CROSS-LINGUISTIC AND CROSS-CATEGORIAL VARIATION OF DATIVES

Elena Anagnostopoulou
University of Crete
elena@phl.uoc.gr
October 2003
To appear in Melita Stavrou and Arhonto Terzi (Eds.) *Recent advances in Greek Generative Grammar. Festshrift for Dimitra Theophanopoulou-Kontou.* Benjamins

Abstract[1]

This paper investigates goal and benefactive arguments introduced by the preposition *se* in Greek. I argue that 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. I account for this difference between Greek and English in terms of differences between *se* and *to* with respect to the feature DIRECTION/ PATH and the related function of resultativity. I furthermore compare Greek *se*-datives to arguments introduced by comparable prepositions in Japanese, French and Spanish. I demonstrate that the meaning, distribution and syntactic properties of *a*-datives in French are very similar to those displayed by *se*-datives, except that the former behave like DPs and the latter like PPs under co-ordination. This leads me to conclude that the category of indirect objects is orthogonal to their distribution in ditransitives. Indirect object DPs may occur in so called 'prepositional ditransitives' and, conversely, indirect object PPs are allowed to surface in double object constructions. The crucial property of the double object construction is the fact that the indirect object is introduced by a light applicative head and the direct object is part of the domain headed by the verbal root (Marantz 1993). This extra layer of functional structure is missing in so called 'prepositional ditransitives' where indirect and direct objects are both introduced at the root level.

[1] I would like to express my debt to Prof. Dimitra Theophanopoulou-Kontou for the fact that by being my first teacher in theoretical syntax she inspired me to become a linguist. I would also like to thank her for her help and support throughout the years.

Many thanks to Artemis Alexiadou, Melita Stavrou, David Pesetsky, Shigeru Miyagawa, Sigrid Beck and Orin Percus for discussions on the material presented here, and to Winfried Lechner and two anonymous reviewers for their detailed comments on an earlier draft. I am grateful to Freiderikos Valetopoulos, Cedric Boeckx and, especially, Dominique Sportiche and Josep Quer for their help with the French and Spanish data.

Introduction

In many languages, oblique arguments with an indirect object role (goal, beneficiary, possessor) surface either as DPs or as PPs, an alternation known in the literature as the 'dative alternation'. According to a widely attested crosslinguistic pattern, there is a systematic correlation between the categorial status of dative arguments and their hierarchical position. In the English *double object construction*, exemplified in (1), DP goals and beneficiaries precede and asymmetrically c-command themes. On the other hand, in *prepositional ditransitives* exemplified in (2) PP goals and beneficiaries follow and are asymmetrically c-commanded by themes (see Barss and Lasnik 1986; Larson 1988, among many others):

(1) a. John sent Mary a book — *Double Object Construction*
b. John baked Mary a cake

(2) a. John sent a book to Mary — *Prepositional Ditransitive*
b. John baked a cake for Mary

Even though the proper structural analysis of (1) and (2) as well as their (transformational or non-transformational) relation have been a matter of considerable debate in the literature, there is, nevertheless, a consensus that DP-datives are hierarchically high (i.e. higher than themes) and PP-datives low (i.e. lower than themes). In this paper, I present evidence against this correlation between category (DP vs. PP) and hierarchical position (high vs. low) of dative arguments.

More specifically, I investigate the syntax of prepositional goals and beneficiaries in Greek, focusing on the properties of phrases introduced by the preposition *se*, a locative preposition corresponding to English *to*.[2] Interestingly, goals and beneficiaries can both be introduced by *se* in Greek, unlike English where *to* is limited to goals. Initially I demonstrate that *se*-PPs do not have a uniform behavior in goal and benefactive constructions. Goal constructions with *se*-PPs qualify as prepositional ditransitives, i.e. Greek *se*-goals behave syntactically similarly to English *to*-goals. On the other hand, benefactive constructions with *se*-PPs share relevant properties with double object constructions. I argue that goals introduced by *se* are VP-internal, selected by the lexical verb V, while beneficiaries introduced by *se* are VP-external, merged as specifiers of the light applicative v which combines with a VP to yield the double object construction (Marantz 1993; Collins 1997; McGinnis 1998; Anagnostopoulou 1999a,b; 2003). I furthermore present evidence showing that goal *se*-PPs can also occur in the double object frame, despite appearances to the contrary. I discuss certain interpretational differences between Greek *se*-PPs and English *to*-PPs which are, arguably, responsible for the fact that the former have a wider distribution than the latter. Finally, I connect the Greek facts to parallel patterns in other languages. On the basis of a comparative examination of Greek, Japanese, French and Spanish, I argue that there is no necessary link between the categorial status of dative arguments and the position in which they are merged. Datives can be either DPs or PPs, and can be

[2] There are important differences between Greek *se* and English *to* discussed in detail in section 4.

generated either high or low, regardless of categorial status. Different combinations of these options give rise to a typology of datives which is much richer than usually recognized.

The paper is organized as follows. In section 1, I discuss goal-ditransitives. I present evidence that constructions with *se*-goals qualify as prepositional ditransitives, while constructions in which the goal surfaces as a DP with genitive case are double object constructions (see also Anagnostopoulou 2003). In section 2, I turn to beneficiaries which are either introduced by the preposition *jia* 'for', or introduced by the preposition *se* 'to', or they surface as genitive DPs. I argue that *jia*- PPs correspond to *for* – beneficiaries in English, while constructions with *se*-beneficiaries and genitive DP-beneficiaries qualify as double object constructions. In section 3, I argue that goals introduced by *se* are ambiguous: they form prepositional ditransitives as well as double object constructions. In section 4, I discuss a number of disparities in the interpretation of *se*-PPs and *to*-PPs which explain their different distribution in ditransitives. Finally, in section 5, I examine Japanese, French and Spanish which have dative arguments that are similar to Greek *se*-datives, focusing on the question of the categorial status of high and low datives.

1. Goal Ditransitives

1.1. Forms of Goals

Greek possesses a variety of ditransitive goal constructions, in which indirect object goals are realized as PPs, as DPs with morphological genitive case or as DPs with morphological accusative case (see Tzartzanos 1945/1989, Mackridge 1985/1987, Philippaki-Warburton 1977, Holton, Mackridge and Philippaki-Warburton 1997 among others). The first construction consists of an accusative DP denoting a theme and a goal PP introduced by the preposition *s(e)* 'to'. The DP is assigned morphological accusative case by the preposition, as shown in (3a). Similarly to English *to,* Greek *s(e)* is also used as a locative preposition, as in (3b):

(3) $ACC_{Theme} - PP_{Goal}$

a. *O Jianis estile to ɣrama stin Maria*
The Janis.NOM sent.3S the letter.ACC to-the Maria.ACC
'John sent the letter to Mary'

b. *O Jianis piɣe stin Olandia*
The Janis.NOM went to-the Holland.ACC
'John went to Holland'

The second construction combines two non-prepositional DPs, a goal and a theme. The goal bears morphological genitive case, while the theme surfaces with morphological accusative:

(4) $GEN_{Goal} - ACC_{Theme}$
O Jianis estile tis Marias to γrama
The Janis.NOM sent.3S the Maria.GEN the letter.ACC
'John sent Mary the letter'

Greek has lost the morphological distinction between genitive and dative case and has generalized the use of genitive.

Finally, with a limited set of verbs, the goal can either be introduced by a PP headed by *s(e)*, as in (5a), it can surface as a genitive DP (5b), or it can be projected into a structure in which both the indirect object and the direct object surface with morphological accusative case, as in (5c):

(5) $ACC_{Theme} - PP_{Goal}$
a. *Diðaksa γramatici ston Petro*
Taught.1S grammar.ACC to-the Peter.ACC
'I taught grammar to Peter'
$GEN_{Goal} - ACC_{Theme}$
b. *Diðaksa tu Petru γramatici*
Taught.1S the Peter.GEN grammar.ACC
'I taught Peter grammar'
$ACC_{Goal} - ACC_{Theme}$
c. *Diðaksa ton Petro γramatici*
Taught.1S the Peter.ACC grammar.ACC
'I taught the children grammar'

The construction in (5c) is discussed in detail in Anagnostopoulou (2001) and will not concern me here.

1.2. The genitive-PP alternation is a 'dative alternation'

As discussed at length in Anagnostopoulou (1999a,b, 2001, 2003), the Greek alternation between a genitive DP and a PP shares many characteristics typical of the dative shift alternation in English (see also Markantonatou 1994). The former qualifies as a double object construction and the latter as a prepositional ditransitive, according to a number of criteria. Among them, I note here four:

(i) *Animacy.* First, the DP construction in Greek is only tolerated with animate goals, similarly to the double object construction in English.

(6) **I Ilektra estile tis Γalias*
The Ilektra.NOM sent.3S the France.GEN
ena ðema
a parcel.ACC
'*Ilektra sent France a parcel'

Se-phrases can be inanimate, similarly to *to*-PPs in English:

(7) *I Ilektra estile ena ðema stin Γalia*
The Ilektra.NOM sent.3S a parcel.ACC to-the France
'Ilektra sent a parcel to France'

The animacy restriction illustrated in (6) has been argued in the literature to reduce to possession (see, among others, den Dikken 1995, Pesetsky 1995 for discussion and references).[3]

(ii) *Predicate restrictions*. Second, there are verb classes that allow the genitive construction and others which don't in Greek, similarly to English. PPs introduced by *se* are less restricted, similarly to *to*-PPs in English. (See Anagnostopoulou, 2003: 11-15, for a detailed comparison of the restrictions in Greek as opposed to the English ones discussed in Oehrle 1976; Pesetsky 1995: 141; Pinker 1989; Gropen et al. 1989: 243ff.)

(iii) *Passivization.* Third, as was first pointed out by Markantonatou (1994) and is extensively discussed in Anagnostopoulou (2003), passivization is prohibited from operating on ditransitive predicates which overtly project a genitive goal, similarly to English which prohibits, so called, 'direct passives' (compare the Greek examples below to their English translations; see Larson 1988 among many others for discussion):[4]

(8) a. ?**To vivlio xaristice tis Marias*
The book.NOM award.NACT the Maria.GEN
apo ton Petro
from the Petros
'?*The book was awarded Mary by Peter'

b. ?**To γrama taçiðromiθice tu Petru*
The letter.NOM mailed.Nact.3S the Petros.GEN
apo tin Ilektra
from the Ilektra
'?*The letter was mailed Peter by Ilektra'

Goals introduced by *se* may freely occur in passives, similarly to English goals introduced by the preposition *to*:

(9) *To vivlio ðoθice stin Maria apo ton Petro*
The book.NOM gave.NACT to-the Maria from the Petros
'The book was given to Mary by Peter'

(iv) *Nominalizations.* Finally, nominalizations related to the genitive construction are ruled out in Greek while nominalizations in which goals are realized as PPs are licit (see Alexiadou 2001; Anagnostopoulou 1999b, 2003):

[3] In Greek, both possession and affectedness seem to be relevant notions.
[4] As discussed in Anagnostopoulou (1999a,b; 2003), the ban against genitive DPs in passives is obviated when the genitive undergoes cliticization or clitic doubling. This fact will generally not concern me here. I will return to this, though, in section 2.2.

(10) a. **I anaθesi mias ðiskolis sonatas*
The assignment a difficult.GEN sonata.GEN
tis Marias apo tin ðaskala
the Mary by the teacher
'The assignment of a difficult sonata of Mary by the teacher'

b. *I anaθesi mias ðiskolis sonatas*
The assignment a difficult.GEN sonata.GEN
stin Maria apo tin ðaskala
to-the Mary by the teacher
'The assignment of a difficult sonata to Mary by the teacher'

A similar contrast obtains in English. As discussed in Kayne (1984), Pesetsky (1995), Marantz (1997), Beck and Johnson (2004), among others, nominalizations cannot have the double object construction as their input, while nominalizations based on the *to*-construction are well formed:[5]

(11) a. *Sue's gift of Mary (of) a book
b. *John's assignment of Mary (of) a hard sonata
c. *Sue's presentation of Mary (of) a metal

(12) a. Sue's gift of a book to Mary
b. John's assignment of a hard sonata to Mary
c. Sue's presentation of a metal to Mary

On the basis of the tests presented in this section, I conclude that constructions with genitive goals in Greek are double object constructions, while their counterparts with *se*-goals are prepositional ditransitives.

1.3. The syntax of genitive goals and goals introduced by 'se'

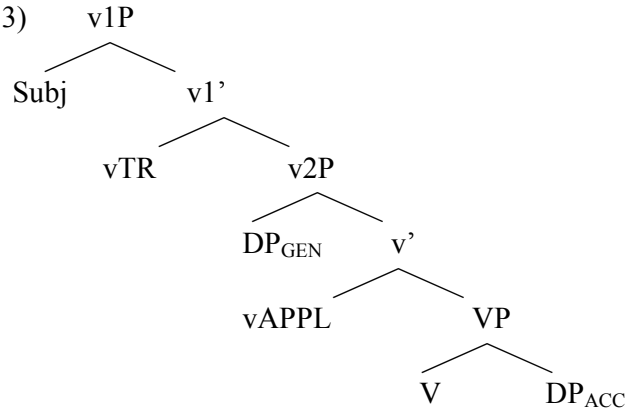
Having presented evidence that the genitive construction is a double object construction and the *se*-construction a prepositional ditransitive, I now turn to their structural analysis.

Following Marantz (1993), Collins (1997), McGinnis (1998) and Anagnostopoulou (1999a,b, 2001, 2003), among others, I assume that in double object constructions the indirect object is introduced by a semi-functional head vAPPL. This head is a light v which takes a VP complement. Applicative constructions in e.g. Bantu languages, which behave on a par with double object constructions (Baker 1988, Marantz 1993), provide evidence that a head separate from the lexical verb introduces the indirect object argument. In applicatives the verb stem necessarily combines with an overt affix, the applicative affix. Following Baker (1988) and Marantz (1993), I assume that a null applicative affix is also present in double object constructions. Following Kratzer

[5] Note that the English nominalizations in (11) and (12) are transitive nominalizations while the Greek ones in (10) have the appearance of passive nominalizations in which the agent surfaces as a by-phrase. As discussed at great length in Alexiadou (2001), Greek lacks transitive nominalizations. Alexiadou (2001) furthermore argues that the Greek nominalizations in (10) are not the counterpart of English passive nominalizations but rather of English transitive ones.

(1994) and Chomsky (1995), I furthermore assume that the external argument is introduced by a higher causative or agentive transitive v/Voice. The above considerations lead to the structure (13) for Greek ditransitives in which the goal surfaces as a genitive DP:

(13)



Structure (13) correctly accounts for the fact that in the genitive construction, the goal asymmetrically c-commands the theme, as illustrated in (14), on the basis of Barss & Lasnik's (1986) *each…the other* test:

(14) a. *Estila tis mias miteras to peði*
sent.1S the one mother.GEN the child.ACC
tis alis
the other.GEN
'I sent each mother the other's child'

b. **Estila tis miteras tu alu*
sent.1S the mother.GEN the other.GEN
to ena peði
the one child .ACC
'*I sent the other's mother each child'

Greek also permits the ACC>GEN permutation (see e.g. Mackridge 1985/1987, Markantonatou 1994), unlike English where the order DP-THEME>DP-GOAL is strictly ungrammatical. The ACC>GEN order is more marked than the GEN>ACC order but is nevertheless possible. As argued for in Anagnostopoulou (2003), the ACC>GEN permutation results from A' movement/scrambling of the theme across goal because the theme is not allowed to bind into the goal in e.g. (15):[6] [7]

---

[6] An anonymous reviewer points out that leftward A-bar scrambling, in itself, does not explain the lack of quantifier binding, since A' movement *can* feed quantifier binding in other contexts:

(i) a. * The other's child hated each mother.
b. Each mother, the other's child hated.

[The reviewer is not sure (b) is perfect, but he is confident it's better than (a).]

An alternative way of looking at things, according to the reviewer, would derive the ACC-GEN word order not by ACC-preposing but by GEN-postposing. The latter adjoins GEN to VP, which is higher than ACC, explaining the effect in (15).

The alternative explanation suggested by the reviewer does not affect my analysis of the genitive goal construction in (13).

(15) **Estila to ena peði*
sent.1S the one child.ACC
tis miteras tu alu
the mother.GEN the other.GEN
'I sent each child (to) the other's mother'

Turning to *se*-PPs, note first that Greek permits both the DP>PP and the PP>DP permutation, as shown in (16a,b). This correlates with the fact that, as illustrated by the pair in (16c,d), Greek generally displays a freedom in the ordering of verbal DP and PP complements, which is not found in English:

(16) a. *Estila ena ðema stin Γalia*
Sent.1S a parcel.ACC to-the France
'I sent a parcel to France'
b. *Estila stin Γalia ena ðema*
Sent.1S to-the France a parcel.ACC
'*I sent to France a parcel'
c. *Evala to vivlio sto trapezi*
Put.1S the book.ACC to-the table
'I put the book on the table'
d. *Evala sto trapezi to vivlio*
Put.1S to-the table the book.ACC
'*I put on the table the book'

In each order the first object asymmetrically binds into the second. This is illustrated in (17a,b) for the DP>PP order and in (16c,d) for the PP>DP order (compare these facts to the properties of the ACC>GEN permutation in (15)):

(17) a. *Estila to ena peði stin mitera*
sent.1S the one child.ACC to-the mother
tu alu
the other.GEN
'I sent each child to the other's mother'
b. **Estila to peði tis alis*
sent.1S the child.ACC the other.GEN
stin mia mitera
to-the one mother
'*I sent the other's child to each mother'

---

[7] Another anonymous reviewer questions the validity of the explanation offered in the main text (or, for that matter, in fn 6) for the ungrammaticality of (15), by pointing out that s/he finds (i) as unacceptable as (15):

(i) *Estila to peði tis miteras tu*
Sent-I the child.ACC the mother.GEN-his.GEN

I disagree with the reviewer's judgments. I find (i) significantly better than (15).

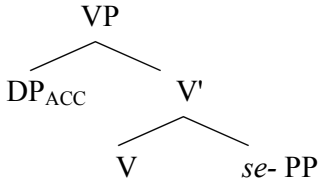
c. *Estila stin mia mitera to peði*
sent.1S to-the one mother the child.ACC
tis alis
the other.GEN

d. **Estila stin mitera tu alu*
sent.1S to-the mother the other.GEN
to ena peði
the one child.ACC

There are three analytical possibilities for the word order and binding facts illustrated in (16), (17) (see Anagnostopoulou 2003 for discussion):

(i) The DP>PP order is basic, as argued for by Larson (1988) for English:

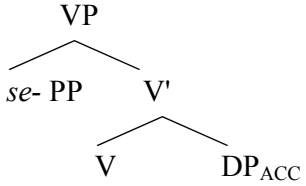
(18)



In this analysis, the PP>DP order is derived from the DP>PP one by leftward scrambling of the PP over the DP. This type of scrambling must be A-scrambling, which has been argued in the literature to feed binding and to not reconstruct for the purposes of the computation of binding principles (see e.g. Webelhuth 1989; Mahajan 1990, among many others, for discussion).

