# Evidence for Selective Spell-Out of Functional Heads - more on the Doubly Filled Comp Filter

Mikko Kupula

Massachusetts Institute of Technology
kupula@mit.edu

#### 1. Introduction

The status of clitics as a heterogeneous class of functional items finds one of its earliest expressions in Suñer (1988) and Sportiche (1992, 1996). The latter establishes a distinction between accusative and dative clitics in Romance, arguing that the former are specificity markers, while the latter encode agreement (see also Jaeggli 1982, Borer 1983 and Demonte 1995). The plausibility of Sportiche's view on clitics as independent functional heads and, as such, exogenous to their DP-associates is reflected in several recent studies based on Spanish (Bleam 2000, Cuervo 2003, Ormazabal & Romero 2010). The approach contrasts with theories like Uriagereka (1995), where clitics are instead viewed as D-features, meronymically related to the DP which also hosts their associate (for recent studies in the latter framework, see Anagnostopoulou 2003 and Roberts 2010).

The question whether clitics are agreement markers or bundles of D-features is an intricate one and might lack a clear-cut and universally valid answer. In any case, the typologically widespread isomorphism of clitics with D (as in definite article) tells us nothing convincing regarding the morphosyntactic status of clitics, because more than one mechanism can give rise to the observed isomorphism, DP-*external* agreement with the DP-associate of the clitic being one of them.<sup>1</sup>

The present article approaches the ontology of clitics by examining dative cliticization patterns in passives and unaccusatives. The main body of data is drawn from Modern Greek, a language where clitic doubling is generally known to be discourse-sensitive and incompatible with focus in the active voice (Iatridou 1991, Anagnostopoulou 1994, Kallulli 2001). In the non-active voice, as in passives (and also unaccusatives), the phenomenon becomes more pervasive: it obtains a semi-obligatory/"unmarked" and discourse-insensitive character. The proposal thus identifies two types of clitics based on transitivity. Clitics are different items – although evidently morphologically identical – depending on whether they surface in the transitive active voice or in passives/unaccusatives.

If accurate, the observation has far-reaching consequences for the research on clitics and clitic doubling cross-linguistically, the most obvious being the impossibility of a "unified" approach to cliticization (as tentatively offered recently in Roberts 2010), unless that approach involves the interplay of at least two strategies, ideally a balanced combination of Uriagereka and Sportiche, the former being applied in the transitive active voice and the latter in other contexts. The present paper highlights the necessity of embracing a combinatory approach of this sort at least in Modern Greek.

The paper revisits Anagnostopoulou's (2003) MLC-based argument regarding the interaction of dative cliticization with locality-violating movement and illustrates that this

<sup>&</sup>lt;sup>1</sup> As is well-known, the syncretism between clitics and definite articles tends to be only partial. Nominative clitics, for instance, do not exist in Greek, despite the existence of nominative D(efinite) articles.

approach is viable only if extended to movement operations in general: dative cliticization is *not* a licensing mechanism for locality-violating movement, but a mechanic reflex of movement in general, implicated in the absence of external arguments (Spec,vP). Dative clitics constitute selective Spell-Out forms of displaced applicative heads (APPL) at phase-boundary (cf. Cuervo 2003, Diaconescu & Rivero 2007, Slavkov 2008). Dative cliticization arises as epiphenomenal to general principles governing phrase structure, particularly the axiomatic restrictions concerning the co-realization of Specifiers and heads in the same domain (the essence of the generalized "Doubly Filled Comp Filter"; Sportiche 1992, Koopman 1993, 2000; Koopman & Szabolcsi 2001, Pearson 2005, among others). The proposal identifies a tight interaction at the syntax-morphology interface (syntactic structure affects morphological arrangement) and highlights the relevance of head movement as a syntactic operation (cf. Chomsky 2000, 2001 and the general debate regarding the syntactic reality of head movement; Boeckx & Stjepanovic 2001, Matushansky 2006, Roberts 2010).

## 2. Doubly filled comps: general remarks

In its earliest incarnation, as discussed in Chomsky & Lasnik (1977), the Doubly Filled Comp Filter (DFCF) was introduced to explain the ungrammatical co-occurrence of overt *wh*-phrases and Complementizers in (embedded) C-domain:

#### (1) \*[CP WH that]

The ill-formed structure in (1), while axiomatic and by itself unaccounted for, explains the ungrammatical status of constructions like (2) in a number of familiar languages (English, Spanish etc). The example in (2b) illustrates that the DFCF is operative in embedded environment also in Greek:

(2) a. I wonder who (\*that/\*whether) she saw
b. dhierotóme pjon (\*óti/\*an) ídhe
wonder.1SG who that/whether saw.3SG

(English)
(Greek)

While several studies point in the direction that (1) could be derived from Kayne's (1994) LCA and therefore extended to Spec,Head relations in general (Sportiche 1992, 1996; Koopman 2000, Pearson 2005 and related work), apparent violations to the generalized DFCF are well-documented in the literature. It is, for instance, widely known that V2-positive languages seemingly violate a generalized form of (1) in root clauses, under the assumption that both Spec-CP and C<sup>0</sup> are filled (typically by the Subject and the verb respectively; see Den Besten 1989, Haegeman 1992, and others). It is equally well-known, however, that the apparent violations are easily avoidable in a "Split CP" -approach to the left periphery (Rizzi 1997, Koopman 2000, Baltin 2010, among others).

Regarding DFCF-violations in T-domain resulting from the co-occurrence of overt Subjects in Spec-TP and verbs in  $T^0$ , at least two possible rescue strategies are available. The most obvious one – in line with the earlier "Split IP"-hypothesis (Pollock 1989 and subsequent work) – is to postulate a separate Agr-projection for the Subject, while the verb remains in  $T^0$  (the head of a lower projection). The alternative solution, which I adopt for the purposes of this

paper, is a feature-based DFCF, as recently discussed in Pearson (2005) and Collins (2007). According to this view, DFCF-violations can also be induced by overt (and shared) grammatical features which in this connection I assume to be  $\varphi$ -agreement features (see also Nash & Rouveret *forthc*.):

(3) Generalized Doubly Filled Comp Filter (Pearson 2005)

If H is a category containing some feature F, \*[HP XP [H' H<sup>0</sup> ...]] when XP and H<sup>0</sup> both overtly encode F.

I assume that the principle in (3) is checked in T-domain. This way of reasoning does not implicate that (3) does not apply at  $\nu$ P-level: Spec, $\nu$ P and  $\nu$ /V also share (unvalued) features.

The principle in (3) allows the following cases of Spec,Head realization: (i) Spec is covert and head is overt (but there is more to say about "covertness", see 4.2), (ii) Spec is overt and head is covert or (ii) Spec and head are both overt, but the head does not overtly duplicate the feature matrix of its Specifier.<sup>2</sup> Languages disallowing pro-drop are a case in point: Spec-TP and T<sup>0</sup> could be simultaneously filled if verbal inflection is impoverished to the extent that it does not reduplicate the φ-features of Subjects, as in English and many Scandinavian languages (for a substantially different view on the "Spec,TP parameter", see Bobaljik 1995). Pro-drop languages, on the other hand, systematically violate (3) in T-domain with overt Subjects and, consequently, further movement of the Subject to one of the sub-projections of C<sup>0</sup> (such as Spec,TopP) is necessary (see also Alexiadou & Anagnostopoulou 1998, Alexiadou 1999, Koopman 2000, among others). The question then arises whether Spec-TP is obligatorily projected in pro-drop languages. I return to additional details regarding this issue in 4.1.

As I pointed out above, DFCF itself remains axiomatic. The present paper will not offer any definitive account for the principle either, but the discussion in Section 4. nevertheless illustrates that complex terminals undergo incremental Spell-Out in Greek due to DFCF. The phenomenon might be universal and regulated by the presence (and locus) of external arguments. If incremental Spell-Out turns out to be *obligatory* for complex heads – as for clausal structure in phase-based syntax (Chomsky 2000, 2001; Fox & Pesetsky 2005 and related work), the DFCF can be conceived as mechanism that regulates cyclic Late Insertion of atomic morphemes (see also Halle & Marantz 1993, Halle 1997 and Skinner 2009).

#### 2. Introducing applicatives in Modern Greek

As is well-known, constructions apparently related to the Indo-European double object construction (DOC) are associated with overt applicative marking in various typologically unrelated languages (Baker 1988, Marantz 1993, Peterson 2007). The Bantu family, among others, is famous for its applicative constructions. Applicative morphemes are valence-augmenting in introducing a novel, oblique, argument as part of the core argument structure of the predicate:

\_

<sup>&</sup>lt;sup>2</sup> See Koopman (2000) for discussion regarding (the exclusion of) the fourth logical alternative, where the Spec and head are both covert.

(4) chiritsu chinagul-**ir**-a atsikana mphatso (Chichewa, Marantz 1993) fool buy-APPL-fv girls gift 'the fool bought a gift for the girls'

The applicative construction exemplified in (4) is known to exhibit numerous similarities with the double object construction (DOC) in familiar languages like English (or Greek) (Baker 1988, Marantz 1993). Such properties include animacy restrictions on the (benefactive/recipient) applied Object and an asymmetric c-command relationship between the Objects, reflected also in their linearization (Kayne 1994). In light of the apparent similarities, a consensus has emerged that English/Greek style DOCs are exponents of applicative constructions, the familiar observation being that in these languages, as opposed to languages like Chichewa, applicative morphology is covert by parameter-setting:

(5) a. Elmer baked Hortence some cookies b. éftiaksa tis mitéras mu mia túrta I-baked the mother.DAT my a cake.ACC 'I baked my mother a cake'

The question now arises regarding the precise nature of the parameter that regulates the overtness or covertness of applicative morphology. Are we dealing with a purely morphological, lexicon-based idiosyncrasy or a more regular and predictable phenomenon, possibly related to underlying syntactic structure? I opt for the latter alternative, guided in part by the constructionalist ideology and in part by the observation that the visibility of applicative morphology appears to correlate with absence of external arguments. In other words, applicative morphemes are *not* uniformly zero morphemes in Greek, as in (5b), but they can be phonetically realized, just like in Chichewa. The relevant morphological difference between Greek and Chichewa ultimately boils down to a portmanteau instantiation of APPL in the former, where APPL simultaneously encodes object agreement. In Bantu languages (among others), the two functions (applicativization and Object agreement) are teased apart.

