

## **From lexical to dependent: the case of the Greek dative\***

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### **1. Introduction**

This paper focuses on the properties of dative/genitive objects in Classical and Standard Modern Greek (CG vs. SMG). We also look into the transition from one system of case assignment to another as well as the relationship between the diachrony of morphological case and the diachrony of prepositions. In particular we argue that while CG dative/genitive objects are hidden PPs, SMG genitives are dependent cases in the sense of Baker (2015). We provide three separate arguments for the dependent case status of SMG genitives and we also provide diachronic support from the transition between the two systems. The change observed in the system of Greek can be understood as a reanalysis of datives from PP to DP structures, with the diachrony of Greek prepositions playing also a crucial role.

### **2. Two types of dative and genitive: a challenge for an inherent Case approach**

#### **2.1 Dative and genitive in Classical Greek**

Classical Greek (CG) is the dialect of Greek spoken in Athens in the 5<sup>th</sup> and 4<sup>th</sup> centuries BC. In this language, nouns inflect in five morphological cases: nominative, genitive, dative, accusative and vocative (see Anagnostopoulou & Sevdali, 2015 for an overview of the CG system). Nominative case is reserved for subjects of finite clauses. Accusative is the most common case for objects and therefore the verbs selecting it are not listed in grammars. Even though there seem to be some semantic generalizations behind the choice of dative or genitive case (Luraghi 2010: 64-67; Anagnostopoulou & Sevdali 2015: 451-452), these are nevertheless idiosyncratically determined by particular verbs.<sup>1</sup> Dative-

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selecting verb classes include verbs denoting appropriateness, equality/agreement, friendly or adversarial feeling or action, persuasion, submission, and finally complex verbs with the prepositions *en-* ‘in’, *sun-* ‘with’, *epi-* ‘on’, *para-* ‘next to’, *hupo-* ‘under’, and the adverb *omou* ‘similarly’. Genitive-selecting verbs classes include verbs denoting memory, beginning/ending taking care of, wanting, enjoyment, being part of, losing, needing, feeling/perception, attempt, success/failure, ruling and comparison.

As can be seen from these verb classes, the choice of dative and genitive objects is determined by specific lexical items, verbs (Vs) or prepositions (Ps)<sup>2</sup>, and especially for the latter we see that prepositions retain the same case-assigning properties both as free-standing elements and as prefixes. A similar observation applies to verbs selecting for two objects, which display four case arrays summarized in (1).

- (1) Case arrays in Classical Greek ditransitives (Anagnostopoulou & Sevdali 2015)
- a. Accusative IO – Accusative DO
  - b. Dative IO – Accusative DO
  - c. Genitive IO – Accusative DO
  - d. Dative IO – Genitive DO

Dative and genitive are subject to some thematic and morpho-syntactic generalizations (Anagnostopoulou & Sevdali 2015: 457): goals tend to be dative, sources and possessors tend to be genitive, and verbs prefixed by dative or genitive assigning prepositions must assign dative or genitive to the goal<sup>3</sup>.

## 2.2 Genitive in Standard Modern Greek

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<sup>1</sup> Cf. Bortone (2010) who points out when discussing the evolution of prepositional constructions in Greek that while dative, genitive and accusative retained their independent semantic functions when they occurred as complements of prepositions in Homer, that was no longer the case in Classical Greek, where obliques often had no clear semantics when they were used as complements of prepositions, resulting in several idiosyncrasies. Bortone’s observation also holds for complements of mono-transitive verbs in CG, i.e. some independent semantic functions of genitive, dative and accusative are retained when they are selected by particular verbs, but rather weakly, and there is a lot of idiosyncrasy in the classes described in the text.

<sup>2</sup> Most prepositions are homophonous to prefixes in CG as shown in Bortone (2010); but there is another class of less frequent items only surfacing as prepositions, which in the philological tradition are called ‘improper prepositions’ precisely because they cannot function as prefixes. The generalizations above indicate that these items retain the same case licensing properties in both of these roles: when they head prepositional phrases and when they attach to verbs.

<sup>3</sup> The verbs classes discussed by Anagnostopoulou & Sevdali (2015) (ex. 14 – 17, pp. 456-457) are by and large following traditional grammars that distinguish the classes based on the morphological cases of the two objects. However, in more recent work we see that there seems to be variable behavior inside the same verb class: One striking example is that some of the verbs in the GEN- ACC class have genitive IOs and accusative DOs (i.e. *apostero*: ‘deprive’ something (acc) from someone (gen)) and some of the verbs have accusative IOs and genitive DOs (*kenoo*: ‘empty’ something (acc) of something else (genitive)). The same is true for the DAT-ACC class that consists of standard ditransitives like *dido:mi* ‘give’ where the dative argument is the IO and the accusative the DO, and verbs like *isoo*: ‘liken’ and *meignumi* ‘mix’ where the frame involves an accusative argument and a dative argument (liken someone (acc) with someone else (dat), mix something (acc) with something else (dat)). A detailed taxonomy of CG ditransitives based on more semantic criteria following the work of Levin (1983) is beyond the scope of this paper but is the subject of ongoing work as part of our AHRC project ‘Investigating variation and change: Case in diachrony’ (AH/P006612/1).

