

# THE SYNTAX OF GOALS AND BENEFICIARIES IN STANDARD MODERN GREEK

*John Bowers & Effi Georgala  
Cornell University*

## 1 Introduction

In this paper, we investigate the syntax of Standard Modern Greek (SMG) and English goal and benefactive ditransitive constructions. SMG poses an interesting challenge to the view that there is a fixed universal structure underlying all ditransitive constructions. We show that English and SMG share the same underlying system of categories and hierarchical relations.

### 1.1 Goals and Beneficiaries in SMG

SMG possesses a variety of ditransitive constructions, in which indirect objects are realized as PPs or DPs with morphological accusative or genitive case. Following, we describe the SMG goal and benefactive ditransitive constructions.

#### 1.1.1 Goal Ditransitives

##### A. *Distribution of Goals*

Tzartzanos (1989), Holton et al. (1997) among others distinguish three variants of the *goal ditransitive construction* in SMG:

1. *Genitive Construction*: V GEN<sup>1</sup><sub>GOAL</sub> ACC<sub>THEME</sub>

- (1) ο οrestis εδωσε tis anastasias  
The.NOM Orestis.NOM gave.3SG the-GEN anastasia.GEN  
το φορεμα  
the.ACC dress.ACC  
'Orestis gave Anastasia the dress'

2. *Se-PP Construction*: V ACC<sub>THEME</sub> σε<sup>2</sup>-PP<sub>GOAL</sub>

- (2) ο οrestis εδωσε το φορεμα  
The.NOM Orestis.NOM gave.3SG the.ACC dress-ACC  
στην anastasia  
to-the.ACC Anastasia.ACC  
'Orestis gave the dress to Anastasia'

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<sup>1</sup> SMG has lost the morphological distinction between genitive and dative case and has generalized the use of genitive.

<sup>2</sup> σε obligatorily incorporates an immediately following definite article (e.g. σε + το > στο). σε is also used as a locative (locational and directional preposition), e.g.

(a) ο οrestis πηγε στη ρομι  
The.NOM Orestis.NOM went.3SG to-the.ACC Rome.ACC  
'Orestis went to Rome'

(b) ο οrestis meni sti ρομι  
The.NOM Orestis.NOM lives.3SG in-the.ACC Rome.ACC  
'Orestis lives in Rome'

3. *Double Accusative Construction: V ACC<sub>GOAL</sub> ACC<sub>THEME</sub>*

- (3) ο οrestis διδασci tin anastasia aqlika  
 The.NOM Orestis.NOM teaches.3SG the.ACC Anastasia.ACC English.ACC  
 ‘Orestis teaches Anastasia English’

**B. *Properties of Genitive Goals and the Dative Alternation***

The term *dative alternation* is used in the literature for English and other languages to express the alternation with respect to the categorial status of the indirect object, i.e. whether it is a PP or a DP. *Dative argument*<sup>3</sup> refers to indirect objects (goals, beneficiaries, experiencers, possessors etc.) regardless of case or categorial status.

It is claimed (Anagnostopoulou 2003 among others) that the alternation between a *se*-PP and a DP<sub>GEN</sub> in SMG is similar to the *dative shift* alternation in English. The similarities between English and SMG as presented in the literature are summarized below.

1. *Sensitivity to animacy*. The goal argument must be animate<sup>4</sup>, i.e. it must be a recipient, e.g.

- (4) a. i anastasia estile ena vivlio sti  
 The.NOM Anastasia.NOM sent.3SG a.ACC book.ACC to-the.ACC  
 nea iorci  
 New.ACC York.ACC  
 ‘Anastasia sent a book to New York’  
 b. \*i anastasia estile ena vivlio tis  
 The.NOM Anastasia.NOM sent.3SG a.ACC book.ACC the.GEN  
 neas iorcis  
 New.GEN York.GEN  
 \*‘Anastasia sent New York a book’

2. *Sensitivity to the semantic properties of the selecting predicates*. In particular, the central meaning is argued to involve transfer of possession between a volitional agent and a willing recipient (Den Dikken 1995, Goldberg 1995 among others). There are verb classes in SMG that do not permit the double object construction, similarly to English<sup>5</sup>. *se*-PPs, on the other

<sup>3</sup> Verbs selecting for a single DP complement assign accusative case in SMG. Yet, there are certain verbs, such as *milaō* ‘talk’, *anikō* ‘belong’, *fenomē* ‘seem’, which assign genitive, but their complement can be either a DP or a PP; e.g.

ο οrestis milise [tis anastasias / stin anastasia]  
 The.NOM Orestis.NOM talked.3SG the.GEN Anastasia.GEN / to-the.ACC Anastasia.ACC  
 ‘Orestis talked to Anastasia’

Moreover, some verbs take only genitive, which cannot be replaced by a PP (e.g. *epimelume* ‘take care of’, *iperischiō* ‘prevail over’).

<sup>4</sup> Den Dikken (1995) shows that in English double-object constructions do not necessarily demand animate goals. To support his claim, he quotes the following examples from Tremblay (1991):

(i) *The revolution gave Romania a new government.*  
 (ii) *The revolution gave Mary a new status.*  
 (iii) *?\* The revolution gave Mary a new government.*

Example (iii) is deviant, because there can be no relationship of possession between *Mary* and *a new government*. However, *the revolution gave a new government to Mary* is deviant too. The reason why (i) is fine is that *Romania* is a personified indirect object. Moreover, example (iii) is fine, if *Mary* is replaced for instance by *the people*, or if we imagine a context where *Mary* represents the people of Romania. It’s worth noticing that (i) cannot be reproduced in SMG. It seems that SMG is more stringent than English with respect to animacy.

<sup>5</sup> However, citing Bresnan & Nikitina (2003), den Dikken (2005) points out that sensitivity to the semantic properties of the selecting verb doesn’t appear to be a particularly stable property of English double object constructions.

hand, are less restricted, similarly to *to*-PPs in English (see Anagnostopoulou (2003) for a discussion on predicate restrictions in English and SMG).

(5) *Verbs of ‘communication of propositions’*

- a. parapem̄psa t̄on ɔrest̄i stin anastasia  
 Referred.1sg the.ACC Orestis.ACC to-the.ACC Anastasia.ACC  
 ‘I referred Orestis to Anastasia’
- b. \*parapem̄psa tis anastasīas t̄on ɔrest̄i  
 Referred.1SG the.GEN Anastasīas.GEN the.ACC Orestis.ACC

3. *Nominalizations* with the genitive construction are ruled out (see example 6a), while nominalizations with goal PPs are licit (see example 6b) (Alexiadou 2001, Anagnostopoulou 2003). As discussed in Pesetsky (1995), and Marantz (1997) among others, a similar contrast is observed in English, i.e. nominalizations with a dative goal are infelicitous, while nominalizations with a *to*-PP goal are well-formed<sup>6</sup>.

- (6) a. \* i anaθ̄esi mias ēfk̄olis asc̄isis  
 The.NOM assignment.NOM an.GEN easy.GEN exercise.GEN  
 tu ɔrest̄i ap̄o tin anastasia  
 the.GEN Orestis.GEN by the.ACC Anastasia  
 \* ‘The assignment of an easy exercise of Orestis (i.e. to Orestis) by Anastasia’
- b. i anaθ̄esi mias ēfk̄olis asc̄isis  
 The.NOM assignment.NOM an.GEN easy.GEN exercise.GEN  
 st̄on ɔrest̄i ap̄o tin anastasia  
 to-the.ACC Orestis.ACC by the.ACC Anastasia.ACC  
 ‘The assignment of an easy exercise to Orestis by Anastasia’

4. *Passivization* of ditransitive predicates with a genitive goal is ungrammatical in SMG (Markantonatou, 1994). Similarly, English doesn’t allow the so-called *direct* or *tertiary passives*<sup>7</sup>. In contrast to genitive goals, PP goals may freely occur in passive.