## 2.1 On clitic doubling of datives in Greek

In Greek, clitic doubling is typically optional in the active voice, (6). It is considered a discourse-sensitive strategy and generally incompatible with focus (Iatridou 1991, Anagnostopoulou 1994, Kallulli 2001, Kallulli & Tasmowski 2005). There is also evidence that clitic doubling reliably diagnoses structural Case in Greek (Anagnostopoulou 2003):

(6) (tis<sub>i</sub>) (to<sub>j</sub>) édosa tis Marías<sub>i</sub> to vivlío<sub>j</sub> CL.DAT CL.ACC I-gave the Maria.DAT the book.ACC 'I gave Maria the book'

As opposed to the optional scenario illustrated in (6), specifically *dative* cliticization suggests itself as an "unmarked" alternative, for some speakers obligatory or at least preferred, in four grammatical environments, to be discussed analytically in the following subsections: (i)

passivized DOCs, (ii) unaccusatives, (iii) psychological predicates with dative Experiencers and (iv) raising (see also Anagnostopoulou 1999, 2003).

#### 2.1.1 Passivized DOCs

In Greek DOCs, only accusative Themes undergo passivization in the sense of alternating with nominatives; dative Goals can be preposed (like nominative Themes), but the latter always retain their dative Case features (see below). The apparent interaction of dative cliticization with long passives in Greek has been extensively discussed in Anagnostopoulou (2003), who claims that passivization of Themes is only licit under concomitant clitic doubling of the dative Goal, as in (7):

(7) to vivlío<sub>i</sub> ?\*\*(tis) dóthike tis Marias  $t_i$  the book-NOM CL-DAT was-given the Maria-DAT 'the book was given Maria'

However, the construction in (7), specifically the degree to which the presence of the dative clitic is mandatory, has been the topic of much controversy and scepticism in recent work, particularly my own (Kupula 2008, 2009, 2010). The controversy boils down to the fact that native speakers do not generally agree with the intuition expressed in (7). For the vast majority of speakers, the dative clitic is optional and constructions like (8) are fully grammatical, with or without the clitic:

(8) to vivlío<sub>i</sub> (tis) dóthike tis Marias  $t_i$  the book-NOM CL-DAT was-given the Maria-DAT 'the book was given Maria'

A somewhat different scenario emerges in V-initial strings with *in situ* Subjects. In this setting, the dative clitic is, in fact, strongly implicated:

(9) <sup>?\*</sup>(tu) dóthike tu Jánni éna vivlío CL-DAT give-PASS the Jánnis-DAT a book-NOM 'Jánnis was given a book'

Similarly, the clitic is mandatory when the dative argument itself occurs preverbally (see also Kupula 2008, 2010 and *to appear*). This construction is typically referred to as *Clitic Left Dislocation* (CLLD) in (Cinque's 1990, Iatridou 1991, Agouraki 1992, Anagnostopoulou 1997, Alexopoulou & Kolliakou 2002):

(10) tis Marías <sup>?\*</sup>(tis) dóthike éna vivlío the Mary.DAT was-given a book.NOM 'Maria was given a book'

Although a palpable asymmetry emerges regarding the necessity of dative cliticization in Theme passivization in (8) and CLLD in (10), a relevant question to ask is whether a

meaningful difference exists between these constructions, either in terms of syntactic Subject properties of the preverbal DP (to vivlío and tis Marías), movement dependencies or, in fact, the theoretical status of the construction itself. I return to discuss this issue in more detail in the following section.

## 2.1.2. Unaccusatives, raising and psychological predicates

The example in (11) illustrates that a discourse-insensitive type of dative cliticization recurs in dyadic unaccusatives. Again, more robust judgments are eliticited in V-intial environment, as in (11b) or dative CLLD, as in (11c):

- (11) a. to grámma <sup>#</sup>(tis) írthe tis Marías me kathistérisi the letter CL.DAT can the Maria.DAT with delay 'the letter came to Maria with delay' b. ?\*(tis) írthe tis Marías éna gramma me kathistérisi
  - b. (tis) írthe tis Marías éna gramma me kathistérisi CL.DAT came the Maria.DAT a letter.NOM with delay
  - c. tis Marías <sup>?\*</sup>(tis) irthe éna gramma me kathistérisi the Maria.DAT CL.DAT came a letter.NOM with delay

Dative cliticizisation occurs under similar conditions also in raising contexts (cf. Anagnostopoulou 2003). Again, judgments are consistently better with CLLD:

(12) a. o Jannis (tis) fénete tis Marías éksipnos the Jannis CL.DAT seems the María.DAT clever 'Jannis seems clever to Maria'
b. tis Marías <sup>?\*</sup>(tis) fenete éksipnos o Jannis the Maria.DAT CL.DAT seem clever the Jannis 'Jannis seems clever to Maria'

As with Theme passivization, the dative clitic appears to be mandatory also in V-initial orders, just like in (9) and (11c):

(13) pos <sup>?\*</sup>(tu) fánike tu kiríu to domátio? how CL-DAT seem-PASS the mister-DAT the room-NOM 'what did mister think of the room'

A fourth syntactic environment which triggers dative cliticization is Belletti & Rizzi's (1988) "Class III" psychological predicates, the *piacere*-type associated with dative Experiencers. As observed in Belletti & Rizzi (1988), dative Experiencers and Stimuli can both occur preverbally. In either case, clitic doubling of the dative Experiencer is induced, but it is not equally obligatory. As expected, the necessity for the clitic is strongest in CLLD and V-initial environment:

(14) a. tis Marías <sup>?\*</sup>(tis) arési to krasí the Maria CL.DAT please the wine.NOM b. to krasí \*(tis) arési tis Marías the wine.NOM CL.DAT please the Maria.DAT 'María likes the wine/the wine pleases Maria' c.?\*(tis) arési tis Marías to krasí CL.DAT please the Maria.DAT the wine.NOM

The data presented in this section indicate that a discourse-insensitive type of dative cliticization is implicated in (i) passivized DOCs with *in situ* Subjects (ii) dyadic unaccusatives, (iii) raising and (iv) Class III psych constructions (which are also unaccusatives). Dative cliticization of the relevant type thus arguably correlates with dyadic argument realization in the absence of external arguments.<sup>3</sup> The review of the evidence also suggests that the necessity for the dative clitic increases in V-initial strings. Crucially, the presence of the clitic is not strictly obligatory in Theme passivization when the Theme is displaced (contra Anagnostopoulou 2003).

#### 3. Applicative morphemes: transitivity, voice and minimality

I now proceed to organize a theoretical analysis of the data which is required to predict the facts discussed in the previous section. I begin by addressing the relation between applicatives and voice/transitivity in a typological perspective and subsequently proceed to a critical review of Anagnostopoulou's (2003) MLC-based approach. I illustrate that Anagnostopoulou's system involves a number of problems and inconsistencies, all of which are immediately remedied by de-emphasizing the analytic relevance of MLC and by instead treating dative cliticization as a general morphosyntactic reflex of head movement, rendered visible by the interaction of the Generalized Doubly filled Comp Filter and the principles of Distributed Morphology. The approach taken here is not compatible with Uriagereka's (1995) analysis of clitics, but the plausibility of that analysis in the active voice is not excluded.

#### 3.1. Applicative constructions and transitivity

Since the central argument of this paper pertains to the overt realization of applicative morphology based on voice and transitivity, it is beneficial to anchor the claim in a broader typological framework where such a claim can be empirically shown to have independent plausibility.

As it turns out, the sensitivity of applicative constructions for the transitivity (or voice) of the hosting predicate transpires from numerous generative and non-generative studies (Baker 1988, Bresnan & Moshi 1990, Woolford 1993, Peterson 2007, Pylkkänen 2008). Many languages where applicativization is productive and morphologically distinct only allow these constructions in the transitive active voice. Additional variation is attested based on the semantic role of the applied argument and whether or not the applied argument is a pronoun or a full DP. The restrictions are known to be particularly severe for benefactive applied Objects

-

<sup>&</sup>lt;sup>3</sup> The notion "external argument" is to be understood as purely syntactic in the sense of being introduced by a specially designated functional head ( $\nu$  in Greek). Passives have been assumed to involve existentially bound "external arguments", as suggested by Agent-phrases (also referred to as "a-adjuncts"; see Grimshaw 1990, Alsina 1992). A-adjuncts do not count as external arguments in the syntactically relevant sense (see, e.g. Alexiadou & Doron 2010 for recent discussion).

which are incompatible with unaccusative bases at least in Bantu languages (Baker 1988, Machobane 1989, Woolford 1993). Consider the following example from Chichewa:

(15) \*mkango u-ku-yend-er-a anyani (Chichewa) lion SP-PRES-walk-APPL-ASP baboon 'the lion is walking for the baboons'

In some Bantu languages, unaccusatives and passives do not behave alike (see also Baker 1988). The examples in (16) from Sesotho (Machobane 1989) illustrate that this language rejects applicative constructions with unaccusative predicates, as in (16a), but fully accommodates them in passives, (16b):

(16) a.\*baeti ba-fihl-ets-e morena
visitors SM-arrive.APPL-IND chief
'the visitors have arrived for the chief'
b. nama e-pheh-ets-o-e `me
meat SM-cook-APPL-PASS mother
'the meat has been cooked for my mother'