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The SMG system is in general characterized by reduction in the inventory of morphological cases available. Nouns inflect in four morphological cases: nominative, genitive, accusative and vocative. One of the most salient characteristics distinguishing all dialects of Modern Greek from CG is the loss of morphological dative (see Humbert 1930, Horrocks 2007 and Luraghi 2003 i.a. on the diachrony of the morphological dative) and its replacement by either genitive or accusative depending on the syntactic environment (ditransitives vs. transitives) and the dialect (Southern Greek vs. Northern Greek). Accusative now surfaces on most objects of transitive verbs in all dialects of MG. The vast majority of the verbs that selected for dative and genitive objects in CG now take accusative objects. This is illustrated in (2) and (3) with sentence pairs from CG and MG including exactly the same verbs:

(2) *Classical Greek*

- a. Ho Odusse-us                      ephthon-e:se                      *Palame:d-ei* dia sophia-n.  
the Ulysses-NOM    envy-3SG.AOR.ACT    Palamedes-DAT because wisdom  
'Ulysses was jealous of Palamedes because of his wisdom.'

*Standard Modern Greek*

- b. O Odiseas                      fthonese                      *ton Palamidi*  
the Ulysses-NOM    envy-3SG.AOR.ACT    Palamedes-ACC  
'Ulysses was jealous of Palamedes (because of his wisdom).'

(3) *Classical Greek*

- a. Katapse:phe:z-o:                      *tin-os.*  
Condemn-1SG.PRS.ACT    someone-GEN  
'I condemn someone.'

*Modern Greek*

- b. Katapsifizo    *kapion.*  
Condemn/ vote against-1SG.PRS.ACT    someone-ACC  
'I vote against someone.'

In Central and Southern Greek (e.g. the dialects spoken in Athens, Peloponnese, many of the islands), as well as in Standard Modern Greek (based on Southern dialects, see Mackridge 1985, 2009), the IO bears genitive and the DO accusative<sup>4</sup>, resulting in the pattern in (4) (Anagnostopoulou 2003, Michelioudakis 2012, Georgala 2012, i.a.):

- (4) a. Edhosa                      *tu*    *Petru*                      ena    paghoto  
Gave-1SG.PST.ACT    the    Peter-GEN    an    ice cream-ACC  
'I gave Peter an ice cream.'
- b. Tha                      *su*                      ftiakso                      ena    paghoto

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<sup>4</sup> As far as ditransitives are concerned, Modern Greek has a dialect split on the case realization of the IO. Northern Greek, i.e. the dialects spoken in Thessaloniki and the northern parts of Greek, has ditransitives where both objects bear accusative morphology (Dimitradis 1999 i.a. for discussion and references). We will not be discussing this pattern here for reasons of space.

FUT      Cl-2SG.GEN    make-1SG.ACT      an      ice cream-ACC  
 ‘I will make you an ice cream’

IOs are not allowed to alternate with nominative in MG passives: example (5) is ungrammatical in all dialects. Thus, even though NG ditransitives contain two accusative objects, they cannot be assimilated to English double object constructions which freely permit passivization of the IO as exemplified by the grammaticality of the translation.

(5)    \*O Petros                  dothike                  ena pagoto                  *All dialects of Greek*  
 The Peter-NOM                  gave-NACT                  an ice cream-ACC  
 ‘Peter was given an ice cream’

### 2.3 SMG vs. CG: different systems

The SMG genitive differs from CG datives and genitives in two respects: The first difference concerns the fact that genitive is rarely found on objects of monadic transitive verbs in SMG, unlike CG. Very few verbs felt by native speakers to be parts of their productive vocabulary of the ‘*Demotiki*’ register (reflecting the spoken, informal language) assign genitive in SMG. Two such verbs are *telefonao* ‘call’ and *milao* ‘talk’ in (6):

(6)    Telefonisa/milisa                  tuPetru  
 Called/ talked-1SG.PST                  the Peter-GEN  
 ‘I called Peter/ talked to Peter’

Genitive is also assigned by verbs prefixed by archaic genitive-assigning prepositions, like *iper-* (‘over’) in (6). These verbs belong to the formal/ *Katharevusa* register, which was introduced in an attempt to revive CG as the official language of the Modern Greek state reintroducing features from CG mainly in written official language and thus leading to registers that do not represent a natural stage in the development of the grammar.<sup>5</sup>

(7)    O Tsipras                  iper-isxise                  tu Meimaraki  
 The Tsipras-NOM                  prevailed                  the Meimarakis-GEN  
 ‘Tsipras prevailed over Meimarakis’

Even though verbs like that in (7) are recognized today as active parts of the SMG vocabulary, they belong to a closed system, similarly to the latinized vocabulary in English.