(ii) Alternatively, the PP>DP order is basic, as depicted in (19):

(19)

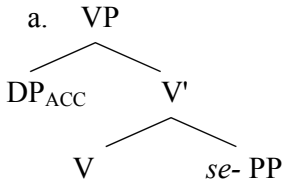


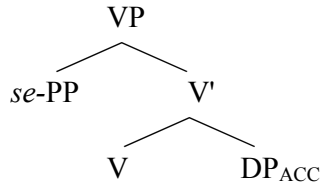
In this analysis, it is the DP>PP order which is derived, by leftward movement of the DP across the PP. Once again, this must be A movement feeding binding. Pesetsky (1995: 221-223) argues for such an analysis for English on the basis of backward binding facts in (20a) and (20b) first noted in Burzio (1986:199-203):

(20) a. Sue showed John and Mary to each other's friends
b. Sue showed each other's friends to John and Mary

According to Pesetsky, the grammatical backward binding example in (20b) provides evidence that the theme in the English PP construction is at some stage in the derivation c-commanded by the goal.

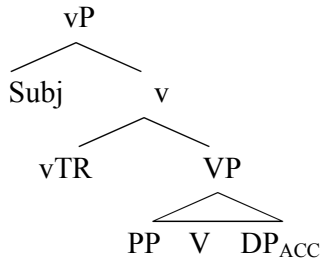
(iii) The third option is that both are base generated orders, as depicted in (21):

(21) a. 

b. 

A *rationale* behind a free base-generation analysis might be that in the case at hand, there is no linking principle forcing one argument to be higher than the other. Marantz (1993) argues that certain thematic roles are such that it doesn't matter where the one is merged relatively to the other.

In Anagnostopoulou (2003) I point out that there are no strong empirical reasons favoring one of these analyses against the others.[8] I will assume here the free base-generation option, for simplicity reasons mainly. Assuming that the external argument is always introduced by a transitive light v, vTR, the vP shell in constructions including *se*-goals is as in (22):

(22) 

1.4. Accounting for passives and derived nominals

In this section, I argue that the structures (13) and (22) proposed in section 1.3 for genitive and *se*-goals, respectively, correctly account for their different behavior in passives and nominalizations (see Anagnostopoulou 2003 for extensive discussion of theme passivization in the presence of a goal in Greek and many other languages).

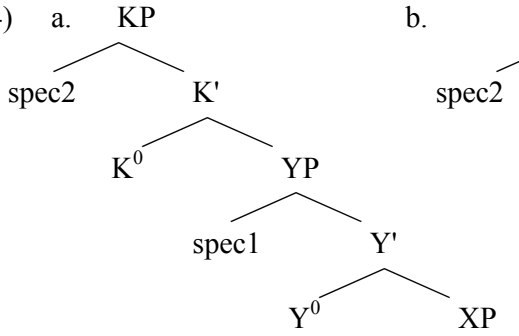
(i) *Passives*. Following Chomsky (1995; 2000) and Collins (1997), among others, I assume that movement proceeds in a local function, being subject to condition (23):

(23) If β c-commands α, and τ is the target of movement, then β is closer to τ than α unless β is in the same minimal domain as (i) τ or (ii) α

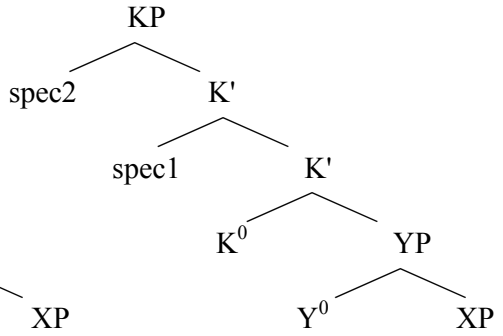
According to (23), α can move across a c-commanding β to target τ if (i) either α and β belong to the minimal domain of the same head (XP and spec1 in 24a) (ii) or β and τ belong to the minimal domain of the same head (spec1 and spec2 in 24b):

[8] Winfried Lechner (personal communication) points out that scope might help us decide the base order among goals and themes if Greek turns out to be like other scrambling languages, e.g. German, Japanese, where base orders are unambiguous and derived orders show scope ambiguity (see Lechner 1998 for discussion and references). I leave this issue for future research.

(24) a.

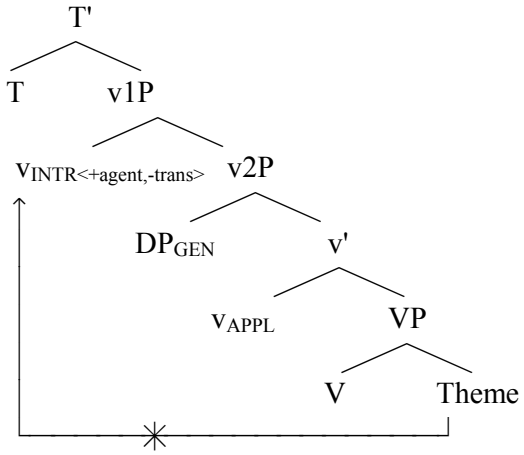


b.



Given the definition of "closeness" based on minimal domains in (23), the ill-formedness of passives projecting a genitive goal follows from locality. Goals block NP movement of themes to T, as illustrated in (25) (following Marantz 1997, Collins 1997, Alexiadou 2001 and many others, I assume that passives feature an intransitive light v, vINTR, carrying agentive features):

(25) PASSIVES: INTERVENING GENITIVE GOAL



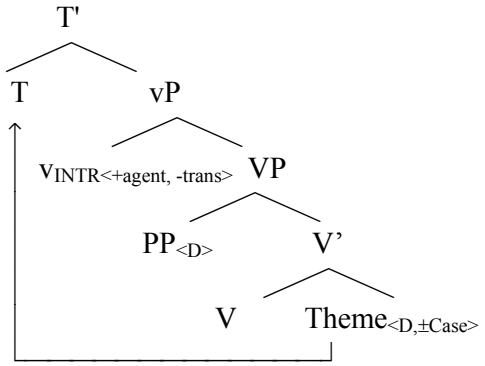
In (25), the genitive goal is higher and in a different minimal domain than the theme, qualifying as being closer to T, the target of NP-movement. The ungrammaticality of passivization of the theme in the presence of a genitive goal is thus correctly accounted for.[9]

Unlike genitives, goal PPs introduced by *se* have been seen above to be well-formed in passives. Within the approach defended here, this asymmetry naturally follows from the hierarchical position of *se*-PPs. While DPs are located in a minimal domain which excludes the nominative, structures including PPs lack a vAPPL head, and PPs are

[9] An anonymous reviewer takes as a starting point the view that head movement extends minimal domains (Chomsky 1993; Bobaljik & Jonas 1996, among others) and asks why verb movement in (25) does not make the Theme and DP_{GEN} equidistant from T. Following Chomsky (1995), Collins (1997), Richards (1997), Anagnostopoulou (2003), among others, I assume that minimal domains are defined over trivial (i.e. single-membered) head chains, and that head movement does not extend minimal domains. Since the main empirical motivation for linking verb movement to equidistance comes from *Holmberg's Generalization* (HG 1986) effects on Object Shift, the position I am taking here entails that I do not assume that HG effects should be tied to minimal domains and equidistance (see Bobaljik 2000; Holmberg 1999; Fox & Pesetsky 2002 for alternative accounts of HG effects not relying on equidistance; see Anagnostopoulou 2002 for critical discussion).

therefore in the same minimal domain as themes. Theme NP-movement to T is thus well-formed, even in the presence of an intervening PP, as in structures (19) and (21b) discussed in section 1.3 above. This derivation is depicted in (26):

(26) PASSIVES: INTERVENING GOAL *SE*- PP



Notice, incidentally, that the order of the theme and the PP in (26) could also be reversed, as in (18) and (21a), with no effect.

(ii) Derived nominals. According to an influential line of approaches, the restriction on event nominalizations based on the double object construction in English (examples (11) repeated below) is caused by the zero (applicative) head which is present in double object structures.[10] The PP-goal construction does not include such a head and therefore, nominalizations as in (12), here repeated, are well-formed.

(11) a. *Sue's gift of Mary (of) a book
b. *John's assignment of Mary (of) a hard sonata
c. *Sue's presentation of Mary (of) a metal

(12) a. Sue's gift of a book to Mary
b. John's assignment of a hard sonata to Mary
c. Sue's presentation of a metal to Mary

Two different implementations of this core idea have been developed in the literature:

(i) According to Pesetsky (1995) and Marantz (1993), attachment of a derivational (adjectivizing[11] or nominalizing) affix on a predicate consisting of the main verb and a

[10] See Kayne (1984) and Beck and Johnson (2004) for an alternative account which takes the ungrammaticality of (11) to derive from a structure in which double object verbs take a small clause complement with the goal/ beneficiary DP as the small clause subject. On this account, the restriction in (11) is treated on a par with the ungrammaticality of examples like **the belief of John handsome* which show that nominalizations are not possible if the object of the verb is not its logical object, i.e. its argument. The evidence presented in the present paper, though, shows that indirect objects in Greek double object constructions do not have to be DPs and can also be PPs. This is unexpected in a small clause analysis of the double object construction (small clause subjects are DPs and not PPs), while it is not incompatible with the applicative analysis, which does not *a priori* impose a restriction on the categorial status of applied arguments.

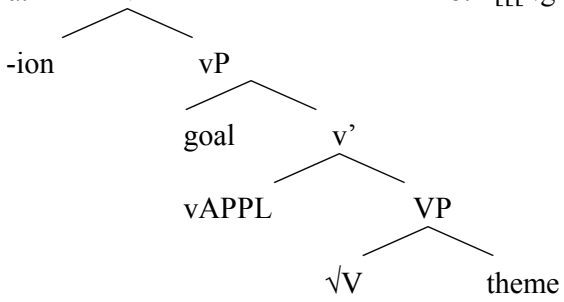
[11] Marantz (1993) extends Pesetsky's (1995) account of nominalizations to synthetic compounding in adjectival passives. He points out that while predicates with two internal arguments form adjectival passives involving synthetic compounding, as illustrated in (i), double object verbs do not permit this kind of adjectival passive formation. It is neither possible for the goal argument to combine with the verb excluding the theme,

zero affix attached to it leads to a violation of *Myers's Generalization* (27) (Myers 1984):

(27) Zero-derived words do not permit affixation of further derivational morphemes

In order for the goal/beneficiary to be included in a nominalization, a zero applicative head must be present, as in (28a).[12] But this will yield the form in (28b), with a nominalizer attaching to the zero-derived word [[√give $_V$] 0 $_V$], violating (27).

(28) a.



b. *[[[√give $_V$] 0 $_V$]ion $_N$]

Prepositional ditransitives are grammatical, as shown in (12), because they do not contain a zero affix (see structures (18), (19), (22)), and can be embedded under the nominalizer as they do not violate (27).

(ii) Pesetsky (1995) argues that *Myers's Generalization* also accounts for the lack of transitive nominalizations (see (30)) based on verbs participating in the causative-inchoative alternation (see (29)). Specifically he assumes that the causer in (29a) is introduced by a zero causative head CAUS. vCAUS cannot be included in the derived nominal in (30a), because this would lead to a violation of *Myers's Generalization* (27).

(29) a. John grows tomatoes
b. Tomatoes grow

(30) a. *John's growth of tomatoes *[[[√grow $_V$] $0_{CAUS\ V}$]ion $_N$]
b. The tomatoes' growth [[√grow $_V$] ion $_N$]

Marantz (1997) offers an alternative explanation for the ban on causative nominalizations in (30). Specifically, he proposes that roots like √DESTROY and √GROW are category neutral between N and V. When they are placed in a nominal environment the result is a nominalization. When they are placed in a verbal environment they become verbs. D's are functional heads in whose environments roots

---

as illustrated in (iia), nor is it possible for the theme argument to combine with the verb, excluding the goal, as in (iib):

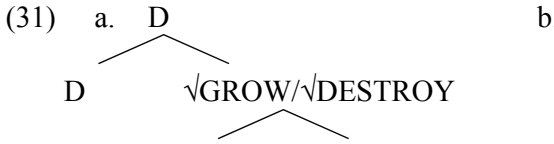
(i) a. hand-made cookies instrument
c. home-made cookies locative
d. paint-sprayed cart theme
e. clean-shaven face result

(ii) a. *boss-given flowers goal
b. *flower-given boss theme

Marantz proposes that the ungrammaticality of (iib) is due to a violation of Myers's Generalization.

[12] Pesetsky (1995) assumes that the zero head present in the double object construction is a null preposition introducing the theme rather than a null verb introducing the goal. See Anagnostopoulou (2003: 51-73) for arguments against Pesetsky's analysis of the double object construction.

become nouns, while light v's are functional heads in whose environments roots become verbs, as illustrated in (31):

(31) a. 

b. 

In this analysis, (30a) is ungrammatical because a light v introducing the agent/causer is illicit in the root-nominal[13] construction (31a). Its presence would create a verbal environment, as in (31b).[14] The grammaticality of transitive nominalizations with roots like √DESTROY, as in (32a) below, is due to the fact that such roots necessarily imply an external cause or agent, and a possessor optionally present in a nominal configuration which embeds √DESTROY can be interpreted as the causer of the externally caused change of state denoted by this root.

(32) a. Nero's destruction of the city
b. The city's destruction

Marantz's analysis of (30) can be straightforwardly extended to (11) if the goal in the double object construction is introduced by the light applicative verb v-APPL, as in structure (13). Assuming that vAPPL belongs to the class of heads that create a verbal environment, the ungrammaticality of nominalizations based on the double object construction is accounted for on a par with the ban of transitive √GROW-nominalizations. In this analysis, goals introduced by *to* are well-formed (see (12)) because they are introduced at the root-level (see (18), (19), (22) above) and therefore, they can be embedded under D yielding a nominal, as in (31a).

Turning to Greek, recall that genitive goals cannot be included in nominals while *se*-goals are licit in nominalizations, as was shown by (10a) and (10b), repeated here:

(10) a. ***I** *anaθesi* *mias ðiskolis* *sonatas*
The assignment a difficult.GEN sonata.GEN
tis *Marias* *apo tin ðaskala*
the Mary by the teacher
'The assignment of a difficult sonata of Mary by the teacher'

[13] According to Marantz (1997) only *–ing* nominalizations are true nominalizations in the sense of embedding a verbal construction into a nominal one.
[14] The restriction against nominalizations of verbs selecting for small clause complements (see fn 10) can, perhaps, be subsumed under Marantz's (1997) proposal that deverbal nominals can only be based on roots, if subjects of small clause complements are taken to require the presence of a Case-checking *verbal* head in order for their subject to be licensed.

b. *I anaθesi mias ðiskolis sonatas*
The assignment a difficult.GEN sonata.GEN
stin Maria apo tin ðaskala
to-the Mary by the teacher
'The assignment of a difficult sonata to Mary by the teacher'

Structures (13) and (22) proposed in section 1.3 for genitive and *se*-goals, respectively, correctly account for the facts in (10). Genitive goals in (10a) are introduced by vAPPL, as in (13), which cannot be included in nominals for the reasons outlined above. On the other hand, goals introduced by *se* are represented as in (22) which lacks vAPPL, and goal *se*-PPs are licit (10b).[15]

To sum up, in this section I argued that the difference between genitive and *se* goals in terms of the presence vs. absence of vAPPL correctly accounts for their distribution in passives and nominals. Having discussed the properties of genitive and *se*-goals, I now turn to benefactive constructions.

2. Benefactive Ditransitives

2.1. Forms of Beneficiaries

Like goals, beneficiaries are realized either as PPs or as DPs with morphological genitive case. Unlike goals, though, beneficiaries can be introduced by two different prepositions: the preposition *jia* 'for' and the preposition *se* 'to'. As a result, Greek has three variants of the benefactive construction: two prepositional ones (one with *jia* and one with *se*) and one non prepositional. These options are illustrated in (33):

---

[15] While nominalizations in which the goal surfaces as the non-prepositional complement of the noun are never possible with the verbs forming the Genitive Construction (see (10) above as well as (i) below), they are possible with the verbs forming the Double Accusative Construction (see (5c) above), as shown in (ii):

(i) a. *To xarisma enos vivliu/ *to xarisma enos peðiou*
The gift of a book/ *the gift of a child (i.e. to a child)
b. *To niciasma tu spitiu/ *to niciasma tu fititi*
The rental of the house/ *the rental of a student (i.e. to a student)

(ii) a. *I ðiðaskalia ton maθimatikon / i ðiðaskalia ton peðion*
The teaching of math/ the teaching of the children (i.e. to the children)
b. *I taktici pliromi ton logarisamon/ i taktici pliromi ton ipalilon*
The regular payment of the bills/ the regular payment of the employees (i.e. to the employees)
c. *To γriγoro servirisma tu fajitu/ to γriγoro servirisma tu pelati*
The fast serving of the food/ the fast serving of the customer (i.e. to the customer)

In Anagnostopoulou (2001) I argue that the above contrast can be accounted for if the goal in the Genitive construction is introduced by vAPPL while the goal in the Double Accusative construction is introduced at the root-level.

(33) ACC_{Theme} - $PP_{Beneficiary\ introduced\ by\ jia}$

a. *O Jianis eftiakse kafe jia tin Maria*
The Janis.NOM made.3S coffee.ACC for the Mary.ACC
'John made coffee for Mary'

ACC_{Theme} - $PP_{Beneficiary\ introduced\ by\ se}$

b. *O Jianis eftiakse kafe stin Maria*
The Janis.NOM made.3S coffee.ACC to-the Mary.ACC
'*John made coffee to Mary'

$GEN_{Beneficiary}$ – ACC_{Theme}

c. *O Jianis eftiakse tis Marias kafe*
The Janis.NOM made.3S the Mary.GEN coffee.ACC
'John made Mary coffee'

2.2. The properties of benefactive constructions.

As with goals, the alternation between genitive beneficiaries and beneficiaries introduced by *jia* 'for' corresponds to the English benefactive alternation. The genitive benefactive construction qualifies a double object construction, and *jia*-PPs behave like *for*-beneficiaries. *Se*-PPs behave on a par with genitive benefactive DPs rather than with *jia*-PPs with respect to the tests diagnosing 'double object-hood':

(i) *Recipient interpretation.* The examples in (34) illustrate an interpretational difference between genitive beneficiaries and beneficiaries introduced by *jia* (based on Kayne 1975:137; see section 5 below on a comparable contrast in French):

(34) a. *Aγorazi pexniδja tu egonu tu egonu tu*
Buy.3S toys.ACC the grandchild.GEN the grandchild.GEN his

b. *Aγorazi pexniδja jia ton egono tu egonu tu*
Buy.3S toys.ACC for the grandchild.ACC the grandchild.GEN his
'He buys some toys for the grandson of his grandson'

Using the genitive in (34a) is appropriate only when there is a direct connection between the subject and the beneficiary. The sentence implies that the grandchild of the grandchild of the subject actually receives the toys, an interpretation requiring that both the subject and the beneficiary be alive. (34b) shows no such restriction. The subject may be merely thinking of his future descendent. A comparable difference in interpretation characterizes the English sentences in (35):

(35) 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 (35a) the 'dative shifted' beneficiary is the recipient of the theme. In (35b) the prepositional beneficiary is not. The genitive construction in (34a) patterns with the double object construction in (35a), while beneficiaries introduced by *jia* in (34b) behave similarly to beneficiaries introduced by 'for' in (35b). Interestingly, beneficiaries introduced by *se* are also understood as recipients, i.e. (36) has an interpretation similar to the interpretation of (34a/ 35a):

(36) *Agorazi pexniđja s-ton egono tu egonu tu*
Buy.3S toys.ACC to the grandchild.ACC the grandchild.GEN his
'He buys some toys for the grandson of his grandson'

A different set of examples showing that double object beneficiaries have a recipient interpretation while *for* beneficiaries do not impose such a restriction is discussed in Beck and Johnson (2004). Consider the sentences in (37):

