The External Structure of the Vocative

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Introduction

Although some consideration has been given to the morphology and distribution of vocatives in the literature, very little has been said about observed word order and case alternations that arise DP-internally in vocative constructions. In Old Bulgarian, for example, possessive adjectives normally appear prenominally; however, in the presence of the vocative enclitic -le on the noun, the possessive adjective can only be postnominal.

1) a. moja gor-o (*moja)
   my forest-voc my

1) b. (*moja) gor-o-le moja
   my forest-voc-you my

'O my forest!' (Hill 2007)

What is of interest in examples like (1) is not the vocative marking itself, nor its interaction with the clause that contains it, but the word-order alternation triggered by the vocative clitic. Such examples are not limited to languages with overt vocative morphology, and call for real syntactic analysis.

One of the goals of this paper is to create such an analysis and in so doing unify apparently diverse alternations found in the vocative constructions of various languages. This, we argue, can be accomplished under a view of the DP as a domain analogous to the VP in terms of case checking, movement, and theta structure. We argue that there exists an additional level of structure in (at least some) vocative constructions, as evidenced by vocative alternations in several languages. The vocative function of "vocatives" derives from this external structure.

The paper will be organized as follows. In section 1.1, we review facts about mechanisms various languages employ in the formation of vocatives. In section 1.2, we will establish the theoretical assumptions and mechanisms adopted in the analyses that will follow. Evidence from Italian, Romanian, and other languages in favor of our proposed "vocative-external" structure is detailed in section 2. We address the semantic and syntactic nature of this external structure in section 3, where we conclude with outstanding issues and directions for future research.
1. Background

In this section we review empirical facts about vocatives generally and previous approaches to their analysis, and then outline the theoretical framework in which we will operate in accounting for the alternations presented in section 2.

1.1 Vocatives of the World

Languages differ greatly in how they mark nominals used in address. In many languages there is a distinct Vocative case form, while in others there is a Vocative that is only various distinct from other cases in the system. Others have no Vocative case morphology but their vocative nominals exhibit other behaviors, such as failure to take otherwise-obligatory articles. Some languages have overt particles that mark a nominal as vocative. Many languages mix these strategies in various ways, making a clear analysis of all of the phenomena difficult. Examples (2-6) illustrate these behaviors.

The term ‘vocative’ was first used by classical grammarians to refer specifically to the morphological case as in Latin (illustrated in (2)), but which is found in a number of languages (Ancient Greek, Sanskrit, Georgian, and Korean, to name a few). In this paper, however, we follow the modern assumption that vocatives are a universal phenomenon, and we use the term to describe any DP used in address. In many languages this DP is syncretic with another case, often the least marked case in the system. Thus, in many nominative-accusative languages like Finnish (example (3)), it is syncretic with the Nominative, and in many ergative-absolutive languages like Somali (example (4)), it is syncretic with the Absolutive.

2) a. bon-us serv-us b. bon-e serv-e
good-nom slave-nom good-voc good-voc
'a good slave' 'O good slave!' (Ashdowne 2002)

3) herra Virtanen
Mister-nom Virtanen-nom (Korn 2005)

4) náag
woman-abs/voc (Korn 2005)
5)  a. o Konstantinos                      b. Konstantinos!  
    the Constantine            Constantine!  

There is a special prenominal particle that is present in Irish to mark vocative nominals.

6)  a. an  buachaill mór                b. a bhuachaill mhóir  
    the big             boy     O big            boy  

Another way languages mark vocatives is through its articles. In languages with an article system, the vocative is often marked by the absence of an overt article, like the Greek in (5). This fact has led some (e.g. Longobardi 1994, Szabolcsi 1994, as cited in Hill 2007) to posit that vocatives lack a D projection. Moro (2003) argues against this view by providing evidence that at least Romance vocatives must be full DPs. There does seem to be additional cross-linguistic support for this latter view.\(^1\) One such piece of additional support for the idea that the category D must be present in vocatives is that the lack of an article does not change the definiteness of the nominal. English, like Greek, deletes the article in the vocative, but there is no sense in which *boy!* is less definite than *the boy*.

1.2 The d/DP

Larson (2009) articulates a view of the DP as analogous to the VP in its projected functional structure. Under such a view, the D head is equivalent to V in selection of arguments and in checking of case. The theory is born from intuitions stemming from Generalized Quantifier Theory, namely the concept that D is universally a quantifier and takes both scope and restriction arguments. These are formalized in Larson's system as thematic roles parallel to AGENT and THEME roles in the verbal domain. Additional "oblique" arguments (such as modifiers, or adjective phrases) are composed similarly, parallel to verbal arguments like GOAL or BENEFICIARY etc.

7) hierarchy of verbal thematic roles:  \text{AGENT} \rightarrow \text{THEME} \rightarrow \text{GOAL}  

    hierarchy of quantifier thematic roles:  \text{SCOPE} \rightarrow \text{RESTRICTION} \rightarrow \text{OBLIQUE}  

\(^1\) Swedish, for example, allows demonstratives to occur with the vocative:  
i) Veit       du  ikkje det, (*den)  stor-e jent-a!  
know.PRES you not   that (DET.SG) big-W girl-DEF.FEM.SG  
'Don't you know that, you big girl!'  

