the introduction and the empirical observation in (20). My overall view is the following:

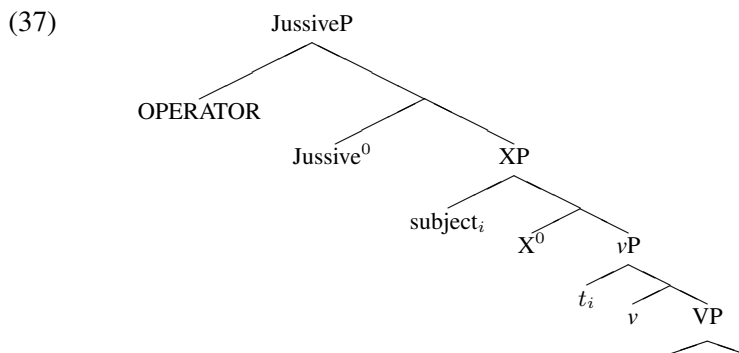
- Sentences with directive force contain a functional projection that is not present in other clause types. I label it a **JUSSIVE PHRASE**. The Jussive Phrase has an operator in its specifier that acts as a lambda

<sup>19</sup>An anonymous reviewer pointed out that the intonational break between a vocative and the rest of the clause can be minimal, implying that one might also be present in the cases we are considering, though perhaps difficult to detect. If so, then one of the three differences between noun phrases used as subjects and vocatives would have to be restated in terms of the size of the intonational break.

operator and abstracts over the subject: it takes as input a proposition, consisting of the predicate saturated by the subject, and yields as output a property. This property has a presupposition that its argument, corresponding to the subject, refers to the addressee(s), and will be assigned an appropriate directive force (e.g., ordering, requesting, invitation) by the pragmatic component, in a way that need not be discussed here (cf. Portner (2004), Portner (to appear)).<sup>20</sup>

- The Jussive Phrase has person features (2nd person in the cases we are considering here; later we will see cases of 1st person features in Korean). When it is the element carrying person features structurally closest to the subject, its head enters an agreement relation with the subject, that is, a syntactic relation that results in the same person features appearing in both places (the Jussive head and the subject). However, if another element carrying agreement features intervenes between the Jussive Phrase and the subject, no agreement takes place. There are several possible ways to implement this agreement relation. For the sake of concreteness, I will propose that we view it as an instance of the relation Agree proposed in Chomsky (2000), and revised in Pesetsky and Torrego (2007). Postulating this syntactic relation allows us to account for both the fact that agreement is sensitive to locality and the presence of nominative case on the subject.
- Recall the empirical observation concerning English made in the previous section: two kinds of non-pronominal, non-quantificational subjects in English imperatives are accepted by all speakers, namely proper names and bare nouns. These noun phrases share the property of not having an overt determiner. In a somewhat speculative way, I will suggest that this property is responsible for the fact that they act as imperative subjects and exhibit 2nd person features: the person features of the Jussive Phrase are passed on to the subject through the determiner layer.

I assume that the structure of an imperative clause consists of the predicate, its arguments, and a certain amount of functional structure. In the interest of space, let me set aside the controversial issue of whether or not TP is present, and represent the structure of an imperative minimally as follows:



In what follows I will not discuss the lambda-abstraction over the subject, for which I refer the reader to Portner (2004) and Pak et al. (2006). I will focus instead on the agreement relation that holds between the Jussive head and the subject of core imperatives, and show how this proposal accounts for the set of facts I aim to explain, starting from the case of null subjects.

<sup>20</sup>I believe that this operation is what is at the basis of the observation made in Platzack and Rosengren (1994, 1998), and subsequently in Jensen (2003b), that the subject of imperatives is not the individual that is being talked about (the subject of predication) but rather the individual that is being talked to. In Portner's work, the notion of 'being talked to' is expressed in terms of the way the conversational context is updated: a new requirement, or expectation, is added to that individual's 'To-do list'. See the references provided for more details.

In some languages, verbal morphology licenses null subjects in imperatives, as in other clause types.<sup>21</sup> However, as observed in the previous section, null subjects with definite reference are also possible in imperatives in the absence of morphological inflection on the verb (as in certain cases of Italian), and even in languages that do not allow definite null subjects at all in other clause types (like English). This is because imperatives differ from declaratives, interrogatives and exclamatives in having a Jussive Phrase. When the head that provides verbal morphology lacks person features, the Jussive head is the element with person features closest to the subject. I propose that it enters an agreement relation with the subject, which can be implemented via the relation Agree: the subject has an unchecked case feature; the head of the Jussive Phrase acts as a probe, enters an Agree relation with the subject, and in so doing assigns a value to the person feature and checks the case feature of the subject. Given the assumption that the Jussive Phrase is present in imperatives cross-linguistically, it follows that all languages allow definite null subjects in imperatives, even when person features on inflectional heads are missing or not sufficiently ‘rich’ to license and identify a null subject.

Let us now turn to overt subjects, starting with the pronominal ones. The fact that the pronoun *you* is a core imperative subject in English is straightforwardly predicted by the account I am proposing: the Jussive head enters an agreement relation with the subject, whereby they share 2nd person features; when the pronominal subject is overtly realized, it is spelled out as *you*. Under this view, a pronominal subject in an agreement relation with a Jussive head with 2nd person features could not be realized as *I* or *he*.<sup>22</sup> The data indeed confirm that *I* or *he* are not possible subjects of core imperatives in English. One could of course argue that this is because the semantics and/or pragmatics of imperatives require that the subject of an imperative refer to the addressee; but the literature offers ample discussions showing that not to be strictly the case (cf. Davies (1986) and Potsdam (1998) in particular). And proposals that make the pragmatic restriction more precise still cannot make the correct prediction. For example, Potsdam’s work argues that the correct pragmatic condition is that the addressee must have control over the subject; though this hypothesis allows an account of much of the data, it does not rule out a subject with 1st or 3rd person features (his hypothesis predicts that it should be possible, as long as the addressee has control over it).<sup>23</sup>

<sup>21</sup>For example, in Bohjpurī, where the imperative verb is inflected for 1st, 2nd and 3rd person, the person features of a null subject reflect those of the verbal morphology.

<sup>22</sup>If a language allowed its Jussive head to have 1st person features, the subject of a clause with directive force could be the counterpart of English *I*. This is arguably the case in Korean, as will be discussed in section 5. If the Jussive head could encode reference to both speaker and addressee, by means of the appropriate person features, then we would expect the corresponding overt pronominal subject to be possible, that is, one that can refer to both speaker and addressee. This is certainly possible in Korean (see section 5) as well as in Italian, as shown in (i):

- (i) Andiamoci noi! (Italian)  
 go-there we  
 ‘Let’s go there!’