(37) a. Thilo cooked spätzle for Satoshi
b. Thilo cooked Satoshi spätzle

Beck and Johnson point out that the indirect object in (37a) has a significantly wider range of roles than the indirect object in (37b). For example, (37a) can be said in a situation in which Thilo cooked spätzle in place of Satoshi who was supposed to do the cooking, but wasn't able to for some reason. This interpretation is absent in (37b) which can only mean that Thilo cooked spätzle for Satoshi to have. Exactly the same difference is found in Greek. The *jia*-PP in (38a) is interpreted similarly to the *for*-PP in (37a). In contrast, the genitive DP in (38b) and the *se*-PP in (38c) can only be understood as recipients, on a par with the double object beneficiary in (37b):

(38) a. *O Jianis majirepse spanakopita jia ton Petro*
The Jianis.NOM cooked.3S spinach pie for the Peter
'Janis cooked spinach pie for Peter'
b. *O Jianis majirepse tu Petru spanakopita*
The Jianis.NOM cooked.3S the Peter.GEN spinach pie
'Janis cooked Peter spinach pie'
c. *O Jianis majirepse ston Petro spanakopita*
The Jianis.NOM cooked.3S to-the Peter spinach pie
'Janis cooked Peter spinach pie'

(ii) *Predicate restrictions.* The *se*-construction is only permitted with a limited set of predicates (e.g. buy-verbs, verbs of creation) similarly to the genitive construction. Both types are disallowed in many other environments which permit the *jia*-construction. Thus, while a verb like *magirevo* 'cook' permits all three options, as illustrated in (39), with a predicate like *diaschizo tin erimo* 'cross the desert' only the *jia*-construction is permitted, as illustrated in (40):

(39) a. *O Jianis majirepse tis Marias ceftedacia*
The Jianis.NOM cooked.3S the Mary.GEN meatballs.ACC
'John cooked Mary meatballs'
b. *O Jianis magirepse stin Maria ceftedacia*
The Jianis.NOM cooked.3S to-the Mary.ACC meatballs.ACC
c. *O Jianis magirepse ceftedacia jia tin Maria*
The Jianis.NOM cooked.3S meatballs.ACC for the Mary.ACC
'John cooked a meal for Mary'

(40) a. **O Jianis ðiesçise tis Marias tin erimo*
The Jianis.NOM crossed.3S the Mary.GEN the desert.ACC
'*John crossed Mary the desert'

b. **O Jianis ðiesçise s-tin Maria tin erimo*
The Jianis.NOM crossed.3S to-the Mary.ACC the desert.ACC
'*John crossed Mary the desert'

c. *O Jianis ðiesçise tin erimo jia tin Maria*
The Jianis.NOM crossed.3S the desert.ACC for the Mary.ACC
'John crossed the desert for Mary'

Predicates behaving like the ones in (39) are e.g. *ftiaxno kafe* 'make coffee', *chtizo* 'build', *ravo* 'sew', *pleko* 'knit' etc. which in English allow the double object structure (see e.g. Pesetsky 1995: 142). Predicates behaving similarly to the ones in (40) are e.g. *katedhafizo to ktirio* 'demolish the building', *dholofono ton proedhro* 'murder the president', which in English do not allow the double object structure. The preposition *jia* can add a beneficiary argument to all kinds of different predicates, while *se*-beneficiaries are allowed with a restricted set of verbs. Genitives occur with a superset of the verbs selecting for *se*-beneficiaries. Except for buy-verbs and verbs of creation which license genitive and *se*-beneficiaries, genitive DPs are also licensed with some transitive predicates e.g. *break the door* receiving a malefactive (adversely affected) interpretation.

In conclusion, predicate restrictions constitute the second criterion distinguishing genitive and *se*-beneficiaries from *jia*-beneficiaries. The former two are licensed by the specific semantics of the verbs, hence qualifying as arguments; the latter are independent of the verb qualifying as adjuncts.

(iii) *Passivization.* The third diagnostic is based on the behavior of beneficiaries in passives. Passives do not permit *se*-benefactive PPs, as shown in (41b), (42b) similarly to genitives as in (41a), (42a) and unlike *jia*-PPs, which are well-formed as illustrated by (41c), (42c):

(41) a. **O kafes ftiaxtice tis Marias (apo ton Petro)*
The coffee.NOM made.NACT the Mary.GEN (by the Peter)
'*The coffee was made Mary by Peter'

b. **O kafes ftiaxtice stin Maria (apo ton Petro)*
The coffee.NOM made.NACT to-the Mary.ACC (by the Peter)

c. *O kafes ftiaxtice jia tin Maria (apo ton Petro)*
The coffee.NOM made.NACT for the Mary.ACC (by the Peter)
'The coffee was made for Mary by Peter'

(42) a. **To fajito majireftice tis Marias (apo ton Petro)*
The food.NOM cooked.NACT the Mary.GEN (by the Peter)
'*The meal was cooked Mary by Peter'

b. **To fajito majireftice stin Maria (apo ton Petro)*
The food.NOM cooked.NACT to-the Mary.ACC (by the Peter)

c. *To fajito majireftice jia tin Maria (apo ton Petro)*
The food.NOM cooked.NACT for the Mary.ACC (by the Peter)
'The meal was cooked for Mary by Peter'

It is important to note that the restriction against double object beneficiaries in passives illustrated in (41) and (42) is not identical to the restriction against double object goals in passives discussed in sections 1.2 and 1.4 above (see also Anagnostopoulou 1999b for discussion). More specifically, as discussed in Anagnostopoulou (1999a,b, 2003), the ban against double object goals in Greek passives is not absolute. While passivization is prohibited from operating on ditransitive predicates which overtly project a genitive goal (see (8a) repeated here), the restriction on genitive goals can be canceled when the goal is realized as a clitic or is related to a doubling clitic, as in (43):

(8) a. ?**To vivlio xaristice tis Marias*
The book.NOM award.NACT the Maria.GEN
apo ton Petro
from the Petros
'?*The book was awarded Mary by Peter'

(43) *To vivlio tis xaristice (tis Marias)*
The book.NOM Cl.GEN award.NACT the Maria.GEN
'The book was awarded to Mary'

Recall from section 1.4. that genitive goals in (8a) block NP-movement because they are higher than the base position of the nominative theme and not contained in the same domain as the nominative theme, as schematized in (44).

(44) [NOM [$_{\text{Domain }\alpha}$ DAT [$_{\text{Domain }\beta}$ t_{NOM}]]]

In Anagnostopoulou (1999a,b 2003), I argue that in clitic-constructions the intervening features of the genitive goal move out of the way of the lower nominative theme, as schematized in (45), and thus the higher goal argument does not count as an intevener.

(45) [NOM [DAT-Clitic [$_{\text{Domain }\alpha}$ $t_{\text{DAT-Clitic}}$ [$_{\text{Domain }\beta}$ t_{NOM}]]]]
STEP II
STEP I

In this analysis, clitic doubling is a manifestation of local movement which licenses an otherwise impossible movement operation.

Unlike goal constructions, theme passivization does not become grammatical under cliticization or clitic doubling of the genitive beneficiary:

(46) a. **O kafes tis ftiaxtice (tis Marias)*
The coffee.NOM Cl.GEN made.NACT the Mary.GEN
apo ton Petro
by the Peter
' *The coffee was made Mary by Peter'

b. **To fajito tis majireftice (tis Marias)*
The food.NOM Cl.GEN cooked.NACT the Mary.GEN
apo ton Petro
by the Peter
'*The meal was cooked Mary by Peter'

The fact that theme passivization in the presence of a double object beneficiary is beyond repair, suggests that the ban against double object (genitive or *se*)-beneficiaries in passives should not to be attributed to locality. If the ungrammaticality of these examples were to be explained in terms of (44), then clitic doubling and cliticization of the intervening beneficiary would rescue theme passivization, contrary to facts. I therefore propose that the Greek double object benefactive construction cannot be the input to passivization at all, unlike the double object goal construction where passivization is, in principle, possible. It appears that the projection of a double object beneficiary is possible only in the context of a transitive v (vTR).

Genitives are accepted in passives formed with verbs of creation, provided that the agent is not expressed overtly in a by-phrase, as shown in (47). Crucially, the genitive argument in (47) is interpreted as being simultaneously the agent and the person that is negatively affected by the cooking event, i.e. it does not bear the beneficiary role. The presence of a doubling clitic is obligatory, as shown in (47), as is always the case in passives (see the discussion of (8a) vs. (43) above).

(47) *To fajito ðen ?*(tis) majireftice tis Marias*
The food.NOM not Cl.GEN cooked.NAct the Mary.GEN
*kala (*apo ton Petro)*
well by the Peter
'The meal was not cooked well by Mary and Mary was unhappy about it'

In short, passives add an interesting wrinkle to the theory of double object constructions, as goal, benefactive and adversely affected datives are subject to different restrictions. Before concluding, I would like to point out that the varying properties of double object goal- and benefactive-passives is not an idiosyncratic property of Greek but falls under a more general crosslinguistic pattern. More specifically, Spanish shows a similar contrast. While theme passivization in the presence of dative goal is freely allowed, with or without clitic doubling (as indicated in (48a) where the doubling clitic is put in brackets), theme passivization in the presence of an *a*-dative beneficiary, which requires clitic doubling, is prohibited (48b)[16] (see section 5 below for discussion of obligatory doubling of Spanish beneficiaries). These facts are discussed in Demonte (1995:11-12) and have been confirmed to me by Josep Quer (personal communication):[17]

[16] See Demonte (1995), Bleam (1999), Ormazabal & Romero (2001), Anagnostopoulou (2003), Cuervo (2003) for arguments that the Spanish goal construction without doubling is a prepositional goal ditransitive and the one with doubling a double object construction. I will come back to this in section 5.
[17] Josep Quer points out that benefactives are only licensed in impersonal passives in Spanish:
(i) *Se *(le) preparó un gran pastel a María*
'A big cake has been made for Maria'
This probably provides the key to the understanding of the ban against beneficiaries in personal passives,

(48) a. *El premio Nobel (le) fue concedido a Cela el año pasado*
The Nobel prize Cl.DAT was awarded to Cela last year
'The Nobel prize was awarded to Cela last year'
b. **La casa le fue pintada a Juan anteayer*
The house Cl.DAT was painted to Juan the day before yesterday
'The house was painted Juan the day before yesterday'

According to Demonte (1995: 11), a similar contrast is also attested in English. While theme-passivization in the presence of a DP-goal is, for some speakers, grammatical, theme passivization in the presence of a DP-beneficiary is for those speakers ill-formed (see (49a,b)). Moreover, goal passivization is always perfect, while beneficiary passivization is not when the direct object is definite (see (49c,d,e)):

(49) a. (?) The book was given Mary
b. *The sandwich was fixed Mary
c. Mary was given the book
d. *Mary was fixed the sandwich
e. Mary was fixed a sandwich

(Native speakers of English disagree on the judgments in (49), as pointed out by Demonte 1995: 11, fn 9; the disagreement on these data has been confirmed to me by David Pesetsky, personal communication.)

(iv) *Nominalizations.* The final test showing that *se*-phrases qualify as double object beneficiaries, like genitive DPs and unlike *jia*-PPs, comes from the distribution of beneficiaries in nominalizations. Nominalizations including the form with *se* are impossible, as shown in (50b), (51b), like nominalizations related to the genitive construction in (50a), (51a) and unlike nominalizations based on *jia*-benefactives in (50c), (51c):

(50) a. **I sinθesi tu traγuðju tis Marias*
The composition the song.GEN the Mary.GEN
b. **I sinθesi tu traγuðju stin Maria.ACC*
The composition the song.GEN to-the Mary
c. *I sinθesi tu traγuðju gia tin Maria*
The composition the song.GEN for the Mary.ACC
'The composition of the song for Mary'

(51) a. **To majirema tu fajitu tis Marias*
The cooking the food.GEN the Mary.GEN
b. **To majirema tu fajitu stin Maria*
The cooking the food.GEN to-the Mary.ACC
c. *To majirema tu fajitu jia tin Maria*
The cooking the food.GEN for the Mary.ACC
'The preparation of the food for Mary'

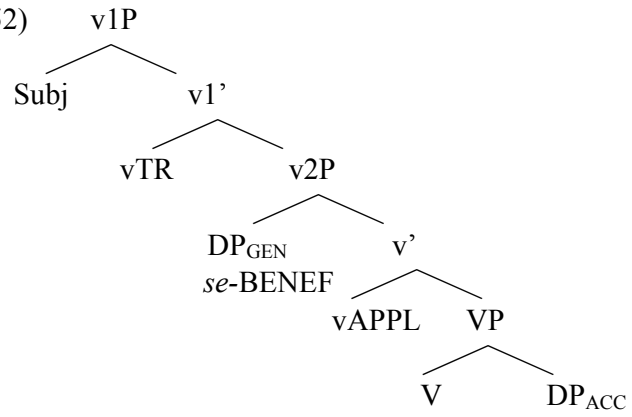
---

but I am currently not in a position to uncover its significance. Perhaps this fact is related to the Greek facts in (47).

2.3. The structures of benefactive constructions.

On the basis of the discussion in section 2.2, I propose that genitive and *se*-constructions are double object constructions. They are represented as in (52):

(52)



Under structure (52) the properties (i)-(iv) discussed in section 2.2 can be accounted for as follows:

(i) *Recipient interpretation.* The recipient interpretation of double object beneficiaries can be accounted for in terms of the proposal that vAPPL assigns a recipient theta-role to its specifier. Recall that genitive DPs can also have a malefactive (adversely affected) interpretation, entailing that a more refined typology of applicatives is necessary in order for the various interpretations of double object arguments to be accounted for. I would like to suggest that double object benefactive/ malefactive constructions involve two different types of vAPPL, one assigning the role "recipient" (vAPPL1) and one assigning the role " (adversely) affected" (vAPPL2) to their specifiers. *Se* PPs and genitive beneficiaries are introduced by vAPPL1. Adversely affected genitives are introduced by vAPPL2. (Cf. Kratzer 1994 who proposes that there are two different types of transitive Voice, vTR, one assigning the role Agent and one assigning the role Possessor.)

(ii) *Predicate restrictions.* S*e*-beneficiaries and benefactive genitives can be added only to certain types of predicates (buy-verbs, creation verbs) because vAPPL1 imposes selection restrictions on its complement related to the recipient role it assigns. Similarly, malefactive genitives are licensed when the complement of vAPPL2 denotes an event that can be perceived of as negatively affecting the genitive argument.

(iii) *Passives.* In the preceding section, I have concluded that the projection of a double object beneficiary is possible only in the context of vTR. In the vAPPL analysis this constraint can be expressed in terms of selection. Only vTR, as in (52) can select for a v2P headed by a benefactive vAPPL1. A passive vINTR not overtly projecting an agent and not assigning Case cannot combine with a benefactive vAPPL1. Therefore double object beneficiaries are absolutely impossible in passives. Adversely affected genitives have been seen to be licit in passives. This suggests that the applicative head vAPPL2 can combine with a passive vINTR. In addition, the agent cannot be overtly expressed in a by-phrase and the adversely affected genitive is also interpreted as the

agent of the event. To account for these effects, I will assume that the two heads, passive vINTR and vAPPL2, are "fused" into one in Greek. See Pylkkänen (2002) for arguments that light vs can occur "packaged" into one syntactic head, this being a point of variation across languages and constructions.

(iv) *Nominalizations.* Finally, benefactive vAPPL1 as well as vAPPL2 cannot be present in nominalizations, either because of *Myers's (1984) Generalization* (Pesetsky 1995) or because they are verbalizing heads (Marantz 1997). See the discussion of goal nominalizations in section 1.4 above.

Structure (52) predicts that beneficiaries asymmetrically c-command themes. This is indeed correct. Consider first binding in the genitive construction:

(53) a. ?*O arçitektonas sçeðiase tu enos pelati*
The architect sketched the one client.GEN
to spiti tu alu[18]
the house.ACC the other.GEN
'The architect sketched each client the other's house'

b. **O arçitektonas sçeðiase tu iðioktiti tu alu*
The architect sketched the owner.GEN the other.GEN
to ena spiti
the one house.ACC
'The architect sketched the other's owner each house'

Next, consider binding in the *se*-construction:

(54) a. *O arçitektonas sçeðiase ston ena pelati*
The architect sketched to-the one client.ACC
to spiti tu alu
the house.ACC the other.GEN
'The architect sketched each client the other's house'

b. **O arçitektonas sçeðiase ston iðioktiti tu alu*
The architect sketched the owner.ACC the other.GEN
to ena spiti
the one house.ACC
'The architect sketched the other's owner each house'

Note that in the ACC>*se*-beneficiary permutation, which is possible in Greek, binding of the theme into the beneficiary is deviant, as illustrated in (55), suggesting that the order feeding binding is the *se*-beneficiary>ACC order in (54). Compare the facts in (55) to the goal facts in (15) discussed in section 1.3:

[18] As noted by Markantonatou (1994) and Anagnostopoulou (2003) indefinite, and quantificational genitive indirect objects are marginal in Greek. Abstracting away from this, the reciprocal interpretation in (53a) is possible.

(55) a. ?**O raftis ekane laθos ce*
The tailor made a mistake and
erapse to ena kustumi ston ayorasti tu alu
sew.3S the one suit.ACC to-the buyer.ACC the other.GEN
b. ?* *O arçitektonas sçeðiase to ena spiti*
The architect sketched the one house.ACC
s-ton iðioktiti tu alu
to-the owner.ACC the other.GEN

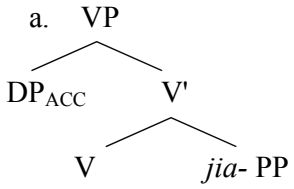
Turning to the *jia*-benefactive construction, it allows for two permutations, as exemplified by (56):

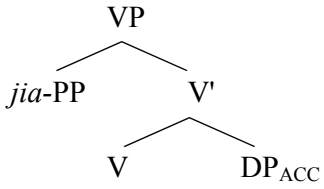
(56) a. *Eftiaksa to fajito jia tin Maria*
Made.1S the food.ACC for the Mary.ACC
b. *Eftiaksa jia tin Maria to fajito*
Made.1S for the Mary the food.ACC
'I made the food for Mary'

In each order, precedence matches c-command *modulo* the preposition, similarly to prepositional goal constructions discussed in section 1.2. (57) shows that in the ACC>PP permutation the theme asymmetrically binds into the beneficiary. (58) shows that in the PP>ACC permutation the beneficiary asymmetrically binds into the theme:

(57) a. *O raftis ekane laθos ce*
The tailor made a mistake and
erapse to ena kustumi jia ton ayorasti tu alu
sew.3S the one suit.ACC for the buyer.ACC the other.GEN
b. **O raftis ekane lathos ke*
The tailor made a mistake and
erapse to kustumi tu alu jia ton ena pelati
sew.3S the suit.ACC the other.GEN for the one client
(58) a. *O arçitektonas sçeðiase jia ton ena pelati*
The architect sketched for the one client.ACC
to spiti tu alu
the house.ACC the other.GEN
b. **O arçitektonas sçeðiase jia ton iðioktiti tu alu*
The architect sketched for the owner.ACC the other.GEN
to ena spiti
the one house.ACC
'The architect sketched the other's owner each house'

The above binding facts lead to the structures in (59) for *jia*-benefactive constructions:

(59) a. 

b. 

The same structures have been proposed in section 1.3. for *se*-goal constructions (compare (59) to (21)).