- (7) a. \* t̄o f̄orēma ð̄oθ̄ice tis anastasīas ap̄o  
 The.NOM dress.NOM was-given.3SG the.GEN Anastasia.GEN by  
 t̄on ɔrest̄i  
 the.ACC Orestis.ACC  
 \*‘The dress was given Anastasia by Orestis’
- b. t̄o f̄orēma ð̄oθ̄ice stin anastasia ap̄o  
 The.NOM dress.NOM was-given.3SG to-the.ACC Anastasia.ACC by  
 t̄on ɔrest̄i  
 the.ACC Orestis.ACC  
 ‘The dress was given to Anastasia by Orestis’

Now, SMG differs from English in the following:

<sup>6</sup> Anagnostopoulou (2003) notes that English nominalizations are transitive, while the SMG ones seem to be passive nominalizations. Alexiadou (2001) argues that SMG lacks transitive nominalizations.

<sup>7</sup> *Direct passives* are commonly cited in traditional descriptions of British English. Although there is clear evidence that *direct passives* exist in American English, and were analyzed in Fillmore (1965) among others, Postal (2004) points out that many linguistic works of the last twenty years deny the existence of American English *direct passives*. In this paper, we provide an explanation for the ungrammaticality of *direct passive* sentences. However, *direct passives* do not posit any problems to our system. They can be accounted for in a straight-forward way.

1. *Goal Passivization*. In SMG, unlike English, the indirect object in genitive cannot be nominativized in passive.

(8) \*i anastasia ðoθice tō fōrema  
 The.NOM Anastasia.NOM was-given.3SG the.ACC dress.ACC  
 ‘Anastasia was given the dress’

2. *Cliticization & Clitic Doubling*. SMG has clitic doubling of indirect (and direct) object DPs, and in this respect it differs from English. In particular, when the goal is expressed as a definite genitive DP, it can be doubled by a pronominal clitic. The clitic and the DP match in features. When the genitive construction is allowed, simple cliticization is possible too.

(9) o orestis tis eðose (tis anastasias)  
 The.NOM Orestis.NOM her.ACC gave.3SG the.GEN Anastasia.GEN  
 tō fōrema  
 the.ACC dress.ACC  
 ‘Orestis gave Anastasia the dress’

When the goal is realized as a PP, clitic doubling is illicit<sup>8</sup>.

(10) \* o orestis tis eðose stin  
 The.NOM Orestis.NOM her.GEN gave.3SG to-the.ACC  
 anastasia tō fōrema  
 Anastasia.ACC the.ACC dress.ACC  
 ‘Orestis gave the dress to Anastasia’

A complication that arises is that unlike genitive DPs, clitic-doubled and cliticized genitives are freely licensed in passives (Markantonatou, 1994), e.g.

(11) tō fōrema \*(tis) ðoθice (tis anastasias)  
 The.NOM dress.NOM her.GEN was-given.3SG the.GEN Anastasia.GEN

So, in contexts in which genitive DPs are licit (i.e. when the goal is animate and the verbal predicate indicates *change of possession*), cliticization and clitic doubling are optional. In contexts in which full genitive DPs are not allowed (passive), cliticization or clitic doubling is obligatory.

### C. *Properties of Accusative Goals*

With a specific class of verbs, such as *ðidaskō* ‘teach’, *servirō* ‘serve’, *plirōnō* ‘pay’, both the goal and the theme may be expressed with morphological accusative case. These verbs also appear in the genitive and *se*-PP construction.

(12)  
 a. *Genitive Construction*  
 o orestis ðiðasci tis anastasias aqlika  
 The.NOM Orestis.NOM teaches.3SG the.GEN Anastasia.GEN English.ACC

<sup>8</sup> In SMG, clitic doubled prepositional objects are not allowed. According to Anagnostopoulou (2001, 2003), other cases, where clitic doubling is not allowed are the following:

1. With definite themes in active double accusatives when the goal is not implicit.
2. With definite genitive DPs which are arguments of a restricted class of single-complement verbs (e.g. *epimelume* ‘take care of’).

‘Orestis teaches Anastasia English’

b. *se-PP Construction*

ο οrestis διδασci aglika stin  
The.NOM Orestis.NOM teaches.3SG English.ACC to-the.ACC  
anastasia  
Anastasia.ACC  
‘Orestis teaches English to Anastasia’

c. *Double Accusative Construction*

ο οrestis διδασci tin anastasia aglika  
The.NOM Orestis.NOM teaches.3SG the.ACC Anastasia.ACC English.ACC  
‘Orestis teaches Anastasia English’

Adjectival passives with goal externalization are possible for verbs, which take the double accusative construction (Anagnostopoulou, 2001). However, this is not the case with the rest of goal ditransitive verbs.

- (13) a. ο plirōmenōs [lɔɣarjasmōs / ipalilōs]  
The.NOM paid.NOM bill.NOM / employee.NOM  
‘The paid bill / employee’  
b. τō nicasmēnō spiti / \*ο nicasmēnōs  
The.NOM rented.NOM house.NOM / the.NOM rented.NOM  
οrestis  
Orestis.NOM  
‘The rented house / \*Orestis’

Unlike the majority of goal ditransitive verbs, which nominalize only themes, double accusative verbs are allowed to nominalize either the goal or the theme.

- (14) a. i διδaskalia [tōn aglikōn / tu  
The.NOM teaching.NOM the.GEN English.GEN / the.GEN  
οresti]  
Orestis.GEN  
‘The teaching of English / Orestis (i.e. to Orestis)’  
b. τō nिकासma tu spitju / \*tu  
The.NOM renting.NOM the.GEN house.GEN / the.GEN  
οresti  
Orestis.GEN  
‘The renting of the house / \*Orestis (i.e. to Orestis)’

Cliticization or clitic doubling of a definite theme<sup>9</sup> is ungrammatical only in active double accusative constructions (Anagnostopoulou 2001), when the goal is not implicit<sup>10</sup>.

- (15) a. \*ο οrestis tōn διδασce (tōn

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<sup>9</sup> Cliticization and clitic doubling of the goal in the double accusative construction is fine, e.g.

ο οrestis ti διδασce (tin anastasia) tōn kanōna  
The.NOM Orestis.NOM her.ACC taught.3SG the.ACC Anastasia.ACC the.ACC rule.ACC  
‘Orestis taught Anastasia the rule’

<sup>10</sup> When the goal is implicit, cliticization and clitic doubling of the theme are grammatical, e.g.

ο οrestis tōn διδασce (tōn kanōna)  
The.NOM Orestis.NON him.ACC taught.3SG the.ACC rule.ACC  
‘Orestis taught the rule’

The.NOM Orestis.NOM him<sup>11</sup>.ACC taught.3SG the.ACC  
 kanōna) tin anastasia  
 rule.ACC the.ACC Anastasia.ACC  
 ‘Orestis taught Anastasia the rule’

b. i anastasia tōn didaxtice (tōn  
 The.NOM Anastasia.NOM him.ACC was-taught.3SG the.ACC  
 kanōna) apō tōn oresti  
 rule.ACC by the.ACC Orestis.ACC  
 ‘Anastasia was taught the rule by Orestis’

Passivization of the goal is possible in double accusative constructions, while passivization of the theme is not (cliticization and clitic doubling do not rescue passivization of the theme).

