From Lexical to Dependent: the case of Greek Dative

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48TH ANNUAL MEETING OF THE NORTH EAST LINGUISTIC SOCIETY,
WORKSHOP ON THE TYPOLOGY OF CASE
UNIVERSITY OF ICELAND, REYKJAVÍK, 27 – 29 OCTOBER 2017
Three central questions

- **Properties** of dative/genitive objects in Classical and Standard Modern Greek (CG vs. SMG) as a window to the nature and diversity of dative and genitive case cross-linguistically;

- The **transition** from one system of case assignment to another;

- The **relationship** between the diachrony of morphological case and the diachrony of prepositions.
Roadmap

- Environments and behaviour of argumental datives and genitives in CG;
- Environments and behaviour of argumental genitives in SMG;
- **Proposal**: CG dative/genitive is *lexical/prepositional* case, and
- SMG genitive is *dependent* case in the sense of Baker (2015);
- Consequence regarding **passivization of the indirect object** (IO) in CG;
- Diachronic change of PPs to DPs;
- Relationship between *loss of the morphological dative case* and *diachrony of prepositions* in Greek.
Classical Greek

- **Five morphological cases** (nominative, accusative, dative, genitive and vocative);
- **CG case system**: reduction from the original Indo-European (IE) system (Luraghi, 2003 a.o.)
- **CG cases** are *syncretic*: genitive < IE genitive and ablative, dative < IE dative, locative and instrumental;
- Nominative case is reserved for subjects of finite clauses;
- Accusative is the most common case for objects (Delaunois, 1988);
- The choice of dative or genitive case can be partially reduced to *semantic generalizations* (Luraghi, 2010: 64-67; Anagnostopoulou & Sevdali, 2015: 451-452) and are also *partially idiosyncratically determined* by particular verbs or prepositions (but see also Stolk, 2015 for a different view).
Classical Greek

(Anagnostopoulou & Sevdali, 2015)

- There are specific verb classes selecting for dative DP objects and different ones for genitive objects (monotransitives);
- Four arrays for ditransitives (Acc-Acc; Dat-Acc; Gen-Acc and Dat-Gen);
- Dative and genitive subject to thematic and morpho-syntactic generalizations: goals tend to be dative, sources and possessors tend to be genitive;
- Verbs prefixed by dative or genitive assigning prepositions must assign dative or genitive to the goal in both monotransitive and ditransitive environments.
Standard Modern Greek

Basic characteristics of the SMG system:

i. **Reduction** of morphological cases (loss of dative);

ii. Systematic replacement of dative by either genitive or accusative depending on the **syntactic environment** (ditransitives vs. transitives);

iii. Accusative surfaces on almost all objects of transitive verbs and the vast majority of the verbs that selected for dative and genitive objects in CG now take accusative objects.

(1) 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.’ (CG)

b. O Odiseas *fthonise* *ton Palamidi* gia tin sophia tu
   the Ulysses-nom *envy*-3sg.aor.act Palamedes-*Acc* because the wisdom his

   ‘Ulysses was jealous of Palamedes because of his wisdom.’ (SMG)
In SMG IO bears genitive and the DO accusative, (Anagnostopoulou, 2003, Michelioudakis, 2012, Georgala, 2012, i.a.):

(2) Edhosa tu Petru ena paghoto SMG
Gave-1sg.pst.act the Peter-Gen an icecream-Acc
‘I gave Peter an ice cream.’
SMG vs. CG datives/genitives: different systems

Difference #1: **very few SMG mono-transitives assign genitive to their complements**, including ones prefixed with archaic prepositions:

(3) Tîlefonisa/milisa  tu Petru
Called/ talked.1sg.pst  the Peter-gen
‘I called Peter/ talked to Peter’

(4) O proedros  iper-aminthike  tis epilogis tu
The president- nom  defended  the choice his-gen
‘The president defended his choice’