It should be pointed out, though, that there is a potential tension between the structures in (59) which place *jia*-PPs as arguments of the base verb and the data in (40), repeated here:

(40) a. **O Jianis ðiesçise tis Marias tin erimo*
The Jianis.NOM crossed.3S the Mary.GEN the desert.ACC
'*John crossed Mary the desert'

b. **O Jianis ðiesçise s-tin Maria tin erimo*
The Jianis.NOM crossed.3S to-the Mary.ACC the desert.ACC
'*John crossed Mary the desert'

c. *O Jianis ðiesçise tin erimo jia tin Maria*
The Jianis.NOM crossed.3S the desert.ACC for the Mary.ACC
'John crossed the desert for Mary'

The fact that *jia* beneficiaries can be added to any predicate, leads to their classification as adjuncts.

And indeed, there is independent evidence for the adjuncthood of *jia* beneficiaries, as opposed to genitive- and *se*-beneficiaries and genitive and *se*-goals which qualify as arguments. Greek has a kind of VP ellipsis that seems to correspond to *do so* ellipsis in English.[19] More specifically, Greek employs the expression *kano to idhio* 'do the same' whose antecedent has to include internal arguments but may exclude VP-adjuncts. (60) exemplifies the construction:

(60) a. *O Kostas efaje to milo stin kuzina*
The Kostas ate the apple in-the kitchen
ce o Petros ekane to iðjo ston kipo
and the Peter did the same in the garden
'Kostas ate the apple in the kitchen and Peter did so in the garden'

[19] This construction has not been studied in the literature. One property it shares with *do so* ellipsis is that it is licensed only with eventive predicates:

(i) **O Petros kseri Γalika ke i Maria kani to iðjo*
The Peter knows French and the Mary does the same
'*Peter knows French and Mary does so too'

Another property the two constructions have in common is that they do not permit Antecedent Contained Deletion:

(ii) **O Petros sinantise ton anðra pu i Maria ekane to iðjo*
The Peter met the man that Mary did the same
'*Peter met the man that Mary did so too'

b. **O Kostas pije stin Olanδia*
The Kostas went to-the Holland
ce o Petros ekane to iδjo s-tin Γalia
and the Peter did the same to the France
'*Kostas went to Holland and Peter did so to France'

The locative phrase in (60a) is an adjunct and therefore *kano to idhio* can be anaphoric to the V+DP constituent excluding the PP. In (60b), on the other hand, the locative is an argument of *pao* 'go' and for this reason the antecedent of *kano to idhio* must include the PP. Thus, the *kano to idhio* construction can be used as a test for argumenthood.

On the basis this diagnostic it can be inferred that *jia* beneficiaries are adjuncts, while all other types of beneficiaries and goals qualify as arguments. The benefactive sentences in (61) and the goal sentences in (62) provide the relevant examples:

(61) a. *O Petros eftiakse kafe jia tin Maria ce*
The Peter.NOM made coffee for the Mary.ACC and
o Kostas ekane to iδjo jia tin Katerina
the Kostas did the same for the Katerina
'?Peter made coffee for Mary and Kostas did the same/ did so for Katerina'

b. ?* *O Petros eftiakse kafe stin Maria ce*
The Peter.NOM made coffee to-the Mary.ACC and
o Kostas ekane to iδjo stin Katerina
the Kostas did the same to-the Katerina
'*Peter made Mary coffee and Kostas did so Katerina'

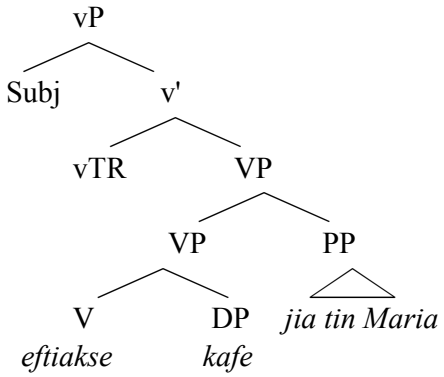
c. ?* *O Petros eftiakse kafe tis Marias ce*
The Peter.NOM made coffee the Mary.GEN and
o Kostas ekane to iδjo tis Katerinas
the Kostas did the same the Katerina.GEN
'*Peter made Mary coffee and Kostas did so Katerina'

(62) a. ?* *O Petros estile to vivlio stin Maria ce*
The Peter.NOM sent the book.ACC to-the Mary.ACC and
o Kostas ekane to iδjo stin Katerina
the Kostas did the same to the Katerina
'?*Peter sent the book to Mary and Kostas did so to Katerina'

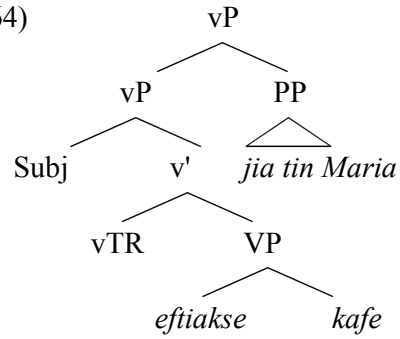
b. ?* *O Petros estile to vivlio tis Marias ce*
The Peter.NOM sent the book.ACC the Mary.GEN and
o Kostas ekane to iδjo tis Katerinas
the Kostas did the same the Katerina.GEN
'*Peter sent Mary the book and Kostas did so Katerina'

The grammaticality of (61a) can be accounted for if *jia* beneficiaries are adjoined to a verb phrase constituent, either VP, as in (63) or vP, as in (64):

(63)



(64)



Under either representation, the antecedent of *kano to idhio* is an XP, VP in (63), vP in (64),[20] explaining why (61a) is grammatical. In contrast, the antecedent of *kano to idhio* is either an intermediate-level X' constituent - vAPPL' in (61b,c) / (62b), V' if the goal-PP in (62a) has the structure (19) – or no constituent at all, if the goal-PP in (62b) has the structure in (18), explaining why these sentences are ungrammatical.

The above considerations lead to the conclusion that *jia*-benefactive constructions present conflicting evidence for constituency. On the one hand, binding suggests that they are attached low, which leads to their analysis as arguments.[21] On the other hand,

---

[20] See Beck and Johnson (2004) for an argument based on repetitive vs. restitutive *Again* (see section 3) that *for*-beneficiaries in English have the structure in (64). If it turns out that (64) is the correct structure for Greek as well, then it must be assumed that the subject position contains a trace of the raised subject (or a null resumptive pro connected to a clitic left dislocated subject; see Alexiadou & Anagnostopoulou 1998).

[21] In English, *for*-benefactive constructions behave similarly to-goal constructions with respect to Barss and Lasnik's tests, i.e. precedence matches c-command, as shown in (ia,b). As pointed out to me by Orin Percus, though, *for*-benefactive constructions in English do not permit (backward) co-reference, as shown in (ic), for unclear reasons:

(i) a. John designed every house$_j$ for its$_j$ future owner
b. *John designed his$_j$ house for every client$_j$
c. ?*John built her$_j$ house for Mary$_j$

The awkwardness of (ic) constitutes an additional complication for the analysis of prepositional benefactive constructions, which cannot be fully assimilated to prepositional goal constructions where backward coreference is licit and backward binding not:

(ii) a. *John returned his$_j$ book to every man$_j$
b. John returned her$_j$ book to Mary$_j$

Note that the same contrast obtains in Greek:

(iii) a. ?**O Petros extise to spiti tis$_j$ jia tin Maria$_j$*
The Peter built the house her for Mary

ellipsis suggests that they are adjuncts attached above the verbal constituent that contains the theme. The adjunct analysis is further corroborated by the observation that they can be added to any predicate, unlike genitive and *se*-beneficiaries. Even though I will not attempt to resolve the issue here, I would like to point out that the problem posed by *jia*-beneficiaries is not unique. Similar *phrase structure paradoxes* posed by PPs have been noted and are extensively discussed in the work of Pesetsky (1995), Phillips (1996), Lechner (2003) and others.

3. Oehrle's contexts and the ambiguity of *se*-goals

We have seen that *se*-PPs can occur in double object benefactive constructions, unlike *to*-PPs which are limited to goal prepositional ditransitives. There is a related important difference between *se*-PPs and *to*-PPs, which can be detected when both realize goals: *se*-goals are licit in, so called, "Oehrle's contexts", which exclude *to*-goals. Consider the sentences in (65):

(65) a. Nixon gave Mailer a book
b. Nixon gave a book to Mailer

As pointed out by Oehrle (1976), the double object construction in (65a) has a reading which is paraphrased in (66):

(66) "Mailer wrote a book which he wouldn't have been able to write if it hadn't been for Nixon"

(65b) cannot be interpreted this way. Nixon must be understood as having performed an action. This difference between prepositional ditransitives and double object constructions becomes clear once the subject is replaced by a DP which cannot be an agent (the examples below are taken from Oehrle 1976 and Pesetsky 1995):

(67) a. The war years gave Mailer his first big success
b. *The war years gave his first big success to Mailer
(68) a. Katya taught me Russian
b. Katya taught Russian to me
c. Lipson's textbook taught me Russian
d. *Lipson's book taught Russian to me

As pointed out by Anagnostopoulou (1999b), Greek *se*-goals, unlike English *to*-goals, are licit in Oehrle's contexts (69), along with genitive DPs (70).

---

b. ?*O Petros epestrepse to vivlio tis$_j$ s-tin Maria$_j$*
The Peter returned the book her to Mary

I leave this issue open for further research.

(69) a. *Ta xronia tis eksorias eðosan ston Θeoðoraci*
The years of exile.NOM gave.3P to-the Theodorakis
tin proti meɣali epitiçia
the first big success.ACC
'The years of exile gave Theodhorakis his first big success'

b. *O ɣamos xarise stin Maria staθerotita*
The marriage.NOM gave to-the Mary stability
'Marriage gave Mary stability'

(70) a. *Ta xronia tis eksorias tu eðosan tu Θeoðoraci*
The years of exile.NOM Cl.GEN gave.3P the Theodorakis.GEN
tin proti meɣali epitiçia
the first big success.ACC
'The years of exile gave Theodhorakis his first big success'

b. *O ɣamos tis xarise tis Marias staθerotita*
The marriage.NOM Cl.GEN gave the Mary.GEN stability.ACC
'Marriage gave Mary stability'

The grammaticality of *se*-goals in Oehrle's environments, which may only tolerate double object goals in English and other languages, provides evidence that *se*-PPs may, in fact, realize double object goals, despite appearances to the contrary. Interestingly, there is a tendency for the goal-PPs to precede theme-DPs in examples like (69), which is reminiscent of the tendency of genitive goals to precede accusative themes in the genitive construction (see the text surrounding example (15) in section 1 above). Unlike *se*-benefactive PPs, which only occur in the double object frame, *se*-goal PPs are also employed in prepositional ditransitives, explaining why *se*-goal constructions fail the tests diagnosing "double-objecthood" such as animacy restrictions, nominalizations and passivization, as discussed in section 2. Non-animate *se*-PPs are licit in prepositional ditransitives, which can furthermore be the input to nominalizations and theme-passives, yielding well-formed results. For this reason, the only diagnostic that can reveal the ambiguity of *se*-goals is provided by examples like (69), as prepositional goals are ruled out in these contexts.

4. *Se*-PPs vs. *to*-PPs

The discussion in the preceding sections has established an important disparity in the distribution of *se*-PPs and *to*-PPs in Greek and English ditransitives. The former realize prepositional goals but may also realize goals and beneficiaries in constructions that qualify as double object/ applicative constructions. The latter occur exclusively in goal prepositional ditransitives. The question that arises is what explains this difference. In this section, I will argue that English *to* is directional and resultative, properties which prevent it from introducing arguments carrying the beneficiary role and from occurring in the double object frame. Greek *se* lacks these properties and therefore, has a wider distribution.

I will start with the facts illustrating the difference between *se* and *to* with respect to

the feature 'directional'.[22] To begin with, *se* occurs in environments where English employs the non-directional prepositions *in* or *at*, as shown in (71a) and (71b). English *to* is ruled out in these environments because it is directional.

(71) a. *O Petros zi stin Americi*
The Peter lives.3S to-the America
'Peter lives in the US'
b. *O Petros emine sto spiti*
The Peter stayed.3S to-the home
'Peter stayed at home'

Furthermore, *to* has the capacity to combine with pure locative prepositions like *in* and *on* yielding a directional meaning (see Pesetsky 1995: 141-140, examples (376)):

(72) a. Mary pulled the trunk on the mat/ onto the mat
b. Mary pushed the heavy box in its proper place/ into its proper place
c. Sue dragged the sack in the office/ into the office
d. Mary shlepped the box in the office/ into the office
e. Mary lifted the box on the platform/ onto the platform
f. Mary gently lowered the saddle on the horse/ onto the horse
g. Mary drove the car in the garage/ into the garage
h. Mary lowered the balloon on the runway/ onto the runway

According to Pesetsky, only the pure locative reading is possible for *in* and *on* in the above examples. For instance, the car in the *in the garage* version of (72g) must be in the garage during the entire event of driving. On the other hand, the car is not in the garage and ends up being in the garage in the *into the garage* version of (72g). In the Greek counterparts of (72) *se* is invariably used, and it is ambiguous between a pure locative and a directional reading. For example, in (73) below (the Greek counterpart of 72g), the *se-PP* can describe a situation in which the car is in the garage throughout the driving event as well as a situation in which the car starts outside the garage and ends up in the garage as a result of Mary's driving.

(73) *I Maria oðijise to aftokinito s-to garage*
The Maria drove the car to-the garage
'Mary drove the car in/ into the garage'

Thus, *se* is neither a locative corresponding to *in* nor a directional corresponding to *into*. *Se* is unspecified for directionality and therefore, it is compatible with both interpretations.

[22] In the typological literature (Talmy 1985) languages are divided into two main categories. (a) Those that express the distinction between direction and pure location by verbs and prepositions. (b) Those that express the distinction between direction and pure location only by the verb. English is taken to belong to category (a) and Spanish to category (b). Unlike Ancient Greek which fell under category (a), Modern Greek belongs to category (b), i.e. locative prepositions generally do not lexicalize the distinction between motion and pure location, which is expressed exclusively by verbs (see Scopeteas 2003 for discussion of the history of Greek locative prepositions).

The fact that *to*-PPs denote direction while *se*-PPs can denote location or direction correlates with a significant contrast in their function in goal-ditransitives. There is one class of motion predicates that requires the presence of *to* in English and disallows the presence of *se* in Greek. More specifically, verbs that denote "continuous causation of accompanied motion in some manner" (an external agent is involved at all stages of motion) disallow the double object construction, as shown in (75), unlike verbs of "instantaneous causation of ballistic motion" (verbs denoting motion that is initiated by an external causer but its continuation depends on natural forces) which may occur in the double object frame along with the prepositional frame, as illustrated in (74) (see Pinker 1989; Gropen et al. 1989; Pesetsky 1995: 137-141, the data are Pesetsky's examples (370) and (371)):

(74) a. Mary threw John the book
b. Mary threw the book to John
c. Mary flung Sue the package
d. Mary flung the package to Sue
e. Mary kicked John the ball
f. Mary kicked the ball to John

(75) a. Mary pulled the trunk to Sue
b. *Mary pulled Sue the trunk
c. Mary pushed the boulder to John
d. *Mary pushed John the boulder
e. Mary schlepped the box to John
f. *Mary schlepped John the box

Pesetsky proposes that the ungrammaticality of the double object construction in (75) is due to the specialized semantics of *to,* the presence of which is required to assign a theta-role to the goal when the selecting predicate denotes the presence of an external agent at all stages of motion. Condition (76) (Pesetsky's 1995: 141 condition (377)) captures the obligatory presence of *to* introducing goals with these verbs:

(76) A Goal arrived at because of continuous imparting of force must be θ-selected by *to.*

Since the double object construction lacks *to*, it is not licensed with verbs denoting continuous imparting of force.

Interestingly, verbs of "continuous causation of accompanied motion in some manner" in Greek do not tolerate the preposition *se*, but require *mechri, eos* 'up to' instead (see Anagnostopoulou 2003):

(77) a. *Traviksa tin poliθrona (?*stin)/ mexri/ eos tin Maria*
Pulled.1S the armchair.ACC to/ up to the Maria
'I pulled the armchair to Mary'
b. *Xamilosa to fos (*s-tin)/ mechri/ eos tin Maria*
Lowered.1S the light.ACC to/up to the Maria
'I lowered the light to Mary'

Both *mechri* and *eos* are directional, as is evidenced by the fact that they are licit as complements of *pigeno* 'go' (78a) and illicit with *meno* 'live' (78b):[23]

(78) a. *I Maria pije mechri/ eos ton Vorio Polo*
The Maria went to the North Pole
'Mary went to the North Pole'
b. **O Petros meni mexri/ eos tin Ameriki*
The Peter lives to the America
'*Peter lives to the US'

The contrast between *to* and *se* as well as the contrast between *se* and *mechri/ eos* suggest that verbs of "continuous causation of accompanied motion in some manner" must combine with goals introduced by prepositions that are specified as directional, i.e. it is the semantic feature DIRECTION/ PATH that underlies θ-selection of Goals by *to* in Pesetsky's Condition (76).[24]

The meaning difference between *to*-PPs and *se*-PPs described so far can explain why *se* is associated with more theta-roles than *to* in ditransitives. *To* is directional and is therefore limited to goals. On the other hand, we have seen that *se* may introduce goals and pure locations. I propose that the unspecified meaning of *se* is responsible for the fact that it may also introduce beneficiaries, i.e. the lack of specialized semantics makes *se* compatible with at least three different roles: goal, location, beneficiary.

I now turn to another set of facts which illustrate that *to*-PPs and *se*-PPs have a different behavior with respect to telicity. This potentially explains why the former are limited to prepositional ditransitives while the latter can also occur in double object constructions.

As is well-known (see e.g. Levin & Rapapport 1995; Snyder 2001; Beck and Snyder 2001 for recent discussions and references), English *to*-PPs can create accomplishments by combining with activity verbs. Greek *se*-PPs differ in this respect: they cannot turn atelic predicates into telic. Consider the sentences in (79) and (80):

(79) a. Paul walked for an hour
b. *Paul walked in an hour
c. Paul walked to the summit in an hour

---

[23] These prepositions also have a temporal use corresponding to English *until*.

[24] According to Pesetsky, condition (76) also explains why the preposition *at* used to express approximation to a goal is compatible with verbs denoting "instantaneous causation of ballistic motion" and incompatible with verbs of "continuous causation of accompanied motion in some manner", as shown by the data in (i) and (ii), respectively (Pesetsky's examples (373), (374)):

(i) a. Mary threw the book at John
b. Mary flung the package at Sue
c. Mary kicked the ball at John
d. John flicked the coin at her

(ii) a. *Mary pulled the trunk at Sue
b. *Mary pushed the boulder at John
c. *Mary dragged the sack at Bill
d. *Mary schlepped the box at John

The Greek counterparts of the sentences in (ii) employing the preposition *pros* 'towards' which expresses approximation to a goal are grammatical (see Anagnostopoulou 2003).

(80) a. *O Petros perpatise jia/ epi mia ora*
The Peter walked for/ for one hour
'Peter walked for an hour'
b. **O Petros perpatise se mia ora*
The Peter walked in one hour
'*Peter walked in an hour'
c. **O Petros perpatise stin korifi se mia ora*
The Peter walked to-the summit in one hour
'Peter walked to the summit in an hour'

(79a) and (80a) vs. (79b) and (80b) exemplify for English and Greek, respectively, the well known fact that activity predicates are compatible with *for*-adverbials and incompatible with *in*-adverbials (see Dowty 1979 and many others). *In*-adverbials become licit, though, when activities combine with directional *to*-PPs, as in (79c), showing that the predicate qualifies as an accomplishment. In contrast, *in*-adverbials are impossible in examples like (80c), which contain locative *se*-PPs, indicating that Greek *se*-phrases cannot alter the telicity of the base predicate (Horrocks and Stavrou 2003).