(16) a. o orestis didascete aglika  
 The.NOM Orestis.NOM is-taught.3SG English.ACC  
 ‘Orestis is taught English’  
 b. \* aglika didaskōde tōn oresti  
 English.NOM are-taught.3PL the.ACC Oresti.ACC  
 ‘English is taught to Orestis’  
 c. \* aglika tōn didaskōde (tōn oresti)  
 English.NOM him.ACC are-taught.3PL the.ACC Orestis.ACC

### 1.1.2 Benefactive Ditransitives

Anagnostopoulou (2003, 2005) distinguishes three variants of the benefactive construction in SMG, two prepositional ones and a non-prepositional.

1. *Genitive Construction*: V GEN<sub>BEN</sub> ACC<sub>THEME</sub>

(17) o orestis majirepse tis anastasias  
 The.NOM Orestis.NOM cooked.3SG the.GEN Anastasia.GEN  
 rizōto  
 risotto.ACC  
 ‘Orestis cooked Anastasia risotto’

2. *se-PP Construction*: V ACC<sub>THEME</sub> se-PP<sub>BEN</sub>

(18) o orestis majirepse rizōto stin  
 The.NOM Orestis.NOM cooked.3SG risotto.ACC to-the.ACC  
 anastasia  
 Anastasia.ACC  
 ‘Orestis cooked risotto for Anastasia’

3. *ja-PP Construction*: V ACC<sub>THEME</sub> ja-PP<sub>BEN</sub>

(19) o orestis majirepse rizōto ja tin  
 The.NOM Orestis.NOM cooked.3SG risotto.ACC for the.ACC  
 anastasia  
 Anastasia.ACC  
 ‘Orestis cooked risotto for Anastasia’

<sup>11</sup> The noun *kanōnas* ‘rule’ is masculine in SMG.

The benefactive alternation resembles the dative alternation and is often subsumed under it. The benefactive alternation (double object frame, *σε*-PP frame and *ja*-PP frame) is found in SMG mostly with verbs of creation, such as *ftjaxno* ‘make’, *majirevo* ‘cook’, and verbs of obtaining, such as *kalo* ‘call’, *ayorazo* ‘buy’. Similar predicate restrictions are observed in English (Levin, 1993 among others). Yet, there are predicates, which allow only the *ja*-PP frame, such as *ðanizome* ‘borrow’. According to Anagnostopoulou (2003, 2005), the preposition *ja* ‘for’ can add a benefactive argument to all kinds of different predicates, while *σε*-PP constructions and genitive constructions have a restricted distribution.

Moreover, Anagnostopoulou (2003, 2005) claims that *ja*-PPs are licit in passive constructions, while genitive DPs are ungrammatical and *σε*-PPs are ill-formed.

- (20) a.  $\text{o}$  kafes ftjaxtice ja ton oresti  
 The.NOM coffee.NOM was-made.3SG for the.ACC Orestis.ACC  
 ‘The coffee was made for Orestis’  
 b. ?\* $\text{o}$  kafes ftjaxtice ston  
 The.NOM coffee.NOM was-made.3SG to-the.ACC  
 oresti  
 Orestis.ACC  
 ‘The coffee was made to Orestis’  
 c. \* $\text{o}$  kafes ftjaxtice tu oresti  
 The.NOM coffee.Nom was-made.3SG the.GEN Orestis.GEN  
 ‘The coffee was made Orestis’

In contrast to theme passivization in goal ditransitives, Anagnostopoulou (2003, 2005) observes that theme passivization in the presence of a genitive DP is not rescued by clitic doubling or cliticization in the case of benefactive ditransitives (compare to theme passivization in the presence of an accusative DP<sub>GOAL</sub> in double accusative constructions).

- (21) a. \* $\text{o}$  kafes tu ftjaxtice tu  
 The.NOM coffee.NOM him.GEN was-made.3SG the.GEN  
 oresti (apo tin anastasia)  
 Orestis.GEN by the.ACC Anastasia.ACC  
 ‘The coffee was made Nikos (by Anastasia)’  
 b. \* $\text{o}$  kafes tu ftjaxtice (apo  
 The.NOM coffee.NOM him.GEN was-made.3SG by  
 tin anastasia)  
 the.ACC Anastasia.ACC  
 ‘The coffee was made him (by Anastasia)’

If a beneficiary and a recipient appear in the same sentence, only the recipient can get cliticized.

- (22) a. ? $\text{o}$  orestis eftjakse kafe stin  
 The.NOM Orestis.NOM made.3SG coffee.ACC to-the.ACC  
 anastasia ja ti mana tu  
 Anastasia.ACC for the.ACC mother.ACC his  
 ‘Orestis made coffee to Anastasia for Peter’  
 b. ? $\text{o}$  orestis tis eftjakse kafe ja  
 The.NOM Orestis.NOM her.GEN made.3SG coffee.ACC for  
 ti mana tu  
 the.ACC mother.ACC his

<sup>12</sup> Both (22a) and (22b) are better with *ja xari tis manas tu* ‘for his mother sake’ instead of *ja ti mana tu*.

- ‘Orestis made her coffee for Peter’
- (23) \*ο οrestis tis eftjakse kafe  
 The.NOM Orestis.NOM her.GEN made.3SG coffee.ACC  
 stin anastasia  
 to-the.ACC Anastasia.ACC

Nominalizations with *ja*-beneficiaries are licit, while nominalizations with *se*- and genitive beneficiaries are ungrammatical.

- (24) i αγορα tu aftocinitu ja tin  
 The.NOM purchase.NOM the.GEN car.GEN for the.ACC  
 anastasia  
 Anastasia.ACC

- ‘The purchase of the car for Anastasia’
- (25) \*i αγορα tu aftocinitu tis  
 The.NOM purchase.NOM the.GEN car.GEN the.GEN  
 anastasias  
 Anastasia.GEN

- (26) \*i αγορα tu aftocinitu stin  
 The.NOM purchase.NOM the.GEN car.GEN to-the.ACC  
 anastasia  
 Anastasia.ACC

Based on Kayne (1975), Anagnostopoulou (2005) claims that there is an interpretation difference between *se*-PPs and genitive DPs on the one hand and *ja*-PPs on the other hand. Genitive DPs and *se*-PPs can only be understood as intended recipients, while *ja*-PPs are interpreted similarly to English *for*-PPs<sup>13</sup>. She points out that the same difference is observed also in English<sup>14</sup>. It’s worth noticing, though, that not all native speakers of SMG and English agree with these facts.

Lastly, the genitive DP and the *se*-PP can only be understood as the intended recipient, while the *ja*-PP has a wider range of roles (it can also mean ‘instead of’). Fellbaum (2004), and Beck & Johnson (2004) make the same observation for English.

### 1.1.3 Outlook

The following sections outline our analysis of the syntax of goal and ditransitive constructions in SMG and English. Section 2 introduces the theoretical framework (Bowers, 2005), applying it to English ditransitive constructions. In section 3, we discuss previous accounts of the SMG data ditransitives, and propose our analysis. In section 4, we summarize and conclude.

<sup>13</sup> Anagnostopoulou’s (2005) examples (27a) and (27b) repeated here as (a) and (b) respectively.

(a) αγοραζι πεχνιδja tu εγονυ tu εγονυ tu  
 Buy.3SG toys.ACC the.GEN grandchild.GEN the.GEN grandchild.GEN his

(b) αγοραζι πεχνιδja ja ton εγονο tu εγονυ tu  
 Buy.3SG toys.ACC for the.ACC grandchild.ACC the.GEN grandchild.GEN his

According to Anagnostopoulou (2005), (a) is appropriate only when there is a direct connection between the subject and the beneficiary, while for (b) there is no such restriction.

<sup>14</sup> Anagnostopoulou’s (2005) examples (28a) and (28b) repeated here as (a) and (b) respectively.