→ This is not the case for CG
SMG vs. CG datives/genitives: different systems

Difference #2: **Genitive is not related to a specific theta-role**

Genitive has been generalized to all IOs in SMG, regardless of whether they are goals (with ‘give’), sources (with ‘steal’) or beneficiaries (with ‘buy’):

(5) Edhosa *tis Marias* to vivlio
    Gave-1sg the Mary-Gen the book-Acc
    ‘I gave Mary the book’

(6) Eklepsa *tis Marias* to vivlio
    Stole-1sg the Mary-Gen the book-Acc
    ‘I stole the book from Mary’

(7) Eftiaksa *tis Marias* pagoto
    Made-1sg the Mary-Gen ice cream-Acc
    ‘I made Mary ice cream’

→ This is not the case in CG
Lexical/Inherent case cannot account for the CG vs. SMG differences

Anagnostopoulou (2003, 2005), Michelioudakis (2012) and Georgala (2012) all analyze SMG IOs as bearing inherent/quirky Case assigned by an applicative head in a structure like (8), in agreement with Woolford (2006) and others:

(8)

```
  VAPPLP
   /\       /
  /   \     /   \     /
IO-GEN VAPPL' VAPPL' ROOTP
     /\  /\       /
    /   /   \     /   \     /
   Root DO-ACC
```
CG vs. SMG differences

But on the basis of Woolford’s criteria CG dative/genitive is also lexical/inherent, since:

- In monotransitives they are idiosyncratically assigned by particular verbs and prepositions (lexical);
- In ditransitives they are inherent Cases, as they are systematically associated with specific thematic roles, such as ‘goal’, ‘source’, ‘possessor’ (inherent).

But if both CG and SMG have inherent dative/genitive Case, then the differences discussed above are accidental.

Syncretism due to loss of morphological dative played a role but cannot explain sensitivity to the environment, i.e. why genitive was generalized as the regular case for IOs and accusative was generalized as the regular case for DOs in SMG.
Our proposal

- There are two ways of assigning dative case cross-linguistically:
  - As lexical/inherent case à la Woolford (2006); where case is assigned by a zero P (Rezac 2008, Pesetsky 2013, Baker 2015 a.o.).

According to Baker, the crucial property of dative is that it is assigned in opposition to a lower argument in the VP domain, unlike accusative which is assigned in opposition to a higher argument (the external argument, EA) in the IP/CP domain.

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

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

*For Dative:* (Baker 2015: 131)

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

NB. We assume that XP and ZP in (10) are DPs and VP in (10) is vAPPLP (see tree (8)).
Our proposal

Proposing that dative/genitive is assigned in CG differently from SMG can *prima facie* explain the differences between the two systems;

→ but it opens new questions:

i. What is the *independent synchronic evidence* that SMG genitive is dependent case;

ii. What about *passivisation* of IO in CG (Anagnostopoulou & Sevdali 2015), a hallmark property of structural case?

❖ In the rest of the talk, we first focus on evidence for dependent case from SMG;

❖ Then we discuss the passivisation facts;

❖ And finally we move to the transition between the two systems and how the diachrony of morphological case interacts with changes in prepositions in Greek.
SMG genitive as dependent case

Baker & Bobaljik (2017) distinguish between dependent and inherent (ergative) case based on two types of evidence:

i. This case must be sensitive NOT to a specific theta role but to the presence of another argument in a local domain, and

ii. Lack of this case must be reduced to a lack of another nominal in the local domain.

- Re point (i): SMG IOs in ditransitives appear in genitive regardless of their theta role (source, goal, beneficiary) ≠ CG.

- Lack of productivity of genitive case in monotransitives and the replacement of CG datives and genitives by accusatives in this context.