\(\text{Julien 2002}\)
This system is implemented under the feature checking theory of Pesetsky & Torrego (2004), which demarcates a four-way distinction among feature specifications: a feature \( F \) can be either valued (\( F_{\text{val}[ ]} \)) or unvalued (\( F[ ] \)), and either interpreted (\( iF[ ] \)) or uninterpreted (\( uF[ ] \)). Full Interpretation requires that a feature be interpreted and valued. Unvalued features act as probes into their c-command domains, and stop probing once they have entered into an Agree relation with a valued instance of the same feature. Once two occurrences of a feature Agree, they constitute a single instance of the feature, which is notated with a bracketed index. This system can be used to describe both Case checking and theta-role checking.

By hypothesis, \( D \) is the site of interpretable but unvalued case feature (i.e. it has \( i\text{Case}[ ] \)). The case feature on \( \text{NP} \) is uninterpretable there but is valued (i.e. it has \( u\text{Case}_{\text{val}}[ ] \)). Adjective phrases also have a Case feature, unvalued and uninterpretable (that is, \( u\text{Case}[ ] \)). The AP merges with \( D \) as its oblique argument. The \( \text{NP} \) merges with \( \text{DP} \) as the restriction. The AP raises to some position higher than \( \text{NP} \). The \( \text{DP} \) projects (or is selected by) little-d, and \( D \) raises to little-d.\(^2\) The \( i\text{Case}[ ] \) on \( D \) probes for a value and Agrees with the \( u\text{Case}[ ] \) feature on \( \text{AP} \). This creates the chain \( i\text{Case}[5]-u\text{Case}[5] \) (the index \( [5] \) being arbitrary). Because there is still no value, it continues to probe and finally Agrees with the \( u\text{Case}_{\text{val}}[ ] \) on \( \text{NP} \), creating \( i\text{Case}[5]-u\text{Case}_{\text{val}}[5] \). Now all of the occurrences of the feature are one interpreted valued instance. The final structure is as in (8) below (using \( K \) as shorthand for the Case feature).

\[\text{8)} \quad \text{dP} \quad \text{proSCOPE} \quad \text{d'} \]
\[\quad \text{d} \quad \text{d'} \quad \text{DP} \]
\[\quad \text{D} \quad \text{d} \quad \text{AP} \quad \text{DP} \quad \text{d} \quad \text{AP} \]
\[\quad \text{the} \quad \text{iK}[5] \quad \text{green} \quad uK[5] \quad \text{book} \quad \text{uK}_{\text{ACC}}[5] \quad \text{D} \quad \text{D'} \quad \text{AP} \]

\(^2\) The appearance of little-d is motivated by the "special requirement" that the external theta role (scope or agent) be assigned from the higher "light" projection.
The crucial aspects of this system we want to highlight are these: a) elements with a feature that need to be checked but which are both unvalued and uninterpretable can be "agreed through" like the AP in (8) above; and b) the D head, like V, is where Case is interpreted.

Because of the above properties of the agreement system, we expect that major internal word order alternations will usually come into play in the presence of multiple arguments or modifiers. This is precisely the case in the Italian and Romanian patterns described and analyzed in section 2.

2. External Vocative Structures

Having laid out our theoretical framework, we will now approach the vocative alternations in question. Insight into the nature of the vocative DP can be found wherever there is a mismatch between vocative and argument dPs; however, here we will focus on word order differences in particular. In section 2.1 we will look at vocatives in Italian, which we will argue shows evidence for an additional d/DP which takes the vocative dP as an argument. Similar facts in Romanian will provide cross-linguistic support in section 2.2.

2.1 Evidence from Italian

Before turning to vocative word order alternations it will be useful to review some basic facts about the nominal in Italian.

Italian nouns, adjectives and determiners agree overtly in gender and number. The article is always prenominal, but adjective position varies according to several factors. Adjective placement relative the noun is dependent on the type and force of a given adjective, its category or derivation, and in some sense its phonological weight. Adjectives describing an "intrinsic property" of the noun tend to occur postnominally; some, in fact, must occur postnominally, such as those describing color, shape, and nationality, illustrated in (9). Modified adjectives must also appear postnominally, as in (10a-b), as must participial adjectives as in (10c).

9) a. una tavola [AP rotonda]
   'a round table'
   b. una casa [AP rossa]

6
‘a red house’

c. una donna [AP inglese]
‘an English woman’

10) a. un viaggio [AP pieno di problemi]
‘a journey full of problems’

b. una persona [AP enormamente simpatica]
‘a really nice person’

c. le mele [AP cotte]
‘cooked apples’

(Moro 2003)

Common descriptive adjectives normally occur prenominally, as in (11a). However, even they can occur postnominally, as a means of putting the adjective into contrastive focus, as in (11b). Some adjectives that ordinarily occur postnominally acquire a special, more intimate meaning when prenominal, as in (13a-b).