However, it would be premature to draw a reliable syntactic distinction between passives and unaccusatives based on the data in (15)-(16) alone, because the Bantu restriction on unaccusative applicatives is not universal. Peterson's (2007) recent cross-linguistic survey reveals that unaccusative bases can, in fact, license an impressive semantic spectrum of applicative constructions in other languages. Consider (17), depicting an unaccusative "affected argument applicative" in the Tibeto-Burman Hakha Lai (see also Gerdts 1988 for Halkomelem):

(17) ?a-ka-than-piak 3Ss-1sO-grow.up-BEN 'he grew up for me'

Recall furthermore that the semantic role of the applied object is likewise known to affect the grammaticality of these constructions (Woolford 1993; Bresnan & Moshi 1990:177-178 report the acceptability of some locative unaccusative applicatives even in Chichewa). There are also cases where the applicative construction is exclusively licensed in passives. The examples in (18) from Sesotho (Woolford 1993) illustrate the ungrammaticality of the applicative construction in the active voice and its grammaticality in the corresponding passive:

(18) a.\*monna s-sho-ets-e Lineo
man AGR-die-APPL Lineo
'The husband has died on Lineo'
b. Lineo o-sho-ets-o-e ke-monna
Lineo AGR-die-APPL-PASS by-husband
'Lineo has been bereaved of the husband'

A fourth pattern is attested in Japanese and Malagasy. In these languages, morphologically overt applicative constructions appear to be restricted to passives (or, more generally, constructions lacking external arguments). Regarding Japanese, Pylkkänen (2000) shows that the so called "adversity passive" in this language, as exemplified in (19), is a (low) applicative construction (possibly related the Sesotho construction in 18b):

(19) Taroo-ga musuko-ni sin-are-ta Taroo.NOM son.DAT die.PASS.PAST 'Taroo's son died on him'

Pylkkänen claims, without offering any principled explanation, that APPL in (20) has a morphological exponent only in the passive voice. The morpheme is suppressed in the active voice under the influence of a causative light verb which in Pylkkänen's framework introduces an external argument. It can be inferred that APPL is spelled out in the absence of external arguments and remains covert when external arguments are projected (see also Marantz 1984).

Strikingly, Pearson (2005) reports a similar phenomenon in Malagasy. In this language, applicative morphemes are selectively spelled out in the absence of external arguments, just like in Japanese (Pearson 2005:401-407). As an attempt to explain the phenomenon theoretically, Pearson argues that Specifiers and heads cannot be simultaneously realized in this language if they share grammatical features (the essence of (3)).

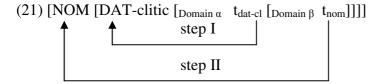
I demonstrate in Section 4. that Modern Greek behaves *exactly* like Japanese and Malagasy regarding the overt realization of APPL. Following Pearson (2005), I furthermore argue that, the generalized DFCF is a strong candidate in providing the phenomenon with a principled morphosyntactic explanation. The discussion in the following section illustrates that Anagnostopoulou's (2003) MLC-based motivation is suboptimal in this regard.

#### 3.2 Dative cliticization and MLC revisited

Anagnostopoulou's (2003, 2004) MLC-inspired system begins with the observation that long passives in Greek, as in (8), violate the MLC because of the different domain-affiliation of Goals and Themes. The dative DP is an intervener in Domain  $\alpha$ , blocking nominative Case checking of the Theme which resides in a lower Domain  $\beta$  (cf. Rizzi 1990, Chomsky & Lasnik 1993, Chomsky 1995 and related work):



According to Anagnostopoulou, violations to *Attract Closest* in (21) are circumvented when the dative DP undergoes clitic doubling. The clitic encapsulates the intervening D-features of the Goal in Uriagereka's (1995) sense and moves to  $T^0$ , pied-piping the offending features. Consequently, intervention effects are cancelled in (21) due to feature movement and the Theme can move to Spec-TP:



Based on the phenomena observed in (20)-(21), the following tentative generalization is formulated:

(22) A nominative DP may move across a dative DP only if the dative is realized as a clitic or is part of a clitic doubling chain. (Anagnostopoulou 2003:7)

The controversial nature of this generalization was made clear already in the previous section. In what follows, I proceed to illustrate that (22) is only a fraction of a much larger and more general morphological scenario where dative cliticization, in fact, does interact with Amovement, but it is *not* conditioned by any locality mechanism.

#### (i) CLLDed dative Goals and Experiencers

Recall that dative cliticization habitually recurs when the dative Goal/Experiencer itself occurs preverbally, as a CLLDed argument. The question now arises as to how CLLD should be addressed syntactically. While clitic doubling and CLLD have been treated as unrelated phenomena in the literature (Cinque 1990, Iatridou 1991, Anagnostopoulou 1994), Cinque's (1990) familiar observation motivating this approach, namely that CLLD can exist independently of clitic doubling (as in Italian), is neither sufficient nor readily applicable for languages where the two phenomena *do* coexist and habitually co-occur (as in Greek). In fact, Agouraki (1992) argues for Greek that CLLD exhaustively reduces to canonical clitic doubling, the former being derived from the latter via A'-movement. A unified approach to the two clitic constructions is attractive also because they display similar sensitivity for focus in the active voice (Iatridou 1991, Alexopoulou & Kolliakou 2002 and others).

For the purposes of this paper, I adopt a hybrid analysis for dative CLLD, combining the essentials of Agouraki's (1992) movement approach and Iatridou's (1991) base-generation analysis (see also Cinque 1990). The latter captures the identity of the fronted dative as a Subject of predication, while the former ascribes it a movement dependency. Here, I defend an A-dependency, because CLLDed DPs reportedly obviate Weak Crossover effects in Greek and consistently fail to license parasitic gaps (see Iatridou 1991 for more discussion).

This way of reasoning does not imply that CLLDed arguments remain in A-positions (it is highly likely that they undergo subsequent topicalization typical of overt Subjects in pro-drop languages; this would be the case also for the preverbal nominative Theme in (8)). What the discussion emphatically *does* imply is that whatever the correct analysis of CLLDed dative Goals turns out to be, it should be consistent with the analysis adopted for dative Experiencers which have been analyzed as quirky Subjects of unaccusative predicates (Belletti & Rizzi 1988, Pesetsky 1995, among many others). I have shown in previous work (Kupula 2009, 2010) that at least in Greek, dative Experiencers and dative Goals behave on a par regarding typical quirky

Subject properties such as binding and PRO-control (*contra* Anagnostopoulou 1999). These findings are consistent with the facts reported earlier for Icelandic in Zaenen *et al.* (1985).<sup>4</sup>

Under the movement approach, constructions like (23) below are derived by moving the dative DP to the preverbal position. Under the assumption that Goals are base-generated higher than Themes in Greek (Anagnostopoulou 2003:137-141), the (A-)movement of dative Goals is *local*:

(23) tis Marías<sub>i</sub> <sup>?\*</sup>(tis) dóthike *t*<sub>i</sub> éna vivlío the Mary.DAT CL.DAT was-given a book.NOM 'Maria was given a book'

The fact that the dative clitic systematically reappears also under local A-movement indicates that its presence is not locality-induced.

Also, assuming (rather uncontroversially) that fronting of the dative DP, as in (24), also pied-pipes the formal features of that DP, the movement of the dative DP would simultaneously execute steps I and II in (21). Consequently, movement of the dative DP alone should eliminate the intervening feature-bundle in (20). This way of reasoning predicts the absence (or at least redundancy) of the clitic in (23). Abstracting away from intervening D-features, the trace of the moved dative DP would lack intervener properties on independent grounds (Chomsky 1995).

#### (ii) The data and native speakers' judgments

The second concern pertains to the basic nature of the empirical data itself which, as I mentioned in the previous section, turns out to be highly probabilistic at a closer examination. Regarding passives, the clitic is considered obligatory only in V-initial strings and CLLD. Theme passivization with overt displacement does not necessitate the presence of the clitic, contrary to what Anagnostopoulou (2003) claims. Although variation of this sort could, in principle, be due to idiolectal, dialectal or stylistic reasons, there is, as of yet, no independent evidence of this. In any case, only dialectal variation would be of scientific interest here and the existing research on Modern Greek dialects (Contossopoulos 1992, among many others) has not documented the presence or absence of the dative clitic as a dialectal trait.

The examples in (24) from Theophanopoulou-Kontou (2007) illustrate that Themes can successfully move across intervening datives, even if the latter is neither a clitic nor part of a clitic doubling chain – contrary to what the generalization in (22) predicts:

(24) a. to aftokínito<sub>i</sub> dóthike teliká tu Jánni  $t_i$  the car.NOM was-given the Jannis.DAT 'the car was given to Jannis in the end'

-

<sup>&</sup>lt;sup>4</sup> The movement analysis also captures the distinctive (subsective) link properties attributed to CLLDed items for Greek (Anagnostopoulou 1994, Alexopoulou & Kolliakou 2002), if D-linking properties are represented by features in C-domain (cf. Iatridou 1991, Alexopoulou & Kolliakou 2002). The checking of these features provides for a straightforward trigger for the assumed movement operation. In this view, the fact that only CLLDed items appear to be felicitous contexts involving (subsective) links does not necessarily implicate a base-generated syntactic difference between clitic doubling and CLLD. D-linking properties are be acquired via feature-checking resulting from movement to CP-domain.

b. to grámma<sub>i</sub> stálthike tis Irínis *t*<sub>i</sub> the letter.NOM was-sent the Irini.DAT 'the letter was sent to Irini'

The grammaticality of (24) indicates absence of MLC-violations or Case-checking failures as a result of the dative clitic being omitted. Translated into Anagnostopoulou's system in (21), "step I" seems optional at best; this outcome is theoretically highly inconsistent against the idea that the clitic is a carrier of intervening D-features.