A possible explanation for this contrast between *to*-PPs and *se*-PPs would be to resort to a property that English has and Greek lacks: the availability of resultative constructions. More specifically, Snyder (1995) and Beck and Snyder (2001) argue on the basis of a comparative examination of English, German, Japanese, Khmer, Korean, Mandarin, French, Hebrew, Hindi/ Urdu, Russian and Spanish that the telic interpretation of predicates like *walk to the summit* is possible only in languages that have resultatives and a number of further properties correlating with resultative formation. These are: (i) Availability of verb-particle constructions. (ii) Availability of root compounding as a productive means of word formation (Snyder 1995; 2001). (iii) Availability of restitutive readings of *again* along with repetitive readings (von Stechow 1995; Beck and Snyder 2001). In the repetitive interpretation of *again*, an action has happened before. In the restitutive interpretation, the result of an action has happened before, but not necessarily the action itself.

To illustrate, *walk to the summit* is an accomplishment in English which also allows resultative constructions as in (81a), root compounding as in (81b), and a restitutive repetitive ambiguity of (82a) which is interpreted either as (82b) or as (82c):

(81) a. Mary beat the metal smooth
b. worm can
(82) a. Sally walked to the summit again
b. Sally walked to the summit, and she had done that before *repetitive*
c. Sally walked to the summit, and she had been there before *restitutive*

On the other hand, *walk to the summit* is not an accomplishment in Spanish since it cannot be combined with an *in an hour* adverbial (83a). In this language, resultatives (83b), root compounding (83c), and restitutive *again* interpretations (83d) are also ruled out:

(83) a. **Juan anduvo hasta la cima de la montaña en una hora*
Juan walked to the summit of the mountain in one hour
b. **María golpeó el metal liso*
Mary beat the metal smooth
c. *bote *(de) gusanos*
can *(of) worms
d. *Suresh anduvo hasta la aldea otra vez*
Suresh walked to the village again
Interpreted only as: *Suresh walked to the village and he had walked to the village before - repetitive*

Beck and Snyder (2001) argue that the (un-)availability of accomplishments with goal-PPs and the (un-)availability of resultatives, root compounding and restitutive *again* result from a single semantic parameter which consists in the (un-)availability of a principle of semantic composition creating accomplishments (proposed by von Stechow 1995). English has this principle, and an accomplishment can be created syntactically from the combination of an activity (the matrix predicate) and a state (the result predicate) explaining the grammaticality of (79c) and (81a). Spanish lacks this principle, and the examples in (83a,b) are ruled out as uninterpretable.

Greek could be claimed to be like Spanish. We already saw that Greek lacks the ability to construct accomplishments from activities with the goal preposition *se*, as in (80) above. This correlates with the fact that it also lacks resultatives, as shown in (84), (see Giannakidou and Merchant 1999 and Horrocks and Stavrou 2003 for discussion) as well as verb-particle constructions:

(84) **O Petros sfirilatise to metalo malako*
The Peter beat the metal smooth
'Peter beat the metal smooth'

However, the status of Greek with respect to Beck and Snyder's (2001) parameter is not as clear-cut as the status of most of the languages they discuss (see also Horrocks and Stavrou 2003 who point out that Snyder's 1995 parameter is too strong for Greek).[25] First, the creation of an accomplishment from an activity via a goal *se*-PP is possible with a few verbs, such as *sernome* 'crawl':

(85) a. *O Petros sirθice sto patoma jia ðeka lepta*
The Peter crawled on-the floor for ten minutes
'Peter crawled on the floor for ten minutes'
b. **O Petros sirθice sto patoma se ðeka lepta*
The Peter crawled on-the floor in ten minutes
'Peter crawled on the floor in ten minutes'
c. *O Petros sirθice stin eksoðo se ðeka lepta*
The Peter crawled to-the exit in ten minutes
'Peter crawled to the exit in ten minutes'

[25] Beck and Snyder (2001) point out that from the languages they discuss the only one that shows a mixed behavior with respect to their diagnostics is Japanese. Greek also shows a mixed behavior.

Second, availability of resultatives appears to be allowed when the result state is a color or some gradable properties, like *high* or *low*:[26]

(86) a. *O Petros evapse to spiti aspro*
The Peter painted the house white
'Peter painted the house white'
b. *O Petros extise to spiti psilo*
The Peter built the house tall
'Peter built the house tall'

In these cases, *again* has a restitutive interpretation, as shown by contexts like (87):

(87) a. *Otan o Petros niciase to spiti itan poli vromiko.*
When the Peter rented the house it was very dirty.
b. *Ke etsi evapse tus tixus asprus ksana*
And so painted.3S the walls white again
'When Peter rented the house it was very dirty. So, he painted the walls white again'

Clearly, the restitutive reading is the only available reading of (87b) in the context of (87a). The walls of the house had been white before, but crucially they were not painted white by Peter who paints them white for the first time after he rents the house in a dirty state.

Finally, Snyder's compounding parameter ("*The grammar does (not) freely allow open-class, non-affixal lexical items to be marked [+Affixal]*", Snyder 1995: 63) is too strong for Greek as there are cases of free N-N compounds (Anastassiadi-Simeonidi 1986), and A-N compounds (Ralli and Stavrou 1997/8)—i.e. open-class items (i.e. words) that function like affixes (e.g. nomos plesio 'law-framework', taksidi astrapi 'trip lightning' (nam. very brief trip)-- (see also Horrocks and Stavrou 2003).

In view of the fact that Greek shows a mixed behavior with respect to the resultative parameter, an alternative, more conservative, explanation for the difference between *se* and *to* with respect to telicity might be that only directional PPs can turn atelic predicates into telic (see e.g. Levin 1993: 105), and *se*-phrases are not directional, unlike *to*-phrases (see Horrocks and Stavrou 2003 on the non-directional meaning of *se*, as opposed to *to*, and on the relation between (non-)directionality and (non-)telicity of prepositions). This proposal is supported by the observation that Greek can construct accomplishments from activities with *mechri* and *eos* 'up to', which have been argued above to be directional (see the discussion of (77) and (78)): [27]

[26] Though see Horrocks and Stavrou (2003) who argue that the adjectives here are modifiers of the resultant state which is lexically encoded in the verb itself, they do not denote the result state; thus, they are more like depictive adjectives.

[27] Note that the telicity shift in (88) provides an argument for the view that the non-directionality of *se* prevents it from making the predicate telic but does not, in itself, argue against the view that Greek has a negative setting of Beck and Snyder's (2001) parameter. Crucially, the restitutive reading of *again* (Greek '*ksana'*) is impossible in the presence of a *mechri* and *eos*-PP suggesting that the accomplishment reading in (88) is not created by the principle of semantic composition proposed by von Stechow (1995).

(88) *O Petros perpatise mexri/ eos tin korifî se mia ora*
The Peter walked up to the summit in one hour
'Peter walked to the summit in an hour'

With these considerations in mind, let us turn to ditransitives. Recall that *se*-PPs, unlike *mechri/ eos*-PPs, are incompatible with verbs of "continuous causation of accompanied motion in some manner" (see (77)). This incompatibility can now be linked to the fact that *se*-PPs cannot create accomplishments from activities. Verbs of continuous causation of accompanied motion are atelic, as can been seen from examples where they occur with a single theme complement:

(89) a. *Traviksa to scini jia ðio lepta/ ?*se ðio lepta*
Pulled.1S the rope for two minutes/ ?*in two minutes
'I pulled the rope for two minutes/ ?*in two minutes'
b. *Esproksa to karotsi jia ðio lepta/ ?*se ðio lepta*
Pushed.1S the cart for two minutes/ ?*in two minutes
'I pushed the cart for two minutes/ ?*in two minutes'

It is therefore expected that such predicates will be incompatible with *se*-goals and will require *mechri/ eos*-goals when used in a ditransitive frame: we just saw that only the latter prepositions can create telic predicates from atelic ones. Note that verbs like *stelno* 'send' and *pulao* 'sell', which co-occur with *se*-goals, qualify as telic when they surface with a single theme complement:[28]

(90) a. *Estila to fax ?*jia ðio lepta / se ðio lepta*
Sent.1S the fax ?*for two minutes/ in two minutes
'I sent the fax ?*for two minutes/ in two minutes'
b. *Pulisa to spiti mu ?*jia enan mina / se enan mina*
Sold.1S the house my for one month / in one month
'I sold my house in a month'

Note, furthermore, that there are some verbs in the Greek "continuous causation of accompanied motion" class which may tolerate *in*-adverbials along with *for*-adverbials when used with a single complement, a fact suggesting that they can be construed as either telic or atelic:

(91) *Kuvalisa to karotsi jia ðio lepta/ ? se ðio lepta*
Carried.1S the cart for two minutes/ in two minutes
'I carried the cart for two minutes/ ?*in two minutes'

[28] The unacceptable examples in (89) become acceptable if either an implicit goal argument is postulated (which is not necessary; the implicit goal is optional) or under an interpretation like "it took me two minutes to be able to start pushing/ moving the cart". The unacceptable interpretations in (90) become acceptable if the *for*-PP is taken to modify the reversible end-state (the *target state* see Parsons 1990; Kratzer 2000) of the event expressed by the predicate, for example if the person receiving the fax may only keep it for two minutes, or if I will get my house back after a month.

These verbs tolerate *se*-goals on a par with *mechri/ eos*-goals:

(92) *Kuvalisa to karotsi mexri/ eos tin Maria / ?s-tin Maria*
Carried.1S the cart up to the Mary / to-the Mary
'I carried the cart to Mary'

Finally, very few verbs which are atelic when they combine with a single complement become telic when a *se*-goal is added. One such example is *serno* 'drag':

(93) a. *Esira to karotsi jia ðio lepta/ ?*se ðio lepta*
Dragged.1S the cart for two minutes/ ?*in two minutes
'I dragged the cart for two minutes/ ?*in two minutes'
b. *Esira to karotsi stin eksoðo se ðio lepta*
Dragged.1S the cart to-the exit in two minutes
'I dragged the cart to the exit in two minutes'

Recall that creation of an accomplishment from an activity via a goal *se*-PP is also possible with a few intransitive verbs, such as *sernome* 'crawl', the intransitive variant of *serno* (see (85) above). In conclusion, verbs of continuous causation of accompanied motion in English and Greek reveal a significant disparity in the semantics of *to*-goals and *se*-goals in ditransitives. When *to*-goals are added to atelic predicates they invariably yield accomplishments from activities by introducing an end-point to the ongoing event denoted by the V + theme complex. Greek *se*-goals do not introduce such an end-point.

Beck and Johnson (2004) argue on the basis of restitutive *again* that *to*-goals always introduce result states in English prepositional ditransitives. In Beck and Johnson's proposal (as in Snyder 2001), prepositional ditransitives are resultatives arising from the combination of an activity and a result state through the application of von Stechow's (1995) principle of semantic composition discussed above. The result states are the denotations of the *to*-PPs, which provide the crucial information about the result state of the event. Beck and Johnson argue that the end-state of double object constructions is uniformly a state of possession of the theme by the goal rather than a state provided by the goal argument alone. Greek *se*-goals have been shown to be in most cases illicit when the V + theme complex is atelic (with the exception of a few verbs like *serno* 'drag' in (93)), which entails that they do not denote result states in these constructions. Possibly they never denote result states, in which case they are interpreted as modifiers (see Beck and Snyder 2001).[29] I would like to propose that the different properties of *to*-PPs and *se*-PPs w.r.t. resultativity explains why the former are limited to the prepositional frame while the latter can also be employed in the double object frame. *To*-PPs necessarily denote result states, and are therefore licit only in prepositional ditransitives where the result state is contributed by the PP. On the other hand, *se*-PPs are incapable of introducing result states with most (intransitive and transitive)

[29] The issue requires further investigation, though, because, to the extent that I have checked, it seems that restitutive readings of *ksana* 'again' are possible in Greek prepositional ditransitives with *se*-goals. If true, this would suggest that *se*-goals are sometimes resultative and sometimes not, i.e. that they denote result states with verbs like *give, send, drag* but not with *push, pull* or *lower.*

activities, and it is questionable if they ever make a result state available (see fn 29). Nothing in its semantics, therefore, limits *se* to prepositional ditransitives and prevents it from introducing arguments in double object/ applicative constructions. *Se* has very little meaning; there is not much distinguishing it from a dummy element.

5. On the categories of high and low datives

In the preceding sections, I have argued that the Greek locative preposition *se* has two interesting properties. (a) It introduces not only goals but also beneficiaries. (b) Indirect object arguments headed by *se* are inserted not only in prepositional ditransitives but also in double object constructions. The English locative preposition *to* differs from *se* in both respects: it introduces exclusively goals, and only in prepositional ditransitives. I have argued that this difference in distribution can be explained in terms of the semantic properties of *to* vs. *se*.

The question I will address in this section is whether the contrasting semantics and external syntax of *to* and *se* are associated with a difference in their internal syntax, more specifically in their categorial status. One might expect that *to* is a true preposition while *se* is a case marker comparable to accusative or dative, at least when it occurs in the double object frame. On the standard view that indirect objects are DPs in double object constructions and PPs in prepositional ditransitives, this would, in fact, be the null hypothesis to pursue. In order to answer this question, I will compare Greek *se*-datives to Japanese *ni*-goals and French *a*-datives (goals and beneficiaries). At first, I will discuss Japanese which supports the view that high goals are DPs and low goals PPs. A comparative analysis of French and Greek, though, will lead me to finally reject the view that there is a necessary correlation between the hierarchical position and the categorial status of dative arguments. I will close with a discussion of Spanish *a*-datives which require clitic doubling when they occur in the double object frame. A comparison of Greek, French and Spanish will lead me to conclude that cliticization and clitic doubling do not constitute reliable diagnostics for determining the categorial status of dative arguments, contrary to what is often assumed in the literature.

5.1. Japanese high 'ni'-datives are DPs and low 'ni'-datives are PPs

In Japanese, indirect object goals are marked by the dative postposition *ni* and direct objects surface with the accusative postposition *o*.[30] The relative order of goals and themes is flexible, as illustrated in (94) (from Miyagawa 1997: 1):

(94) *IO >DO/DO > IO*

a. *John ga Mary ni pizza o ageta*
John.NOM Mary.DAT pizza.ACC gave
'John gave Mary pizza'

[30] Beneficiaries surface with a different postposition (Shigeru Miyagawa, personal communication), and will not be discussed here.

b. *John ga pizza o Mary ni ageta*
John.NOM pizza.ACC Mary.DAT gave
'*John gave pizza Mary'

The two surface strings in (94) are bi-uniquely mapped into two different hierarchical tree representations, as documented by the distribution of anaphoric dependencies. In the order dative- accusative, the dative may bind a reciprocal contained within the accusative, as in (95a), whereas the accusative cannot license a reciprocal in the dative, as in (95b) (from Ura 1996: 193):

(95) a. IO_i $[_{DO}$ *reciprocal*$_i$*]*
Mary ga [John to Bill$_k$*] ni [otagai*$_k$ *no*
Mary NOM John and Bill DAT each other GEN
sensei] o syookaisita
teacher ACC introduced
'Mary introduced each other's teachers to John and Bill'

b. *$[_{IO}$ *reciprocal*$_i$*] DO*$_i$
**Mary ga [otagai*$_k$ *no sensei] ni*
Mary NOM each other GEN teacher DAT
[John to Bill$_k$*] o syookaisita*
John and Bill ACC introduced
'Mary introduced John and Bill to each other's teachers'

In the accusative-dative order, binding relations are reversed. The accusative can bind a reciprocal inside the dative (see (96a)), from Ura 1996: 195), but not vice versa (see (96b), provided by Kazuko Yatsushiro p.c.; see also Miyagawa 1997:4):

(96) a. DO_i $[_{IO}$ *reciprocal*$_i$*]*
Mary ga [John to Bill]$_k$ *o [otagai*$_k$ *no*
Mary NOM John and Bill ACC each other GEN
sensei] ni syookaisita
teacher DAT introduced
'Mary introduced John and Bill to each other's teachers'

b. *$[_{DO}$ *reciprocal*$_i$*] IO*$_i$
**Mary ga [otagai*$_k$ *no sensei] o*
Mary NOM each other GEN teacher ACC
[John to Bill] $_k$ *ni syookaisita*
John and Bill DAT introduced
'Mary introduced each other's teachers to John and Bill'

Two competing analyses for the word order alternation in (94)-(96) have been proposed in the literature.

According to the standard view (Hoji 1985, Takano 1998, Yatsushiro 2001), Japanese lacks the dative alternation. The goal>theme order in (94a) is considered to be basic, while the permutation in (94b) is argued to derive from (94a) by optional scrambling of the theme across the goal. On the other hand, Miyagawa (1997) and

Miyagawa and Tsujioka (to appear) argue convincingly that the scrambling analysis is incorrect and that strings in which the goal precedes the theme are double object constructions, whereas theme-goal orders are prepositional ditransitives. Central for their argumentation is the fact that the suffix *ni* is a case marker in the goal-theme construction and a postposition in the theme-goal construction. Evidence for the ambiguity of *ni* is provided by numeral quantifier float. As shown in (97a,b), Q-float in Japanese is licit with DPs and blocked with PPs (data from Ura 1996: 201, 204-205):

(97) a. *John-ga hon-o Mary-ni san-satsu age ta*
John.NOM book.ACC Mary.DAT three.CL give Past
'John gave three books to Mary'

b. **John ga tomodati kara san nin*
John NOM friends from three .Cl
tegami o orat ta
letters ACC receive Past
'John received letters from three of his friends'

Crucially, Q-float of numerals construed with datives leads to well-formed results only when the goal is animate (see (98); Miyagawa and Tsujioka to appear), and only when the animate goal precedes the theme (see (99), data from Miyagawa 1997):

(98) a. *Taroo-ga gakusei-ni futa-ri nimotu-o okutta*
Taro.NOM students.DAT 2.CL package.ACC sent
'Taro sent two students a package'

b. **Daitooryoo-ga kokkyoo-ni futa-tu heitai-o okutta*
President.NOM borders-to 2.CL soldiers.ACC sent
'*The President sent two borders soldiers'

(99) a. *Mary-ga tomodati-ni futa-ri CD-o okutta*
Mary.NOM friends.DAT 2.CL CD.ACC sent
'Mary sent two friends a CD'

b. ???*Mary-ga CD-o tomodati-ni futa-ri okutta*
Mary.NOM CD.ACC friends.DAT 2.CL sent

The fact that dative goals are DPs when they are animate and precede themes, while they are PPs when they are inanimate or when they are animate and follow themes can be explained in terms of the hypothesis that *ni* is ambiguous between a case marker and a postposition. Since the alternation in category is typical of the dative shift alternation, Q-float leads to the conjecture that the *goal>theme* construction in (94a) is a double object construction and the *theme>goal* construction in (94b) a prepositional ditransitive.[31]

And indeed, the *goal>theme* construction shows characteristics typical of the double object construction. These are particularly clear under Q-float because goals are

[31] Since inanimate goals are generally not licensed in the double object construction, they are always PPs, even when they precede themes, as in (98b). As discussed by Miyagawa and Tsujioka, low PP-goals are allowed to precede or follow themes, unlike high DP goals which prevent themes from moving across them.

unambiguously high DPs when they are associated with floated numerals. One such characteristic is the fact that high goals can be passivized, similarly to goals in English,[32] while low goals cannot, as shown in (100). In (100a), which is well-formed, the stranded quantifier marks the position of a high goal while in (100b), which is ill-formed, the quantifier marks the position of the low goal (data from Miyagawa and Tsujioka to appear):

(100) a. *Gakusei$_j$-ga Taroo-ni t_j san-nin nimotu-o okur-are-ta*
Students$_j$.NOM Taro-by t_j 3.CL package.ACC send.PASS.PAST
'Three students were sent a package by Taro'
b. **Gakusei$_j$-ga Taroo-ni nimotu-o t_j san-nin okur-are-ta*
Students$_j$.NOM Taro-by package.ACC t_j 3.CL send.PASS.PAST
'Three students were sent a package by Taro'

Inanimate goals cannot be passivized patterning with low animate goals:

(101) **Tokyo-ga nimotu-o okur-are-ta*
Tokyo.NOM package.ACC send.PASS.PAST
'Tokyo was sent a package'

A further characteristic is exemplified by (102). Theme passivization cannot proceed across a high goal, as shown in (102a) where the high goal is marked by Q-float, while it may proceed across a low goal, as illustrated by (102b) where there is no Q-float associated with the dative goal:

(102) a. **Nimotu-ga Taroo-ni (yotte) gakusei-ni futa-ri okur-are-ta*
package.NOM Taro-by students.DAT 2.CL send.PASS.PAST
'?*A package was sent two students by Taro'
b. *Nimotu-ga Taroo-ni (yotte) Hanako-ni okur-are-ta*
package.NOM Taro-by Hanako.DAT send.PASS.PAST
'A package was sent to Hanako by Taro'

The reader is referred to Miyagawa and Tsujioka (to appear) for more evidence that the *goal>theme* construction is a double object construction.