Note that the pronoun *noi* in (i) is obligatorily interpreted as inclusive of the addressee in imperatives, whereas in other clause types it may or may not include the addressee. (This example raises the interesting possibility that the person features exhibited by the verbal morphology do not come from I or T, but rather from the Jussive head.) English has a special construction for exhortatives:

- (ii) Let’s do it!

It would be interesting to investigate whether *let’s* could be seen as the overt realization of the Jussive head. Potsdam (1998, 266-72) indeed argues that *let’s* is a lexical unit with 1st person inclusive agreement features, though he analyzes it as an I<sup>0</sup>.

<sup>23</sup>Potsdam (1998, 210-11) formulates the control relationship that holds between the addressee and the subject as follows: “The addressee must be in a control relationship over the referent of the imperative subject.” “x is in a control relationship with y if x has potential control over y in some domain z (where z may range over social, military, political, economic, discourse of other situations).” For a discussion of the problem presented by 1st and 3rd person pronouns, see Potsdam (1998, 251), note 14.

Turning now to quantificational subjects, recall that they present two exceptional properties in imperatives, which they do not exhibit in interrogatives and declaratives: they are restricted to ranging over the set of addressees and can bind 2nd person elements even when the domain of quantification is not overtly expressed.<sup>24</sup> Since it could be argued that the interpretive property can be independently derived from the meaning and function of imperatives, I will focus on the exceptional binding property, which I believe provides clear evidence in support of the presence of 2nd person features in the syntax. I assume that every quantificational phrase has a syntactic element that corresponds to its domain restriction (when it is not overt, it is phonologically empty but still syntactically present) and that can be endowed with person features; the simplest assumption is that it is a null noun phrase. This view is in agreement with a proposal independently made by Stanley and Szabó (2000), who argue that domain restriction is a syntactic and semantic phenomenon, rather than a pragmatic one, and that every quantifier is associated with a variable that expresses its domain restriction. I propose that the null element that corresponds to the domain of quantification acquires 2nd person features from the Jussive Phrase in a manner parallel to that in which the null subject does; in other words, the head of the Jussive Phrase enters an Agree relation with the null element that corresponds to the domain restriction of the quantificational subject, and in so doing assigns a value (2nd) to its person feature. One question that arises from implementing the agreement relation via Agree is what makes the null noun phrase an active goal. I assume it is a case feature. Another is whether the Agree relation can be established with the null noun phrase in situ, or whether it raises to the specifier of the quantifier phrase. I speculate that it does not need to raise; a quantifier in English is likely to lack person features, and thus not to interfere with the relation between the Jussive Phrase and the null element that corresponds to the domain restriction. Because the null noun phrase acquires 2nd person features (and arguably checks its case feature), its syntactic behavior is like that of its overt counterpart: it allows for the presence of a 2nd person element in object position.<sup>25</sup>

We're now ready to turn to the last of the four cases of core imperatives subjects: overt non-pronominal, non-quantificational subjects. As pointed out in section 2, two kinds are accepted by all speakers: proper names and bare nouns. In imperatives, and only in imperatives, both can bind a 2nd person element. Though the authors who give a comprehensive description of imperative subjects have included them, to my knowledge no-one has yet raised the question of whether it is significant that they both lack a determiner. I think that it is, and that this is the property that allows them to serve as subjects of core imperatives. My proposal is that a null determiner in English differs from an overt one (like *the*) in that it lacks a value for the person feature. In imperatives, the Jussive head enters an Agree relation with the subject; given that the subject does not have a 3rd person feature (as it would be the case if *the* were present), the value for the person feature of the Jussive head (2nd person) is passed on as the value of the person feature of the subject.<sup>26</sup> This in turn allows the binding of a 2nd person element in object position.

In sum, my proposal is that core imperatives encode reference to the addressee in the syntax by means of a functional projection with 2nd person features that enters a special relation with the subject – a relation that involves semantic binding and syntactic agreement. The agreement relation is responsible for the licensing of null subjects, the restrictions on overt pronominal subjects, and the exceptional binding properties of

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<sup>24</sup>This option is not generally available cross-linguistically. In Italian, for example, neither an overt nor a null element expressing the domain restriction can enable the binding of a 2nd person element.

<sup>25</sup>The question of how exactly the noun phrase that represents the domain restriction can act as the binder for a pronoun or anaphor in object position is not a trivial one. However, this is not unique to imperatives, since we have seen that English exhibits this property in other clause types as well, as long as the element is overt. What is unique to imperatives is that the domain restrictor can bind an element in (or within) the object position even when it is null. This, I argue, is to be thought of as parallel to the possibility of a null subject, which in English is also restricted to imperatives.

<sup>26</sup>As pointed out to my attention by Marcel den Dikken, my analysis implies that so-called third person truly is a person specification, and not simply the lack of person specification, as suggested in some of the literature. That this is indeed the case is independently argued in Nevins (2007).

quantificational and bare noun phrases. My proposal does better than an account that attributes these properties to a pragmatic condition, as it can predict why certain forms are ungrammatical even in the appropriate pragmatic context (like the pronouns of 1st or 3rd person) and why imperatives differ from declaratives and interrogatives, which do not allow the same range of options even when the pragmatic context is such that it could. By invoking the presence of person features on the Jussive head, my proposal accounts for why null subjects with definite interpretation are possible in English and other languages in the absence of person features on verbal morphology, while preserving the role of person features in making definite null subjects possible. Finally, it provides a uniform account of the exceptional interpretive and binding properties of imperative subjects, to an extent not attained by previous proposals.

### 3.2 A closer look at the relation between the Jussive Phrase and the subject

In the preceding section I proposed that the Jussive head enters an agreement relation with the subject, and implemented it as the relation Agree. In this section I will offer a more detailed discussion of the nature of this relation, by asking whether it resembles other relations that result in the sharing of features, like the one that holds between two referential expressions, an operator and a variable, or a noun phrase and a functional element bearing *phi*-features.

The relation between the Jussive Phrase and the imperative subject is not one of referential dependence of the sort that might hold between a noun phrase and a pronoun, for at least two reasons. First, the Jussive Phrase does not refer to an individual, or a set of individuals, as it is not a referential expression. It simply brings into the syntactic derivation a 2nd person feature; this person feature carries a presupposition that can only be satisfied by an individual that corresponds to the addressee (or intended addressee) in the context, or a set that contains the addressee, or the intended addressee; but it does not itself denote an individual. Second, if this relation were like the one that might hold between a noun phrase and a pronoun, it would be surprising that the bound element were a proper name or a bare noun phrase, since they typically cannot be bound.