11) a. il [AP piccolo] cacciavite
‘the small screwdriver’

b. il cacciavite [AP piccolo]
‘the SMALL screwdriver’

12) a. i studenti [AP poveri]
‘the destitute students’

b. i [AP poveri] studenti
‘the unfortunate students’

(Moro 2003)

13) a. il cane [AP caro]
‘the expensive dog’

b. il [AP caro] cane
‘the dear dog’

Possessive adjectives in Italian require also that the definite article be used, unlike in English where the possessive pronoun and the article are in complementary distribution, as seen in (14). ³ The article precedes the possessive adjective, and the two together are the leftmost elements in the DP. Specifically, when there is a modifier and a possessive, the possessive adjective precedes the modifier. This is illustrated in (15).

14) a. la sua macchina

b. *sua macchina

15) a. la sua bella macchina

³ Family members are the well cited exception to this rule which are considerably degraded with the article:

i) (*la) mia madre,
‘my mother’
b. *la bella sua macchina
  c. *bella la sua macchina (Moro 2003)

Vocatives are commonly described as being marked in Italian by the absence of a determiner (as is commonly said of English). In simplest case, determiners are, indeed, illicit with the vocative.4

16) a. O ragazzo  
   'O boy'
  b. *O il/un ragazzo  
   'O the/a boy'

As shown above in (16), nominals with possessives must occur with the definite article. In vocatives, however, the definite article is illicit even in this context, as shown in (17-18).

17) a. il mio ragazzo  
   'my boy'
  b. *mio ragazzo
   non-vocative

18) a. O mio ragazzo  
   'O, my boy'
  b. *O il mio ragazzo
   vocative

Despite the impossibility of an article in (18), the definite article is possible just in case two conditions are met: there is an adjective modifier, and the adjective is not postnominal.5 In such a structure, the adjective must exceptionally appear to the left of both the possessive adjective and the article.6

19) a. O caro il mio ragazzo  
    b.*Caro il mio ragazzo (argument)

20) a. O mio (caro) ragazzo (caro)  
    b.*Mio caro ragazzo (argument)

21) *O il mio caro ragazzo

The class of adjectives that participate in this alternation seems highly restricted, and for some speakers possibly restricted just to caro. A similar situation in Romanian will be discussed later in section 2.2.

4 In the Italian examples, we indicate vocative DPs with the particle ‘O’, which is always optional and has no syntactic effect.

5 There is variability in speakers' judgements here. Some do not allow the article even in this case, while others require it with no optionality.

6 Examples (19-21) come from (Moro 2003) and Andrea Fedi (p.c.)
The simplest explanation for the difference between (17-18) is something like the classic one: that $\emptyset$ is the morphological realization of the definite article with Vocative case, while il is its realization with Default case. Recall from section 1.2 that D is valued for case only by agreement with an element that itself has come into the derivation with a valued case feature. In (17a) then, the NP ragazzo has the feature $uK_{\text{DEF}}[\ ]$ and D has the feature $iK[\ ]$. (We assume the possessive adjective mio has the feature $uK[\ ]$, and raises to the position between the D and the NP in order to be checked without the NP interfering.) The D head agrees with its argument NP and is valued Default by feature sharing. This results in the article spelling out as il. The sentence in (18a) has the same derivation but the NP ragazzo comes with the feature specified $uK_{\text{VOC}}[\ ]$ and D spells out $\emptyset$.

The two sentences (19-20) present the interesting complication. In the construction illustrated in (19), where D is realized as il, at least the phrase il mio ragazzo must be Default case. The adjective caro is crucially outside this phrase, as evidenced by the fact that it cannot occur in either of its usual positions (left- or right-adjacent to the noun). We will return in a moment to where exactly caro is positioned in such a structure. In (20a), on the other hand, caro does appear in its usual positions, and the article spells out $\emptyset$, indicating that the whole phrase mio caro ragazzo is Vocative.

We suggest that the relationship between caro and il mio ragazzo in (19a) should be treated as (thematically) the same as the relationship between caro and ragazzo in (20a). To the extent that thematic relationships correspond to structural relationships, this indicates that there is a certain structural (underlying) similarity between the two constructions. The difference is the size of the constituent modified by caro.

Suppose that all other aspects of the structure were identical. This would imply that in both structures the AP is the complement of a functional head, but that in (20a) this head has an NP in its specifier (as in (8)) and in (19a) the head has a larger constituent, such as a dP or DP, in its specifier. These structures are illustrated in (22) (abstracting away from the possessive adjective for simplicity).
The two structures are parallel in all but the category of the nominal phrase in the specifier position. We can even take this parallelism to extend to the notion of thematic structure if we understand the \textsc{scope} of the vocative to be the set of all contextually relevant possible addressees, and the \textsc{restriction} to be that individual to whom the utterance is directed. Under this view, \textit{il mio ragazzo} and \textit{ragazzo} both bear a \textsc{restriction} theta role, and as such are both merged in the same position relative to the quantifier. Given that scope and restriction are theta roles associated with D, this indicates that what was labeled F in (22b) is, in fact, D.\footnote{Presumably, the AP \textit{caro} bears an \textsc{oblique} role, as is typical of modifiers in this system.} Let us proceed then under the assumption that a vocative is always a dP, and that (at least for structures like that in (22b)) this dP embeds another dP as an argument.