In conclusion, Japanese *ni*-goals, similarly to Greek *se*-datives, occur both in double object constructions and in prepositional ditransitives. Moreover, Japanese presents straightforward evidence that the category of goal phrases is not identical in the two constructions. High goals are DPs and low goals are PPs, exactly as expected by theories viewing the alternation in the categorial status of dative arguments as a defining property of the dative alternation.

5.2. High and low French 'a'-datives

[32] Japanese datives can become nominative under passivization acting as if they have purely structural Case, unlike e.g. Greek genitives and Icelandic datives (see Larson 1988; Ura 1996; Anagnostopoulou 2003 for discussion).

French *'a'*-datives are very similar to Greek *se*-datives both in their semantics and in their distribution (unless otherwise indicated, the French data in this and the next section have been provided to me by Dominique Sportiche, personal communication).

To begin with the semantics, the prepositional element *'a'* is locative not specified for the feature DIRECTION/ PATH, just like Greek *se* ((103a) from Kayne 1975: 1):

(103) a. *Les garçons sont tous partis à la guerre*
The boys are all gone to the war
'The boys have all gone to the war'
b. *Jean est à la maison*
Jean is *a* the home
'Jean is at home'
c. *Kyriakos vit à Athènes*
Kyriakos lives *a* Athens
'Kyriakos lives in Athens'

Like *se* and unlike *to, a* cannot shift an activity to an accomplishment ((104) is taken from Beck & Snyder 2001):

(104) **Jean a marché au sommet en une heure*
Jean has walked *a*-the summit in one hour
'Jean walked to the summit in an hour'

More generally, French has a negative setting of the resultative parameter, according to Beck and Snyder (2001), as it lacks resultatives, verb particle constructions, noun compounding, and restitutive readings of *again* in examples like (105) (from Beck and Snyder 2001): [33]

(105) *Jean a marché de nouveau au sommet*
Jean has walked again *a*-the summit
'Jean walked to the summit again'

Turning from the meaning to the distribution of *a,* note first that *a*, like *se*, introduces goals and also beneficiaries:

(106) a. *Il a donné un gâteau à la femme*
He has given a cake *a* the woman
'He has given a cake to the woman'
b. *Il a préparé un gâteau à la femme*
He has made a cake *a* the woman
'He has made a cake for the woman'

[33] If the proposal put forth in section 4 to analyze ditransitives with verbs of continuous imparting of force on a par with examples like (104) and (105) is correct, then such predicates are predicted to qualify as atelic in French. I haven't tested this prediction.

A-beneficiaries alternate with beneficiaries introduced by the preposition *pour* in French, just as *se*-beneficiaries alternate with *jia*-beneficiaries in Greek:

(107) *Il a préparé un gâteau pour la femme*
He has made a cake for the woman
'He has made a cake for the woman'

In what follows, I will discuss the goal construction in (106a) first, proceeding from there to the benefactive construction in (106b).

As in Greek *se*-goal ditransitives, precedence matches c-command in French *a*-goal ditransitives. (108a) illustrates that indirect object quantifiers may bind pronominal variables to their right, whereas direct object quantifiers take scope over indirect objects which they precede, as documented by (108b) (from McGinnis 1998: 98-99; compare these facts to the Greek facts in (17) above):

(108) a. *Jean a attribué [à chaque mot]$_i$ son$_i$ symbole*
Jean has attributed to each word its symbol
'Jean attributed to each word its symbol'
b. *Jean a attribué [chaque mot]$_i$ à son$_i$ symbole*
Jean has attributed each word to its symbol
'Jean attributed each word to its symbol'

French resembles Greek once again in that the well-formedness of the two alternative permutations in (108) correlates with a more general freedom in the relative ordering of verbal DP and PP complements (data from Belletti and Shlonsky 1995; compare the data in (109) to their Greek counterparts in (16c) and (16d)):

(109) a. *J' ai mis ce livre sur la table*
I have put this book on the table
'I put this book on the table'
b. *J' ai mis sur la table ce livre*
I have put on the table this book

In passives, *a*-goals are well-formed, similarly to Greek *se*-goals (data from McGinnis 1998; compare (110) to (9) in section 1):

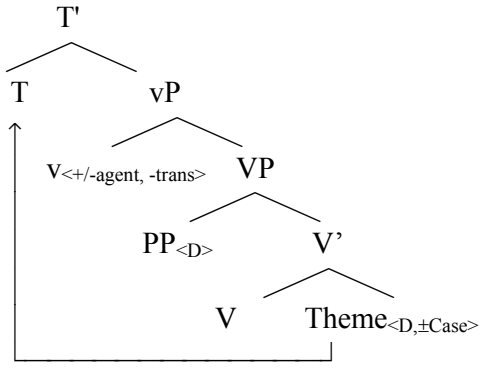
(110) *Un cadeau a été offert à Marie*
'A gift has been given to Marie'

Finally, *a*-goals are licit in nominalizations (compare (111), provided to me by Cedric Boeckx, personal communication, to the Greek example (10b) above):

(111) *La restitution des territoires aux Palestiniens*
The return of-the territories to-the Palestinians

Recall that nominalizations are derivationally related to the PP-goal construction in English and Greek, as in *Sue's gift of a book to Mary*, but not to the double object construction, as in **Sue's gift of Mary (of) a book*. In section 1 this asymmetry has been accounted for in terms of the hypothesis that vAPPL, which introduces the goal in the double object construction, is not licensed in nominals. On this view, the well-formedness of (111) indicates that *a*-goals are not introduced by vAPPL; rather they are arguments of the root. The freedom of word order and binding exemplified in (108a) and (108b) can be analyzed similarly to the Greek alternation in (16) and (17) proposed in section 1, i.e. either in terms of A-scrambling of one object across the other (taking either the theme>goal as basic as in (18) or the goal>theme order as basic as in (19)) or in terms of free base-generation of the two objects, as in (21). What is crucial for present purposes is the fact that both the theme and the goal are arguments of V. In the passive (110) the theme moves to T from the minimal domain of V which contains the dative *a*-goal, and the sentence is correctly predicted to be well-formed even if the goal is taken to c-command the theme, as in (26) repeated here:[34]

(26)



The data discussed so far strongly suggest that *a*-goals and *se*-goals share the same syntax, namely that of a dative in a prepositional ditransitive. But there is also evidence that *a*-goals are inserted in the double object frame. Specifically, *a*-goals are licit in Oehrle's contexts which do not allow the prepositional construction in English and other languages:

(112) a. *Le livre de Lipson a appris le Russe à Marie*
' Lipson's textbook taught Mary Russian'

[34] See McGinnis (1998) and Anagnostopoulou (2003) for evidence that Greek *se*-datives and French *a*-datives block NP-movement when they are higher and in a different minimal domain than the moved element. Specifically, *a*-datives and *se*-datives are illicit when they realize experiencers in raising contexts because they belong in the minimal domain of the matrix V *seem* and raising takes place from the embedded clause violating locality. The blocking effect of *a*-experiencers is obviated under cliticization of the intervener in French as in Greek.

b. ?*Le fait de rencontrer Paul a donné mal de tête à Marie*[35]
'Meeting Paul gave Mary a headache'

Recall from section 3 that *se*-goals are also permitted in these contexts (see examples (69)), a fact I proposed to interpret as an argument that they occur in the double object construction. This led me to conclude that sentences with *se*-goals are ambiguous between prepositional ditransitives and double object constructions. French *a*-goals can similarly be concluded to be ambiguous. In sentences like (112) they instantiate double object goals.

Turning to benefactive constructions, and in particular to the alternation between (106b) and (107) repeated below, two criteria show that the *a*-benefactive (106b) is a double object construction and the *pour*-construction (107) is the counterpart of Greek *jia*- and English *for*-benefactives.

(106) b. *Il a préparé un gâteau à la femme*
He has made a cake *a* the woman
'He has made a cake for the woman'

(107) *Il a préparé un gâteau pour la femme*
He has made a cake for the woman
'He has made a cake for the woman'

(i) *Recipient interpretation*. As pointed out by Kayne (1975: 137), (113a) below implies a direct connection between the subject and the *a*-beneficiary and is therefore appropriate only if the subject is the head of a huge family.[36] On the other hand, (113b) with *pour* can be said in a situation in which the subject is merely thinking of the future, i.e. when there is no direct connection between the subject and the beneficiary.

(113) a. *Il achète des jouets aux petits-fils de ses petits-fils*
He buys some toys to the grandchildren of his grandchildren
b. *Il achète des jouets pour les petits-fils de ses petits-fils*
'He buys some toys to the grandchildren of his grandchildren'
'He is buying toys for his grandchildren's grandchildren'

The French alternation is characterized by the same meaning difference described in section 2.2 above for Greek. *A*-beneficiaries have the same interpretation as genitive DPs in (34a) and *se*-PPs in (36), and *pour*-beneficiaries correspond to the *jia*-beneficiary in (34b). Recall that I take the meaning difference in (34), (36), (113) to derive from the fact that genitive-, *se-,* and *a*-beneficiaries are interpreted as recipients

[35] According to Dominique Sportiche, there is a slight contrast between (112b) and its counterpart with the dative clitic in (i), which is perfect:
(i) *Le fait de rencontrer Paul lui a donné mal de tête*
'Meeting Paul gave her a headache'
In Anagnostopoulou (1999b) I have noticed a similar contrast in Greek. When the goal is realized as a genitive DP and the subject is a non-volitional causer there is a preference for cliticization or clitic doubling of the genitive, for unclear reasons.

[36] For Dominique Sportiche (113a) is out, presumably because such a scenario is too far-fetched.

while *jia*-, *for*- and *pour*-beneficiaries denote individuals for the benefit of which some action happens.

(ii) Nominalizations. As shown in (114), *a*-beneficiaries are illicit in nominalizations. In contrast, *pour*-beneficiaries are well-formed:

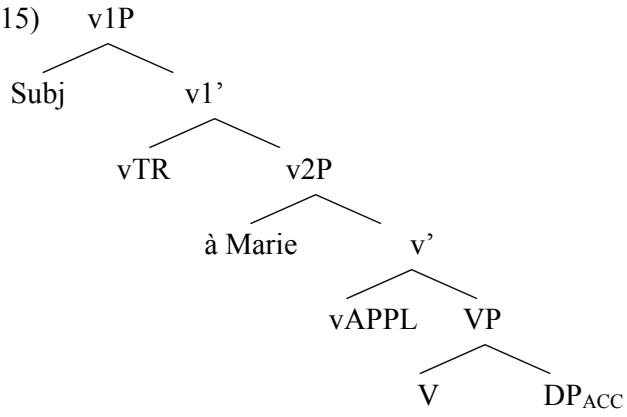
(114) *la préparation du repas pour/ *à Marie*
The preparation of the meal for Marie

The contrast in (114) is entirely parallel to the one in (51), repeated here from section 2.2, which shows that neither genitive nor *se*-beneficiaries are licit in Greek nominalizations while *jia*-beneficiaries are allowed.

(51) a. **To majirema tu fajitu tis Marias*
The cooking the food.GEN the Mary.GEN
b. **To majirema tu fajitu stin Maria*
The cooking the food.GEN to-the Mary.ACC
c. *To majirema tu fajitu jia tin Maria*
The cooking the food.GEN for the Mary.ACC
'The preparation of the food for Mary'

The ban on nominalizations with *a*-beneficiaries in French suggests that they are introduced by vAPPL, leading to the structural analysis in (115) which is identical to (52) proposed in section 2 for *se*-beneficiaries:

(115)



v2P cannot be the input to the formation of a root nominal, explaining the ungrammaticality of the *à Marie* version of (114). vAPPL assigns a recipient role to its specifier, explaining the interpretation of (113a). The *pour Marie* version of (114) is well-formed because *pour*-beneficiaries are adjuncts not introduced by vAPPL which is therefore not receiving a recipient role in (113b). *Pour* beneficiaries are adjuncts which share the same syntax as Greek *jia*-beneficiaries and English *for*-beneficiaries (see the discussion of structures (59), (63) and (64) in section 2 above). The analysis predicts that *a*-beneficiaries are licensed with certain verb classes, unlike *pour* beneficiaries which can be added to virtually any predicate. I haven't tested this prediction yet, but I would be surprised if it were incorrect.

Is the analysis of *a*-beneficiaries in terms of structure (115) corroborated by evidence from passives and binding? The answer to this question is not straightforward, as will be seen immediately, but the observed contrasts seem to indicate that the analysis is on the right track. More specifically, theme passives are worse in the presence of an *a*-beneficiary than with a *pour*-beneficiary, as illustrated by (116):

(116) a. *?Un gâteau a été fait à Marie par Kyriakos*
A cake was made to Mary by Kyriakos
b. *Un gâteau a été fait pour Marie par Kyriakos*
A cake was made for Mary by Kyriakos

Interestingly, according to Dominique Sportiche, (116a) is not entirely natural but improves if *Marie* is understood as adversely affected by the baking of the cake. Adversely affected genitives have also been seen to be legitimate in Greek passives; compare (116a) to (47), repeated here:

(47) *To fajito* *ðen* *?*(tis)* *majireftice* *tis Marias*
The food.NOM not Cl.GEN cooked.NAct the Mary.GEN
kala *(*apo ton Petro)*
well by the Peter
'The meal was not cooked well by Mary and Mary was unhappy about it'

I would like to suggest that *à Marie* in (116a) is not a true beneficiary but the French counterpart of *tis Marias* in (47) and that the applicative head vAPPL1 introducing beneficiaries cannot combine with a passive light v in French, as in Greek. vAPPL2 introducing adversely affected arguments is allowed to co-occur with a passive vINTR in both languages. The difference between French (116a) and Greek (47) is that the agent and the affected dative can be disjoint in reference in (116a), as shown by the fact that the agent can be overtly expressed in the *par*-phrase. In Greek, the affected dative is also interpreted as the agent and the by-phrase is ungrammatical. I take this contrast between the two languages to indicate that passive v-INTR and the vAPPL2 introducing malefactive datives are two separate syntactic heads in French; recall that they form a single syntactic unit in Greek.

Turning, finally, to evidence from binding, French permits both the a-beneficiary>theme and the theme>*a*-beneficiary permutation, similarly to Greek (see section 2). Under structure (115) the *a-beneficiary>theme* permutation reflects the base order, in which the beneficiary asymmetrically c-commands the theme. The *theme>a-beneficiary* serialization derives either from (A or A') scrambling of the theme across the beneficiary or from post-posing of the beneficiary to the right of the theme. Pronominal variable binding is accordingly expected to be perfect in the *beneficiary>theme* order, while it will be problematic in the alternative *theme>beneficiary* order, if this order is derived either by A' scrambling or beneficiary-post-posing. And indeed, binding of the pronoun is easier in the *beneficiary>theme* permutation than in the *theme>beneficiary* permutation, as shown in (117):

(117) a. *beneficiary>theme*
Marie a fait à chaque cuisinier$_j$ un gâteau qu'il$_j$ a inventé
Marie made to each cook$_j$ a cake that he$_j$ invented
b. *theme> beneficiary*
?*Kyriakos a fait chaque gâteau$_j$ au cuisinier qui l$_j$'a inventé*
Kyriakos made each cake$_j$ for the cook who invented it$_j$

The contrast between (117a) and (117b) is not as sharp as would be expected under e.g. an A' scrambling analysis of (117b),[37] but is nevertheless present.

5.3. French 'a'-datives are DPs and Greek 'se'-datives are PPs

Section 5.2 has established that French *a*-datives and Greek *se*-datives share the same syntax. As goals they are ambiguous occurring low as arguments of the root (prepositional ditransitives) or high as specifiers of vAPPL (double object constructions). As beneficiaries they are specifiers of vAPPL. However, *a*-datives and *se*-datives also differ in important ways with respect to their categorial status and their interaction with cliticization (see also Anagnostopoulou 2003 for discussion). In this section, I will concentrate on the first difference. The second one will be taken up in the next subsection, which discusses more closely cliticization and clitic doubling of dative arguments.

One important difference between Greek and French manifests itself in the categorial status of the term introducing the dative argument. Even though it has been occasionally claimed that *a* is a preposition, Jaeggli (1982: 28), drawing on Vergnaud (1974), presents convincing evidence that *a* is a case marker, not a true preposition. The arguments in support of this view are based on the behavior of *a* under co-ordination.

First, while a conjoined DP may serve as the complement of a preposition, illustrated in (118a), a DP-conjunct cannot combine with *a*, as exemplified by (118b). Instead, coordination must target two full *a*-phrases, as in (118c), suggesting that *a*-phrases are DPs:

(118) a. *Ils se sont assis sur la table et les chaises*
They Cl.REFL are sat on the table and the chairs
'They sat on the table and the chairs'
b. **Ils ont parlé à Marie et le directeur*
They have.3P talked to Marie and the director
'They talked to Mary and the director'

[37] The fact that (117b) is basically ok suggests that the theme>beneficiary order is derived by A-movement of the theme over the beneficiary. As extensively discussed in Anagnostopoulou (2002, 2003) so called "symmetric double object languages" show a correlation between the availability of direct object> indirect object orders in transitive sentences and the grammaticality of theme passivization across a higher intervening indirect object in passives. This correlation can be accounted for if it is assumed that in symmetric double object languages vAPPL licenses a secondary specifier which functions as an escape hatch for further A-movement (object shift, passivization, A-scrambling) of the direct object across the indirect object (the *specifier to vAPPL parameter*). The fact that (i) the theme undergoes A movement across the beneficiary in (117b) and (ii) theme passivization across an adversely affected dative in (116a) is well-formed suggests that French behaves like a symmetric double object language with respect to the *specifier to vAPPL parameter*.

c. *Ils ont parlé à Marie et au directeur*
They have.3P talked to Marie and to-the director
'They talked to Mary and to the director'

A-goals and *a*-beneficiaries pattern with *à Marie* in (118b,c), as shown in (119):

(119) a. *Il a donné un gâteau à la femme et au/* le directeur*
He has given a cake to the woman and to-the/ *the director
'He has given a cake to the woman and to the director'
b. *Il a préparé un gâteau à la femme et au/* le directeur*
He has made a cake to the woman and to-the/ *the director
'He has made a cake for the woman and to the director'

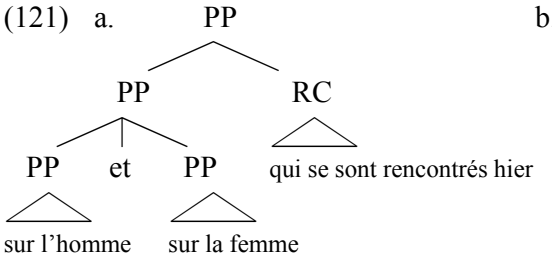
Coordination of two *a*-phrases is obligatory in both (119a) and (119b) suggesting that *a*-datives are always DPs, regardless of whether they occur high (as beneficiaries or high goals) or low (as low goals).