Vocatives are referential expressions that obligatorily refer to the addressee; one could speculate that, in imperatives, a referential dependence is established between the vocative and the subject. But this cannot be correct, for the following reasons. Vocatives are not restricted to imperatives: they are found in declaratives and interrogatives as well;<sup>27</sup> however, in imperatives they exhibit a different behavior than in the other clause types. First, in declaratives and interrogatives, a vocative may stand in a relation of referential dependence with an argument other than the subject of the clause, as we see in (38); and it may also not co-refer with any argument in the clause at all, as in (39). In contrast, in imperatives, an overt vocative cannot co-refer with an argument other than the subject, as we see in (40):

- (38) a. Kids<sub>*i*</sub>, Mr. Conti is calling you<sub>*i*</sub>.  
       b. Kids<sub>*i*</sub>, is Mr. Conti calling you<sub>*i*</sub>?  
 (39) a. Kids<sub>*i*</sub>, Mr. Conti<sub>*j*</sub> is moving the piano<sub>*k*</sub>.  
       b. Kids<sub>*i*</sub>, is Mr. Conti<sub>*j*</sub> moving the piano<sub>*k*</sub>?  
 (40) \*Kids<sub>*i*</sub>, someone help you<sub>*i*</sub>!

Moreover, in declaratives and interrogatives, a vocative can provide the domain restriction for the quantifier, as we see in (41). However, even when the quantifier ranges over the set of addressees provided by the

<sup>27</sup>They occur in exclamatives, too, though I will not discuss them here.

vocative, a 2nd person element in object position is not possible, as shown in (42). In contrast, in imperatives, as discussed above, the quantifier in subject position ranges over the set of addressees and a 2nd person element in object position is possible:

- (41) a. Guys, someone/everyone should help him move the piano.  
b. Guys, shouldn't someone/everyone help him move the piano?
- (42) a. \*Guys, someone/everyone should raise your hand and answer the question.  
b. \*Guys, shouldn't someone/everyone raise your hand and answer the question?

I take these data to show that the mere presence of a vocative in a sentence is not sufficient to make the subject refer to or quantify over the set of addressees, or to license the presence of a 2nd person element in object position. It is only in imperatives that the subject has these properties. From this I conclude that the characteristic properties of imperative subjects derive from something unique to imperatives, and not from the presence of an overt or abstract vocative. I attribute this special behavior to the presence of the Jussive Phrase, which other clause types lack.<sup>28</sup>

We should now consider the possibility that the syntactic relation between the Jussive Phrase and the subject might be like the one that holds between an operator and the noun phrases that it binds. For example, interrogative clauses have been argued to have an operator that enters a syntactic relation with a noun phrase in the clause. If such an operator passes its features on to the noun phrase it binds, the relation would be similar to the one under discussion, in that it results in the same feature value appearing on more than one element. However, it would also be different from the one we are investigating in that it is not limited to the noun phrase in subject position, but can affect noun phrases in other positions as well (whereas the Jussive

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<sup>28</sup>Along similar lines of reasoning, one might wonder whether the relation between the Jussive Phrase and the imperative subject is like the relation between a topic phrase and the noun phrase with which it co-refers. In some cases, the subject co-refers, overlaps in reference with or quantifies over a set provided by the topic:

- (i) a. As for the kids, the boys are still adjusting, the girls are doing fine.  
b. As for the kids, Gabriel plays the piano, Dani plays the guitar.  
c. As for the kids, some are doing a great job!

Though topic phrases and left-dislocated elements may co-refer with the subject, they may also co-refer with arguments other than the subject, as we see in (iia). Most notably, they can do so even in imperatives, as shown in (iib):

- (ii) a. As for Mr. Conti<sub>i</sub>, the kids adore him<sub>i</sub>.  
b. As for Mr. Conti<sub>i</sub>, write him<sub>i</sub> a thank you note!

Like vocatives, topic phrases and left-dislocated elements can also provide a range for a quantifier; when it is in subject position, the restriction of the quantifier need not be overt:

- (iii) As for the students, everyone/many thought it was a good lecture.

However, they cannot affect the binding properties of the subject. Even when the left dislocated element is second person, and the quantifier in subject position ranges over the set it provides, as in (iva), this does not seem sufficient to license a second person element in object position. While (iva) is less than perfect for many speakers, a comparable case in an imperative (like ivb) is perfect:

- (iv) a. ???As for you guys, everyone should behave yourself.  
b. As for you guys, everyone behave yourself!

In sum, a topic phrase or left dislocated element does not have to enter a relation of referential dependence with the subject; whether it does or not, the unique properties of imperative subjects do not depend on it. Thus the relation that holds between a topic or left dislocated element and the subject is different from the one that holds between the Jussive Phrase and the subject. (See Lambrecht (1996) for a discussion of topics that touches on similar points.)

Phrase cannot affect noun phrases in other positions). Suppose we take the relation between the Jussive Phrase and the subject to be like that between an operator and the variable that it binds. We would then have to say something special about the strict locality that it manifests – possibly that whenever operator-variable agreement involves person features, it is subject to strict locality constraints. This assumption seems to be independently supported by the results of recent unpublished work like Baker (to appear) and Kratzer (2006). Building on insights of Schlenker (2003, 2005) and Sigurðsson (2004), Baker (to appear) proposes the existence of two operators within the CP level designating the speaker and the addressee of the sentence.<sup>29</sup> In his proposal, all 1st person and 2nd person elements must be interpreted as bound by the S(peaker) or A(ddressee) operator, respectively, in accordance with the Person Licensing Condition, which is stated as follows: (a) A DP/NP is first person only if it is locally bound by the closest c-commanding S or by another element that is first person; (b) A DP/NP is second person only if it is locally bound by the closest c-commanding A or by another element that is second person; (c) Otherwise, a DP/NP is third person.

Would it be possible, then, to characterize the relation between the Jussive Phrase and the subject as one of operator-variable binding? And should we identify the Jussive Phrase with the Addressee operator proposed in Baker’s work? The answer to the latter question is negative, for the following reason: the effects of the Jussive Phrase are only visible in imperatives. That is, null subjects with a definite interpretation of 2nd person are not available in English declaratives, interrogatives or exclamatives; quantificational subjects with a null domain of quantification do not have the same interpretive restrictions and exceptional binding properties in clause types other than imperatives; and the same holds for referential expressions. If I am correct in assuming that these properties are to be related to the presence of the Jussive Phrase, then two options are available: either the Addressee operator is different in imperatives than in other clause types; or else the Jussive Phrase is distinct from the Addressee operator. These are perhaps two equivalent ways of saying the same thing, but for the purpose of clarity I choose the latter and say that the Jussive Phrase is a projection distinct from the Addressee operator, and unique to sentences with directive force; it co-occurs with the Speaker and Addressee operator postulated by Baker, and might inherit person features from them (as we will see later, in Korean the Jussive Phrase may have 1st person features as well).