(a) John bought his wife a kimono #but finally gave it to his mistress

(b) John bought a kimono for his wife, but finally gave it to his mistress

In (a) the beneficiary DP is the recipient of the theme, while in (b) the prepositional beneficiary is not.



## 2. Theoretical Framework

### 2.1. Assumptions

1. All arguments are introduced in Spec of functional categories.
2. There are three *primary* arguments Ag(en)t, Th(eme), Appl(icative) and a number of *secondary* arguments, two of which, Goal and Ben(efactive), will be relevant here.
3. Arguments merge with a predicate (verb, noun, etc.) or with the output of previous merge operations in an order determined by the *Universal Order of Merge (UOM)*:

$$(27) \text{ Agt} < \text{Ben} < \text{Goal} < \text{Th} < \text{Appl}$$

4. Arguments required by a given root are determined by *a(argument)-selection features* (e.g. [Agt], [Th], etc.), which are checked and deleted when the root raises and adjoins to the head of the selected category. Functional categories and roots also have *c-selection* features of the standard sort, which are satisfied by merging a phrase of the required category in Spec of the a-selected category. A functional head may often have more than one c-selection feature. Agt, for example, may c-select either D (with structural Case) or the Preposition *by*.
5. Subject and object relations arise solely through the operation of Agree. Only two probes available in T and Voi(ce), which assign structural NOM and structural ACC, respectively. A *probe* is a set of uninterpretable  $\phi$ -features that are valued and deleted by establishing an Agree relation with a *goal* containing matching interpretable  $\phi$ -features and an uninterpretable structural Case feature, which is also valued and deleted by the Agree operation. In English, Voi and T also contain an uninterpretable c-selection feature (the so-called EPP or OCC feature), which can only be satisfied by merging an occurrence of some previously formed constituent in the specifier position. Following Chomsky (2000, 2001), Move = Agree+OCC is a composite operation in the sense that its OCC feature must be satisfied as soon as the Agree relation is established. However, we follow Collins (1997), Bowers (2002a), and others, in assuming that an OCC feature associated with Agree does not necessarily have to be satisfied by moving to its specifier the same constituent with which the probe establishes the Agree relation. Rather, the OCC feature of a head H is satisfied either by moving the closest constituent of the required category in the domain of H or by merging an expletive with H.
6. A DP with an unvalued Case-feature is said to be “active”, while one whose structural Case-feature has been valued and deleted is “inactive.” An inactive DP is frozen in place and cannot enter into another Agree relation of the same type (Chomsky 2000). Nothing, however, prevents an inactive DP from entering into another *type* of agreement relation such as *wh*-Agree. Crucially, an inactive DP is no longer visible to another probe searching for a goal with matching  $\phi$ -features.
7. Agree is constrained by the standard locality condition (28) (Chomsky 2000):  

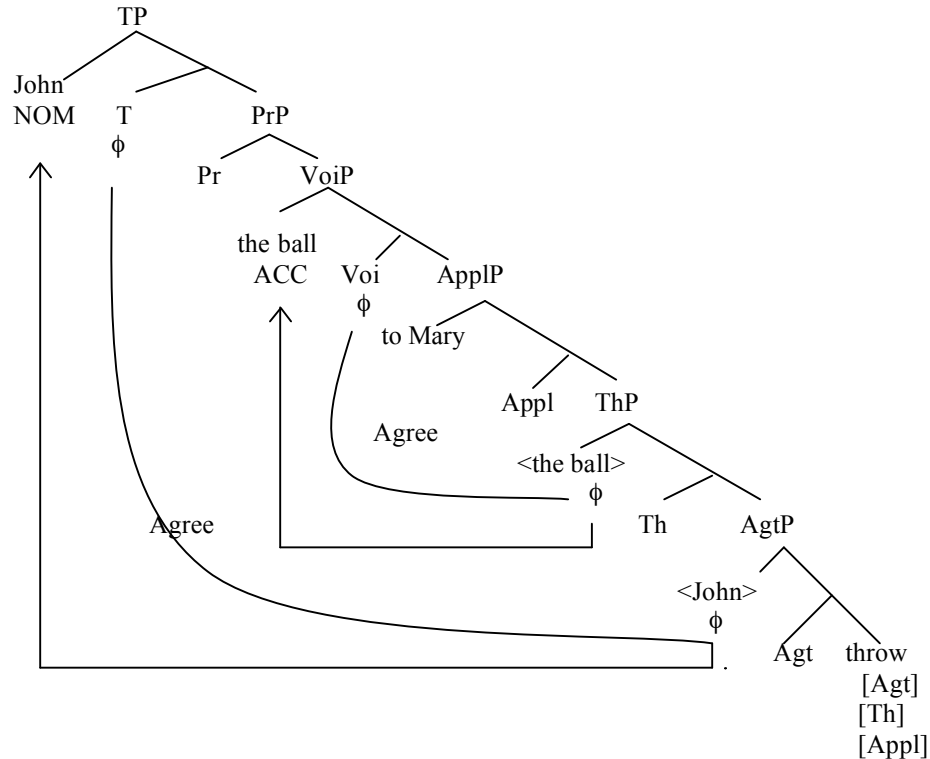
(28) Locality Condition (LC):  
Suppose P is a probe and G is goal. Then Agree holds between P and G just in case G is the closest set of features in the domain D(P) of P that match those of P. The *domain* D(P) of P is the sister of D, and G is *closest to* P if there is no G' matching P such that G is in D(G').
8. Generalizing the analysis of transitivity proposed in Bowers (2002a), we assume a universal category Voi(ce) with one of two values: *active* ([+act]) or *passive* ([-act]). In English, when Voi has the value [+act], it contains a probe that assigns structural accusative Case. When

Voi has the value [-act], it has no probe, though it does retain an OCC feature (Bowers 2002b).

## 2.2. Derivation of Actives and Passives in English

We illustrate the theory by deriving the active sentence *John threw the ball to Mary*.

(29)



By the LC, the probe in Voi must establish an Agree relation with the Th-DP *the ball*, the nearest potential goal with matching  $\varphi$ -features. The Case feature of the Th-DP is valued ACC and it is immediately moved to [Spec, Voi] to satisfy the OCC feature of Voi. Since the Th-DP is now inactive, hence no longer a potential goal, nothing prevents the next probe in T from entering into an Agree relation with the nearest potential goal, the Agt-DP *John*. It is then assigned NOM Case and moves to [Spec, T] to satisfy the OCC feature of T. At the same time, of course, each time a new head is merged, the verb adjoins to it, ending up in Pr in English, but continuing on to T in SMG. In contrast, the passive sentence *the ball was thrown to Mary by John* is derived as shown in (30).