We assume that only a dP that is valued as Vocative can be used as a vocative. However, we see that the case value on \textit{il mio ragazzo} is not Vocative, but rather Default (as revealed by the fact that the article spells out as \textit{il}). Remember that the adjective \textit{caro} is special in that it can appear in these constructions where most other adjectives cannot. What seems clear, then, is that the Vocative value of the dP must come from a Vocative case value on \textit{caro} itself. This idea finds support in the fact that \textit{caro} is often used independently as a vocative in Italian and that it has direct analogues with the same properties in other languages (as will be discussed in later sections).

The apparently obligatory phrase initial position of \textit{caro} in sentences like (19a) is, in fact, now predicted by the feature checking system itself. If \textit{caro} were to remain in its original base position, then the little-d head probing for case would find the Default case value on the dP argument, and the case feature of \textit{caro} would remain unchecked/uninterpreted. The adjective must raise to a position above dP in order to enter into an Agree relation with little-d. Of course, because the embedded dP is already fully valued and interpretable for case, it does not need to
enter into any further case checking relationships. These checking relationships are illustrated in the structure in (23) below.

23) dP
   /   
  d'  dP
     /   
    d  d'
   /   
  dP  dP
     /   
    d  d'
   /   
  dP  dP
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    d  d'
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  dP  dP
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    d  d'
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  dP  dP
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  dP  dP
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    d  d'
   /   
  dP  dP

Note that *caro (and its class) is special with respect to this behavior. It is not the case that "any" adjective can come into this structure valued Vocative:

24) *O piccolo/Italiano/simpatico il mio ragazzo
  'O my small/Italian/nice boy!'                 (Andrea Fedi p.c.)

But it is worth noting that the structure would not crash if a "regular" adjective were merged into the structure instead of *caro. Such an adjective would presumably raise to a position higher than the embedded dP argument as in the usual situation, and would be Agreed through, so that the whole d/D-AP-dP chain would share the Default case value of the dP argument. The problem with this is that the completed full dP will then be case marked as if it were an argument dP, not a vocative dP, and will be inappropriate for use in address. In order to capture this, we therefore take it that the vocative D that quantifies over possible addressees has a formal requirement that it be valued Vocative in order to be licit with this function. Unfortunately, this must remain a simple stipulation for now.

Another possible derivation to be considered is one in which the embedded dP argument is built as Vocative valued instead of Default. In this case, the adjective *caro will still have to raise above the argument in order to check its uninterpretable feature with an interpretable one.
only difference will be that the embedded dP argument that follows *caro* will be spelled out with \(\emptyset\) as its head instead of *il*. The proposal here predicts that such a structure is grammatical. This prediction is correct, for many speakers of Italian accept both (25a) and (25b). Rather than viewing the article as optional, we can view the alternation in (25) as meaning that the case of the embedded dP argument can be either Default or Vocative, the choice being for all intents and purposes a vacuous one since the important site for vocative valuation is the external, embedding DP.

25) a. O cara mia ragazza  
    b. O cara la mia ragazza

The embedded dP seems to be highly restricted. For those speakers who prefer (25a) over (25b), the definite article only appears with the possessive adjective, as shown in the contrast between (26-27).

26) O cara la mia ragazza
    O dear the my girl

27) *O cara la ragazza
    O dear the girl

Although the details of an analysis are not clear under our current proposal, some explanation for the interaction between the definite article and the possessive adjective could be found in the structure of the internal dP. Above, we argued that *il mio ragazzo* in the phrase *O caro il mio ragazzo* is a dP in the specifier of the larger D and is independently interpreted with Default case. This analysis predicts that the internal dP can take more or less any form, including the basic structure, *il ragazzo*, which as we see in (27) is impossible. It may be the case, however, that *il ragazzo* and *il mio ragazzo* are much less similar than they appear. This intuition comes from the fact, described above, that non-vocative possessive adjectives obligatorily appear with the definite article throughout Italian. In Romanian, we can overtly see that the definite article which appears with the possessive adjective is morphologically distinct from the definite article which appears with other nominals. Though this is not visible in Italian, we suspect that the same is true: that the embedded dP argument in example (23) is a dP valued with some kind of Possessive, rather than Default, case; and, that there is some selectional restriction holding of the
external D such that its dP argument must have either a Vocative or Possessive case value, making dPs like la ragazza (valued only Default) impossible. We cannot offer a more deeply principle explanation at this time, but this does at least capture the distributional generalization that are central to the alternation.