The second difference concerns sensitivity to thematic information in ditransitives. As already mentioned, the choice of dative vs. genitive was related to the theta-roles of IOs in CG. Since there is no longer a dative-genitive distinction, the genitive has been generalized to all IOs in SMG, regardless of whether they are goals (with ‘give’), sources (with ‘steal’) or beneficiaries (with ‘bought’), as is shown in (8)-(10). By contrast, the

<sup>5</sup> This movement started in the 18<sup>th</sup>-19<sup>th</sup> century and was completely abandoned right after the Greek dictatorship in 1974, see Mackridge (1985, 2009) for discussion. Relics of the archaic language still survive but are not used productively by “naïve” native speakers. The verb in example (7) in particular are not even relics of archaic language: they are artificial forms that are the direct result of the *katharevusa* movement, not found in any of the dialects of Greek (Dionysios Mertyris, p.c.).

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choice of P in the corresponding prepositional ditransitives is thematically determined, *se* ‘to/in’ introduces goals, *apo* ‘from’ sources and *gia* ‘for’ benefactives.

- |      |   |                     |                        |               |                    |
|------|---|---------------------|------------------------|---------------|--------------------|
| (8)  | Edhosa  | <i>tis Marias /</i> | <i>s-tin Maria</i>     | to vivlio     | <i>Goal</i>        |
|      | Gave-1SG  | the Mary-GEN        | to-the Mary            | the book-ACC  |                    |
|      | ‘I gave Mary the book/ I gave the book to Mary’     |                     |                        |               |                    |
| (9)  | Eklepsa   | <i>tis Marias /</i> | <i>apo tin Maria</i>   | to vivlio     | <i>Source</i>      |
|      | Stole-1SG   | the Mary-GEN        | from the Mary          | the book-ACC  |                    |
|      | ‘I stole the book from Mary’                        |                     |                        |               |                    |
| (10) | Eftiaksa  | <i>tis Marias</i>   | <i>/ gia tin Maria</i> | pagoto        | <i>Beneficiary</i> |
|      | Made-1SG  | the Mary-GEN        | for the Mary           | ice cream-ACC |                    |
|      | ‘I made Mary ice cream / I made ice cream for Mary’ |                     |                        |               |                    |

Based on the evidence in this section, we argue that CG and SMG are two distinct systems and we will need to pursue an analysis that accounts for their differences. In the next section we turn to previous approaches of SMG genitives and present some preliminary observations why they cannot be maintained.

#### **2.4 Lexical/inherent Case cannot be the answer**

The standard, text-book approach to non-accusative objective case, prototypically dative, but also genitive, ablative, instrumental etc., drawing on Chomsky (1981, 1986), is that they are non-structural Cases. They are called ‘oblique’, ‘lexical’ or ‘inherent’ in the literature, and are accordingly taken to be prepositional, or idiosyncratically assigned by particular verbs or tied to specific theta-roles (see Pesetsky & Torrego 2011 for a recent overview). In an attempt to clarify the nature of dative, Woolford (2006) argues that it is either lexical or inherent Case: lexical dative is idiosyncratic, lexically-selected by certain verbs or prepositions, whereas inherent dative is more regular, associated with specific  $\theta$ -positions. On the basis of Woolford’s criteria, genitive and dative in CG transitives qualify as lexical Cases since they are assigned by particular verbs and prepositions, while genitive and dative in CG ditransitives are inherent Cases, as they are systematically associated with specific thematic roles, such as ‘goal’, ‘source’, ‘possessor’.

A further commonplace assumption is that when a DP does not enter into case-alternations in passives, this is so because its Case is lexically or thematically licensed and must therefore be retained throughout the derivation (Chomsky 1981, 1986; Vergnaud 1977/2008; see Bobaljik & Wurmbrand 2008, Pesetsky & Torrego 2011 for overviews and references. Based on this property, Anagnostopoulou (2003, 2005), Michelioudakis (2012) and Georgala (2012) all analyze SMG IOs as bearing inherent/quirky Case assigned by an applicative head.