In order to highlight the properties involved in the relation between the Jussive Phrase and the subject, in particular the passing of person features and the sensitivity to locality, I express it in terms of the relation Agree. This relation was proposed in (Chomsky (2000, 2001)) for cases where a functional head enters a relation with a nominal element that has features of the same kind; this nominal element must be in the c-command domain of the head and be an *active goal*, in the sense of having an uninterpretable feature that needs to be eliminated. For example, the head of TP is argued to enter an Agree relation with the subject; as a result, the (uninterpretable)  $\varphi$ -features on the head of TP are valued and deleted, and the uninterpretable case feature on the subject is eliminated. In the case of the Jussive Phrase, I am assuming that the person feature on its head is interpretable, in the sense that it provides a presupposition that can only be satisfied by the addressee in the context; therefore I am contemplating a relation between a probe and a goal that both have interpretable features.<sup>30</sup> But, as in the case just described, I take the subject of an imperative to

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<sup>29</sup>Baker’s proposal is formulated as follows (from Chapter 4 of his book manuscript):

- (i) a. All matrix clauses and certain embedded clauses have two special null arguments generated within the CP projection, one designated S (for speaker) and the other A (for addressee).
- b. In the absence of an over-riding control relationship, S designates the person who spoke/wrote the CP, and A designates the person who the CP was addressed to.

As a precedent of these ideas, Baker cites some work within the generative semantics tradition and, in syntax, Koopman and Sportiche (1989), Adesola (2005), and related work, whose goal is to offer a syntactic explanation of logophoricity in West African languages.

<sup>30</sup>The relation Agree was modified in Pesetsky and Torrego (2007), so as to eliminate the need for the probe to have uninter-

be an active goal, in the sense that it has an uninterpretable case feature that needs to be eliminated. This is so because, in the cases we are considering, the imperative clause either lacks a TP projection or has one with non-finite tense features, which therefore lacks *phi*-features and cannot enter an Agree relation with the subject and eliminate its case feature. The Jussive Phrase, which has person features, can Agree with the subject and eliminate its uninterpretable case feature.

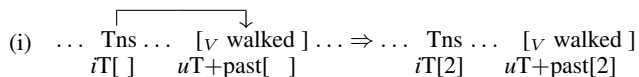
The idea that the Jussive Phrase can enter an Agree relation with the subject when no other functional projection with *phi*-features is present finds support in the following pattern found in Icelandic.<sup>31</sup> In Icelandic imperatives, when the verb is in the infinitival form, a non-pronominal subject can license a 2nd person pronoun (cf. 43a); but when the verb in the subjunctive, it cannot (cf. 43b):

- (43) a. Allir taka upp bækurnar sínar / ykkar. (Icelandic)  
 All.MASC take.INF up books.the REFL / yours  
 ‘Everyone pick up your books!’
- b. Allir.MASC taki upp bækurnar sínar / \*ykkar.  
 All take.3.PL.SUBJ.PRES up books.the SELF / yours  
 ‘Everyone should pick up his books.’

In my view, this follows from the fact that the subject does not enter an Agree relation with the TP of the infinitive (which lacks *phi*-features); its case feature being unchecked, the subject enters an Agree relation with the Jussive head, acquires 2nd person features from it, and in turn licenses a 2nd person element in object position. In contrast, the subject does enter an Agree relation with the TP of the subjunctive (which has *phi*-features); its case feature being checked as a result of this relation, it cannot enter the same relation with the head of the Jussive Phrase.

In sum, I am proposing that the Jussive Phrase enters an Agree relation with the subject when the TP is missing or lacks *phi*-features. By virtue of having 2nd person features and entering an Agree relation with the subject, the Jussive Phrase (a) makes null subjects possible, (b) allows quantificational subjects with null domain restrictions to acquire 2nd person features and bind 2nd person elements in object position, and (c) enables noun phrases with a null determiner (proper names and bare nouns) to acquire 2nd person features and bind 2nd person elements. The first property holds cross-linguistically, whenever the verbal form employed by the imperative lacks *phi*-features. The others are more restricted.<sup>32</sup>

interpretable features. Take the case of the feature tense. Following Chomsky (1957), Emonds (1976), Emonds (1978), and Pollock (1989), Pesetsky and Torrego (2007) posit a Tns node as the syntactic realization of semantic tense, that is, as a category with an interpretable tense feature. Given that tense can be morphologically marked on the finite verb, they assume that the finite verb has a T feature which is uninterpretable but valued. Tns acts as a probe and T acts as a goal, and they enter an Agree relation. As a result of this relation, the value of the T feature on the finite verb is passed to the Tns head, as schematically indicated in (i). The symbols *i* and *u* stand for ‘interpretable’ and ‘uninterpretable’, respectively; *T* is the name of the feature; *+past* is the name of the feature value; an empty pair of square brackets indicate that Agree has not taken place, and the number within square brackets is an arbitrary number that indicates that Agree has taken place:



The relation between the Jussive head and the subject is partially similar to this case. However, differing from Pesetsky and Torrego (2007), I also assume that the person features on the target (the subject) are interpretable.

<sup>31</sup>I am grateful to Gunnar Hrafn Hrafnbjargarson for pointing my attention to this pattern and its significance for my hypothesis.

<sup>32</sup>The second property, attested in English and Icelandic (and perhaps other languages as well), might depend on whether quantificational phrases allow the person features of the domain restriction to become the person features of the phrase as a whole. I do not know how widespread the third property is; if my intuition is correct, it hinges on having null determiners that lack a value for the person feature. This allows noun phrases headed by them to acquire the person feature value of another phrase, when in the

## 4 Other imperative subjects

So far we have been discussing core imperative subjects, that is, subjects accepted by all speakers of English. Let us now turn our attention to other subjects of imperatives, those which are accepted by some speakers only. Throughout this section, the notation “Set B” next to an example signals precisely the fact that it is grammatical for some speakers only.