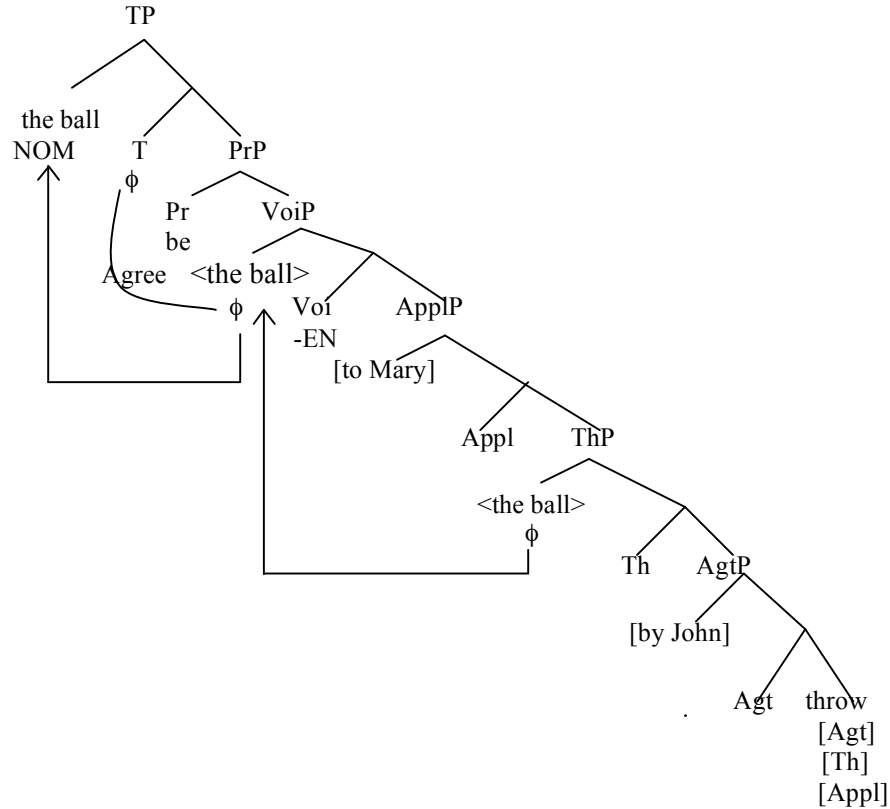
As was mentioned earlier, the category Agt in English may select either a DP with structural Case or a PP headed by *by* (in which case the Agt-DP *John* is assigned inherent Case by the preposition). If the latter option is chosen, then the derivation will necessarily crash unless there exists a possible continuation in which Voi contains no  $\phi$ -features, since otherwise there will be an extra probe whose  $\phi$ -features will have no way of getting valued. In English, such a continuation can be ensured by selecting the value [-act] for Voi. The latter is lexically realized in English by the past participial morpheme *-EN* and has no probe associated with it. Another language-specific property of English requires that if Voi has the value [-act], then Pr must be lexically realized as *be*. (This requirement does not hold in SMG. Hence the verb, after picking up the passive morpheme in Voi, moves to Pr and from there to T.)

Since the only active DP is the Th-phrase *the ball*, it moves to [Spec, Voi] to satisfy the OCC feature of Voi. At this point the Case feature of *the ball* can be valued NOM by the probe in T and

moved to [Spec,T]. Note that if the value [-act] was chosen for Voi and a DP with structural Case was generated in [Spec, Agt], then the derivation would crash, because there would be no probe to value the Case feature of the Agt-DP. Similarly, if the AgtP were realized as a PP in the previous derivation (29), the derivation would also crash, since there would be an extra probe unable to have its uninterpretable  $\phi$ -features valued and deleted.

No need for either “Case absorption” or “ $\theta$ -role transfer” in this theory. The former is explained by the fact that Voi in English lacks  $\phi$ -features when it has the value [-act].  $\theta$ -role transfer is also unnecessary, because the subject of an active sentence and the *by*-phrase of a passive sentence derive from the same structural position, namely, [Spec, Agt].

(30)



### 2.3. Applicatives: the Dative Alternation

The dative argument in both prepositional-dative constructions and “double object” constructions originates in ApplP. Appl-phrases are similar to Agt-phrases in English in that they can be realized either as a PP (headed by *to* or *for*, depending on the particular verb) or as an active DP with structural Case. The derivation in (29) already shows what happens in an active sentence when ApplP is realized as PP: Th-DP must have structural Case, which is assigned ACC Case by Voi, and subsequently moves to [Spec, Voi].

What happens if ApplP selects DP with structural Case? Assume that Th-phrase in English can take either structural Case or null inherent accusative Case, which we notate [0ACC]. (NB: [0ACC] is also inherently inactive, hence is not visible to probes in Voi and T.) The “double object” sentence *John threw Mary the ball* is immediately derived as shown in (31):

(31) [TP John Past [PrP throw-Pr [VoiP Mary-<throw>-Voi [ApplP <Mary>  
 NOM  $\phi$  ACC  $\phi$   
 <throw>-Appl [ThP the ball <throw>-Th [AgtP <John> <throw>-Agt  
 [0ACC]  $\phi$

<throw>]]]]]]

Note that if the ApplP is realized as DP with structural Case, then the Th-phrase *the ball* must be assigned null inherent accusative Case, as indicated. Otherwise, there would be three active DPs, one of which would be unable to have its Case feature valued, causing the derivation to crash. The probe in Voi then forms an Agree relation with the DP *Mary*, assigning it ACC Case and moving it to [Spec, Voi]. The remainder of the derivation is the same as the derivation of the prepositional dative construction (29).

Suppose Appl-phrase has structural Case but Agt-phrase is realized as a PP headed by *by*: Appl-DP *Mary* is raised successively to [Spec, Voi] and [Spec, T], instead of the “basic object” *the ball*, resulting in passive form *Mary was thrown the ball by John*:

(32) [TP Mary Past [PrP be [VoiP <Mary> throw+EN [AppIP <Mary> <throw-AppI>  
 NOM  $\phi$   $\phi$   $\phi$   
 [ThP the ball <throw-Th> [AgtP by John] <throw-Agt> <throw>]]]]]]  
 [0ACC]

This analysis of dative constructions explains immediately why c-command asymmetry between Th-phrase and Appl-phrase in prepositional dative constructions is reversed in the double-object construction (Barss & Lasnik, 1986).

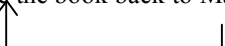
It also predicts nicely the position of Th-phrase and Appl-phrase between the copula and the passive participle in expletive sentences such as the following:

- (33) a. There was someone given a book (by John).  
 b. There was a book given to Mary (by John).

It also explains the apparent shift of particles from a position following the Th-phrase in the prepositional dative construction to a position preceding it in the double object construction:

- (34) a. John gave the book back to Mary (\*back).  
 b. John gave Mary back the book (\*back).

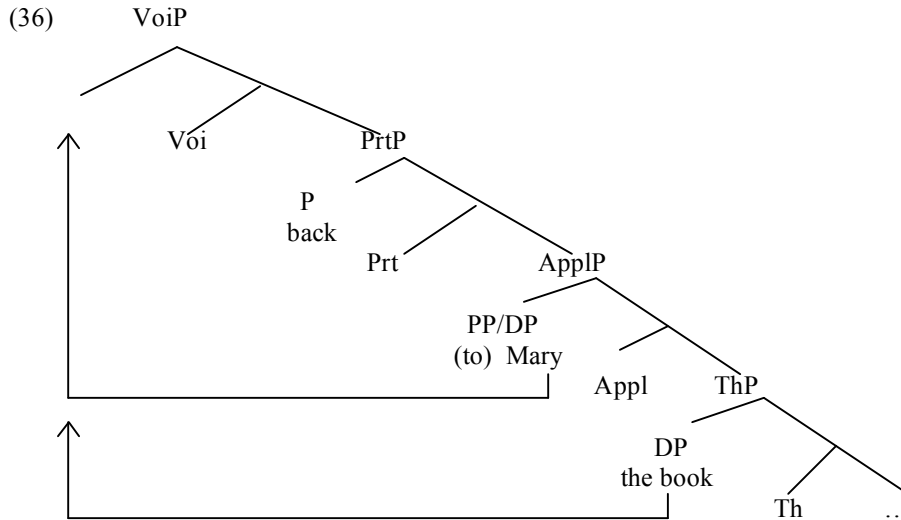
This data is particularly puzzling for any analysis that attempts to derive the double object construction from an underlying prepositional dative structure by movement of the dative to the left of the Th-phrase:

(35) John gave the book back to Mary  


Assume instead that so-called “particles” in English are prepositions generated in the specifier of a category *Prt*, which is required by the UOM to be merged after Th but before Voi. Depending on whether the Case of the Th-phrase or the Appl-phrase is valued by the probe in Voi and moved to [Spec, Voi], the particle will either appear after or before the Th-phrase.