Second, as illustrated by (120), coordinated PPs may not serve as the head of a relative clause which functions as a (derived) collective predicate:

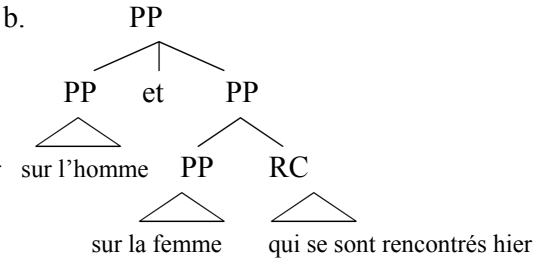
(120) **Il a compté sur l' homme et sur la*
He has.3S counted on the man and on the
femme qui se sont rencontrés hier
woman who Cl.REFL are met yesterday
'He counted on the man and the woman who met yesterday'

As suggested to me by Winfried Lechner (personal communication), there are two potential explanations for the ungrammaticality of (120), both of which are reasonable. (i) One possibility is that modification of a PP by a relative clause is not allowed, i.e. neither (121a) nor (121b) are possible parses for (120):

(121) a.

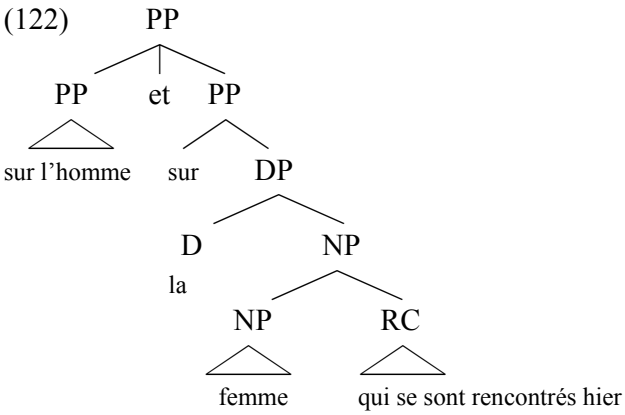


b.



The relative clause must therefore attach to the NP of the second conjunct, as in (122), barring a group reading of the head of the relative in terms of non-Boolean conjunction:

(122)



(ii) Alternatively, modification of the conjoined PP in (121a) is licit, but the conjunction of two PPs does not allow for a non-Boolean group reading, and structure (121a) is uninterpretable.

Co-ordinated *a*-phrases differ from ordinary PPs in that relative clause modification is well-formed, as shown by (123). Once again, the presence of *a* in the second conjunct of (123) is obligatory (compare (123) to (118c) above):

(123) *Il a parlé à l' homme et * (à) la*
He has.3S spoken to the man and to the
femme qui se sont rencontrés hier
woman who Cl.REFL are met yesterday
'He spoke to the man and the woman who met yesterday'

A-goals and *a*-beneficiaries behave just like the coordinated single *a*-complements in (123) with respect to this diagnostic:

(124) *Il a donné/préparé un gateau à l' homme et*
He has given/ prepared a cake to the man and
**(à) la femme qui se sont rencontrés hier*
to the woman who Cl.REFL are met yesterday
'He gave a cake to the man and the woman who met yesterday'
'He made a cake for the man and the woman who met yesterday'

Thus, the contrast between (120) and (123), (124) provides the second argument that French *a*-phrases are DPs.

Applying Vergnaud's tests to Greek reveals that Greek *se* - unlike French *a* - falls in the same group as prototypical prepositions: first, conjoined *se*-goals and *se*-beneficiaries can only marginally be assigned a group interpretation, as shown by (125a,b), (126a,b). Second, *se* can serve as the head of a conjunction of noun phrases (goals and beneficiaries), as in (125c), (126c):

(125) a. ??*Estilan γramata ston anðra ce stin jineka*
Sent.3P letters.ACC to-the man and to-the woman
pu zusan mazi
who were-living together
'They sent the letters to the man and to the woman who were living together'

b. *Estilan γramata ston anðra ce tin jineka*
Sent.3P letters.ACC to-the man and the woman
pu zusan mazi
who were-living together
'They sent the letters to the man and the woman who were living together'

c. *Estilan γramata stus γonis ce tus/stus*
Sent.3P letters.ACC to-the parents and the/to-the
papuðes ton enðiaferomenon
grandparents the interested.GEN
'They sent letters to the parents and (to the) grandparents of the interested party'

(126) a. ??*Eftiaksa kafe ston anðra ke stin jineka*
Made.1S coffee.ACC to-the man and to-the woman
pu protosinantiθikan xtes
who first met yesterday
'I made coffee for the man and for the woman who met for the first time yesterday'

b. *Eftiaksa kafe ston anðra ke tin jineka*
Made.1S coffee.ACC to-the man and the woman
pu protosinantiθikan xtes
who first met yesterday
'I made coffee for the man and the woman who met for the first time yesterday'

c. *Eftiaksa kafe ston Jiani ke tin/stin Maria*
Made.1S coffee.ACC to-the Gianis and the/to-the Maria
'I made coffee for John and Mary/ for John and for Mary'

To conclude, the diagnostics derived from co-ordination demonstrate that *a*-datives are DPs and *se*-datives are PPs. The fact that *a*-goals occur in prepositional ditransitives leads to the conclusion that not all indirect objects which surface as DPs need to be related to an applicative head. And conversely, the fact that *se*-goals and *se*-beneficiaries occur in double object constructions shows that indirect objects which have the catagorial status of PPs can be introduced by an applicative head. Unlike Japanese *ni* which is a preposition in low goal constructions and a case marker in high goal constructions, French *a* is always a case marker and Greek *se* always a preposition, regardless of whether the arguments they introduce occur high or low.

5.4. Cliticization and clitic doubling of datives

The second difference between *se* and *a* emerges in contexts of cliticization. In Greek, clitic doubling may affect indirect objects bearing genitive case, as in (127a), but it must not apply to goals which are introduced by *se*, as illustrated by (127b):

(127) a. *Tu eðosa tu Jiani to vivlio*
Cl.GEN gave.1S the Jianis.GEN the book.ACC
'I gave John the book'
b. **Tu eðosa to vivlio s-ton Jiani*
Cl.GEN gave.1S the book.ACC to-the Jianis
'I gave the book to John'

This restriction does not only hold of clitic doubling, but also discriminates between licit and illicit instances of *Clitic Left Dislocation*, as in (128), and *(Clitic) Right Dislocation*, as in (129):

(128) a. *Tu Jiani tu eðosa to vivlio*
The Jianis.GEN Cl.GEN gave.1S the book
b. *S-ton Jiani (* tu) eðosa to vivlio*
To-the Jianis Cl.GEN gave.1S the book
'To John I gave the book'
(129) a. *Tu eðosa to vivlio*
Cl.GEN gave.3S the book.ACC
i Maria # tu Jiani
the Mary.NOM the Jianis.GEN
b. *(*Tu) eðosa to vivlio*
Cl.GEN gave.3S the book.ACC
i Maria # s-ton Jiani
the Mary.NOM to-the Jianis
'It was Mary that gave him a book, to John'

As will be seen immediately, French by and large limits cliticization to phrases headed by *a* (Kayne 1975: 134-160; see in particular Kayne 1975: 141-2 for a reanalysis of apparent dative cliticization with *après, sur/dessus*). In this respect, *a*-phrases behave similarly to Greek genitive DPs and differ from *se*-PPs (see Jaeggli 1982: 29 for discussion of cliticization with *à*-datives in French).

French generally lacks clitic doubling (see e.g. Kayne 1975; Jaeggli 1982; Sportiche 1992, 1998 among many others). Thus, independent factors exclude the French counterpart of (127a). However, clitic doubling of personal pronouns is possible, as discussed in Kayne (2000), and doubling of *a*-dative personal pronouns is well-formed, as shown in (130a,b) (from Kayne 2000: 165):

(130) a. *Jean me parle à moi*
Jean me speaks to me
'Jean speaks to me'

b. *Jean lui parle à elle*
Jean her speaks to her
'Jean speaks to her'

Moreover, there are other constructions in which dative clitics undergo chain formation. In these contexts, the foot of the chain must be occupied by an *à*-phrase. For one, in what Kayne (1975: 138-139) calls the *detachment construction* (i.e. Right Disloaction), a dative clitic may form a chain with a right dislocated beneficiary or goal headed by *a*, as illustrated by (131). Detachment with a *pour*-beneficiary in (132), leads to ill-formed results:[38]

(131) a. *On leur en construira, à tes amis*
We Cl.DAT Cl.PART build.FUT, to your friends
'We'll build them some, your friends'
b. *On leur en donnera, à tes amis*
We Cl.DAT Cl.PART give.FUT, to your friends
'We'll give them some, your friends'
(132) a. **On leur en construira, pour tes amis*
We Cl.DAT Cl.PART build.FUT, for your friends
'We'll build some for your friends'
b. **Cela leur est pénible, pour ces enfants*
This Cl.DAT is painful, for those children
'This is painful for those children'

Another instance of chain formation of a dative clitic with an *à*-phrase involves stranded quantifiers. As exemplified by the contrast between (133a) and (133b) (Kayne 1975: 136), dative clitics may associate with quantifiers introduced by *à*, but not with quantifiers introduced by *pour*:

(133) a. *Elle leur a souri à tous*
She Cl.DAT has smiled to all
'She smiled at all of them'
b. **Il leur en a construit pour tous les deux*
He Cl.DAT Cl.PART has built for both of them
'He built some for both of them'

In sum, the cross-linguistic comparison between French and Greek shows that French *a*-datives exhibit hybrid characteristics. The majority of the diagnostics suggest that *a*-datives share the syntax of Greek *se*-datives. But it was also seen that two phenomena, co-ordination and cliticization, group *a*-phrases together with Greek genitive DPs. The evidence based on co-ordination presented in the preceding section convincingly demonstrates that French *a*-datives are DPs and Greek *se*-datives PPs. The question that arises now is whether the (un-)availability of clitic doubling and

[38] Dominique Sportiche points out that (132a) is ok with the benefactive *pour*-phrase unrelated to the clitic. In (132b) the *pour*-phrase would be interpreted as "according to these children". Similarly, (133b) below is grammatical on a reading according to which the *pour*-phrase is not related to the clitic.

cliticization constitute further diagnostics for categorial status. Under the hypothesis that only DPs are allowed to undergo chain formation with clitics it would be immediately explained why cliticization and clitic doubling are precluded with *se*-PPs in Greek and are licit with *a*-DPs in French and genitive DPs in Greek.

In order for the above hypothesis to receive support it would have to be demonstrated for all clitic languages that pronominal clitics form chains with categories that can be independently argued to be DPs on the basis of evidence like e.g. Q-float or co-ordination. Spanish shows that this is incorrect. As will be discussed below, dative arguments introduced by *a* undergo clitic doubling in Spanish, similarly to Greek genitive DPs and unlike *se*-PPs. Spanish double object constructions show *obligatory* clitic doubling of *a*-datives, unlike Greek genitive double object constructions which show *optional* clitic doubling. And yet, Spanish clitic doubled *a*-datives qualify as PPs on the basis of the co-ordination tests discussed above, similarly to *se*-PPs and unlike genitive DPs in Greek or *a*-DPs in French.

In the literature on Spanish there is a growing consensus that the double object construction is signaled by the obligatory presence of dative clitics. Demonte (1995), Torrego (1998), Bleam (1999), Ormazabal & Romero (2001), Cuervo (2003) and others point out that the presence vs. absence of dative clitics in goal ditransitives correlates with a number of syntactic and semantic phenomena characterizing the dative alternation in English (cf. Uriagereka 1988 on similar asymmetries in Galician). In particular, Spanish ditransitives with clitic doubled *a*-goals pattern with English double object constructions, while their counterparts without clitic doubling show properties of prepositional ditransitives. For one, animate goals can be doubled while locative goals cannot (see Bleam 1999, Ormazabal & Romero 2001, Cuervo 2003):

(134) *Andrea le envió un dictionario a Gabi / *a Barcelona*
Andrea Cl.DAT sent a dictionary to Gabi/ to Barcelona
'Andrea sent Gabi/ *Barcelona a dictionary'

Animate and locative datives may equally occur undoubled, as in prepositional ditransitives which do not discriminate between animate and inanimate goals:

(135) *Andrea envió un dictionario a Gabi / a Barcelona*
Andrea sent a dictionary to Gabi/ to Barcelona
'Andrea sent Gabi/ *Barcelona a dictionary'

Clitics are allowed to double inanimate dative goals only when the goal and the theme stand in a part-whole relationship. In (136a) below *el mantel* can be construed as a part of *a la mesa*, and doubling is licit. In (136b) *los platos* cannot be construed as a part of *a la mesa*, and doubling is ruled out. This restriction is similar to the one attested in English, where the double object construction is licensed only when the indirect object can be understood as a possessor of the direct object (see Demonte 1995):

(136) a. *Le puse el mantel a la mesa*
Cl.DAT put.1S the tablecloth to the table
'I put the tablecloth on the table'

b. **Le puse los platos a la mesa*
Cl.DAT put.1S the dishes to the table
'I put the dishes on the table'

Furthermore, datives are permitted exclusively under clitic doubling in Oehrle's environments (Demonte 1995; Bleam 1999; Cuervo 2003; data from Cuervo 2003):

(137) a. **El viaje a Troncoso ofreció a Maria la oportunidad de practicar portugués*
The trip to Troncoso offered to Maria the opportunity to practice Portuguese
'*The trip to Troncoso offered an opportunity to practice Portuguese to Maria'

b. *El viaje a Troncoso le ofreció a Maria la oportunidad de practicar portugués*
The trip to Troncoso Cl.DAT offered to Maria the opportunity to practice Portuguese
'The trip to Troncoso offered Mary the opportunity to practice Portuguese'

Recall that only the double object construction is licit in these contexts.

Binding provides syntactic evidence that the clitic doubling construction is a double object construction. In the absence of a dative clitic, a direct object can bind a reflexive indirect object while the reverse is not possible, as shown in (138). When a dative clitic is present, the indirect object can bind into the direct object while the reverse is impossible, as shown in (139):

(138) a. *El tratamiento psicoanalítico reintegró a María a sí misma*
the therapy psychoanalytic gave-back to Mary.DO to herself.IO
'The psychoanalytic therapy gave back Mary to herself'

b. **El tratamiento psicoanalítico reintegró/devolvió (a) sí misma a Maria*
The therapy psychoanalytic gave-back (to) herself-DO to Mary-IO
'*The psychoanalytic therapy gave back herself to Mary'

(139) a. **El tratamiento psicoanalítico le devolvió a María a la estima de sí misma*
The therapy psychoanalytic Cl.DAT gave-back to Mary.DO to the esteem of herself.IO
'The psychoanalytic therapy gave back her self-esteem to Mary'

b. *El tratamiento psicoanalítico le devolvió a la estima de sí misma a María*
The therapy psychoanalytic Cl.DAT gave-back to the esteem of herself-DO to Mary-IO
'The psychoanalytic therapy gave back Mary her self-esteem'

A-beneficiaries undergo clitic doubling obligatorily, as shown in (140) (Demonte 1995: 7, fn 5; Cuervo 2003; Josep Quer, personal communication):

(140) **(Le) cociné el pollo a Mario*
Cl.DAT cooked.1S the chicken to Mario
'I cooked Mario the chicken'

The obligatoriness of clitic doubling in (140) entails that beneficiaries introduced by *a* are necessarily arguments of vAPPL in Spanish, just like Greek *se*-beneficiaries and French *a*-beneficiaries. The clitic doubling construction alternates with the prepositional construction in (141) where the benefactive argument is introduced by *para* 'for' (Demonte 1995: 7):

(141) *Cociné el pollo para Mario*
Cooked.1S the chicken for Mario
'I cooked the chicken for Mario'

The alternation between the clitic doubled *a*-beneficiary in (140) and the *para*-beneficiary in (141) shows characteristics that are similar to the properties displayed by the alternation between genitive and *se*- vs. *jia*-beneficiaries in Greek and *a*- vs. *pour*-beneficiaries in French:

(i) *A*-beneficiaries are impossible in nominalizations while *para*-beneficiaries are well-formed (Josep Quer, personal communication):

(142) a. *La preparación del pastel para María/ *a María*
The baking of the cake for Maria/ of Maria
b. *La construcción de un gran palacio para/*a Luis de Baviera*
the building of a big palace for Ludwig of Bavaria
c. *La preparación de una fiesta sorpresa para/*a el director*
The preparation of a party surprise for the director
'The preparation of a surprise party for the director'

(ii) Clitic doubled *a*-beneficiaries are impossible in passives, just like genitive and *se*-beneficiaries in Greek. The data illustrating this are repeated here from section 2:

(48) b. **La casa le fue pintada a Juan anteayer*
The house Cl.DAT was painted to Juan the day before yesterday

Para-beneficiaries are well-formed, similarly to *jia*-beneficiaries (Josep Quer, personal communication):

(143) *Este pastel ha sido preparado para Juan*
this cake has been prepared for Juan

(iii) Like *pour*-beneficiaries in French, Spanish *para*-beneficiaries are not allowed to form an (A or A') chain with a clitic. (144a) illustrates this with an example of right

dislocation. Right dislocation of an *a*-beneficiary is wellformed in Spanish, just as in French (see (144b), data provided by Josep Quer, personal communication):

(144) a. **Les prepararan algunos, para tus amigos*
Cl.DAT prepare.FUT.3S some, to your friends
b. *Les prepararan algunos, a tus amigos*
Cl.DAT prepare.FUT.3S some, to your friends

In the literature on Spanish it is commonly assumed that *a*-datives are PPs when they occur undoubled and DPs when they undergo clitic doubling (see e.g. Demonte 1995; Bleam 1999; Cuervo 2003). There are two reasons for this claim. First, PPs generally do not undergo clitic doubling in Spanish; if doubled *a*-datives are PPs, then they are the only ones to permit doubling. Second, as has been seen above, there is ample evidence that undoubled *a*-goals occur in prepositional ditransitives while constructions with doubled *a*-goals and *a*-beneficiaries are double object constructions. The view that the former arguments are PPs and the latter DPs fits the standard picture of the 'dative alternation' as an alternation in category ('oblique' PP vs. 'structural or semi-structural' DP). But the discussion of Greek and French in the preceding sections has shown that there is empirical evidence against the second argument. The first argument in itself is weak, as the unavailability of doubling with all other PPs could derive from independent factors. [39] It is therefore important to examine how clitic doubled *a*-datives fare with respect to the co-ordination tests discussed in the preceding section.