For some speakers, plural noun phrases with an overt determiner are acceptable subjects of imperatives; an example is given in (44). The same speakers who accept sentences like (44) as an imperative also allow plurals with an overt determiner to bind 3rd person elements in the reading of an imperative, as in (45):

- (44) The girls be the cops, the boys be the robbers! (Set B)
- (45) a. The boys<sub>i</sub> raise their<sub>i</sub> hands, the girls<sub>j</sub> wiggle their<sub>j</sub> fingers! (Set B)  
b. The boys be their own judges, the girls be their own bosses! (Set B)

The judgment for (45a) is delicate, as the sentence could be a declarative clause with a verb in the indicative. The case of (45b) is clearer, since a root clause with the uninflected *be* form cannot be a declarative. For the speakers who accept these examples, they have a different meaning from bare noun phrases, as can be seen by comparing the two examples in (46). In the case of bare plurals (cf. 46a), the subject picks out a subset of the set of addressees. In the case of plurals with an overt determiner, as in (46b) (and (44) above), speakers can interpret the sentences as spoken to an addressee distinct from the subject (for example, to the teacher of the boys and girls):

- (46) a. Girls straighten your shoulders, boys lift your chins!  
b. The girls straighten their shoulders, the boys lift their chins! (Set B)

This contrast is very clearly reflected in the constraints on their co-occurrence with overt vocatives. In the case of bare noun phrases, the vocative can only refer to an addressee that is a superset of the bare plural subject (as in 47a), otherwise the sentence is ungrammatical, as in (47b). In contrast, plurals with an overt determiner are not subject to this restriction: they can co-occur with a vocative that refers to an addressee that is not a superset of the subject noun phrase, as shown in (48):

- (47) a. Kids, girls straighten your shoulders, boys lift your chins!  
b. \*Ms. Heiser, girls straighten your shoulders, boys lift your chins!
- (48) Ms. Heiser, the girls straighten their shoulders, the boys lift their chins! (Set B)

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right configuration. One NLLT reviewer pointed out to me that Dutch proper names differ from the English ones in both relevant respects: they cannot be the subjects of imperatives and cannot co-occur with the counterpart of ‘you’ as a determiner:

- (i) a. \*Ga Jan nu maar naar huis!  
go John now but to house  
b. \*Ga jij Jan nu maar naar huis!  
go you John now to house  
c. Ga (jij) nu maar naar huis! (Dutch)  
go (you) now but to house  
'(You) go home!'

This corroborates the analysis presented in this paper, as it suggests that the ability of a DP to function as the subject of an imperative correlates with its ability to have a determiner with 2nd person features.

In other words, for the speakers who accept them, plurals with overt determiners can co-occur with a vocative that introduces an individual or a set of individuals distinct from the subject.

A similar set of judgments can also be found in the case of proper names, as shown in (49). I include an overt vocative to highlight the fact that the addressee and the subject can be distinct:

(49) Ms. Heiser, Gabriel stand by the door, Dani sit by the tree! (Set B)

In the case of proper names, all speakers allow cases where the subject can bind a 2nd person element, as in (22). But the same speakers who accept sentences like (49) also allow sentences like (50):

- (50) a. Gabriel<sub>i</sub> comb his<sub>i</sub> hair, Dani<sub>j</sub> put on his<sub>j</sub> shoes! (Set B)  
b. John<sub>i</sub> raise his<sub>i</sub> hand, Mary<sub>j</sub> wiggle her<sub>j</sub> fingers! (Set B)  
c. Ms. Heiser, Gabriel<sub>i</sub> straighten his<sub>i</sub> shoulders, Dani<sub>j</sub> lift his<sub>j</sub> chin! (Set B)

The literature on English imperatives contains data confirming these observations (cf. Davies (1986, 133-143), Hamblin (1987, 52-53) and Potsdam (1998, 208-214). For example, Potsdam (1998) claims that the following examples (and many others like them) are acceptable in English with an interpretation where the addressee and the subject do not coincide:

- (51) a. YOUR soldiers build the bridge, General Lee!  
b. Your guards be the diversion while we sneak in!  
c. Maitre d', someone seat these guests!  
d. Counselors, everyone be packed up and ready to go in half an hour!

Most speakers I consulted find (51c) and (51d) grammatical only on a reading that identifies the referent of the vocative with that of the subject (e.g., in (51d), the counselors are the ones who are to be ready), and the others ungrammatical. This leads me to think that these sentences have the same status as the ones discussed above, namely they are accepted by only *some* speakers.

Turning now to pronominal subjects, Richard Kayne (personal communication) pointed out to me that, in his English, a negative imperative may marginally have a 3rd person pronoun as a subject, and in this case it also fails to coincide with the addressee. A sentence like (52a) is marginally acceptable when, for example, addressed to a parent about his/her child. Its non-negative counterpart, however, is completely ungrammatical:

- (52) a. ??Don't he move!  
b. \*He move!

If we take these data into account, we conclude that the overall picture concerning the subjects of English imperatives is the following:

1. All speakers can interpret the following subjects as referring to, or quantifying over, an addressee, a group of addressees, or a group containing the addressee: null subjects; overt 2nd person pronouns; quantificational subjects; third person referential subjects that have a null determiner, including proper names. With such interpretation, all these subjects can bind a 2nd person element in object position - most notably, even quantificational subjects and third person referential subjects.

2. Some speakers can also interpret the following subjects as not related in reference to the addressee: quantificational subjects; third person referential subjects with an overt or null determiner, including proper names; and 3rd person pronouns in a negative imperative. When a bound element occurs in object position in co-occurrence with these subjects in such interpretations, it has 3rd person features (a second person element is degraded for some speakers, impossible for others).<sup>33</sup>

The question that arises, then, is how to account for these two options allowed by the grammar of English. Two possibilities come to mind. One is to argue that the Jussive head is present in core imperatives, but not in the imperatives accepted by some speakers only (Set B). Though this would provide a very simple account of why the subjects of Set B imperatives are not restricted to referring to or quantifying over the addressee(s) and do not exhibit 2nd person features, it would fail to capture one important similarity between the subjects of core imperatives and of set B imperatives: all of them fail to combine with the predicate and to give rise to a predication relation. In all cases, the subject of an imperative refers to an individual or set of individuals onto whom a requirement, or expectation, is imposed (for example, the requirement that they not move, be ready, stand by the door, etc.). In my view, this suggests that in all of them the Jussive Phrase is present and abstracts over the subject, thus preventing it from saturating the predicate. The difference between core imperatives and Set B imperatives then must reside not in the presence of the Jussive Phrase, but rather in its ability to pass its person features onto the subject - i.e., in the syntactic relation it holds with the subject. I suggest that the difference between core imperatives and set B imperatives lies in the fact that the Jussive head enters an Agree relation with the subject in the former case, but not in the latter.