The key intuition for this proposal is that there is additional structure external to the dP itself that is responsible for the structural alternations seen in complex vocative phrases. We have proposed that this external structure is in fact another DP. Whether this external structure is also present in simpler vocative phrases is an open question, and probably not an empirical one. The core of the proposal is simply that the feature-checking system of Pesetsky & Torrego (2004) together with Larson's (2009) view of the dP as a domain of theta assignment and case checking make possible a straightforward and motivated account for otherwise mysterious vocative alternations like those in Italian. There are still many open questions about these structures, but before raising them, we turn to find additional evidence from other languages that the proposal outlined above is on the right track.

2.2 Evidence from Romanian

The Romanian DP is generally similar to the Italian DP in its distribution of modifiers. Where it diverges is in a detail of its article system. Indefinite articles, along with demonstratives and full quantifiers, are prenominal as in Italian (28a & 29a). But the definite article is enclitic on either the noun (28b & 29b) or on the head of the highest prenominal adjective (30b).

28) a. un prienten    b. prienten-ul
    a friend        friend-the

29) a. o prientenă    b. prienten-a
    a girlfriend    girlfriend-the

30) a. fluture-le   b. frumos-ul   fluture
    butterfly-the beautiful       beautiful-the butterfly

A common analysis for this pattern (Dobrovie-Sorin 1999, Grosu 1988, Giusti 1994, inter alia) is N-to-D raising when the article is enclitic on the noun, or AdjP raising to Spec,D when
the article is enclitic on the adjective. This is analysis is not uncontroversial. Ormann & Popescu (2000) for example purport to find numerous theoretical and empirical problems with this standard picture, motivating them to declare the apparent definite article to be an inflectional suffix. An interesting aspect of their proposal is that it involves the merger of the adjectival head A with the determiner head D in sentences like (30b). This recalls the "complex determiner" view of modification implied by structures like (8) in section 1.2, in which D composes with AP before combining with its restriction argument.

The purpose of the current paper is not to analyze the Romanian nominal, and so these questions cannot be dealt with in this space. Instead, for the remainder of this section, we will attempt to adopt as non-committal an assumption regarding the definite article alternation as possible. Namely, whether the definite article's non-initial position is a morphological/phonological phenomenon, or results from the ultimate raising of some element to an immediate and dominating position, will not (we expect) bear crucially on the essence of our analysis, and so we leave our derivations at the point before this operation occurs unless otherwise stated.

The Romanian definite article appears in three case forms (each with morphophonologically conditioned allomorphs): one for Nominative and Accusative (-ul), one for Genitive and Dative (-ului), and one for Vocative (-ule). The Vocative form has a slightly different distribution than the non-vocative versions: it appears on proper names (31a), and it appears on the noun instead of the prenominal adjective in modified DPs (32-33).

31) a. Ionel-ule
   Ionel-theVOC
   'O Ionel'

   b. *Ionel-ul
   Ionel-theDEFAULT
   'Ionel'
   (Hill 2007)

32) a. actriț-a exceptională
   actress-the exceptional
   'the exceptional actress'

   b. exceptional-a actriță
   exceptional-the actress
   'the EXCEPTIONAL actress'
   (Cojocaru 2003)

33) a. dragă domn-ule
   dear sir- the
   'dear sir'

   b. *drag-ule domne
   dear-the sir
   'dear sir'
   (Cojocaru 2003)

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8 The tendency in modern colloquial Romanian is to use the Nom/Acc forms for vocatives instead of these distinct forms.
Possessive adjectives are ordinarily postnominal and the noun must have the definite article, as in (34a). There must always be a definite article immediately before the possessive adjective. If the noun has a prenominal indefinite article, or if the possessive is "inverted" to a prenominal position, a special form of the definite article appears. This article is illicit when a preceding noun has postnominal definite article. The pattern is exemplified in (34b-d) (which are all from Cojocaru 2003).

34) a. prieten-ul meu
friend-the my

b. un prieten al meu
a friend the my

c. al meu prieten
the MY friend

d. *prietel-ul al meu
friend-the the my

These structures are not compatible with the vocative version of the definite article:

35) a. *prieten-ule/-e (al) meu
 b. *al meu prieten-ule/-e
(Ferent, p.c.)

To say *my friend as a vocative, the Nom/Acc forms in (34) must be used. This is not, however, to say that the dP is not a vocative. When additional elements are introduced into these structures, differences between vocative and non-vocative phrases arise.

An adjective will ordinarily appear postnominally, even in the presence of a possessive, as in (34a). In vocatives, however, both the adjective and the possessive must appear prenominally as in (30), and this prenominal position does not yield the focal stress usually associated with prenominal adjectives (recall 34b and 34c).

36) drag-ul meu prieten
dear-the my friend
'O my dear friend"

These facts are reminiscent of those in Italian, as we will show below. The similarity is highlighted by looking at the simpler case of vocatives with an adjective. Recall that in non-
vocative nominals, adjectives are by default postnominal (prenominal has special focus). This contrasts with vocatives, in which the adjective is most natural prenominally. This is the contrast in (37a-b). At the same time, prenominal adjectives in non-vocatives host the definite article, while prenominal adjectives in vocatives do not. This is the contrast in (37b-c).