- In the next section, we provide some further arguments showing that the SMG genitive is indeed sensitive to the presence of a lower argument in the vAPPLP domain.
SMG genitive as dependent case

Argument #1: **Dyadic unaccusative verbs with genitives and nominatives**

**Psychological predicates** corresponding to Italian ‘piacere’ verbs (Belletti & Rizzi 1988, i.a., see Anagnostopoulou 1999 for SMG), **sensation predicates**, different types of **possessive and change of location verbs** productively select for a genitive experiencer, possessor or goal argument and a nominative theme, as shown in (11) and (12):

(11)  

\[
\text{Tu Petru} \quad \text{tu} \quad \text{aresi} \quad \text{i musiki} \\
\text{The Peter-GEN cl-GEN please-3SG the music-NOM} \\
\text{‘Peter likes music’}
\]

(12)  

\[
\text{Tu Petru} \quad \text{tu} \quad \text{xriazete/tpi} \quad \text{enas anaptiras} \\
\text{The Peter-GEN cl-GEN need-3SG/lack.3SG a lighter-NOM} \\
\text{‘Peter needs/lacks a lighter’}
\]
SMG genitive as dependent case

The vAPPLP in these constructions contains a lower theme object introduced at the Root-level.

→ Genitive case is assigned in opposition to the lower argument

Case assignment proceeds just as in ditransitives except that the theme bears nominative morphology since there is no EA unlike in ditransitives where a transitive v/Voice head is present (Voice in Alexiadou et al. 2006, 2015, Schäfer 2008, i.a.). GEN is assigned in opposition to the lower argument not bearing case at the vAPPLP level. At the TP/CP level, the DO is assigned environment-sensitive (unmarked) NOM case.

(13)
SMG genitive as dependent case

Argument # 2: **Genitive alternates with nominative in the absence of a theme argument** with sensation verbs like ‘hurt’, ‘be cold’ etc. => GEN is not linked to a particular theta-role & its assignment depends on the presence of a lower argument:

(14)  

<table>
<thead>
<tr>
<th>O Janis</th>
<th>ponai</th>
</tr>
</thead>
<tbody>
<tr>
<td>The John-NOM</td>
<td>hurt-3SG</td>
</tr>
<tr>
<td>‘Jianis hurts’</td>
<td></td>
</tr>
</tbody>
</table>

(15)  

<table>
<thead>
<tr>
<th>Tu Jani</th>
<th>tu</th>
<th>ponai</th>
<th>o lemos tu</th>
</tr>
</thead>
<tbody>
<tr>
<td>The John-GEN</td>
<td>cl.GEN</td>
<td>hurt-3SG</td>
<td>the throat-NOM his-GEN</td>
</tr>
<tr>
<td>‘Jianis has a sore throat’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- The experiencer (in 14) is the single argument of the Root+vAPPL complex 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**.

- The experiencer (in 15) receives dependent genitive in opposition to the lower vP-internal *o lemos tu* ‘his throat’.
SMG genitive as dependent case

- The lower NOM argument in (15) contains a possessor, providing evidence against a possessor-raising analysis of these constructions (clitic doubling within DPs is impossible in Greek and hence, (15) could not involve possessor raising +clitic doubling).

- By contrast, even though Greek has high applicatives with static predicates (16a) it does not allow them with unergatives (16b) because there is no lower argument for GEN to be assigned:

  (16) a. Kratisa tis Marias tin tsanda gia na vgali to palto tis
      Held-1sg the Mar-GEN the bag-ACC to na take.out-3sg the coat her-GEN
      ‘I held Mary’s bag (for her) to take out her coat’

  b. *Etreksa/*Kolimpisa/*Perpatisa tu Petru
     Run-1SG/Swam-1SG/Walked-1SG the Peter-GEN
     *’I run/swam/walked for Peter’
SMG genitives

Argument #3: **Direct object incorporation and genitive/accusative alternation**

(17) Dino mistho tu stratioti
    Give-1SG salary-ACC the soldier-GEN
    ‘I give a salary to the soldier’

(18) Misthodoto ton stratioti
    Salary.give-1SG the soldier-ACC
    ‘I pay the soldier’

Theme incorporation in (low) goal applicatives yields realization of the IO as ACC. This is evidence that GEN is not tied to the theta-role goal, but to the presence of a lower DP in the vAPPLP domain.
Our analysis predicts that CG datives/genitives should retain their case in alternations like (17)-(18) above involving theme-incorporation.