However, if both CG and SMG have inherent dative/genitive Case, then the differences discussed are accidental. The invariable use of genitive in all SMG ditransitives can be linked to the syncretism of dative with genitive case which took place in the course of the transition from CG to SMG, but this does not explain why in the course of historical evolution from CG to SMG morphological genitive was generalized as the regular case for

IOs and morphological accusative was generalized as the regular case for DOs. We argue that this key asymmetry in SMG can receive a principled explanation if genitive and accusative in SMG both qualify as dependent cases which are assigned in opposition to a lower and a higher argument, respectively. On the other hand, datives and genitives in CG were lexical/prepositional cases and were therefore sensitive to thematic/idiosyncratic information. In the following section, we will provide independent evidence in the spirit of Baker & Bobaljik (2017) that genitive assignment in SMG is sensitive to the presence and manifestation of a lower nominal in the vAPPLP domain, and thus SMG genitive is best analysed as dependent case, in contrast to dative and genitive case in CG which is generally tied to thematic information and properties of verbs and prepositions.<sup>6</sup>

### 3. Towards a proposal

Based on the data presented so far, we propose that the core difference between SMG and CG is that the former has dependent genitive and the latter has lexically governed dative and genitive. The former is assigned in opposition to a lower argument in the VP domain following a rule like (11) and (12) below:

*General Dependent Case rule (adapting Marantz 1991)* (Baker 2015: 79, 111)

- (11) If XP bears c-command relationship Y to ZP in local domain WP, then assign case V to XP.

*For Dative:* (Baker 2015: 131)

- (12) If XP c-commands ZP in VP, then assign U (dative) to XP

Such an approach would be crucially different from another option from the literature: Harley's (1995: 161) *Mechanical Case Parameter* in (13), where dative (or SMG genitive) is canonically realized on the second argument checking a structural Case feature in constructions where three arguments are eligible to receive m-case:

- (13) *The Mechanical Case Parameter (MCP)*
- a. If one case feature is checked structurally in the clause, it is realized as Nominative (mandatory case)
  - b. If two case features are checked structurally in the clause the second is realized as Accusative.
  - c. If three case features are checked in the clause, the second is realized as Dative and the third as Accusative.
  - d. The mandatory case in a multiple case clause is assigned in the top/bottom AgrP.

In the following section, we look at a range of environments in SMG where genitive is assigned in opposition to another argument in the lower VP domain: dyadic unaccusatives, sensation predicates, theme-incorporation contexts and high applicative genitives in

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<sup>6</sup> With one apparent exception, namely passivization that we will not discuss here for reasons of space. The reader is directed to Anagnostopoulou & Sevdali (submitted).

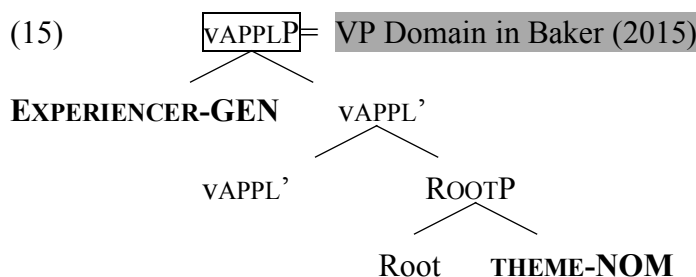
unaccusatives vs. unergatives. These environments provide independent evidence for a dependent case approach towards SMG genitive, as opposed to an alternative approach.

### 3.1 Evidence that SMG genitives are sensitive to the presence of a lower argument inside the VP: dyadic unaccusatives

Dyadic unaccusative verbs, for example, psychological predicates corresponding to Italian ‘piacere’ verbs, as in (14) (Belletti & Rizzi 1988, i.a., see Anagnostopoulou 1999 for SMG), sensation verbs, different types of verbs expressing possession/ deprivation like *xriazete* ‘need’ *lipi* ‘miss’ productively select for a genitive experiencer or possessor argument and a nominative theme:

- (14) *Tu Petru tu aresi i musiki*  
 The Peter-GEN cl-GEN please-3SG the music-NOM  
 ‘Peter likes music’