While MLC-violations are known to form a continuum regarding the degree of ungrammaticality they produce and that, consequently, MLC-induced ungrammaticality is not always severe (Kitahara 1995, Fanselow 2004), there is evidence that MLC-violations can produce sharp ungrammaticality in Greek. Consider the double accusative construction, a variant of DOC where Goals and Themes both surface as accusatives. In Greek, this construction is limited to a handful of ditransitive verbs ('teach' being the most frequent one) and I have shown in previous work (Kupula 2008) that accusative Goals asymmetrically c-commands Themes, just like in the dative construction. Observe that locality-violating movement of the lower Theme across the c-commanding Goal results in sharp ungrammaticality, (25), which cannot be repaired by clitic doubling, (26):

(25) a. dídaksa ti María grammatikí taught.1SG the Maria.ACC grammar.ACC 'I taught Maria grammar' b.\*grammatikí didáhtike ti María grammar.NOM taught.PASS the María.ACC 'grammar was taught Maria'

(26) \*grammatikí ti<sub>i</sub> didáhtike ti María<sub>i</sub> grammar CL.ACC taught.PASS the Maria.ACC 'grammar was taught Maria'

The omission of the dative clitic in (8) would not produce ungrammaticality of the caliber illustrated in (25b). Examples like (25b) also remind us that treating MLC-violations as "mild" cannot be a null hypothesis, despite the fact that MLC and its precise effects for movement appear to lack a coherent definition in the literature.<sup>6</sup>

Returning to (24), the grammaticality of these constructions could, in principle, be explained also by postulating two base-generated orders for DOs and IOs (see Doggett 2004 and Citko 2008 for recent discussion). The constructions in (24) would be derived from a IO>DO order without locality violations (or clitic doubling). Such approach would be highly undesirable for independent reasons, however. First of all, Anagnostopoulou (2003:137-141) shows convincingly, based on Weak Crossover effects, binding and superiority, that Greek

\_

<sup>&</sup>lt;sup>5</sup> Furthermore, both arguments bear structural Case under Kupula's (2008) analysis.

<sup>&</sup>lt;sup>6</sup>MLC is sometimes regarded as an economic guideline (Chomsky 1993, Fanselow 2004), sometimes a fundamental – and unviolable – *sine qua non* principle governing Move/Attract (see, e.g. Poole & Burton-Roberts 2004)

datives are never low in the sense of being c-commanded by the DO in the base (the occasional DO>IO string would be due to scrambling). Irrespective of these facts, the coexistence of IO>DO and DO>IO violates projection principles like Baker's (1988, 1997) UTAH. The only way to render this option viable would be to assume a non-trivial semantic distinction between high and low datives. This distinction would end up approximating the distinction between DOCs and their locational counterpart (PP-datives): low datives would acquire locative semantics and/or end up PPs in disguise (see also Holmberg & Platzack 1995 for relevant discussion on Icelandic). Any attempt to defend a base-generated DO>IO order will require excluding the possibility that the low IO is a locative PP underlyingly. Establishing this distinction is highly relevant especially for languages like Greek, where the dative Case has been associated with locative uses diachronically.<sup>7</sup>

In sum, a deterministic MLC-based solution is not credible in light of the exceedingly probabilistic nature of the linguistic data. An attempt to implement this analysis creates unnecessary tension between theory and empirical reality and, in any case, ends up making disproportionately strong predictions. MLC can produce sharp ungrammaticality in Greek; since the ungrammaticality is not sharp when the dative clitic is omitted in SVO strings (in many cases the construction is not even mildly ungrammatical), it is highly likely that MLC does not interact with dative cliticization in the relevant constructions. This view is strongly supported by the fact that dative cliticization is also triggered by local A-movement (of the dative DP itself). Furthermore, the generalization in (23) could not be salvaged with the *ad hoc* assumption of two base-generated orders for IOs and DOs. This approach cannot be independently justified and could not be elegantly implemented in syntax in concurrence with an alternative which only requires one base-generated order.

Having expressed my skepticism, coupled with various objective concerns regarding Anagnostopoulou's (2003) MLC-based account, I now proceed to outline the contours of a remarkably simple, yet theoretically attractive alternative which only requires one basegenerated order (IO>DO) and thus complies with the Universal Base Hypothesis (Kayne 1994 and related work).

#### 4. Towards an alternative

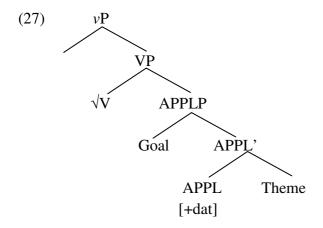
The alternative solution identifies a positive correlation between the absence of external arguments (Spec, $\nu$ P) and dative cliticization. Dative clitics are treated as Spell-Out forms of APPL, a view that has become highly popular in recent work based on several languages (Demonte 1995, Pylkkänen 2000, Cuervo 2003, Diaconescu & Rivero 2007, Slavkov 2008 and others). In this view, the dative clitic is exogenous to its DP-associate; clitics are not D-items in Greek, at least not in passives and unaccusatives. As I pointed out earlier, the fact that D (as in definite articles) is syncretic with clitics in Greek (among many other languages) does not

-

<sup>&</sup>lt;sup>7</sup> Locative uses of the dative Case were widespread in Ancient Greek (as well as other, now obsolete Indo-European languages). The fact that locative datives are not popular in modern languages is compatible with the view that such use is inherently unstable in the presence of competing uses for that Case, motivating a grammaticalization path to a more analytic expression (i.e. a prepositional phrase). In light of these facts, if it turns out that low datives do exist in Modern Greek, there is a very real possibility that they might be prepositional phrases in disguise and as such incompatible candidates also for clitic doubling (see also Holmberg & Platzack's 1995 discussion on Icelandic and German).

provide any convincing cues regarding the precise ontology of clitics, because such syncretism can be acquired also by DP-external clitics via another mechanism, namely agreement.

Agreement is the keyword in the proposed analysis. I assume that the clitic establishes agreement with the dative DP in its capacity as APPL, i.e. the head of the phrase where the dative DP is base-generated as the Specifier (see also Sportiche 1992, 1996; Demonte 1995 and others). Presupposing the correctness of a low applicative analysis for Greek DOCs (Kupula 2008; see also Den Dikken 1995, Harley 2002 and Diaconescu & Rivero 2007, Slavkov 2008), the applicative head is base-generated medially to the Goal and the Theme:<sup>8</sup>



The clitic exhaustively duplicates the feature-matrix of the DP, including its morphological Case (cf. Borer 1983, McGinnis 1998). Because the Goal surfaces as dative, APPL must be associated with [+dat] features (McGinnis 1998, Anagnostopoulou 2001). Under this view, an overt manifestation of APPL also ends up overlapping with object agreement markers morphologically and functionally (Marantz 1984, Demonte 1995, Cuervo 2003, among others).

The structure in (27) is applicable to all of the constructions discussed in this paper (passivized DOCs, dyadic unaccusatives and raising). Each one of these constructions involves an abstract notion of possession (for a possessive dimension of psychological verbs, see Åfarli 2002 and Kupula 2010). Notably, Greek differs from English in that even unaccusatives and raising predicates can subcategorize for DOCs (for a possible morphological explanation for the attested cross-linguistic variation in this regard, see Romero & Ormazabal 1999). Adopting (27) also for psychological predicates, specifically Belletti & Rizzi's (1988) *piacere*- type, implicates an applicative status also for these constructions. The topic has not been extensively studied in the literature, but encouraging morphological data in the form of overt applicative morphology in psycho-emotive predicates, is indeed available in several typologically unrelated languages (Georgian, various Salish languages etc; see Harris 1981, Marantz 1989, McGinnis 2000, Gerdts & Kiyosawa 2007 and Peterson 2007).

\_

<sup>&</sup>lt;sup>8</sup> Georgala et al. (2008) argue against a low applicative structure for Greek DOCs, based on the fact that adverbs can interfere between the Goal and the Theme. It needs to be pointed out that adverb diagnostics should be handled with extreme care in Greek, a language that behaves very differently from English in this regard. See also Kallulli (2006) for general observations concerning the problems with adverb placement tests.

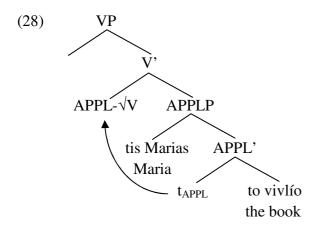
# 4.1. Revisiting DFCF-effects

Following Chomsky (1995), Embick (1998, 2004) and McGinnis (1999) among others, I assume that passives and unaccusatives are configurationally similar in lacking external arguments and that the latter merge to Spec,vP in Greek. However, there is evidence that external arguments do not merge to Spec,vP cross-linguistically; I demonstrate in 4.3. that languages like Spanish merge external arguments to Spec,Voice instead (v and Voice being distinct). I furthermore assume, following Legate (2003) and Müller (2010) that all vPs, even passives and unaccusatives, are phases (see also Svenonius 2001, 2004).

It was established in the previous section that dative cliticization is obligatory in passives and unaccusatives in (i) V-initial strings and dative CLLD and (ii) optional with overt Theme-displacement in passives (SVO strings). The theory will need to predict the positive correlation observed between (i)-(ii) and the absence of external arguments; the challenge lies in the necessity of simultaneously capturing the obligatoriness and the optionality of the clitic in similar grammatical settings (*modulo* word order). The following section illustrates that generalized Doubly Filled Comp Filter alone is sufficient to explain the observed cliticization patterns and that the morphological component can be handled in a simple Item-and-Arrangement framework.