As pointed out by Jaeggli (1982: 32), the evidence from co-ordination classifies Spanish *a*-datives as PPs. Unlike French *a*, Spanish *a* may take the conjunction of DPs as its complement. Jaeggli's original examples are provided in (145):

(145) a. *Les compraron una casa a Maria y el director*
Cl.DAT bought.3P a house for Maria and the director
'They bought a house for Maria and the director'
b. *Les mandaron cartas a los padres*
Cl.DAT sent.3P letters to the parents
y los abuelos del interesado
and the grandparents of the interested party
'They sent cards to the parents and the grandparents of the interested party'

Two more examples, one with an optionally doubled goal and one with an obligatory doubled beneficiary, are given in (146) (Josep Quer, personal communication). They show that co-ordination can take place either at the DP level or at the PP level, as is always the case with PPs (see (147):

[39] For example, it could be suggested that only *a*-PPs are allowed to form double object constructions, which in Spanish necessitate the presence of a doubling clitic (see Demonte 1995; Torrego 1998; Bleam 1999; Cuervo 2003 for some explanations of the requirement for doubling in the Spanish double object construction). The reasons for that could be similar to the ones discussed in section 4 for Greek *se* and French *a*, though there is a complication, namely that *a*-phrases in Spanish do not denote pure location, i.e. they are not allowed as complements of 'live' or 'stay' (Josep Quer, personal communication).

(146) a. *Juan (les) regaló un retrato al rey y (a) la reina*
Juan Cl.DAT gave a portrait *a*-the king and *a* the queen
'Juan gave a portrait to the king and (to) the queen'
b. *Juan les pintó un retrato al rey y (a) la reina*
Juan Cl.DAT painted a portrait *a*-the king and *a* the queen
'Juan painted a portrait for the king and (for) the queen'

(147) a. *Hablaron con María y el director*
Talked.3pl with Maria and the director
'They talked with Maria and the director'
b. *Hablaron con María y con el director*
Talked.3pl with Maria and with the director
'They talked with Maria and with the director'

Jaeggli did not discuss the behavior of co-ordinated Spanish *a*-datives when these are modified by a relative clause. As pointed out to me by Josep Quer (personal communication), repetition of *a* is optional in these constructions, similarly to (146) and (147) above. Judgments appear to be subject to dialectal variation: some speakers prefer co-ordination of two *a*-datives when these are modified by a relative clause while for others repetition of *a* is entirely optional. Interestingly, when the predicate in the relative clause is collective, as in (148), forcing a group reading of the head of the relative, the speakers that prefer the conjunction of two *a*-datives find it quite natural not to repeat *a* in the second conjunct:

(148) a. *Les preparé café al chico y (a) la chica*
Cl.DAT prepared.1S coffee to-the boy and to the girl
que se conocieron ayer
that Cl.REFL met yesterday
'I prepared coffee for the boy and the girl who met yesterday'
b. *(Les) han enviado una carta al chico*
Cl.DAT have.3P sent a letter to-the boy
y (a) la chica que se conocieron ayer
and to the girl that Cl.REFL met yesterday
'They sent a letter to the boy and the girl who met yesterday'

Recall that co-ordination of two *a*-datives is obligatory in comparable French examples (see (124)) while co-ordinated *se*-datives resist a group interpretation in the Greek counterparts of (148) (see (125a vs. b) and (126a vs. b) above). Spanish appears to be in between French and Greek: repetition is neither obligatory, as in French, nor dispreferred, as in Greek. The fact that co-ordination of two *a*-datives in these environments is optional, though, as well as the fact that the preference for repetition of *a* is relaxed in the presence of a collective predicate in the relative suggest that Spanish *a* is closer to Greek *se* than to French *a*, providing one more piece of evidence that is a preposition rather than a case marker. And yet, *a*-PPs are allowed to form chains with pronominal clitics in Spanish, unlike Greek *se*-PPs which are not allowed to form chains with clitics patterning, in this respect, with *jia*-, *para*- and *pour*-beneficiaries. I therefore conclude that the DP vs. PP status of dative arguments cannot be determined on the

basis of chain formation with a clitic, contrary to what is often assumed in the literature on Spanish.

Before closing this section, a final remark on the cross-linguistic distribution of clitic doubling is worthwhile mentioning. As is well known, clitic doubling is attested to varying extents in Spanish and Romanian, while it is absent in French, except for the personal pronoun cases discussed in Kayne (2000; see examples (130) above). In the GB literature it was widely assumed that the property that regulates the cross-linguistic distribution of doubling is *Kayne's Generalization*: an object NP may undergo doubling only if it is preceded by a special preposition. In order to account for Kayne's Generalization, Jaeggli (1982) proposed that clitics absorb government of the verb (a special kind of government called "subcategorization-government"). As a result, when an overt NP occurs in object position, it cannot receive Case, which must be assigned under government. Therefore, clitic doubling is ruled out as a violation of the Case Filter, unless a preposition is present, which can assign Case to the NP. On the basis of the evidence from co-ordination also discussed here, Jaeggli argued that dative clitic doubling is licit in Spanish because *a* is a true preposition which can license the doubled NP for Case. It is illicit in French because *a* is a case marker which realizes dative case rather than assigning it to the dative NP. The evidence from Greek discussed in the present paper clearly shows that this line of argument is incorrect. In Greek, clitic doubling is licit with genitive arguments which are DPs and illicit with *se*-datives which are PPs.

In conclusion, the complex patterning of Spanish *a*-PPs, French *a*-DPs, Greek *se*-PPs and genitive DPs with respect to cliticization and clitic doubling shows that it is incorrect to appeal to the category of the associate in order to explain the crosslinguistic distribution of clitic doubling. I will have to leave the exploration of ramifications of this result to further research.

6. Concluding remarks

This paper took as a starting point the observation that Greek benefactive arguments have three alternative realizations. An attempt was made to place these constructions within the broader typology of ditransitives. The investigation focused in particular on beneficiaries introduced by the prepositional element *se* which were compared and contrasted to goals surfacing with *se* in Greek as well as dative arguments introduced by comparable prepositions in English, Japanese, French and Spanish.

In the first part of the paper I argued that 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. I linked this cross-linguistic difference to the contrasting semantic properties of *se* and *to* with respect to the feature DIRECTION/ PATH and the (possibly related) function of resultativity.

In the second part of the paper, I compared *se*-datives to *a*-datives in French and Spanish. The meaning, distribution and syntactic properties of *a*-datives in French were argued to be very similar those displayed by *se*-datives, except that the former behave like DPs and the latter like PPs under co-ordination. This led me to conclude that the

category of indirect objects is orthogonal to their distribution in ditransitives. Indirect object DPs may occur in so called 'prepositional ditransitives' and, conversely, indirect object PPs are allowed to surface in double object constructions. It is therefore 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. This structure is missing in so called 'prepositional ditransitives' where indirect objects are introduced at the root level.

A further difference between Greek *se*-datives and French *a*-datives manifests itself in their behavior under cliticization, clitic doubling and other instances of chain formation with dative clitics. *Se*-datives do not form dependencies with clitics, while *a*-datives do. The question I investigated is whether this difference can be derived from the hypothesis that PPs prohibit and DPs permit chain formation with clitics. As it turned out, the answer to this question is negative. Spanish provides crucial evidence for this. Indirect objects introduced by *a* undergo obligatory clitic doubling in Spanish double object constructions, and yet they act like PPs under co-ordination. This led me to conclude that the category of indirect objects is not the crucial factor that determines the well-formedness of clitic dependencies. Which property underlies the parametric (un-)availability of clitic doubling and other clitic dependencies remains an open question.

References.

Alexiadou, A. 2001. *Functional Structure in Nominals. Nominalization and ergativity*. Amsterdam/Philadelphia: John Benjamins Publishing Company.

Alexiadou, A. and E. Anagnostopoulou. 1998. "Parametrizing AGR: Word Order, Verb-movement and EPP checking." *Natural Language and Linguistic Theory* 16: 491-539.

Anagnostopoulou, E. 1999a. "On Clitics, Feature Movement and Double Object Alternations." *Proceedings of the North East Linguistic Society 29. University of Delaware. Volume Two. Papers from the Poster Sessions,* 41-55. Amherst: GLSA.

Anagnostopoulou, E. 1999b. On Double Object Alternations and Clitics. Unpublished ms. University of Crete.

Anagnostopoulou, E. 2001. "Two classes of double object verbs: the role of zero-morphology." In *Progress in Grammar. Articles at the 20th Anniversary of the Comparison of Grammatical Models Group in Tilburg,* M. van Oostendorp and E. Anagnostopoulou (eds.). Dutch Royal Academy Publications: electronic book in progress.

Anagnostopoulou, E. 2002. Movement Across Phonologically Visible Categories. Talk presented at MIT-Ling-Lunch, December 5, 2002.

Anagnostopoulou, E. 2003. *The Syntax of Ditransitives. Evidence from Clitics.* Berlin/ New York: Mouton de Gruyter.

Anastassiadi-Simeonidi, A. 1986. *Neology in Modern Greek Koine*. Aristotle University of Thessaloniki.

Baker, M. 1988. *Incorporation: a Theory of Grammatical Function Changing.* Chicago, Illinois: The University of Chicago Press.

Barss, A. and H. Lasnik. 1986. "A Note on Anaphora and Double Objects." *Linguistic Inquiry* 17: 347-354.

Beck, S. and K. Johnson. 2004. "Double Objects Again." *Linguistic Inquiry* 35: 97-123.

Beck, S. and W. Snyder. 2001. "The resultative parameter and restitutive 'again'." In *Auditur vox sapientiae: a festschrift for Arnim von Stechow,* C. Fery and W. Sternefeld (eds.), 81-95. Berlin: Akademie Verlag.

Belletti, A. and U. Shlonsky. 1995. "The Order of Verbal Complements: a Comparative Study." *Natural Language and Linguistic Theory* 13: 489-526.

Bleam, T. 1999. Leísta Spanish and the Syntax of Clitic Doubling. Ph.D. disseration, University of Delaware. [Distributed by the Institute for Research in Cognitive Science, Philadelphia: University of Pennsylvania.]

Bobaljik, J. 2002. "A-Chains at the PF-Interface: Copies and 'Covert' Movement." *Natural Language and Linguistic Theory* 20: 197-267.

Bobaljik, J. and D. Jonas. 1996. "Subject Positions and the Roles of TP." *Linguistic Inquiry* 27: 195-236.

Burzio, L. 1986. *Italian Syntax*: Dordrecht: Reidel Publishers.

Chomsky, N. 1993. "A minimalist program for linguistic theory." In *The view from building 20*, K. Hale and S. J. Keyser (eds.), 1-52. Cambridge Mass: MIT Press.

Chomsky, N. 1995. "Categories and transformations." In *The Minimalist Program*, 219-394. Cambridge, Mass.: MIT Press.

Chomsky, N. 2000. "Minimalist Inquiries: The framework." In *Step by step*, Roger Martin, David Michaels and Juan Uriagereka (eds.), 89-155. Cambridge, Mass.: MIT Press.

Collins, C. 1997. *Local Economy*. Cambridge, Mass.: MIT Press.

Cuervo, M.C. 2003. "Structural asymmetries but same word order: the dative alternation in Spanish." In *Asymmetry in Grammar*, A-M. DiSciullo (ed.). Amsterdam / Philadelphia: John Benjamins Publishing Company.

Demonte, V. 1995. "Dative alternation in Spanish." *Probus* 7: 5-30.

Dikken, M. den. 1995. *Particles: on the Syntax of Verb-particle, Triadic and Causative constructions.* Oxford/ New York: Oxford University Press.

Dowty, D. 1979. *Word Meaning and Montague Grammar*. Dordrecht: Reidel Publishing Company.

Fox, D. and D. Pesetsky. 2002. Cyclic Spellout, Ordering and the Typology of Movement. Handout, MIT.

Giannakidou, A. and J. Merchant. 1999. "Why Giannis can't scrub his plate clean: on the absence of resultative secondary predication in Greek." *Proceedings of the 3rd International Conference on Greek Linguistics*, 95-105. Athens: Ellinika Grammata.

Gropen, J., S. Pinker, M. Hollander, R. Goldberg, and R. Wilson. 1989. "The Learnability and Acquisition of the Dative Alternation in English." *Language* 65: 203-257.

Hoji, H. 1985. Logical Form Constraints and Configurational Structures in Japanese. Ph.D. Dissertation, University of Washington.

Holmberg, A. 1986. Word Order and Syntactic Features. Ph.D. dissertation, Stockholm.

Holmberg, A. 1999. "Remarks on 'Holmberg's Generalization'." *Studia Linguistica* 53: 1-39.

Holton, D., P. Mackridge and I. Philippaki-Warburton. 1997. *Greek. A Comprehensive Grammar of the Modern Greek Language.* London /New York: Routledge.
Horrocks, G. and M. Stavrou. 2003. "Actions and their results in Greek and English: The Complementarity of Morphologically Encoded (Viewpoint) Aspect and Syntactic Resultative Predication." *Journal of Semantics* 20: 297-327.
Jaeggli, O. 1982. *Topics in Romance Syntax*. Dordrecht: Foris Publications.
Kayne, R. 1975. *French Syntax.* Cambridge Mass: MIT Press.
Kayne, R. 1984. *Connectedness and Binary Branching*. Dordrect: Foris Publications.
Kayne, R. 2000. *Parameters and Universals.* Oxford: Oxford University Press.
Kratzer, A. 1994. The Event Argument and the Semantics of Voice. Ms., University of Massachusetts at Amherst.
Kratzer, A. 2000. "Building Statives." *Berkeley Linguistic Society* 26.
Larson, R. 1988. "On the Double Object Construction." *Linguistic Inquiry* 19: 335-392.
Lechner, W. 1998. "Two kinds of reconstruction." *Studia Linguistica* 52: 276-310.
Lechner, W. 2003. "Phrase Structure Paradoxes, Movement and Ellipsis." In *The Interfaces*, K. Schwabe, and Susanne Winkler (eds.)*,* 177-203. Amsterdam / Philadelphia: John Benjamins.
Levin, B. 1993. *English Verb Classes and Alternations*. Chicago, Illinois: The University of Chicago Press.
Levin, B. and M. Rappaport Hovav. 1995. *Unaccusativity*. Cambridge, Mass.: MIT Press.
Mackridge, P. 1985. *The Modern Greek Language.* Oxford/ New York: Oxford University Press. [1987: *Η Νεοελληνική Γλώσσα.* Translation of Mackridge 1985 by K.N. Petropoulos. Athens: Patakis.]
Mahajan, A. 1990. The A/A-bar distinction and movement theory. Ph.D. dissertation, Department of Linguistics and Philosophy, MIT.
Marantz, A. 1993. "Implications of asymmetries in double object constructions." In *Theoretical aspects of Bantu grammar*, S. Mchombo (ed.), 113-150. Stanford, CA: CSLI Publications.
Marantz, A. 1997. "No escape from syntax: Don't try morphological analysis in the privacy of your own lexicon." Paper prsented at the 21st Penn Linguistics Colloquium. *University of Pennsylvania Working Papers in Linguistics,* 4.2. Philadelphia: University of Pennsylvania.
Markantonatou, S. 1994. "Δίπτωτα ρήματα: μία λεξικο-σημασιολογική προσέγγιση." *Proceedings of the 15th Annual Meeting of the Department of Linguistics of the University of Thessaloniki*: 360-371.
McGinnis, M.J.1998. Locality in A-Movement. Ph.D. dissertation, Cambridge Mass.: MIT.
Miyagawa, S. 1997. "Against optional scrambling." *Linguistic Inquiry* 28: 1-25.
Miyagawa, S. and T. Tsujioka. To appear. "High and Low Goals and Word Order in Japanese." Ms. MIT and Georgetown University. In *Journal of East Asian Linguistics*.
Myers, S. 1984. "Zero-derivation and inflection." *MIT Working Papers in Linguistics* 7: *Papers from the January 1984 MIT Workshop in Morphology.* Cambridge Mass.: MIT.
Oehrle, R. 1976. The Grammatical Status of the English Dative Alternation. Ph.D. dissertation, Department of Linguistics and Philosophy, MIT.
Ormazabal, J. and J. Romero. 2001. Agreement Restrictions. Ms. University Basque Country (EHU)/Basque Center for Language Research (LEHIA) and U. of Alcalá/U. Autónoma de Madrid.

Parsons, T. 1990. *Events in the Semantics of English. A Study in Subatomic Semantics.* Cambridge Mass: MIT Press.
Pesetsky, D. 1995. *Zero Syntax*. Cambridge, Mass.: MIT Press.
Philippaki-Warburton, I. 1977. "Modern Greek Clitic Pronouns and the 'Surface Structure Constraints'." *Journal of Linguistics* 13: 259-281.
Phillips, C. 1996. Order and Structure. Ph.D. Dissertation, Cambridge, Mass: MIT.
Pinker, S. 1989. *Learnability and cognition: The acquisition of argument structure.* Cambridge, Mass.: MIT Press.
Pylkkänen, L. 2002. Introducing Arguments. Ph.D. Dissertation, Cambridge, Mass: MIT.
Ralli, A., and M. Stavrou. 1997/8. "Morphology-Syntax interface: A-N Compounds vs. A-N Constructs in Modern Greek." In *Yearbook of Morphology*, G. Booij and J. van Marle (eds.), 243-265. Dordrecht: Kluwer Academic Publishers.
Richards, N. 1997. What Moves Where When in Which Language Ph.D. dissertation, Cambridge, Mass: MIT.
Scopeteas, S. 2003. The Evolution of Control in Greek Verbs of Motion. Ms. University of Erfurt.
Snyder, W. 1995. Language Acquisition and Language Variation: The Role of Morphology. PhD dissertation, Cambridge, Mass: MIT.
Snyder, W. 2001. "On the Nature of Syntactic Variation: Evidence from Complex Predicates and Complex Word-formation." *Language* 77: 324-342.
Sportiche, D. 1992. Clitic Constructions. Ms., UCLA.
Sportiche, D. 1998. *Partitions and Atoms of Clause Structure. Subjects, agreement, case and clitics.* London/ New York: Routledge.
Stechow, A. von. 1995. "Lexical Decomposition in Syntax." In *Lexical Knowledge in the Organization of Language*, U. Egli, P. E. Pause, C. Schwarze, A. von Stechow and G. Wienhold (eds.), 81-118. Amsterdam / Philadelphia: John Benjamins.
Takano, Y. 1998. "Object Shift and Scrambling." *Natural Language and Linguistic Theory* 16: 817-889.
Talmy, L. 1985. "Lexicalization patterns: semantic structure in lexical forms." In *Language typology and syntactic description. Vol. III: Grammatical categories and the lexicon* T. Shopen, (ed.), 57-149. Cambridge: Cambridge University Press.
Torrego, E. 1998. *The Dependencies of Objects*. Cambridge Mass.: MIT Press.
Tzartzanos, A.1945/1989. *Νεοελληνική Σύνταξις (της Κοινής Δημοτικής)*. (Modern Greek Syntax). Thessaloniki: Kiriakidhes [2nd edition].
Ura, H. 1996. Multiple Feature-Checking: A Theory of Grammatical Function Splitting. Ph.D. dissertation, Cambridge, Mass: MIT.
Vergnaud, J.-R. 1974. French Relative Clauses. Ph.D. dissertation, Cambridge, Mass: MIT.
Uriagereka, J. 1988. On Government. Ph.D. Dissertation, University of Connecticut.
Webelhuth, G. 1989. Syntactic Saturation Phenomena and the Modern Germanic Languages. Ph.D. dissertation. University of Massachusetts, Amherst.
Yatsushiro, K. 2001. Case Licensing and VP Structure. Ph.D. dissertation, University of Connecticut. [Distributed by MITWPL, Cambridge, Mass.: MIT.]