Strikingly, this prediction is indeed borne out:

(19) Misthon didontes tois nautais
    payment.ACC give.PRCPL the crew.DAT
    “we paid the crew out” (Isocrates, In Callimachum, 60, 7)

(20) ekei de Kyniskos humin misthodote:sei
    There then Kyniskos-NOM US-DAT hire.FUT.3SG
    “there Cyniscus will take you into his service” (Xenophon, Anabasis 7, 1: 13)
SMG vs. CG - summary

<table>
<thead>
<tr>
<th></th>
<th>Dative/Genitive IOs (monotransitives &amp; ditransitives)</th>
<th>Theta-role restrictions on case choice</th>
<th>Prepositions (&amp; prefixes) assigning obliques</th>
<th>Genitives being sensitive to the presence of a lower argument in vAPPL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classical Greek</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Standard Modern Greek</td>
<td>✗ (ditransitives only)</td>
<td>✗</td>
<td>✗</td>
<td>✓</td>
</tr>
</tbody>
</table>

→ SMG genitive is dependent case in the sense of Baker (2015).
→ CG genitive/dative are lexical/inherent cases.
→ But then how do we account for their ability to alternate with nominative in CG passives?
SMG passivization of IOs

IOs are not allowed to alternate with nominative in SMG.

(21) a. *O Petros dothike ena pagoto SMG
    The Peter.NOM gave.NACT an ice cream.Acc
    ‘Peter was given an ice cream’

b. He was given an ice cream English

This difference between Greek and English follows if SMG is sensitive to the presence of a lower DP, while English IOs (at least pronouns that surface with overt ACC and NOM) bear dependent case sensitive to a higher DP (see Baker 2015, ch. 6 on the mechanics of this in English-type systems).
CG passivization of datives/genitives

Anagnostopoulou & Sevdali 2015, Alexiadou, Anagnostopoulou & Sevdali 2014

(22) DAT-NOM ALTERNATIONS IN TRANSITIVES:

   Athenians-NOM betray-3SG.PRS.ACT us-DAT
   ‘The Athenians are betraying us.’

b. He:m-eis hup’ Athε:naí-o:n epiboule-ometha.
   we-NOM by Athenians-GEN betray-1PL.PRS.PASS
   ‘We are betrayed by the Athenians.’ (Thucydides, Historia I: 82. 1)

(23) GEN-NOM ALTERNATIONS IN TRANSITIVES:

   condemn-1SG.PRS.ACT someone-GEN
   ‘I condemn someone.’

b. Ekeino-s katepse:phis-the:.
   he-NOM condemn-3SG.AOR.PASS
   ‘He was condemned.’ (Xenophon, Historia V: 2. 36)
CG passivization of datives/genitives

Anagnostopoulou & Sevdali 2015, Alexiadou, Anagnostopoulou & Sevdali 2014

(24) DAT-NOM ALTERNATIONS IN DITRANSITIVES:

a. All-o ti meiz-on hum-in epitaks-ousin. (Active: ACC-DAT)
   something.else-ACC bigger-ACC you-DAT order-3PL.PRS.ACT
   ‘They will order you to do something else bigger/greater.’

  b. All-o ti meiz-on hum-eis epitachthe:s-esthe. (Passivized: ACC-NOM)
     something.else-ACC bigger-ACC you-NOM order-2PL.PRS.PASS
     ‘You will be ordered to do something else, bigger.’ (Thucydides, Historia I: 140. 5)

(25) GEN-NOM ALTERNATIONS IN DITRANSITIVES:

a. Apetem-on to:n strate:g-o:n tas kephal-as. (Active: GEN-ACC)
   cut.off-3PL.AOR.ACT the generals-GEN the heads-ACC
   ‘They cut the heads from the generals.’