37) a. fluture-le frumos
   butterfly-the\textsubscript{DEF} beautiful

   b. stimate cititor-ule
   respected reader-the\textsubscript{VOC}

   c. drag\textsubscript{a}(\textsuperscript{*}-ule) prienten-e
   dear friend-the\textsubscript{VOC}

   (Hill 2007)

   (Ferent, p.c.)

The inability of the prenominal adjective to host the definite article, and its prenominal position, we propose, have the same single explanation as the anomalously high position of \textit{caro} in Italian. That is, the adjective is external to the dP that includes the nominal, and has raised to the high position in order to participate in the Agree relation with the vocative head.

38)

This structure is identical to that in (8) in section 2.1 except in a few key points. First, notice that the embedded dP argument is valued Vocative rather than Default case. This is more transparent that it was in Italian — it can be seen in the Vocative form of the definite article on

9 This is apparently a point on which speakers disagree. Published sources (Hill (2007), Cojocaru (2003)) agree that adjectives in vocatives are usually prenominal, but our native informant gives exactly the opposite data, insisting that the prenominal adjective is in fact completely ungrammatical. We will restrict our data to that in the literature for the relevant cases.
the noun. In Italian we could only hope to diagnose the case value of the dP argument by whether the definite article in a possessive structure was realized as $\emptyset$ or *il*, a complicated diagnostic as discussed in that section. Romanian too has a complication, though. The distinct Vocative forms are dying out in modern colloquial Romanian, being replaced with Default case forms, though the $\emptyset$ variant remains robust. Therefore it is the *possibility* of the Vocative form, and not the *necessity* of the Vocative form, that must be our diagnostic. In the following examples we illustrate with the Vocative form whenever possible, though in virtually all of these instances a Default case form of the definite article is also possible (or sometimes preferred) for most speakers.

Another key difference is that the Romanian AP *dragă* is not presumed to be the bearer of a valued Vocative case feature, as was supposed for the Italian AP *caro*. This is not a necessary difference, but one of convenience at this point. The motivation for our proposing that *caro* is the bearer of the valued Vocative case feature in Italian stemmed from the fact that it alone (or along with a small subclass of similar adjectives) could appear in the Vocative construction, and behaved suspiciously nominal. In Romanian, the class of adjectives that can appear in place of *dragă* in the structure in (38) is much broader (and in fact rather difficult to pin down, given the varying and contradictory data available). We therefore make the simple proposal that the vocative in Romanian is compatible with (most) adjectives — and because we are hesitant to propose that virtually all adjectives in Romanian are as nominal and invocative as Italian *caro*, and because we can see morphologically the embedded dP argument as a/the source of Vocative valuation, we assume that the AP in (38) is not the bearer of the valued Vocative case. Instead it is "agreed through" in manner typical of prenominal adjectives, and it is the embedded dP argument that is valued (and itself interpreted) as Vocative.

A crucial parallelism with Italian is the interaction of possessive adjectives in these structures. We stipulated for Italian that the *il* of the embedded dP argument was not Default case but some Possessive case in phrases like *il mio ragazzo*. This is not a stipulation in Romanian, it is empirical: the definite article has a different form when it precedes a possessive adjective (appearing as the prenominal *al* set as seen in, for example, (34c) above). Cojocaru (2003) labels these as "possessive articles," are they are not the same as the articles that agree
with Genitive case (which are the enclitic -ului set). This "Possessive" case form of the definite article will also encliticize to a preceding definite nominal (including adjectives) within the same dP (the enclitic form being syncretic with the Default form), so that the following word orders are all possible:

39) a. al meu (drag) prieten (drag)
    thePOSS my (dear) friend (dear)

b. drag-ul meu prieten
    dear-thePOSS my friend

c. prieten-ul meu drag
    friend-thePOSS my dear

(Ferent, p.c.)

According to our proposal, the AP drag in (39a) and (39c) is within the embedded dP argument (parallel to the Italian sentence (19a)); the AP drag in (39b) is external, as in the structure drawn in (38).10

Romanian is complicated by the existence of a special "particle" used in vocatives, the particle măi (and its regional dialectal associates bre, be, and a, among possibly others). This "particle" in fact derives from the second person singular pronoun, and native speakers volunteer glossing it as 'you' in English. It is colloquial in register, and can undergo phonological reduction. It can be used on its own as a vocative exclamation, but its use in actual vocative dPs is syntactic and interesting.

Hill (2007) points out the following generalizations about măi: it is initial in the vocative dP, and it is incompatible with other adjectives appearing within the vocative dP, except dragă (and some similar adjectives), which is still licit, though only in a dP-final position (despite the ability of dragă to appear both pre- and postnominally in non-măi vocatives). These properties are illustrated in (40).11

10 Recall that in setting up the structure in (38), the inability of the external AP to host the enclitic definite article was used as evidence for the AP's external status. This has not (necessarily) been undermined here: the article in (39b) is a Possessive case article, not a Default case article, and the two must simply (stipulatively) have different properties regarding the size of the domain in which they can find a host for cliticization.