#### 2.4. ApplP vs. GoalP

It is crucial to our analysis that the primary argument Appl be distinguished from the secondary argument Goal. The latter is obligatorily marked by the preposition *to*, but is merged earlier in the UOM than Appl (SMG is like English in that both Appl-PP and Goal-PP require the same preposition *se*).



1. Goal cannot appear in double object constructions:

- (37) a. I sent the package to NY.  
 b. \*I sent NY the package.  
 c. I sent the package to Mary.  
 d. I sent Mary the package.

2. Appl and Goal can co-occur<sup>15</sup>:

- (38) a. I shipped Mary the package to her apartment in NY.  
 b. I shipped the package to Mary to her apartment in NY.

3. Goal patterns with other locative prepositions such as *in*, *down*, *on*, *into*, *onto*, etc., whereas Appl patterns only with benefactive *for*:

- (39) a. I threw the rock to the fence/into the next field/onto the table/down the hill etc.  
 b. I got the book to/for Mary.

4. Exceptions to requirement that a GoalP be marked with *to* behave completely differently from Appl-DPs:

- (40) a. John sent Bill home/downtown/uptown.  
 b. \*John sent home/downtown/uptown Bill.  
 c. \*Home/uptown/downtown was sent Bill by John.  
 d. Bill was sent home/downtown/uptown by John.

5. Unmarked order of Source and Goal phrases is Source > Goal:

- (41) a. <sup>U</sup>I sent the package from Ithaca to NY.  
 b. <sup>M</sup>I sent the package to NY from Ithaca.

But unmarked order of Appl and Source phrases is Appl > Source:

<sup>15</sup> Some speakers find (38a-b) illicit. It's worth noticing that for those speakers, who find these sentences fine, there is a contrast between *I shipped Mary the package to her apartment in NY* and *\*I shipped Mary the package to NY*. The same contrast holds for *I shipped the package to Mary to her apartment in NY* and *I shipped the package to Mary to NY*.

- (42) a. <sup>U</sup>I sent the book to Mary from Ithaca.  
 b. <sup>M</sup>I sent the book from Ithaca to Mary.

These two observations are contradictory if there is no distinction between Appl and Goal, but follow automatically from the UOM.

6. ‘High goal’ vs. ‘low goal’ in Japanese: Miyagawa and Tsujioka (2003) show that Japanese has two distinct argument positions, both marked with the ‘dative’ case-marker *-ni*. Their ‘high goal’ is our Appl; their ‘low goal’ is our Goal. Though English and Japanese have identical underlying structures, Japanese differs from English in that there is no probe in Voi that assigns structural ACC Case. Hence the base order Appl-Theme is fixed (unless Scrambling applies), whereas in English the base order is preserved in the double object construction but inverted in the prepositional dative construction. As we will see shortly, one reason that the facts are so complicated in SMG is that SMG behaves in certain respects like English but in other respects like Japanese.

### 2.5. *For*-Applicatives vs. Benefactives

Some verbs require that Appl-phrase be marked with *for* instead of *to*:

- (43) a. I bought a book for/\*to Mary.  
 b. I bought Mary a book.

We distinguish these two types of ApplP by means of a feature [+/-Ben]: *give* a-selects [+Appl, -Ben], *buy* a-selects [+Appl, +Ben].

But there is also a completely different secondary argument ‘Ben(efactive)’, obligatorily marked with the same preposition *for*, which is merged earlier than Appl. Supported by the fact that Ben can cooccur with *for*-Applicatives, is obligatorily marked with the preposition *for*, and can’t be passivized:

- (44) a. I bought Mary a book for Sue.  
 b. \*I bought Sue Mary a book.  
 c. I bought a book for Mary for Sue.  
 d. \*I bought Sue a book for Mary.  
 e. I gave (\*Sue) Mary a book for Sue.  
 f. I gave (\*Sue) a book to Mary for Sue.  
 g. I went to the store for Sue.  
 h. \*I went Sue to the store.  
 i. \*Sue was gone to the store.  
 j. \*Sue was given Mary a book.  
 k. \*Sue was given a book to Mary.

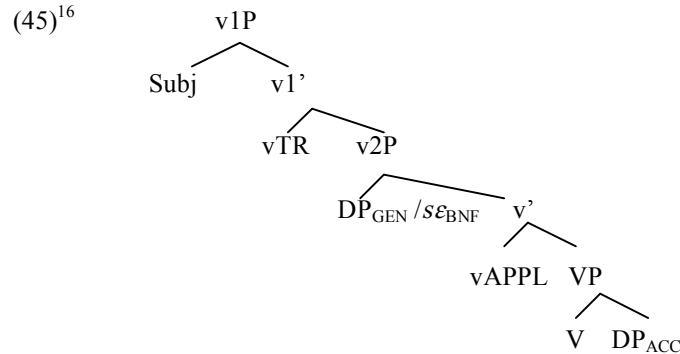
NB: SMG differs from English in that [+Ben] Appl-PP requires the preposition *se*, whereas the Ben-PP requires a different preposition *ja*.

## 3. The Syntax of Goal and Benefactive Ditransitives

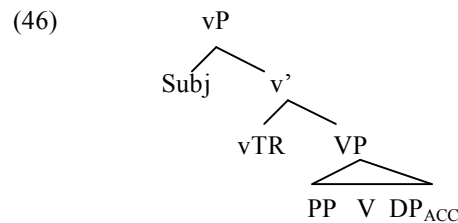
### 3.1 Previous Accounts: Anagnostopoulou (2001, 2005)

Anagnostopoulou (2005) investigates the syntax of indirect objects in SMG focusing on indirect objects introduced by the preposition *se* in genitive goal and benefactive ditransitives. Double accusative constructions are extensively discussed in Anagnostopoulou (2001). Anagnostopoulou’s main claims are summarized below.

- Dative arguments introduced by *se* occur in double object benefactive and goal constructions and in prepositional goal ditransitives, unlike *to* in English, which is limited to prepositional goal constructions. Anagnostopoulou links this difference to the contrasting semantic properties of *se* and *to* with respect to the feature DIRECTION/PATH and the (possibly related) function of resultativity.
- Based on evidence from French, SMG, and other languages, it is argued that it's incorrect to think of the 'dative alternation' in terms of alternative categorial realizations of indirect object arguments. The crucial property is the association of indirect objects with extra functional structure, i.e. light applicative heads, in the double object construction.



The extra functional structure is missing in prepositional ditransitives where indirect objects are introduced in the root level<sup>17</sup>.



- *ja*-benefactive constructions present conflicting evidence for constituency. On the one hand, binding suggests that they are attached low, which leads to analyzing them as arguments. On the other hand, ellipsis suggests that they are adjuncts attached above the verbal constituent that contains the theme. The adjunct analysis is further supported by the observation that *ja*-

<sup>16</sup> According to Anagnostopoulou (2005), structure (28) accounts for the following facts:

- In the genitive goal construction, the goal asymmetrically c-commands the theme (on the basis of Barss & Lasnik's 1986 *each ... the other* test). The ACC < GEN permutation, which is allowed in SMG unlike English, results from A' movement / scrambling (see Anagnostopoulou 2003).
- Based on evidence from binding (see Anagnostopoulou 2005) *se*- and genitive beneficiaries asymmetrically c-command the theme.