Two questions arise at this point: (a) what blocks the Agree relation between the Jussive head and the subject in set B imperatives? (b) in the absence of such a relation, how does the subject get nominative case?<sup>34</sup>

Since it is difficult to answer this question by focusing on English, I suggest that we look at how other Indo-European languages express sentences with directive force in which the subject does not have 2nd person features. In some languages, seemingly limited in number, a sentence with directive force may exhibit a subject distinct in reference from the addressee and use a verbal form from the imperative paradigm, which is fully inflected. This is the case in some Indo-Aryan languages, like Sanskrit and Bhojpuri (a language spoken in northern India, in the state of Uttar Pradesh). Consider the following examples:<sup>35</sup>

- (53) a. Layke tini baje aavē (Bhojpuri)  
 children three o'clock come-imp.3p  
 'The children come at 3 o'clock!'  
 b. Tebulwa: sa:ph rahe!  
 table-nom. clean-nom be-imp.3s  
 "The table be clean!"

Example (53a) might be spoken to the parent or caretaker of the children who are to come at 3 o'clock; it conveys that he or she is to see to it that the children come, making it something like a causative, but

<sup>33</sup>These speakers can also interpret some 3rd person subjects with an overt determiner as coinciding with the addressee, when used deictically (cf. Potsdam (1998, 205)):

- (i) a. The boy in the corner stand up!  
 b. The man with the list come here!  
 c. Those near the front wait until the others have left!

<sup>34</sup>The presence of nominative case on the subject is suggested by examples like 52a, where the form of the pronoun is *he*.

<sup>35</sup>These examples were collected by Simon Mauck from a Bhojpuri speaker, Dr. Shaligram Shukla.

clearly without causative morphology (it has imperative verbal morphology). Example (53b) is spoken to an addressee that is obviously distinct from the subject of the clause, asking him or her to see to it that the table be clean. So, a requirement or expectation is imposed on the subject (for the children, coming at 3 o'clock; for the table, being clean); however, given the nature of the subjects, the sentences are interpreted as addressed to someone who can be held responsible for making sure that these properties hold.

In other (to my knowledge, more numerous) languages, sentences with directive force in which the subject does not have 2nd person features employ a verbal form from a verbal paradigm other than the imperative. This is the case in Italian, for example, where a subjunctive form is used when a sentence with directive force has a quantificational or a referential subject. These subjects may coincide with or quantify over the set of addressees, as in (54). But they can also be used when the subject and the addressee are distinct, as in (55). Note that the latter kind of examples exhibit the overt complementizer *che*.<sup>36</sup>

- (54) Nessuno si muova! (Italian)  
 nobody self move  
 'Nobody move!'
- (55) a. Signor Rossi, che nessuno si sieda in prima fila! (Italian)  
 Mister Rossi that no one self sit in first row  
 'Mr. Rossi, nobody sit in the first row!'
- b. Ragazzi, che tutto sia in ordine quando torno questa sera!  
 Kids, that all be in order when return this evening  
 'Kids, everything be in order by the time I get back this evening!'

Note that both in the Bhojpuri and in the Italian examples, the verb is inflected; this makes it plausible to think that the sentence must have a functional head with person features. I suggest that this functional head be seen as responsible for checking the case feature of the subject and blocking the Agree relation between it and the Jussive head. Turning now back to English, it is tempting to assume that, in set B imperatives, it employs a strategy similar to the one used by these languages: sentences with directive force may, for some speakers, have a functional head that has person features and blocks the relation between the Jussive head and the subject. Such a sentential form is likely to be that of a subjunctive clause, not only given the cross-linguistic preference for associating this sentential form with the force of ordering, but also because the verbal morphology of subjunctives coincides with that exhibited by these forms.

Before concluding this section, I would like to point out the advantages of separating core imperatives from Set B imperatives in the description of English. First, it allows us to give a more careful description of the data, distinguishing those imperatives that are accepted by all speakers from those that are not, making sense of the (at first sight contradictory) reports found in the literature concerning what are possible subjects of English imperatives. Second, it allows us to see that the distinction found in English reflects a distinction that other languages also express, most commonly by using a verbal paradigm other than the imperative, and in some cases by using a fully inflected imperative paradigm.

<sup>36</sup>The complementizer is not obligatory in such examples, but much preferred. In this respect, these cases contrast with the ones in which the quantifier ranges over the set of addressees, where the complementizer is truly optional.

## 5 Conceptual and empirical gains

In this section I would like to discuss how my proposal builds on the insights offered by previous work in the literature, while at the same time differing from it and making some steps forward both conceptually and empirically. This brief discussion will not do justice to the vast literature on the topic, but hopefully it will show how our understanding of the issues under study gets deeper and more refined as time goes on, by virtue of taking the essence of existing intuitions and combining them with new ideas and the new possibilities made available by advances in linguistic theory.

Several proposals have invoked the underlying presence of a 2nd person pronoun for null subject imperatives. For English, it has been said that this pronoun either gets deleted (e.g., in the days of the performative hypothesis, cf. Sadock (1974)), or is simply void of phonetic features and is made possible by some phonetically null but still “rich” agreement morphology (Rupp (1999)) or by semantic interpretation (Potsdam (1998), Rupp (2003)). The intuition behind such proposals is shared by mine as well, since I argue that a null pronominal is present in the subject of imperatives, made possible by the Jussive Phrase. However, my proposal attempts to provide an explanation for the possibility of null subjects in imperatives that can also extend to another characteristic of imperative subjects, namely the exceptional binding properties of quantificational and referential noun phrases. Previous works have not typically attempted to make this link. For example, noting that quantifiers used as subjects of imperatives can bind either 2nd or 3rd person elements, Platzack and Rosengren (1998, 209) propose that they contain a covert *of you* complement, which acts as the head of the construction from the point of view of interpretation; the anaphoric element can then be bound by either the quantifier or its covert complement. Because the presence of the covert *of you* complement is not related to a more general property of imperatives, this work does not connect the exceptional properties of quantificational subjects to those of null subjects of imperatives. It also leaves open the question of why such a covert complement can license a 2nd person element in imperatives, but not in other clause types. Potsdam (1998) suggests that the dual binding possibilities of quantificational subjects of imperatives are given by the fact that the anaphoric element can be bound either by its morpho-syntactic antecedent (the quantifier, with 3rd person features) or by its semantic antecedent, which is a 2nd person element. Similarly to Platzack and Rosengren’s, this proposal does not link the exceptional properties of the different kinds of imperative subjects, and leaves open the question of why such dual possibility is not given equally freely to bound elements in other clause types. My proposal views the unique properties of all imperative subjects as stemming from the presence of the Jussive Phrase, thus connecting the possibility of having null subjects and that of a quantificational and referential subjects binding a 2nd person element; if these properties are indeed related, drawing the connection is a step toward a deeper understanding of the nature of imperatives.