11 Again this is a source of speaker variation. Our informant disagrees with Hill's facts, showing instead a tendency to treat măi everywhere as a rather non-syntactic exclamatory particle, which a more restricted distribution within the clause but with no impact on the internal syntax of the vocative dP itself.
40) a. măi fetiț-o
    O you girl-the\textsc{voc}

    b. *măi (isteță) fetiț-o (isteță)
    O you (smart) girl-the\textsc{voc} (smart)

    c. (dragă) fetiț-o (dragă)
    (dear) girl-the\textsc{voc} (dear)

    d. măi (*dragă) fetiț-o dragă
    O you (*dear) girl-the\textsc{voc} dear  

(Hill 2007)

Suppose that \textit{măi} is an oblique argument of the external D structure, recipient of a higher oblique thematic role than APs like \textit{dragă} but, as an \textsc{oblique}, lower still than the \textsc{restriction} dP. The category of \textit{măi} is unclear and perhaps not immediately relevant, but for illustrative purposes we can call it a MăiP.

The existence of \textit{măi} in this structure will have the consequence that a lower AP will stay in situ. Because \textit{măi} is not valued for case, it will be a probe. It will find the AP in its c-command domain, and form the Agree relation. The AP is not valued for case, and so they are not finished with their checking requirements. After the introduction of the restriction dP, \textit{măi} will raise to a prenominal position like any other unvalued element, so that it can be checked by the interpretable feature on little-d before little-d's probing hits the Vocative valued feature on the restriction argument dP. Because \textit{măi} and the lower AP have already entered into Agree, the AP never has any motivation to raise to a prenominal position, and ends up staying postnominal while still sharing the value and interpretability of the case feature. This derivation is illustrated in (41) below.
A similar pattern is found in Old Bulgarian, according to Hill (2007), though the data is too incomplete to warrant much discussion at this point. There, the possessive adjective (which is usually prenominal), is obligatorily prenominal in the vocative (42), but it becomes obligatorily postnominal in the presence of the vocative "particle" -le (though the particle surfaces as enclitic on the head nominal) as shown in (43).

42) a. moja gor-o (*moja)  
   my    forest-voc my

   b. (*moja) gor-o (moja)  
   my    forest-voc my

43) a. (*moja) gor-o-le (moja)  
   my    forest-voc-LE my

   b. (moja) gor-o-le (*moja)  
   my    forest-voc-LE my

The Old Bulgarian facts replicate the Romanian facts, and we might assume that the -le particle is something similar to the măi argument. It must be left for further investigation to discover whether or not Old Bulgarian shares the other properties with Romanian in the alternations and restrictions placed on dPs, vocative dPs, and vocative dPs with măi and -le particles.

At this point it must simply be stipulated that adjectives outside the dragă type cannot occur with măi in Romanian. We have to further stipulate that the restriction dP argument cannot contain modifiers other than possessives and dragă-type APs. This kind of constraint on the
content of the embedded dP argument seem unavoidable in any system, and might have a semantic or pragmatic origin rather than a syntactic/structural one.

The key result of this analysis is that the alternations in Italian and those in Romanian, although on the surface so dissimilar, can be unified into an incredibly consistent account. Even though the details of our particular proposed analysis may be unsatisfactory on several fronts, the approach as a whole is successful in at least revealing how vocatives differ systematically from non-vocatives in two languages with rather different dP-internal properties.

3. The Nature of External Vocative dP

Many open questions remain regarding the nature of the proposed external level of structure, including the syntactic properties of the D, its relationship with the features of the embedded dP argument, its semantics, and other questions. This section will outline some of these questions and sketch our proposed answers to those about which we have anything to say.

3.1 Definiteness and Case

Giusti (1995) draws a correlation between whether a language marks Case overtly on nominals and whether it makes use of articles. The observation here is that, typologically, overt case and articles are roughly in complementary distribution. Giusti argues that this is to be understood as case and articles being two realizations of a single functional system, where a language either realizes overt case or makes use of articles, but not both (except during transition from one type to the other).

She argues that languages exhibiting both case and article systems are in periods of transition by showing that in these languages acquisition of one of the two correlates with loss of the other. For example, the reanalysis of the demonstrative as an article in Germanic correlates with the weakening of overt case, such that it is now all but lost in English and Dutch, and German, having retained case (on the article) is an example of the aforementioned transitional languages.

This seems to us to make a prediction regarding the status of vocatives as a case. Specifically, if the Vocative is a structural case, then it should manifest as marking on nominals in "case languages" and be realized as article alternations in "non-case languages." This in fact
seems to be a correct prediction. Languages like English, Italian, and Greek, which make use of articles "instead of case," display an alternation between the definite form and a vocative (zero) form of the article. On the other hand, languages like Georgian, Serbo-Croatian, Latin, and Korean, which make use of rich case systems but lack articles, have distinct Vocative case morphology on nominals. A transitional language would be expected to employ some combination of these characteristics — the transitional language German, which shows overt case morphology on its articles, behaves like an article language in marking the vocative with a ∅-form of the article, while another transitional language, Romanian, which also marks case on its articles, shows Vocative case marking on the article but not on the nominal, and also has the option of dropping the article in vocatives. Arabic, as another transitional language, has both overt case and articles, and indeed its vocatives are marked both by the vocative (∅-form) article and by case alternation on the nominal itself (Moutaouakil 1998).