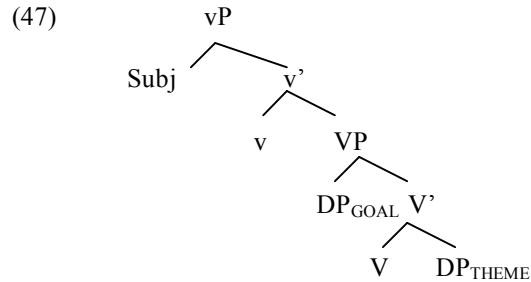
<sup>17</sup> SMG permits both the DP > PP and PP > DP permutations. In each order the first object asymmetrically binds into the second (evidence from the *each ... the other* test). Anagnostopoulou (2005) suggests three analyses to account for the word order and binding facts:

- The DP > PP order is basic
- The PP > DP order is basic
- Free base-generation analysis according to which no linking principle forces one argument to be higher than the other.

Anagnostopoulou (2003) argues that there is no strong empirical evidence favoring one of the three aforementioned analyses. For simplicity reasons, she prefers the third one in Anagnostopoulou (2005) (see structure 46).

beneficiaries can be added to any predicate, unlike genitive and *se*-beneficiaries. Anagnostopoulou (2005) doesn't resolve this issue.

- Anagnostopoulou (2001) claims that the double accusative construction does not include a light head *vAPPL*, unlike the genitive construction. There is only one EPP/Case-checking head for both the goal and the theme, namely *vCAUS*. When *vAPPL* is absent, there is no source for dative case, therefore, the goal surfaces as accusative.



### 3.2 Our Analysis

Following we summarize the main drawbacks in Anagnostopoulou's (2005) account, and we present our proposal.

#### A. Main drawbacks in Anagnostopoulou's (2005) model

Anagnostopoulou suggests two independent structures to account for the difference between double object and prepositional ditransitives. In other words, the so-called Uniformity of  $\theta$ -Assignment Hypothesis (UTAH<sup>18</sup>) (Baker 1988, 1996) is undermined. Moreover, Anagnostopoulou fails to distinguish Appl from Goal, and therefore cannot account for a sentence with both a *se*-PP Appl or a genitive Appl and a *se*-PP Goal, which expresses a location, e.g.

- (48) a. ??  $\omega$        $\sigma$ restis       $\epsilon$ stile      stin      anastasia      to  
 the.NOM orestis.NOM shipped.3SG to-the.ACC Anastasia.ACC the.ACC  
 $\rho$ acet $\omega$       sto       $\delta$ iamerizma      tis sti      nea      i $\sigma$ rci  
 package.ACC to-the.ACC apartment-ACC her in-the.ACC New.ACC York.ACC  
 'Orestis shipped the package to Anastasia to her apartment in New York'  
 b<sup>19</sup>.  $\omega$        $\sigma$ restis      tis       $\epsilon$ stile      to       $\rho$ acet $\omega$   
 the.NOM Orestis.NOM her-GEN shipped.3SG the.ACC parcel.ACC  
 sto       $\delta$ iamerizma      tis sti      nea      i $\sigma$ rci  
 to-the.ACC apartment.ACC her to-the.ACC New.ACC York.ACC  
 'Orestis shipped her the package to her apartment in New York'

#### B. Our Proposal

In this section, we present our analysis of goal and benefactive constructions, as well as double accusative constructions.

<sup>18</sup> UTAH: Identical thematic relationships between predicates and their arguments are represented syntactically by identical structural relationships when items are merged (Adger, 2003).

<sup>19</sup> Most speakers prefer sentences such as 48b with a genitive clitic rather than a  $DP_{GEN}$ . The reason why this is the case might be related to the fact that  $DP_{GEN}$  can also be possessors. This ambiguity doesn't occur with the genitive clitic.

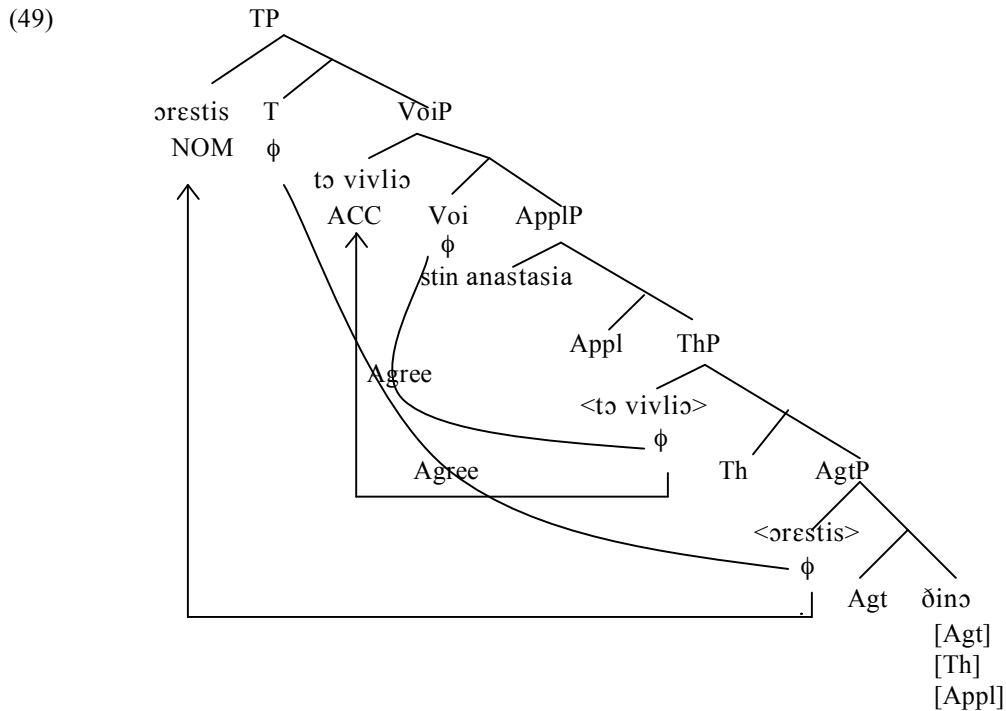


## The Structure of GEN-PP Goal & Benefactive Constructions

### I. GEN-PP Goal Ditransitives

#### Active: ACC > Applicative se-PP

Contra Anagnostopoulou (2003, 2005), we claim that both *se*-PP goals and DP<sub>GEN</sub> goals are base generated at the same position, i.e. [Spec, ApplP]. There is no need to suggest two different syntactic structures, since both *se*-PPs and genitive DPs bear the same thematic role. Based on the criterion of passivizability, we assume that in SMG the applicative DP bears inherent genitive case<sup>20</sup>. The derivation in (49) accounts for *ο οrestis εδωσε το vivlio stin anastasia* ‘Orestis gave the book to Anastasia’ as follows. First, the category Agt merges with the verbal root *δino* ‘give’. Then, adjunction of *δino* to Agt, checking off the a-selection feature [Agt] takes place. The phrase Agt’ merges with the DP *ο οrestis*, satisfying the c-selection feature [D] of Agt. By the LC, the probe in Voi establishes an Agree relation with the DP<sub>THEME</sub> *το vivlio* ‘the book’, the nearest potential goal with matching  $\varphi$ -features. The DP<sub>THEME</sub> is valued ACC and it is immediately moved to [Spec, Voi] to satisfy the EPP feature of Voi, accounting for the fact that the ThP c-commands an [-Ben] ApplP marked with *se*. The probe in T enters an Agree relation with the nearest potential goal. The DP<sub>AGT</sub> *ο οrestis* is assigned NOM Case and moves to [Spec, T] to satisfy the EPP feature of T.



<sup>20</sup> Anagnostopoulou (2003) argues that genitive goals/experiencers in SMG have undetermined case-theoretic status. According to the criterion of passivizability, they bear inherent case (unlike Japanese datives). According to the criterion of clitic doubling, they are assigned structural case, unlike the inherent genitive in a very restricted class of single-complement verbs (e.g. *epimeleme* ‘take care of’).