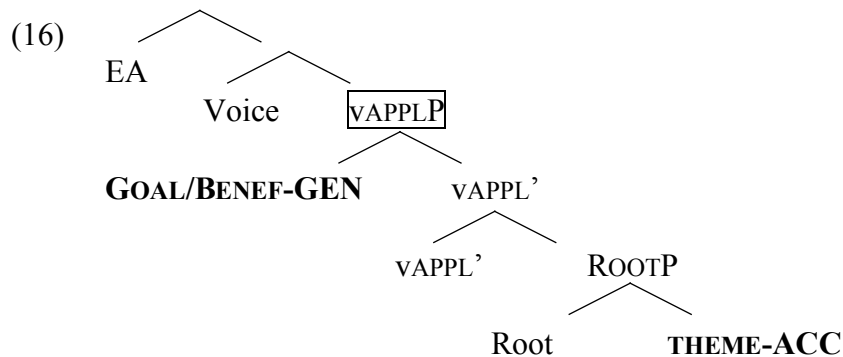
Evidently, genitive case in (14) cannot be derived from the MCP since these constructions contain two arguments, therefore only two structural case features are checked in the clause, while the MCP predicts that genitive can appear only as the “third” case in a clause. Therefore, it must be analysed as lexically governed case in Harley’s system, which is unsatisfactory as it fails to express the fact that genitive is highly systematic in these environments, just as in ditransitives. On the other hand, Baker’s dependent case rule in (12) correctly predicts that experiencers/possessors will bear genitive in these constructions, since the VP contains a lower theme object e.g. (15). We assume that experiencers/possessors/goals are introduced by an applicative *v* which combines with a root introducing the theme argument, but any VP-structure representation would lead to the same result under Baker’s definition in (12) above as long as the genitive is higher than the nominative (see Anagnostopoulou 1999 for evidence to this end concerning dyadic unaccusative experiencer-object predicates)<sup>7</sup>:



Case assignment in (15) proceeds just as in ditransitives in (16), except that the theme bears nominative morphology since there is no EA in (21), unlike (16) where a transitive *v*/Voice head is present (Voice in (22), Alexiadou et al. 2006, 2015, Schäfer 2008, i.a.).<sup>8</sup>

<sup>7</sup>We are assuming throughout the paper that the theme is an argument of the root. See Harley (2014), Borer (2003, 2005a, 2005b), Lohndal (2014), Alexiadou (2014) and the discussion in the various contributions to Doron (2014) for arguments for and against roots taking complements.

<sup>8</sup>See Baker (2015) on the details of how dependent accusative is assigned to the theme in applicatives.



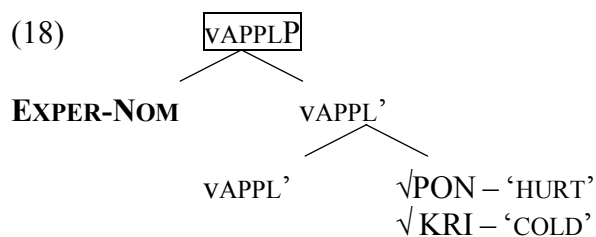
This is the first environment where we observe that genitive in SMG is sensitive to a lower argument in the VP domain.

### 3.2 Evidence that SMG genitives are sensitive to the presence of a lower argument inside the VP: case alternations with sensation predicates

The dependent genitive analysis of dyadic unaccusatives receives further support by verbs like *ponai* ‘hurt’, *krioni* ‘be cold’ which show that genitive alternates with nominative in the absence of a theme argument with sensation verbs. This provides evidence that the genitive assigned to the DP in the (b) examples is not tied to the experiencer theta-role.

- (17) a. *O Janis*                      *ponai*  
 The Janis-NOM                      hurt-3SG  
 ‘Janis hurts’
- b. *Tu Jani*              *tu*                      *ponai*              *o lemos*  
 The Janis-GEN cl.GEN              hurt-3SG              the throat-NOM  
 ‘Janis has a sore throat’

Just as in example (14), the experiencer receives dependent genitive in opposition to the lower vP-internal *o lemos* ‘the throat’ in (17b), see tree (15). On the other hand, the experiencer is the single argument of the Root+vAPPL complex in (17a), as depicted in (18), and receives unmarked/ environment-sensitive Nom since dependent genitive cannot be assigned, because, crucially, there is no lower argument to be assigned in opposition to.





This also explains why monadic sensation predicates always select for nominative and never for genitive experiencers in SMG, as genitive is almost always dependent case in SMG and can never appear as the sole argument of a monadic predicate:

- (19) *I Maria*            *pinai/ dipsai*  
The Mary.NOM    hunger.3SG.ACT/thirsty.3SG.ACT  
'Mary is hungry/thirsty'.

In conclusion, based on the data from sensation-predicates in this section, we conclude that the right condition for dependent genitive case in SMG is Baker's rule (12). Even more importantly, we have seen evidence that the thematic role of experiencer is not uniquely tied to genitive case morphology but surfaces as either genitive or nominative depending on whether there is a lower DP in the vP vs. a PP or no other argument. Case alternations of this sort provide support for a dependent case theory of the SMG genitive, as opposed to a competing theory which treats genitive as inherent case assigned by vAPPL (see Anagnostopoulou 2003 among others for SMG, and Holmberg et al. (2017) for a recent approach along these lines).