It is surprising that languages which normally do not show overt case morphology do still exhibit a distinction for the vocative, albeit in the form of a zero-article. In this sense, the Vocative is actually more distinct than other cases in the system. This is expected under our account, where the vocative is more than a case value in also involves additional quantificational structure. This is reminiscent of Genitive case, which is also more robustly marked than other cases cross-linguistically, and which has also been said to involve additional structure (see Larson (2009) and his (R)EzP proposal).

3.2 The External D Quantifier

We have discussed some of the properties of the proposed external D throughout the preceding sections. Here we will attempt to summarize these properties.

The external vocative head is a quantifier that ranges over the (contextually relevant) set of all possible addressees, and takes as its restriction an argument dP that picks out the actual or intended addressee. Because its theta roles are SCOPE and RESTRICTION, we identify this head with D. This decision is supported by the interactions of case feature checking, which seem to proceed much as in other dPs in the Larsonian worldview.
Underlying this reasoning is an intuition that vocatives, while certainly dPs, are more than just dPs. This is an intuition apparently shared by Hill (2007), who proposes that vocative DPs are contained within a RoleP shell, though hers is a more cartographic approach and meant to operate on the pragmatic-syntactic interface.

Though we have shown that vocatives are distinct from non-vocative nominals, and that many of the vocative-conditioned syntactic alternations are akin to more typical dP-internal operations, we have not accounted for the fact that many of the differences between vocatives and non-vocatives are in the form of additional restrictions placed on vocatives. These are not directly predicted either by the mechanics of the theoretical framework we adopt or by the details of our proposal in particular. Instead we have been forced to state as simple stipulations several non-trivial properties of the external vocative structure:

First, there is a commonly recurring ban on modifying adjectives within the embedded dP argument. Only a privileged set of adjectives can appear there, including the caro and dragă classes of adjectives, and possessive adjective constructions, for the languages examined. Second, the constraints on what adjectives are possible oblique arguments in the external structure are language-specific and cannot transparently be tied to other properties specific to the language. That is, why should it be that Italian allows such a restricted set of adjectives here while Romanian seems to allow virtually any adjective? Third, the Italian data forced us into the uncomfortable position of specifying that not only must external D end up valued for Vocative case, but that even when this does happen the embedded dP argument cannot be marked overtly for Default case (though it may be marked for "Possessive" case, whatever that really means). And finally, it is not clear what the difference is between the D that includes in its theta structure nominal-like APs with a valued case feature, and the D whose theta structure includes whatever category măi is, and the D whose theta structure includes simply a dP restriction (of the various kinds). Of course we hope that closer scrutiny and perhaps some revision to a few initial assumptions will illuminate explanations for the phenomena these stipulations address. Meanwhile they capture what seem to the correct generalizations.

A final point of concern in this proposal regards the legitimacy of a dP as an argument of a D. The Larsonian system draws a parallel between the D and V in its feature checking behaviors. In
the VP, V has an interpretable but unvalued case feature, and its dP argument has a valued but uninterpretable case feature. Agreement between the two creates a legible feature. Identically, in DP, D has an interpretable but unvalued case feature, and its nP argument has a valued but uninterpretable case feature, and agreement between the two creates a legible feature that is both interpretable and valued. However, if the case feature of the dP is fully legible, is both interpretable and valued, then what happens to it when it enters the VP that makes the dP suddenly only valued, no longer interpretable so that it needs to check with V? It seems that either the relationship between V and dP is special, or the process of finishing a dP changes it. That is, either V-D case agreement and D-N case agreement happen on different "strata" (or involve different "kinds" of case feature), or merger of a dP into the core derivation renders its case feature no longer interpretable alone (as in, it consolidates into a simple value that must be "re-interpreted" in its matrix). If the former, then a completed dP might continue to interact with a containing DP in the manner utilized in this paper. If the latter, then the proposal is in trouble from its underpinnings: it seems central to the analysis that the embedded dP argument not act as an uninterpretable, but as a complete — and still accessible, valued — feature bearer.

Despite these concerns, the analysis sketched here captures several key intuitions that cannot be disputed. The unusual positions available to certain restricted classes of adjectives in vocatives finds a natural explanation. The function of the vocative as a means of address is captured via general quantification, without making recourse to special functional projections specific to these nominals. And the framework allows for the unification of seemingly disparate phenomena across languages. With more cross-linguistic comparison, and more articulated theoretical assumptions, we have faith that these advantages will only be strengthened. The vocatives of the world have been only poorly studied in previous literature, or have been studied only from morphological and pragmatic viewpoints, and this proposal constitutes an important step forward in understanding the syntax of what in the end is one of the most common functions of language use.
References