#### 4.1.1. Cyclic Spell-Out of V-APPL

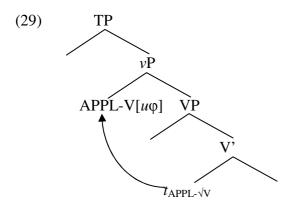
Suppose that applicative morphemes are by default zero morphemes in languages like Greek (see also Baker 1988, Marantz 1993, Anagnostopoulou 2001). For Greek, there is independent evidence that APPL moves to  $\sqrt{V}$  as a zero-morpheme in (27). As discussed earlier in Anagnostopoulou (2001) and Kupula (2008), that evidence is manifest in ill-formed nominalizations and adjectival passives with Goal externalization. The ill-formedness of these constructions has been attributed to a violation of a morphosyntactic principle known as "Myers's Generalization" (Myers 1984, Pesetsky 1995, Hale & Keyser 2002) according to which zero-derived roots cannot undergo further morphological derivation. Thus APPL moves to  $\sqrt{V}$  as a zero-morpheme:



As illustrated in (28), low APPL left-adjoins  $\sqrt{V}$  under the Mirror Principle (cf. Baker 1988, Halle & Marantz 1993) in a purely agglutinative fashion morphologically. This explains the proclitic nature of cliticization attested in the Spell-Out form. Assuming the universal character of Myers's Generalization and the fact that verbal morphology is not universally postverbal,

left-adjunction of zero-morphemes also violates Myers's Generalization. I have argued in Kupula (2010), based on Russian, that APPL must c-command its extraction site in constructions like (28), so a postsyntactic fusion, possibly related to Matushansky's (2006) "mmerger" needs to take place (see also Bobaljik 1995). Under this assumption, the precise locus of adjunction is irrelevant from a morphological point of view.

The treatment of " $\sqrt{V}$ " as an acategorial root in the spirit of Distributed Morphology (Halle & Marantz 1993, Marantz 1997, Embick & Noyer 2001, Ramchand 2008 and others) motivates further movement of the APPL- $\sqrt{V}$  compound to v:



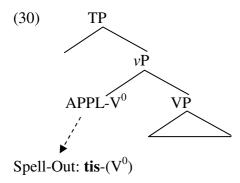
The step of movement illustrated in (29) involves critical morphosyntactic reorganization. First of all, the acategorial root assumes a full-fledged verbal status in lexical terms due to a fusion with  $\nu$  (a verbalizer). The feature-checking of the verb is still incomplete, however. Secondly,  $\nu$ P demarcates a phase boundary and, as such, a possible site for cyclic Spell-Out for clausal structure (Chomsky 2000, 2001; Fox & Pesetsky 2005 and subsequent work).

The vP-level is an obligatory Spell-Out site also for a morphologically complex verb under generalized DFCF, because the vP in (29) lacks a Specifier. Under these circumstances, the head needs to be spelled out. The question now arises as to the precise implementation of the mandatory Spell-Out of the relevant (complex) terminal, consisting of APPL and a lexical verb (denoted as APPL-V<sup>0</sup> above). Observe that V<sup>0</sup> cannot undergo Spell-Out here, because it is associated with a strong uninterpretable  $\varphi$ -set which must be checked *prior* to Spell-Out and V<sup>0</sup> must raise overtly to T<sup>0</sup> in Greek in order to check its  $\varphi$ -features (Rivero 1994, among many others). In other words, a compatible Vocabulary Item that matches V<sup>0</sup> cannot yet exist at this stage (cf. Halle's 1997 "Subset Principle").

For these reasons, the only way to satisfy the requirement to spell out a head in the absence of a Specifier is to spell out atomically the only morphological component of the complex terminal that can be spelled out under the circumstances, namely the applicative morpheme. APPL – unlike the rest of the verb – does not enter into further feature checking. Under this view, the first instance of Vocabulary Insertion at  $\nu P$  only targets APPL:

<sup>-</sup>

<sup>&</sup>lt;sup>9</sup> Assuming that spellout can only take place at phase-boundary constrains the operativeness of DFCF at the root level (here:  $\sqrt{\text{VP}}$ ) which is not a phase, nor has it an argument structure of its own. Defective syntactic properties of this sort explain why no incremental spellout of the applicativized verb can take place at VP, despite the fact that Specifiers might not be merged at this level.



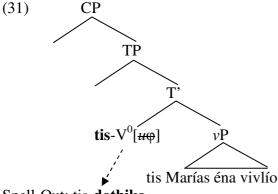
Consequently, an incremental/cyclic spellout pattern in multiple domains emerges even for morphologically complex (here: applicativized) verbs (see also Halle & Marantz 1993 and Skinner 2009). As is well-known, incremental Spell-Out of similar sort has been associated also in clausal structure since the beginnings of phase-based syntax (Chomsky 2000, 2001; Fox & Pesetsky 2005 among many others). If incremental Spell-Out of this sort in fact turns out to be *obligatory* for morphologically complex verbs – for the same reasons it is obligatory for clausal structure – the Doubly Filled Comp Filter can be conceived, in new light, as a principle that renders "cyclic Spell-Out" of complex terminals possible.

The head movement of APPL itself takes place in narrow syntax prior to Spell-Out and it is syntactically manipulative because it affects the internal structure of phases (see also Chomsky 2000, 2001 and the general debate concerning the reality and LF-relevance of syntactic head movement; Boeckx & Stjepanovic 2001, Matushansky 2006, Roberts 2010). I have discussed in detail the syntactic consequences of the head movement illustrated in (29) in previous work (Kupula 2008, 2010 and to appear). Following Den Dikken (2006, 2007), I have treated the applicative phrase as a Small Clause and a phase (cf. McGinnis 2001). The movement of the phase head (=APPL), as in (29), triggers phase extension which relaxes the islandhood of the phase-domain and, consequently, mobilizes the Theme. Any "escape hatch" properties phases might be associated with due to phase EPP-features, multiple Specifiers (or clitic movement) reduce to phase extension which in turn reduces to positive movement parameter on the phase head. This way of reasoning highlights the relevance of head movement as a narrow syntactic operation and it also illustrates that head movement must take place prior to Spell-Out (see below). EPP-driven movement of dative Goals is also possible under locality, making the Greek DOC symmetric in terms of A-movement (for additional details, see Kupula to appear).

The second instance of Late Insertion takes place at subsequent phase level (CP) where the verb can be matched with a Vocabulary Item due to completed feature checking at T. 10

-

<sup>&</sup>lt;sup>10</sup> I assume that strong and weak agreement features are both uninterpretable and need to be checked. Alexiadou & Anagnostopoulou (1998) assume that strong agreement features are [+interpretable], essentially pronominal items, with independent lexical entries.



Spell-Out: tis-dothike

**'tis-dóthike** tis Marías éna vivlío' CL.DAT:give.PASS the Maria.DAT a book.NOM

The structure in (31) explains the obligatory dative cliticization patterns in V-initial strings. Since neither of the Objects undergoes overt displacement, it is obvious that Spec-vP is not projected. Lack of Spec,vP triggers cyclic Spell-Out of APPL at vP. Recall, however, that the dative clitic is optional in SVO strings, as in (32):

(32) to vivlío<sub>i</sub> (tis) dóthike tis Marias  $t_i$  the book-NOM CL-DAT was-given the Maria-DAT 'the book was given Maria'

The optionality of the clitic (= overt APPL) in (32) is immediately explained if the Theme is allowed to create an intermediate Spec,vP on its way to T. Since vP is a phase, the relevant Specifier obtains a principled *raison d'être* as an optional manifestation of a phase EPP-feature. Intermediate Specifiers of this sort have been extensively discussed in the literature ever since Chomsky (2000) and McGinnis (2001) (the latter exploits phase EPP-features in order to capture cross-linguistic variation in A-movement (a)symmetries in applicative constructions). Here, the intermediate Spec,vP is optional and constitutes a locus of interpersonal variation. As such, it lacks syntactic relevance in the sense of licensing a movement operation. As I pointed out earlier, locality-violating A-movement is instead licensed via phase extension; multiple Specifiers or phase EPP-features are not implicated in a movement-facilitating function.

That said, the presence of the intermediate Specifier has morphological consequences. Speakers whose grammar performs passivization cyclically through an intermediate Spec,vP (possibly modelled on cyclic wh-movement) necessarily suppress an overt manifestation of APPL due to DFCF. Since the vast majority of native speakers do not require the dative clitic in (32), it is plausible to assume that the grammars of most speakers are cyclically modelled. If, however, the intermediate Spec,vP is not created, APPL needs to be spelled out, just like in (31). In V-initial strings the intermediate Spec,vP cannot be projected since neither of the arguments moves overtly; consequently APPL is obligatorily spelled out.

With the discussion in the previous paragraph in the background, the necessity of dative cliticization with CLLDed dative arguments, as in (23), arguably reduces to lack of intermediate Spec,vP. Under DFCF, the absence of Spec,vP follows as a consequence if APPL

moves to v prior to the dative DP. In fact, I have found independent evidence for this view in previous work (Kupula 2010 and *to appear*) where I argue, based on Russian, that dative DPs surface as dative due to APPL-to-v movement. In other words, APPL [+dat] discharges/checks the dative Case features on the Goal under local c-command. In this view, APPL must move to v before the dative DP is mobilized, so that the latter can check its Case features. Consequently, an intermediate Spec,vP is suppressed and the systematic presence of the dative clitic constructions like (23) is explained.

The facts discussed above provide for a simple, yet comprehensive account for the observed dative cliticization patterns in Greek. As I have repeatedly pointed out, the dative clitic exhibits no sensitivity for minimal domains; its presence is not motivated by *Attract Closest* nor is its syntactic function *specific* to licensing an otherwise impossible movement operation. The presence of the clitic is rooted in simple and general principles regarding phrase structure which mandate the Spell-Out of a head in the absence of Specifiers.