Two recent and independently developed proposals are in some respects similar to the one I am making. One is found in Bennis (2006), a paper that discusses null and overt pronominal subjects in Dutch imperatives. The paper observes that null subjects in Dutch are possible only with *un*-inflected imperatives, whereas a verbal form that shows inflection must co-occur with an overt pronominal subject. It proposes that imperatives have a special feature in C, called {2} (to distinguish it from the 2nd person feature of pronominal elements and verbal inflection, called [2]); it is a feature that indicates 2nd person without further distinctions of number or level of formality. The {2} feature is assigned to the subject under agreement, and can delete the uninterpretable [2] feature on the verb when the verb is un-inflected; a null subject is possible in these cases, and it is 2nd person, unspecified for number and formality. In contrast, when the verb is inflected, the {2} feature in C cannot delete the uninterpretable features on the verb, because the inflection on the verb has more feature specifications (for example, 2nd and polite, or 2nd and plural); therefore, an overt pronominal subject is required to delete such features, and a null subject is ruled out, because it is assumed not to be able to do so. Though this work and mine differ in the empirical domain they investigate

and in the details of the analysis, there are two important similarities. The first is the idea that the person features of the null subject can be licensed through agreement with features present in the syntactic representation of imperatives. The second is the intuition that this mechanism plays a role only in the absence of verbal inflection; when present, it is the verbal inflection (or, more precisely, the functional head with the corresponding features) that licenses, or fails to license, a null subject.

The idea that 2nd person features are uniquely encoded in the syntactic representation of an imperative is also present in Jensen's dissertation and related papers (cf. Jensen (2003a,b)). This work suggests that imperatives have a special TP projection, whose head has two unique properties: a tense feature that is "anchored to speech time", and an interpretable 2nd person feature. In Jensen's view, the 2nd person feature of this imperative T ( $T_{imp}$ ) is interpreted as the addressee and contributes to the special nature of the imperative subject, which is not the subject of predication but rather the subject "that is talked to" (following Platzack and Rosengren (1994, 1998)). Jensen's work does not contain any discussion of the subject acquiring 2nd person features from a functional projection (like  $T_{imp}$ ), and so in this respect it is different from my proposal. But it expresses perhaps a similar intuition: in her work, the sharing of features takes place between  $T_{imp}$  and the verb, which is said to acquire 2nd person features.<sup>37</sup>

The similarity between Jensen's and Bennis' proposal and mine lies in the idea that imperatives are uniquely characterized by the presence of 2nd person features on a functional projection higher than the subject.<sup>38</sup> My choice of a Jussive Phrase can be seen as a variant of Bennis' idea that a special CP is at play, especially in light of the recent proposals in the literature that break down the notion of CP, showing that it is a cover term for different functional elements. But our proposals depart in a more significant way in the distribution and the role that they assign to the functional projection carrying 2nd person features. In terms of distribution, I view the Jussive Phrase as present in all the clauses conventionally associated with directive force, regardless of whether they use a verbal form from the imperative paradigm or a suppletive form. In Bennis' and Jensen's work, in contrast, the projection with 2nd person features is argued to be present only when the clause employs a verb from the imperative paradigm;<sup>39</sup> it passes 2nd person features onto the verb (Jensen) or the subject (Bennis). My approach offers broader empirical coverage. Consider the cases from Icelandic in (43) above: neither clause employs a verbal form from the imperative paradigm, and yet both are conventionally associated by this grammatical system with directive force; in other words they are imperative clauses that employ a suppletive verbal form. We observe that, when the clause employs an infinitival verb, the subject exhibits 2nd person features, whereas when it employs a subjunctive verbal form, it does not. This pattern cannot be accounted for under a view that argues that a special CP or TP is present only in clauses with verbs from the imperative paradigm.<sup>40</sup> However, it follows from my proposal:

<sup>37</sup>Evidence for this idea is argued to come from cases of Latin and colloquial Finnish in which the verb exhibits 2nd person morphology in the presence of a quantificational subject. They are illustrated in (i):

- (i) a. *Aperi-te aliquis.* (Latin)  
 open-2PL someone  
 'Someone open.'
- b. *Maista-kaa joku keitto-a.* (Finnish)  
 taste-2PL someone-NOM soup-PART  
 'Someone taste some of the soup.'

Jensen proposes that the 2nd person morphology on the verb is acquired as a result of the verb moving to  $T_{imp}$ , which has 2nd person features.

<sup>38</sup>A similar idea is also found in Potsdam (1998, 270), where it is suggested that imperatives have a null morpheme of category  $I^0$ , which is restricted to having 2nd or 3rd person features.

<sup>39</sup>Bennis' paper focuses on 'simple imperatives' in Dutch: "What I call 'simple imperatives' are those imperatives that have a more or less specialized verb form which shows up in the first position of the clause (...)".

<sup>40</sup>Such a view would have to say that imperatives with an infinitival form have a special TP or CP as well, while those with a

the Jussive Phrase is present in these cases, and enters an Agree relation with the subject only if T lacks person features, which is the case when the verb is in the infinitival form, but not in the subjunctive.

The assumption that the Jussive Phrase is present in all imperatives, including those that employ a suppletive verbal form, is also one of the ways in which my proposal differs from Platzack and Rosengren's (1994; 1998) approach. They attribute the fact that imperative subjects do not enter a predication relation to the lack of what they call a Finiteness Phrase in imperatives. This assumption restricts their account to applying only to sentences with a special imperative verbal form; it does not apply to imperatives that employ suppletive verbal forms from the paradigm of the subjunctive or the indicative, because they have a Finiteness Phrase. In contrast, my account covers such cases, which are very common in Romance and Germanic languages (for polite imperatives, or cases with quantificational subjects like the one exemplified in (55)). In my view, the Jussive Phrase is always present, and abstracts over the subject, even when it does not enter an Agree relation with it because a functional head with person features intervenes.