### 3.3 Evidence that SMG genitives are sensitive to the presence of a lower argument inside the VP: theme-incorporation alternations

A further environment showing an alternation in the case of the goal depending on the realization of the lower theme argument involves theme-incorporating predicates with the verb 'give', more precisely with the bound verbal root *dot-o*, an allomorph of the free root *din-o* 'give', in examples like *mistho-doto* 'pay a salary to', *trofo-doto* 'cater for', *ilektr-o* 'give electricity to'. These predicates display an alternation in SMG whereby in one variant, they involve an incorporated theme argument, *mistho* 'salary', *trofi* 'food', and *ilektr-* 'electricity', respectively, in addition to an independent goal, while they can also appear with the theme projected as a separate argument, in a regular goal ditransitive construction with 'give'. The relevant alternation is exemplified in (20) with the a. examples exhibiting the ditransitive structure, vs. the b. examples the incorporated one.

- (20) a. *Dino*            **tu stratioti**            *mistho*  
Give.1SG the soldier.GEN            salary.ACC  
'I give the soldier a salary'
- b. *Mistho-doto*            **ton stratioti**  
Salary.give.1SG            the soldier.ACC  
'I pay the soldier'

What we observe is a stark contrast in the morphological realization of the IO depending on the projection of the theme as a separate argument or not. So, in the (a) examples where there are two arguments inside the vAPPL domain, the IO is realized with genitive, while theme incorporation yields realization of the IO as accusative, seen in the (b) examples above. This is one additional piece of evidence that the SMG genitive is not tied to the theta-role 'goal', but to the presence of a lower DP in the vAPPL domain.



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<i>Para</i>	+	dative	= at the side of
<i>Para</i>	+	accusative	= to the side of

In Classical Greek cases retain their prepositional meanings (comitative, instrumental, ablative), while prepositions can still select for different cases, and then the cases they select have clear meaning (e.g. accusative: extent, dative: location, genitive: source). However, it is already evident that the case-assigning properties of prepositions start to diminish (Hatzidakis, 1892). As Bortone (2010) points out, the accusative slowly begins to establish itself as the main case used after prepositions<sup>9</sup>.

Some prepositions idiosyncratically select for one case which does not then have a clear meaning, as Regard (1918) also states: ‘as prepositions become unable to take a wide range of cases, the choice of a particular case mostly loses meaning’. For example, *pro* takes only genitive case and the semantic contribution of the case is unclear in this instance:

(25) *Pro* + genitive = in favor of someone / something (benefactive)

Finally, there is evidence that genitive is stronger than dative even in CG, as almost all ‘improper prepositions’ (i.e. non-prefixal ones) select for genitive and not dative (Bortone, 2010: 119).

So far, the data are consistent with an analysis of cases as headed by zero prepositions, and the same analysis would apply to argumental datives and genitives, which were used for animates and inanimates alike providing additional evidence for a PP analysis.<sup>10</sup> The fact that overt prepositions assign dative or genitive makes the hypothesis that zero prepositions do the same plausible for the language learner. In other words, CG dative/genitive IOs could be acquired by speakers as PPs exactly *because* they bear oblique case morphology, in accordance also with the rest of the prepositional system, where an overt preposition often requires an obliquely marked nominal complement.

In Hellenistic (Koiné) Greek we observe the beginnings of most of the changes that shaped the system as we know it today. First, old cases are replaced by prepositions, which means that obliques lose their zero-P status. Once this happens it is more difficult for genitive and dative IOs to be analysed as PPs headed by a zero preposition. Moreover, morphological dative is on a sharp decline: from the 3<sup>rd</sup> until the 8<sup>th</sup> centuries AD, the dative was variably replaced by the genitive and the accusative case (Humbert 1930, Horrocks 1997/2007, Browning 1983). Sometimes, genitive and accusative were employed simultaneously, in the same documents. Goodwin (1894) also reports the same author of Hellenistic Greek using datives and PPs as complements of the same unprefixal verb: cf. *lalo*: ‘speak’. At the same time, overt prepositions start losing their capacity to assign oblique cases, and accusative is starting to take over as the main case inside PPs. Once this happens, oblique cases lose their core meanings like source and location which they had before when they combined with overt prepositions.

Medieval Greek marks the last period of the changes in prepositions and morphological dative case. In particular:

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<sup>9</sup> For example even in Xenophon (5<sup>th</sup>- 4<sup>th</sup> BC) prepositions *ana* and *amphi* take accusative only, while the same prepositions in Homer (8<sup>th</sup>- 7<sup>th</sup> BC) took all three oblique cases.