## 4.2. The "Spec,TP parameter" revisited

The generalized DFCF obviously precludes overt Subjects from residing in Spec, TP if  $V^0$  overtly raises to  $T^0$ . The dilemma can be solved by assuming that Subjects do not reside in Spec-TP, at least not in pro-drop languages where  $V^0$  typically raises to  $T^0$  (see also Alexiadou & Anagnostopoulou 1998 and Koopman 2000 among others). It is plausible to assume that they end up dislocated in C-domain due to their discourse-sensitive character in pro-drop languages; Rizzi's (1997) Split-CP approach offers numerous possible landing sites (such as "TopP") (see also Ordoñez 1997, Alexiadou & Anagnostopoulou 1998, Alexiadou 1999 and Barbosa 2009).

Under this view, Spec-TP becomes superfluous and, in fact, disallowed in pro-drop languages; its syntactic function reduces to being a placeholder for *pro* or a transit-point for EPP-checking. The prediction here is that instead of forcing pro-drop with overt heads (Koopman 2000), it is necessary to suppress the affiliated Specifier altogether.

Languages disallowing pro-drop, like Swedish (V2) or English, on the other hand, avoid DFCF-violations due to impoverished inflectional morphology. Consequently, the same domain affiliation of Subjects and verbs in TP/CP is possible under the feature-based DFCF in (3) and Spec-TP can be projected. Bobaljik's (1995) system based on morpheme fusion makes the opposite prediction, i.e. the absence of Spec-TP (or a negative value on Spec-TP parameter) for languages like English and Swedish.

An obvious question to ask is how the DFCF-based system handles transitive predicates with pro-Subjects in the active voice. Modern Greek being a pro-drop language, constructions of this sort are ubiquitous. In constructions like (33), the clitic is always optional, however (recall the discussion in 2.1 on clitic doubling in Greek in the active voice):

(33) *pro* (tu) édosan tu Kósta mia ipotrofía pro.3SG CL.DAT gave.1SG the Kostas.DAT a scholarship.ACC 'they gave Kóstas a scholarship'

As I mentioned above, the current analysis on dative cliticization as selective Spell-Out of APPL is incompatible with the active voice in Greek. The question is: why should the analysis not work in (33)? After all, the Subject is covert and therefore APPL could be spelled out at  $\nu$ P.

Constructions lacking external arguments should behave on a par with constructions where external arguments are covert.

The rationale is clear and understandable, yet untenable. The licensing of referential *pro* takes place in T-domain where agreement and – consequently – conditions like the feature-based DFCF are checked. The conventional wisdom regarding *pro* is that its licensing depends on the strength of AGR at T, not the properties of v; the latter constitutes merely the base-generation locus for external arguments (see also Safir & Jaeggli 1989 and Embick & Iatridou 1997). As a result of *pros* not being licensed at vP, they must be treated as if they were overt items at this level. Consequently, 'tis' cannot be a Spell-Out form of APPL in (33). It must be a *bona fide* clitic pronoun, either a D-item in the sense of Uriagereka (1995) or an additional species of (optional) agreement marker in the sense of Sportiche (1992, 1996).

## 4.3. Clitic doubling of datives in Spanish and reciprocals in French

While in Greek dative cliticization is discourse-insensitive and the unmarked option only in the non-active voice, many studies point in the direction that in languages like Spanish it is obligatory also in the active voice (Demonte 1995, Cuervo 2003 and others). These studies also posit that clitic doubling of the dative argument is the defining characteristic of DOCs, a property that distinguishes the latter from the locational PP-dative counterpart. Similar views have been expressed recently also for Rumanian (Diaconescu & Rivero 2007) and Bulgarian (Slavkov 2008). Consider the following examples:

(34) a. Juan envió la carta a María (PP-dative)

Juan sent the letter to María

b. Juan le<sub>i</sub> envió la carta a María<sub>i</sub> (DOC)

Juan CL.DAT sent the letter to María

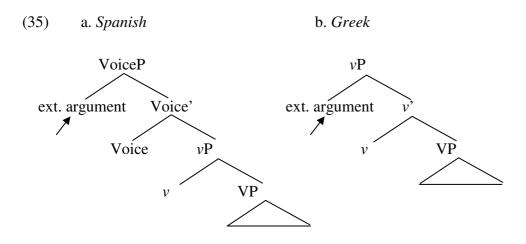
'Juan sent María the letter'

There is also a long tradition in Spanish linguistics, beginning from Demonte (1995), to treat the dative clitic as an overt manifestation of APPL (Bleam 2000, Cuervo 2003 and Ormazabal & Romero 2010). Assuming the correctness of this assumption also for Greek, the obvious question to ask is why APPL should be consistently spelled out in Spanish, but only selectively (in the non-active voice) in Greek.

The DFCF-based approach adequately captures the observed variation. There is a large body of literature supporting the view that Voice and v, two functional heads implicated with external arguments, can be regarded as distinct (Rivero 1990, Kratzer 1996, Embick 1998, 2004; Pylkkänen 2008, Labelle & Doron 2010). Following Embick (1998), I have been assuming that in Modern Greek, Voice and v are either (i) fused (in which case they are indistinguishable syntactically; see also Bobaljik 1995 and Pylkkänen 2008) or that (ii) Voice is absent altogether, external arguments being merged to Spec-vP. In terms of morphosyntactic organization, and regarding the locus of external arguments, I do not see a meaningful difference between (i) and (ii).

If, on the other hand, Voice and v coexist as *separate* heads (cf. Ramchand's 2008 "split vP" approach), the realization of external arguments becomes a non-trivial issue, one that possibly captures the variation between languages like Greek and Spanish in terms of dative

cliticization. Suppose that Greek and Spanish are minimally different regarding the locus of external arguments. In particular, suppose that in Spanish, as opposed to Greek, external arguments merge to Spec-Voice. The projection principle only allows one external argument and therefore Spec-vP is necessarily suppressed even though the v-head itself is still required for its verbalizing function in the Distributed Morphology style derivation of lexical items:



Adverb placement tests provide more support for the structures in (35). Consider the contrast illustrated in (36) between Spanish and Greek regarding the placement of temporal adverbs. The contrast arises independently of overt  $V^0$ -to- $T^0$  movement in both languages (see Suñer 1994 for  $V^0$ -to- $T^0$  movement in Spanish and Rivero 1994, Alexiadou & Anagnostopoulou 1998 for Greek):

(Laenzlinger & Soare 2009)

(36) a. Juan recientemente/a menudo ha leído este líbro
Juan recently/often has read this book
b. o Jánnis ?prósfata/?sihná éhi diavási aftó to vivlío

the Jannis recently/often has read this the book

'Jannis has read this book frequently/often'

Although adverb placement tests need to be handled cautiously and with skepticism in languages like Greek (see also Kallulli 2006), overt realization of Subjects immediately to the left of temporal adverbs is non-standard in this language (Greek clearly patterns with Italian and Finnish in this respect). As illustrated in (36a), the Greek facts stand in contrast with Spanish where a similar phenomenon appears to be unproblematic.

If adverbs constitute Specifiers to functional heads (Cinque 1999), the differences between Spanish and Greek indicate that a vacant head or Specifier can intervene between Subjects and verbs in Spanish, but not in Greek. This fact is consistent with the view expressed in (35), namely that Subjects merge higher in Spanish than they do in Greek. If we furthermore assume, following Demonte (1991) and Cozier (2006), among others that V-movement can pied-pipe the modifying adverb, the contrast between Spanish and Greek in (36) is immediately explained.

The morphosyntactic consequences of the different loci of external arguments in (35)-(36) are evident. As (35a) makes clear, the  $\nu$ P-level in Spanish is configurationally identical to

passive and unaccusative vPs in Greek. The prediction is that transitive DOCs in Spanish should behave like unaccusative/passive DOCs in Greek regarding the Spell-Out of APPL; as illustrated in (34b), the prediction is borne out.<sup>11</sup>

Now consider *se*-cliticization in French/Romance (Marantz 1984, Cinque 1988, Grimshaw 1990, Pesetsky 1995 among others). According to the dominating view originating from Marantz (1984), *se*-cliticization blocks the projection of external arguments. Consequently, constructions like (38) are analyzed as unaccusatives, anticausatives or middles (Marantz 1984, Pesetsky 1995, Folli & Harley 2005):

(37) a. cette robe *se* lave facilement this dress SE wash easilyb. la vase *se* brise the vase SE break

Generalized DFCF predicts the unaccusative status of (37) if se is regarded as overt realization of v (for a recent incarnation of this view, see Folli & Harley 2005 and Labelle & Doron 2010): the generalized DFCF predicts that if v is spelled out its Specifier will be suppressed. Although the issue cannot be examined in detail in the present context and it evidently awaits further research, the DFCF-approach might provide the contours for an immediate explanation for the unaccusative/middle properties of many Romance verbs associated with se-cliticization.

## 4.3 A final note on Subject raising

Modern Greek lacks infinitives and infinitival complements, a fact that renders the reality of traditional Case-driven Subject raising a controversial issue in this language. Arguments exist both for (Alexiadou & Anagnostopoulou 1999, Anagnostopoulou 2003) and against (Philippaki-Warburton 1992) the existence of Subject raising in Greek. If the discussion in this paper regarding the interaction of DFCF and dative cliticization is on the right track, it is directly relevant for the debate regarding Case-driven Subject raising in Greek and provides an additional piece of support for the existence of raising in this language, despite the lack of infinitives.

To begin with, the Greek counterpart to the raising verb 'seem' in English, *fénete*, comes in a morphological doublet consisting of two forms, one that establishes exhaustive  $\varphi$ -agreement with its surface Subject, and a defective one that consistently displays default 3<sup>rd</sup> person singular agreement:

(38) ta pedhia den fénete/fénonte na dulevun the children NEG seem.3SG/seem.3PL SBJ work.3PL 'the children do not seem to work'

\_

<sup>&</sup>lt;sup>11</sup> In fact, the system has the potential to capture a considerable amount of cross-linguistic variation. In particular, it might provide us with a simple explanation for why "extremely head-marking" languages seem to be associated with overtly encoded applicative constructions (Peterson 2007:209). In these languages, the DP-associate, while superficially an "external argument", in fact turns out to be an optional adjunct-level category (see also Baker 1988, 1996). If the external argument is never merged to Spec,*v*P in these languages, simply because it is not even an "argument" in the relevant sense, the necessity in head-marking languages of overt applicative morphology, as well as other agreement-related morphology, becomes understandable (and straightforwardly explained by DFCF).