My view can be easily extended to an intriguing pattern found in Korean, a language where verbal forms in general cannot be distinguished on the basis of finiteness or agreement features. Pak et al. (2007) show that Korean imperatives, exhortatives and promissives have several syntactic and semantic properties in common, which distinguish them from declaratives, interrogatives and exclamatives and justify viewing them as members of a single clause type ("jussives"). Syntactically, imperatives, exhortatives and promissives are alike in several respects. They do not allow tense markers or any of the evidential and evaluative particles that occur in other clause types. When embedded, they typically have null subjects and can only have overt subjects in special circumstances. They are negated by using the negative marker *mal-*, which in other clause types can only co-occur with an overt element expressing deontic modality. Finally, they can be conjoined by *-ko* 'and' and *-kena* 'or', coordinators that can only conjoin clauses of the same type (for example, a declarative with a declarative, but not with an interrogative). Semantically, they are similar in that they all have the function of imposing a requirement, or expectation, on one of the participants in the conversation: imperatives impose a requirement on the addressee, exhortatives on both the addressee and the speakers, and promissives on the speaker. For example, the imperative in (56a) conveys that the addressee is to eat lunch, the exhortative in (56b) that both speaker and addressee are to eat lunch, and the promissive in (56c) that the speaker will buy lunch (i.e., it has the function of a promise, by which the speaker imposes a requirement on him/herself):

- (56) a. Cemsim-ul mek-**ela**. (imperative)  
lunch-ACC eat-IMP  
'Eat lunch!'
- b. Cemsim-ul mek-**ca**. (exhortative)  
lunch-ACC eat-EXH  
'Let's eat lunch.'
- c. Nayil cemsim-ul sa-**ma**. (promissive)  
tomorrow lunch-ACC buy-PRM  
'I will buy lunch tomorrow.'

As the examples clearly show, what distinguishes imperatives, exhortatives and promissives is a sentence final particle. Pak et al. (2007) view the particle as the head of a functional projection that enters an agreement relation with the subject of the clause and shares with it its person features. They assume, for example, that the particle (*e*)*la* has 2nd and the particle *ma* 1st person features, and that they pass them onto the subjunctive form do not; but this would be a stipulation without independent motivation.

subject, giving rise to the different interpretations. Interestingly, this passing of features can take place not only with null subjects, but also with quantifiers and proper names (or nouns like ‘mommy’), which are then interpreted as referring to the addressee (57a) or the speaker (57b), respectively:

- (57) a. Inho-ka simpwulum-ul hay-**la** (imperative)  
 Inho-NOM errand-ACC do-IMP  
 ‘Inho run the errand!’
- b. Emma-ka masiysnun kansiyk-ul cwu-**ma** (promissive)  
 mommy-NOM delicious snack-ACC give-PRM  
 ‘Mommy promises to give you a delicious snack.’

It would not be plausible to argue that the particles are special forms of TP with different person features, as TP does not exhibit  $\phi$ -features at all in Korean, or that they are complementizers, as they co-occur with the usual complementizers (when embedded). However, this pattern can easily be interpreted within a view that argues that a special projection with person features is present in all clauses conventionally associated with directive force and enters a special relation with the subject. Whereas in English this projection only has 2nd person features, and thus only connects the subject with the addressee, in Korean it can also have 1st person features, and thus can connect the subject with the addressee, the speaker or both (in the case of exhortatives). I take the ability to extend the view of imperatives to the broader class of jussives to be an argument in favor of postulating the existence of a projection that is shared by all clauses with the pragmatic function of adding a requirement or expectation on one (or more) of the participants in the conversation, and to keep it distinct from categories such as TP, CP or FinitenessP.

## 6 Summary and conclusion

This section summarizes the contributions of this paper and offers a brief reflection on some interesting connections that could not be explored, but could form the basis for future investigations. One contribution of this paper is empirical: it provides a characterization of which subjects of imperatives are accepted by all speakers of standard American English and which are possible for some speakers only. Whether or not the analysis I provided for them is correct, establishing the existence of two classes promises to be an important contribution, since it amounts to uncovering a fact that calls for an explanation. All of these subjects have been mentioned in previous works, but without drawing a distinction between two classes the literature as a whole appeared to contain contradictory statements concerning what is a possible subject of English imperatives and what is not. I trust that this paper will help make sense of the data and trigger further thinking on why the distinction between the two classes falls the way it does.

Other contributions are theoretical in nature. I proposed that all clauses conventionally associated with directive force contain a functional projection, the Jussive Phrase, that abstracts over the subject and prevents it from entering a predication relation. In core imperatives in English, the Jussive Phrase also enters a syntactic relation with the subject, by virtue of which it endows it with 2nd person features. For this to happen, two conditions must be met: the Jussive Phrase must be the projection with person features closest to the subject; and the subject must be of a certain type, i.e. a pronominal element, a quantificational element, a referential noun phrase with a null determiner or a proper name. From this constellation of constraints, I drew two conclusions. One is that the relation between the Jussive Phrase and core imperative subjects is strictly local; I expressed it in terms of the relation Agree, because this relation involves the sharing of  $\phi$ -features between a functional head and a noun phrase, and is subject to locality. Moreover, envisioning an

Agree relation between the Jussive Phrase and the subject can provide an answer to the question of how the subject of an imperative checks its case feature. The other conclusion is that the passing of features requires that the D-layer be somehow ‘available’ to receive features; cross-linguistically, this is the case when null subjects are involved; in English, it is also the case with overt subjects as long as they are quantifiers, bare nouns and proper names – all of which lack an overt determiner. It would be worth exploring in more detail what is behind the difference between English and other languages in this respect. I tentatively suggested that null determiners in English lack a value for the person feature, and therefore can acquire one from a functional head in the appropriate configuration. It would also be interesting to investigate whether the locality that characterizes the relation between the Jussive Phrase and the subject can be captured by the notion of semantic binding, without invoking the Agree relation; in other words, whether it is possible to view the binding relation as strictly local, at least when it involves the sharing of person features.<sup>41</sup>

More generally, this paper contributes to the body of literature that argues that the notion of addressee is encoded in the syntax, like Sigurðsson (2004) and Baker (to appear).<sup>42</sup> Though the proposal presented in this paper converges with Baker’s proposals in arguing for the syntactic encoding of the notion of addressee, I do not think that we can identify the Jussive Phrase with Baker’s Addressee operator, for two reasons. One is that the effects of Baker’s Addressee operator are visible in all sentences, whereas those of the Jussive Phrase are limited to clauses with directive force. The other is that, while the person features of the Addressee operator are only visible on pronouns, those of the Jussive Phrase can also be detected in certain quantificational phrases, bare nouns and proper names, at least in English. If we assume that the Jussive Phrase and the Addressee operator are distinct syntactic elements, we can speculate that the former gets its value for person feature from the latter, and then binds the subject and enters an Agree relation with it. Further investigation of the relation between the Addressee operator and the Jussive Phrase is clearly needed.

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<sup>41</sup>This might be possible, in light of the proposal found in Kratzer (2006) that 1st or 2nd person pronouns with bound variable interpretations are subject to strict locality constraints. If so, then the question would be how to extend the notion of local binding to capture the data concerning quantificational and referential noun phrases, and how to address the issue of case to the subject of imperatives.

<sup>42</sup>The idea that an addressee projection is present in imperatives is also found in Brandstetter (2005) and Mauck and Zanuttini (2005).

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