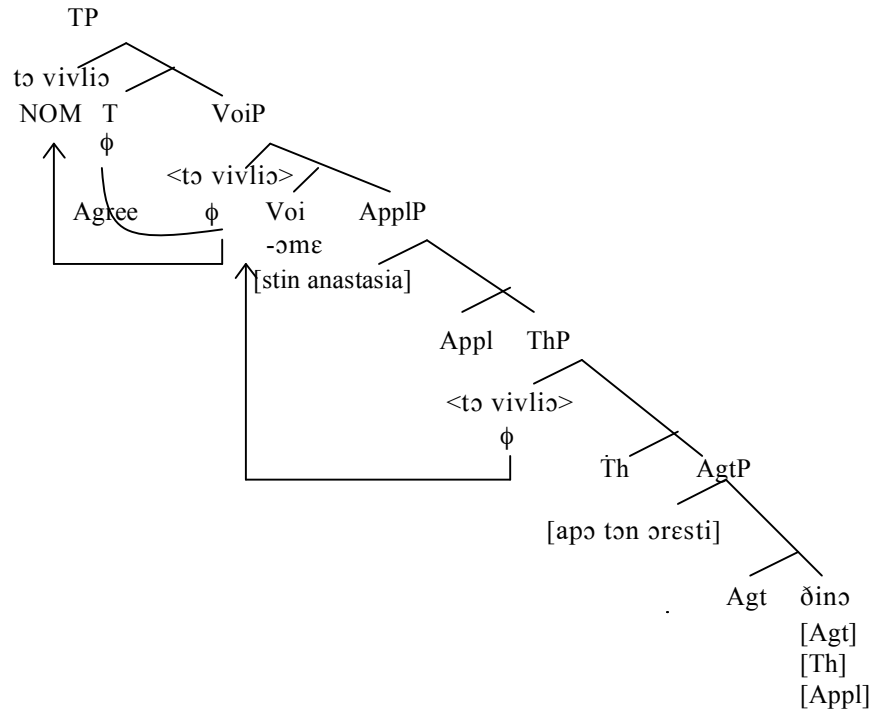


will be an extra probe whose  $\varphi$ -features will have no way of getting valued. In SMG, such a continuation can be ensured by selecting the value [-act] for Voi.

Step 2: Since the only active DP is the Th-phrase *to vivlio*, it moves to [Spec, Voi] to satisfy the EPP feature of Voi.

Step 3: The Case feature of *to vivlio* is valued NOM by the probe on T and moves to [Spec, T]. Although the *se*-PP in [Spec, ApplP] intervenes when *to vivlio* moves from [Spec, ThP] to [Spec, VoiP], the derivation doesn't crash, because the PP doesn't bear any  $\varphi$ -features.

(52)



**Passive: GEN > ACC**

In the case of genitive DPs in passive constructions (e.g. *\*to vivlio dothice tis anastasia apo ton oresti* ‘The book was given Anastasia by Orestis’), the intervention of the DP<sub>GEN</sub> when the probe in T looks for a matching goal causes the derivation to crash, because the DP<sub>GEN</sub> bears  $\varphi$ -features, unlike *se*-PPs, which do not. As noted earlier, Th in this case has inherent ACC Case. The restriction on genitive goals can be canceled when the goal is realized as a clitic or is clitic doubled. Our assumptions are the following:

- The clitic is base generated at the head of ApplP where it is picked up by the verb as it moves in head-to-head fashion to T<sup>24</sup>.
- In the case of clitic doubling, the clitic “absorbs” the  $\varphi$ -features of the DP<sub>GEN</sub> in [Spec, ApplP], thus permitting the probe in T to form an Agree relation with the DP<sub>THEME</sub> and assign it NOM Case in spite of the intervening DP<sub>APPL</sub>. By absorption of the  $\varphi$ -features, we

<sup>24</sup> Note that the order of the clitics is predicted by our theory.

mean that the agreement of the  $\varphi$ -features in the Spec and the clitic renders the features of the DP inactive.

### *Nominalizations*

To account for (53a-d), we assume that there is a probe in D that assigns structural GEN. We know that the DP<sub>THEME</sub> in [-Ben] ditransitives can have structural Case. An intervening PP in ApplP won't block the Agree relation between the probe and DP<sub>THEME</sub>, since it has no  $\varphi$ -features. However, an intervening inherent DP<sub>GEN</sub> in ApplP will block Agree between the probe and the DP<sub>THEME</sub> for the same reason it does in passive sentences, namely, because inherent DP<sub>GEN</sub> has  $\varphi$ -features that are nearer to the probe than the ones in the DP<sub>THEME</sub>. So the structural Case feature of the Th will never be able to get valued. Moreover, there is no rescue mechanism in nominals, as there is in passives, because nominalizations do not allow clitics. Unlike verbs, nominals cannot assign inherent Case.

- (53) a. \* i            anaθesi            tis            ascisis            tu  
           The.NOM assignment.NOM the.GEN exercise.GEN the.GEN  
           oresti  
           Orestis.GEN
- b. i            anaθesi            tis            ascisis            ston  
           The.NOM assignment.NOM the.GEN exercise.GEN to-the.ACC  
           oresti  
           Orestis.ACC
- c. i            anaθesi            tis            ascisis  
           The.NOM assignment.NOM the.GEN exercise.GEN
- d. \* i            anaθesi            tu            oresti  
           The.NOM assignment.NOM the.GEN Orestis.GEN

## II. *GEN-PP Benefactive Ditransitives*

### *Active*

To account for (54a) and (54b), we assume that both *se*-PP and DP<sub>GEN</sub> benefactives are base generated at the [Spec, ApplP] and bear the features [+Appl, +Ben]. The mechanism we described above for active [+Appl, -Ben] ditransitives applies also for [+Ben] ditransitives.

- (54) a. o            orestis            majirepse    rizoto            stin  
           The.NOM Orestis.NOM cooked.3SG rizoto.ACC to-the.ACC  
           anastasia  
           Anastasia.ACC
- b. o            orestis            majirepse    tis            anastias            rizoto  
           The.NOM Orestis.NOM cooked.3SG the.GEN Anastasia.GEN risotto.ACC

### *Passive*

How can one account for the fact that theme passivization in the presence of a DP<sub>GEN</sub> or *se*-PP beneficiary is beyond repair (see 55a-c)? Both ThP and ApplP in benefactive constructions never take structural Case. Since the ThP in benefactive constructions never takes structural Case, such a repair strategy is unavailable.

- (55) a. \* rizoto            majireftice    tis            anastias            (apo ton  
           Risotto.NOM was-cooked.3SG the.GEN Anastasia.GEN (by the.ACC



#### 4. Conclusions

A wide variety of verbs of different types contain an Appl argument in SMG and English. The specific way that the Appl-phrase is realized for any given verb is a function of its particular lexical properties, interacting with the universal principles governing derivations and the UOM. We proposed a single underlying system of categories and hierarchical relations to account for ditransitive constructions in SMG and English. Languages such as English are quite promiscuous in allowing both goal and benefactive ApplP to be marked either with structural case or with a preposition, while ThP can be marked either with structural Case or with null inherent ACC case. The result is a system in which the surface order of elements in active sentences may or may not reflect the underlying universal hierarchy of arguments and in which there is a variety of different passive forms. Other languages, such as SMG, are not nearly so liberal, resulting in a system in which surface order is most often a direct reflection of the underlying universal hierarchy, though SMG also has vestiges of an English-type system under certain restricted conditions. Both languages share, however, the same underlying system of categories and hierarchical relations.

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