As to the possible raising status of the two variants, Anagnostopoulou (2003:176) argues that only the agreeing *fénete* qualifies as a raising predicate. The non-agreeing *fénete* projects an external argument, the Subject of the embedded complement being an expletive *pro* (Philippaki-Warburton 1992; see also Embick & Iatridou 1997 for the existence of two types of *pro*). In what follows, I argue that dative cliticization supports Anagnostopoulou's argument.

The examples in (39) illustrate that dative cliticization appears to be obligatory only with the agreeing form of *fénete*. As with passivization, judgements become more robust in V-initial settings, as in (39a). Crucially, as the example in (39b) illustrates, the clitic is not obligatory with the non-agreeing default form: <sup>12</sup>

(39) a. den <sup>?\*</sup>(tis) fénonte tis Marías na meletún ta pediá

NEG CL.DAT seem.3PL the Maria.DAT SBJ study.3PL the children

'the children do not seem to Maria to work'

b. (pro) (tis) fénete tis Marias oti<sup>13</sup> ta pediá den meletún

pro CL.DAT seem.3SG the Maria.DAT that the children NEG study.3PL

'the children do not seem to Maria to work'

Assuming that the Spell-Out of APPL reflects absence of external arguments, the agreeing *fénete* arguably lacks an external argument and therefore qualifies as a raising predicate in the unaccusative sense of the term. On the other hand, the fact that dative cliticization is disallowed with the non-agreeing *fénete* in (39b) signals the presence of a thematic Subject, 'the children'. Under these circumstances, the Subject of the embedded clause must be a coreferential *pro* (see also Philippaki-Warburton 1992).

## 5. Summary and conclusions

In the present article, I have revisited several issues regarding the interaction of dative cliticization with A-movement in Modern Greek. Based on data from passives and unaccusatives, I have argued for an extension of Anagnostopoulou's (2003) insight regarding the interaction of dative cliticization with locality-violating movement. I have shown that dative cliticization is not a "rescue strategy" of any sort, but merely an epiphenomenal reflex of movement. It does not discriminate non-local and local movement operations and, therefore, MLC or *Attract Closest* should play no role in explaining the observed cliticization patterns.

The superior alternative approach is based on the observation that the presence or absence of dative cliticization systematically covaries with the presence or absence of external arguments (which in Greek merge to Spec- $\nu$ P). In light of these facts, I have investigated the role of the generalized Doubly Filled Comp filter in explaining the dative cliticization patterns. In this view, the dative clitic is viewed as a Spell-Out of the applicative head; the Spell-Out is forced by DFCF as a result of lack of external arguments. The DFCF-approach also provides an attractive explanation for dative cliticization in Spanish and also addresses *se*-cliticization in Romance, a phenomenon already connected with absence of external arguments in previous work (Marantz 1984 among others).

-

<sup>&</sup>lt;sup>12</sup> Some speakers prefer the clitic in (39b).

<sup>&</sup>lt;sup>13</sup> For some reason, my informant regarded the use of the conjunction  $\acute{o}ti$  'that' better than the modal particle na used in (40a).

In sum, it seems to me that the first association with (generalized) DFCF should not be its apparent violations attested in many languages. I hope to have illustrated in the present paper that the generalized DFCF is morphosyntactically real not only in Modern Greek but also in various other languages and that the principle should be regarded as a viable and economical solution in addressing multiple hitherto unnoticed phenomena in the syntax-morphology interface.

#### **References:**

Agouraki, Yoryia. 1992. Clitic Left Dislocation and Clitic Doubling: A Unification. *UCL Working Papers in Linguistics 4*.

Alalou, Ali and Patrick Farrel. 1993. Argument structure and causativization in Tamazight Berber. *Journal of African Languages and Linguistics* 14.2:155-186.

Alexiadou, Artemis and Elena Anagnostopoulou. 1997. Toward a Unified Account of Clitic Doubling and Scrambling. In: W. Abraham and E. Van Gelderen (eds.), *German: Syntactic Problems, Problematic Syntax?* 143-161. Tübingen: Niemeyer.

Alexiadou, Artemis and Elena Anagnostopoulou. 1998. Parametrizing AGR: Word Order, V-movement and EPP-checking. *Natural Language & Linguistic Theory* 16.3:491-539.

Alexiadou, Artemis and Elena Anagnostopoulou. 1999. Raising without Infinitives and the Nature of Agreement. *Proceedings of WCCFL 18*, 14-26. Somerville: Cascadilla Press.

Alexiadou, Artemis. 1999. On the properties of some Greek word order patterns. In: A.

Alexiadou, G. Horrocks and M. Stavrou (eds.), *Studies in Greek Syntax*. 45-66. Dordrecht: Kluwer.

Alsina, Alex 1992. On the Argument Structure of Causatives. *Linguistic Inquiry* 23.4:517-555. Anagnostopoulou, Elena. 1994. Clitic Dependencies in Modern Greek. PhD dissertation, University of Salzburg.

Anagnostopoulou, Elena. 1997. Clitic Left Dislocation and Contrastive Left Dislocation. In: E. Anagnostopoulou, H. van Riemsdijk and Frans Zwarts (eds.), *Materials on Left Dislocation*. 151-192. Amsterdam: John Benjamins.

Anagnostopoulou, Elena. 1999. On Experiencers. In: A. Alexiadou, G. Horrocks and M. Stavrou (eds.), *Studies in Greek Syntax*. 67-93. Dordrecht: Kluwer.

Anagnostopoulou, Elena. 2001. Two classes of double object verbs – the role of zero morphology. *Progress in Grammar. Articles at the 20th Anniversary of the Comparison of Grammatical Models Group in Tilburg*, Tilburg.

Anagnostopoulou, Elena. 2003. *The Syntax of Ditransitives*. Berlin: Mouton de Gruyter. Anagnostopoulou, Elena. 2004. On clitics, feature movement and double object alternations. In:

A. Stepanov, G. Fanselow and R. Vogel (eds.) *Minimality Effects in Syntax*. 15-37. Berlin: Mouton de Gruyter.

Baker, Mark. 1988. Incorporation. Chicago: The University of Chicago Press.

Baker, Mark. 1996. The polysynthesis parameter. Oxford: Oxford University Press.

Bayer, Josef and Ellen. Brandner. 2008. On wh-head-movement and the Doubly Filled Comp Filter. *Proceedings of the 26<sup>th</sup> WCCFL*. 87-95.

Belletti, Adriana and Luigi Rizzi 1988. Psych verbs and theta theory. *Natural Language and Linguistic Theory* 6:291-352.

Bleam, Tanya. 2000. Leísta Spanish and the Syntax of Clitic Doubling. PhD dissertation, University of Delaware.

Bobaljik, Jonathan. 1995. In terms of Merge: Copy and Head Movement. MITWPL 27.

Bobaljik, Jonathan. 2000. The Ins and Outs of Contextual Allomorphy. *University of Maryland Working Papers in Linguistics* 10:35-71.

Borer, Hagit. 1983. Parametric Syntax. Dordrecht: Foris.

Brandner, Eleonore. 1995. *Specifiers and Functional Projection*. PhD dissertation. Universität Stuttgart.

Bresnan, Joan and Lioba Moshi. 1990. Object Asymmetries in Comparative Bantu Syntax. *Linguistic Inquiry* 21.2:147-185.

Burchert, Frank. 1993. On the French complementizers que, dont and de. Probus 5:3.179-192.

Chomsky, Noam and Howard Lasnik. 1977. Filters and Control. Linguistic Inquiry 8:425–504.

Chomsky, Noam. 1993. A Minimalist Program for Linguistic Theory. In: K. Hale and S. J. Keyser (eds.), *The View from Building 20*. 1-58. Cambridge, MA: MIT Press.

Chomsky, Noam. 1995. The Minimalist Program. Cambridge, MA: MIT Press.

Chomsky, Noam. 2000. Minimalist inquiries. In: R. Martin, D. Michaels & J. Uriagereka (eds.) *Step by Step.* 89-155. Cambridge, MA: MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In: M. Kenstowicz (ed.), *Ken Hale: A life in language*. 1-52. Cambridge, MA: MIT Press.

Cinque, Guglielmo. 1988. On Si Constructions and the Theory of Arb. Linguistic Inquiry 19.4:521-581

Cinque, Guglielmo. 1990. Types of A'-dependencies. Cambridge, MA: MIT Press.

Collins, Chris. 2007. Home sweet home. NYU Working Papers in Linguistics 1:1-34.

Cuervo, Cristina. 2003. Datives at Large. PhD dissertation, MIT.

Demonte, Violeta. 1991. Temporal and aspectual constraints on predicative APs. In: H. Campos and F. Martínez-Gil (eds.), *Current Studies in Spanish Linguistics*. 165-200. Georgetown University Press.

Demonte, Violeta. 1995. Dative alternation in Spanish. *Probus* 7.1:5-30.

Den Dikken, Marcel. 2006. Relators and Linkers. Cambridge, MA: MIT Press.

Embick, David and Sabine Iatridou. 1997. Apropos pro. Language73:58-78.

Embick, David. 1998. Voice Systems and the Syntax/Morphology Interface. *MIT Working Papers in Linguistics* 32:41-72

Diaconescu, Constanta Rodica and Maria Luisa Rivero. 2007. An applicative analysis of double object constructions in Romanian. *Probus* 19.2: 209-233.