<sup>10</sup> Compare this to SMG, where genitives are DPs/applicatives. In SMG genitives are used exclusively for animates and inanimates have to be realized as PPs with an overt preposition.

- (i) By the 10<sup>th</sup> century AD all prepositions governed accusative case (Browning 1983: 42 – 43), i.e. Ps had lost their idiosyncratic case-assigning capacity.
- (ii) Monadic transitive verbs no longer assigned dative or genitive but only accusative case to their objects, i.e. transitive verbs no longer assigned lexically governed case to their objects.

In MG, morphological dative is entirely lost and has been syncretized with either genitive (SMG IOs), accusative (NG IOs) or PP (adverbial uses). The two types of syncretism we find today in ditransitives subject to a Southern vs. Northern split have been further assisted by two processes: (i) a reanalysis of possessor raising constructions as applicatives facilitating dative-genitive syncretism and (ii) a spread of CG double accusative constructions to more ditransitive verbs leading to dative-accusative syncretism. Concerning the former process, Cooper & Georgala (2012; building on Horrocks 1997, 2007) and Stolk (2015) argue that genitive possessor pronouns underwent possessor raising, which led to a reanalysis of pronominal clitic possessors as applicative arguments due to the semantic and syntactic similarities between possessor raising constructions and applicative constructions. This led to ditransitives with genitive pronominal IOs. This reanalysis took place when the Wackernagel position for clitics was abandoned, and clitics were pushed down close to the verb in the IP domain; it was then generalized to all DPs. Thus, this reanalysis also contributed to the re-categorization of IOs from PPs into DPs. As for the pattern we find in NG, the use of two accusatives after verbs such as *didasko* “teach” in CG encouraged analogical overlaps between the dative and the accusative according to Horrocks (1997: 124–125).

## 5. Conclusion

In this paper we provided arguments that CG datives/genitives and SMG genitives are different: the former are lexical cases, hidden PPs, while the latter have dependent case in the sense of Baker (2015). This proposal can account for the observed differences between the two systems, most notably that genitives in SMG (but not in CG) are sensitive to another argument in the vAPPL domain. Finally, we showed that this proposal receives diachronic support from the parallel developments in morphological case and prepositions from the history of Greek.

## References

- Alexiadou, Artemis. 2014. Roots don't take complements. *Theoretical Linguistics* 40 (3/4), pp. 287-297.
- Alexiadou, Artemis, Elena Anagnostopoulou & Florian Schäfer. 2006. Properties of anticausatives cross-linguistically. *Phases of interpretation*, ed. by Mara Frascarelli, 187–212. Berlin: Mouton de Gruyter.
- Alexiadou, Artemis, Elena Anagnostopoulou & Florian Schäfer. 2015. *External arguments in transitivity alternations: A layering approach*. Oxford: Oxford University Press.
- Alexiadou, Artemis, Anagnostopoulou, Elena & Christina Sevdali. 2014. Opaque and transparent datives, and how they behave in passives. *The Journal of Comparative Germanic Linguistics*, 17(1), 1-34.