Embick, David. 2004. Unaccusative syntax and verbal alternations. In: A. Alexiadou, E. Anagnostopoulou and M. Everaert (eds.) *The Unaccusativity Puzzle*. 137-159. Oxford: OUP.

Embick, David and Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32.4:555-595.

Fanselow, Gisbert. 2004 The MLC and derivational economy. In: A. Stepanov, G. Fanselow and R. Vogel (eds.) *Minimality Effects in Syntax*. 73-124. Berlin: Mouton de Gruyter.

Fox, Danny and David Pesetsky. 2005. Cyclic Linearization of syntactic structure. *Theoretical Linguistics* 31(1-2): 1-46.

Folli, Raffaella and Heidi Harley. 2005. Flavors of v. In: P. Kempchinsky and R. Slabakova (eds.), *Aspectual Inquiries*. 95-120. Dordrecht: Springer.

Georgala, Effi, Paul Waltraud and John Whitman. 2008. Expletive and Thematic Applicatives. *Proceedings of the 26<sup>th</sup> WCCFL*. 181-189.

Grimshaw, Jane. 1990. Argument Structure. Cambridge, MA: MIT Press.

Haegeman, Liliane. 1992. *Theory and Description in Generative Syntax: A Case study in West Flemish*. Cambridge: Cambridge University Press.

Halle, Morris and Alec Marantz. 1993. Distributed Morphology and the Pieces of Inflection. In: K. Hale & J. Keyser (eds.) The View from Building 20. Cambridge, MA: MIT Press.

Hermon, Gabriella. 1985. Syntactic Modularity. Dordrecht: Foris.

Holmberg, Anders and Christer Platzack. 1995. *The Role of Inflection in Scandinavian Syntax*. Oxford: Oxford University Press.

Iatridou, Sabine. 1993. On Nominative Case assignment and a few related things. *MIT Working Papers in Linguistics* 19: 175-196.

Iatridou, Sabine. 1995. Clitics and Island Effects. *UPenn Working Papers in Linguistics* (Vol 2).

Jaeggli, Osvaldo. 1982. Topics in Romance Syntax. Dordrecht: Foris.

Jaeggli, Osvaldo and Kenneth Safir. 1989. The Null Subject Parameter. Dordrecht: Kluwer.

Kallulli, Dalina. 2006. Unaccusatives with dative causers and experiencers: A unified account. In: D. Hole, A. Meinunger & W. Abraham (eds.), *Datives and other Cases*. Amsterdam: John Benjamins.

Kallulli, Dalina and Liliane Tasmowski (eds.). 2005. *Clitic doubling in the Balkan languages*. Amsterdam: John Benjamins.

Kayne, Richard. 1994. Antisymmetry of Syntax. Cambridge, MA: MIT Press

Kemmer, Suzanne and Arie Verhagen 1994. The grammar of causatives and the conceptual structure of events. *Cognitive Linguistics* 5: 115-156

Kiparsky, Paul. 1973. "Elsewhere" in phonology. In S. Anderson & P. Kiparsky (eds.) *A festschrift for Morris Halle*. 93-106. New York: Holt, Rinehart and Winston.

Koopman, Hilda. 2000. The Syntax of Specifiers and Heads. London: Routledge.

Koopman, Hilda and Anna Szabolcsi. 2000. Verbal Complexes. Cambridge, MA: MIT Press.

Kupula, Mikko. 2008. Adnominal Possession and Ditransitives. Stockholm: Acta Universitatis Stockholmiensis.

Kupula, Mikko. 2010. On Goals and Experiencers in Modern Greek. *Proceedings of ICGL9* (in press)

Kupula, Mikko. to appear in *Studia Linguistica* 65.2. A phase extension approach to double object constructions.

Kratzer, A. 1996. Severing the external argument from its verb. In: J. Rooryck and L. Zaring (eds.), *Phrase Structure and the Lexicon*. 109-138. Dordrecht: Kluwer.

Labelle, Marie. 2008. Pronominal object markers in Bantu and Romance. In: C. De Cat & Katherine Demuth (eds.), *The Bantu-Romance Connection*. 83-109. Amsterdam: John Benjamins.

Labelle, Maria and Edit Doron. 2010. Anticausative derivations (and other valency alternations (in French. *Probus*, in press.

Landau, Idan. 2010. The Locative Syntax of Experiencers. Cambridge, MA: MIT Press.

Legate, Julie Anne. 2003. Some interface properties of the phase. *Linguistic Inquiry* 34:506-516.

Marantz, Alec. 1984. On the Nature of Grammatical Relations. Cambridge, MA: MIT Press.

Marantz, Alec. 1989. Relations and configurations in Georgian. Ms.

Marantz, Alec. 1993. Implications of Asymmetries in Double Object Constructions. In: Sam

Mchombo (ed.), *Theoretical Aspect of Bantu Grammar*. 113-150. Stanford: CSLI Publications.

Marantz, Alec. 1997. No Escape from Syntax: Don't Try Morphological Analysis in the Privacy of Your Own Lexicon. *UPenn Working Papers in Linguistics* 4.2.

Matushansky, Ora. 2006. Head movement in linguistic theory. *Linguistic Inquiry* 37.1:69-109.

McGinnis, Martha. 1998. Locality in A-movement. PhD dissertation, MIT.

McGinnis, Martha. 2000. Event heads and the distribution of psych roots. In: A. Williams & E.

Kaiser (eds.). Current Work in Linguistics: University of Pennsylvania Working Papers in Linguistics 6:3, 107-144.

McGinnis, Martha. 2001. Variation in the phase structure of applicatives. Linguistic Variation Yearbook 1: 105-46.

Mohanan, Karavannur and Tara Mohanan. 1990. Dative subjects in Malayalam. In: M. K.

Verma and K. P. Mohanan (eds.). *Experiencer Subjects in South Asian Languages*. Stanford: CSLI Publications.

Müller, Gereon. 2010. On deriving CED effects from PIC. Linguistic Inquiry 41.1:35-82.

Ordóñez, Francisco. 1997. Word order and clause structure in Spanish and other Romance languages. PhD dissertation, NYU.

Ormazabal, Javier and Juan Romero. 2010. *Object clitics and agreement*. Ms, U. of the Basque County & U. de Extremadura.

Owens, Melanie. 2003. Benefactive, applicative and possessor raising constructions in Bimanese. *AFLA 10*.

Pearson, Matthew. 2005. The Malagasy Subject/Topic as an A'-Element. *Natural Language and Linguistic Theory* 23:381-457.

Pesetsky, David. 1995. Zero Syntax. Cambridge, MA: MIT Press.

Peterson, David. A. 2007. Applicative Constructions. Oxford: Oxford University Press.

Philippaki-Warburton 1992. On Mood and Complementizers in Modern Greek. *Reading University Working Papers in Linguistics* 1:5-41

Poletto, Cecilia. 2000. *The Higher Functional Field in the Northern Italian Dialects*. Oxford: Oxford University Press.

Poole, Geoffrey and Noel Burton-Roberts. 2004. MLC violations: Implications for the syntax/phonology interface. In: A. Stepanov, G. Fanselow and R. Vogel (eds.) *Minimality Effects in Syntax*. 327-366. Berlin: Mouton de Gruyter.

Pylkkänen, Liina. 2000. What do applicative heads apply to? *UPenn Working Papers in Linguistics* 7.1.

Pylkkänen. Liina. 2008. Introducing Arguments. Cambridge, MA: MIT Press.

Ramchand, Gillian. 2008. *Verb Meaning and the Lexicon – A First Phase Syntax*. Cambridge: Cambridge University Press.

Rizzi, Luigi. 1997. The fine structure of the left periphery. L. Haegeman (ed.) *Elements of Grammar*. 281-337. Dordrecht: Kluwer.

Rivero, Maria Luísa. 1994. Verb Movement and the Structure of IP in the Balkan languages. *Natural Language and Linguistic Theory* 12:63-120.

Roberts, Ian. 2010. Agreement and Head Movement. Cambridge, MA: MIT Press.

Schönenberger, Manuela 2006. A glimpse of doubly-filled COMPs in Swiss German. In: H.

Broekhuis, N. Corver, R. Huybregts, U. Kleinhenz & Jan Koster (eds.). *Organizing Grammar: Studies in Honor of Henk van Riemsdijk*. 572-581. Berlin: Mouton de Gruyter.

Skinner, Tobin R. 2009. *Head movement and PF Spell-out: a review*. Ms. McGill Syntactic Interfaces Research Group.

Slavkov, Nikolay. 2008. Formal Consequences of Dative Clitic Doubling in Bulgarian Ditransitives: An Applicative Analysis. *Journal of Slavic Linguistics* 16:139-166.

Sportiche, Dominique. 1996. Clitics, Voice and Spec-head Licensing. *GLOW Newsletter* 42:56-57.

Stowell, Timothy. 1981. Origins of Phrase Structure. PhD dissertation, MIT.

Surányi, Balazs. 2004. The left periphery and cyclic spellout: the case of Hungarian. In: D. Adger, C. De Cat and G. Tsoulas (eds.) *Peripheries – Syntactic Edges and their Effects*. 49-75. Dordrecht: Kluwer.

Svenonius, Peter. 2004 On the edge. In: D. Adger, C. De Cat and G. Tsoulas (eds.) *Peripheries – Syntactic Edges and their Effects*. 259-289. Dordrecht: Kluwer.

Theophanopoulou-Kontou, Dimitra. 2007. Συντακτική απροσδιοριστία και ερμηνεία. Οι που-αναφορικές προτάσεις της ελληνικής. Paper presented at the 8<sup>th</sup> ICGL, University of Ioannina.

Woolford, Ellen 1993. Symmetric and Asymmetric Passives. *Natural Language and Linguistic Theory* 11:679-728.