- Anagnostopoulou, Elena. 2003. *The syntax of ditransitives: Evidence from clitics*. Berlin: Mouton de Gruyter.
- Anagnostopoulou, Elena. 2005. Cross-linguistic and cross-categorical distribution of datives. *Advances in Greek generative syntax*, ed. by Melita Stavrou and Arhonto Terzi, 61–126. Amsterdam: John Benjamins.
- Anagnostopoulou, Elena, & Christina Sevdali. 2015. Case alterations in Ancient Greek passives and the typology of Case. *Language* 91(2), 442 – 481.
- Anagnostopoulou, Elena, & Christina Sevdali. Submitted. Two modes of genitive and dative case assignment: evidence from Greek. Pp 1 – 51.
- Baker, Mark C. 2015. *Case. Its Principles and Its Parameters*. Cambridge: Cambridge University Press.
- Baker, Mark C. & Jonathan David Bobaljik. 2017. On inherent and dependent theories of ergative case. *The Oxford Handbook of Ergativity*. Oxford: Oxford University Press.
- Belletti, Adriana & Luigi Rizzi. 1988. Psych-verbs and  $\theta$ -theory. *Natural Language and Linguistic Theory*, 6(3), pp.291-352.
- Bobaljik, Jonathan David & Susi Wurmbrand. 2008. Case in GB/minimalism. In Andrej Malchukov and Andrew Spencer (eds.) *The Oxford Handbook of Case*. Pp 44–58. Oxford: Oxford University Press.
- Borer, Hagit. 2003. Exo-skeletal vs. endo-skeletal explanations: Syntactic projections and the lexicon. *The nature of explanation in linguistic theory*, pp.31-67.
- Borer, Hagit. 2005a. *Structuring Sense I: In name only*. Oxford: Oxford University Press.
- Borer, Hagit. 2005b. *Structuring Sense II: The Normal Course of Events*. Oxford: Oxford University Press.
- Bortone, Pietro. 2010. *Greek prepositions: From antiquity to present*. Oxford: Oxford University Press.
- Browning, Robert. 1983. *Medieval and Modern Greek*. Cambridge: Cambridge University Press.
- Chomsky, Noam. 1981. Lectures on government and binding. *Dordrecht: Foris*.
- Chomsky, Noam. 1986. Knowledge of language: Its nature, origin, and use. New York: Praeger.
- Cooper, Adam. & Effi Georgala. 2012. Dative loss and its replacement in the history of Greek. In *Historical Linguistics 2009: Selected Papers from the 19th International Conference on Historical Linguistics, Nijmegen, 10-14 August 2009* (Vol. 320, p. 277- 292). John Benjamins Publishing.
- Doron, Edit (Ed.). 2014. *Theoretical Linguistics* 40 (3/4), Special issue On the Identity of Roots
- Georgala, Effi. 2012. *Applicatives in their structural and thematic function: A minimalist account of multitransitivity*. Doctoral dissertation, Cornell University).
- Goodwin, William W. 1894. *Greek grammar*. London: Bristol Classics.
- Harley, Heidi. 1995. *Subjects, events and licensing*. Cambridge, MA: MIT dissertation.
- Harley, Heidi. 2014. On the identity of roots. *Theoretical linguistics*, 40(3-4), pp.225-276.
- Hatzidakis, Georgios N. 1892. *Einleitung in die neugriechische Grammatik*. Leipzig: Breitkopf&Härtel.
- Holmberg, Anders, Michelle Sheehan & Jenneke van der Wal. 2017. Movement from the double object construction is not fully symmetrical. *Ms., Newcastle*

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- Horrocks, Geoffrey. 1997/2007. *Greek: a history of the language and its speakers/Ελληνικά: Ιστορία της γλώσσας και των ομιλιτών της*. London/Athens: Estia.
- Humbert, Jean. 1930. *La disparition du datif grec du I<sup>er</sup> au X<sup>em</sup> siècle*. Paris: Champion.
- Levin, Beth. 1993. *English Verb Classes and Alternations*. The University of Chicago Press.
- Lohndal, Terje. 2014. *Phrase structure and argument structure: a case study of the syntax-semantics interface*. Oxford: Oxford University Press.
- Luraghi, Silvia. 2003. *On the meaning of prepositions and cases: The expression of semantic roles in Ancient Greek* (Vol. 67). John Benjamins Publishing.
- Luraghi, Silvia. 2010. The extension of the transitive construction in Ancient Greek. *Acta Linguistica Hafniensia* 42.1.60–74.
- Mackridge, Peter. 1985. *The Modern Greek language: A descriptive analysis of standard Modern Greek*. Oxford University Press, USA.
- Mackridge, Peter. 2009. *Language and national identity in Greece, 1766-1976*. Oxford University Press.
- Marantz, Alec. 1991. Case and licensing. *Eastern States Conference on Linguistics (ESCOL '91)* 8.234–53.
- Michelioudakis, Dimitris. 2012. *Dative arguments and abstract Case in Greek*. Doctoral dissertation, University of Cambridge.
- Pesetsky, David & Esther Torrego, 2011. Case. *The Oxford handbook of linguistic minimalism*, ed. by Cedric Boeckx, 52–72. Oxford: Oxford University Press.
- Regard, Paul F. 1918. *Contribution à l'étude des prépositions dans la langue du Nouveau Testament*. Paris: Ernest Leroux.
- Rezac, Milan. 2008. Phi-agree and theta-related case. In D. Harbour, D. Adger; and S. Béjar (eds.) *Phi theory: Phi-features across modules and interfaces*. Oxford University Press. Pp 83–129.
- Schäfer, Florian. 2008. *The syntax of (anti-)causatives: External arguments in change-of-state contexts*. Amsterdam: John Benjamins.
- Stolk, Joanne V., 2015. Case Variation in Greek Papyri. PhD dissertation (University of Oslo).
- Vergnaud, Jean-Roger. 2008. Letter to Noam Chomsky and Howard Lasnikon`Filters and Control," April 17, 1977. In *Foundational issues in linguistic theory*. Robert Freidin, Carlos Otero, and Maria-Luisa Zubizarreta (eds.) 3 – 5. Cambridge Mass: MIT Press.
- Woolford, Ellen. 2006. Lexical case, inherent case, and argument structure. *Linguistic Inquiry* 37.1.111–30.

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