b. Hoi strate:g-oi apetme:th-e:san tas kephal-as. (Passivized: NOM-ACC)
   the generals-NOM cut.off-3PL.AOR.PASS the heads-ACC
   ‘The generals were beheaded/The generals had their heads cut off.’ (Xenophon, Anabasis II: 6. 29)
CG passivization of datives/genitives

The core observation we will build on is that all verbs in the examples above, and in general the majority of verbs that allow passivization of dative/genitive IOs in CG are prefixed (cf. also Michelioudakis 2012):

(26)  

a. \textit{epi}-bouleuometha ‘be betrayed’

b. \textit{kat}-epse:phis-the: ‘be condemned’

c. \textit{epi}-tachthe:s-esthe: ‘be ordered’

d. \textit{ap}-etme:th-e:san: ‘be cut off’

\textbullet\ These prefixes are homophonous to the corresponding prepositions which retain their case-assigning properties when they are prefixed to the verbs.
CG passivization of datives/genitives

- Following AAS (2014) we propose that genitives and datives in CG are always contained within PPs, overt, as in the prefixed examples discussed here, or covert with non-prefixal verbs;

- Prefixal verbs in CG are formed by P(reposition)-incorporation of the prepositions introducing the dative and genitive objects;

- Generally speaking, PPs are phases, and, DPs contained within them are inaccessible to operations triggered by higher heads; i.e. opaque to operations like Agree & Move;

- However, there are strategies by which such PPs become transparent (Rezac (2008) for different dialects of Basque);

- One major strategy leading to the transparency of dative and genitive objects is P incorporation into a higher head, the complex V-Voice.

- We propose that P-incorporation in CG makes the relevant PPs transparent, and the dative and genitive objects are allowed to passivize, as shown in (22-25) above.
On the diachrony of Greek cases and prepositions

Proposal so far:

- CG datives/genitives are lexical/inherent cases
  - they are hidden PPs
- SMG genitives bear dependent GEN
  - they are DPs

Question: how did this change take place?

How does it relate to the loss of morphological dative from Greek?

We will present evidence that changes in the PP-system played a key role.
Loss of morphological dative

- *Replacement of (morphological) dative in Standard Modern Greek*
  
a) *Accusatives* (as objects of transitive verbs).

b) *Genitives* as IOs in SMG.

c) *PPs* (for locative, instrumental and other adverbial uses of CG datives).

- Argumental dative loss timeline:

  3rd – 9th/10th centuries according to Humbert (1930) or 4th – 8th century A.D. according to Luraghi (2003)

Humbert (1930): the three main uses of the dative: locative, instrumental and argumental have three very separate diachronic paths.
Diachrony of prepositions

- Prepositions in CG function as heads of PPs, but also as prefixes.
- CG Ps assign all three objective cases;
- SMG Ps lost their oblique case assigning capacities, assigning only accusative

(exceptions: archaic prepositions from the “katharevousa” register metaksi ‘between’, enantion ‘against’, kata ‘against’);

- There are two interrelated changes in the prepositional system of Greek that concern us here:
  i. With datives and genitives, prepositions are first used to “reinforce” (Bortone, 2010) / i.e. ‘double’ the semantic role of Greek cases, leading ultimately to the replacement of the two oblique cases by prepositions;
  ii. Prepositions themselves lose their oblique case-assigning abilities and are only able to assign accusative case (Hatzidakis, 1892, Bortone, 2010).
Diachrony of prepositions

- Prepositions are starting to lose their capacity of assigning dative and genitive from 3rd century (Lavidas, 2010) and this change concludes during the early Medieval Greek period (Horrocks, 2007) or the 10th century (Browning 1983: 42 – 43), i.e. Ps had lost their idiosyncratic case-assigning capacity.

- This change is especially interesting if viewed from the perspective of Pesetsky’s (2013) proposal about the nature of oblique case in connection to prepositions:

  According to Pesetsky assigning an oblique case is indeed a defining characteristic of prepositions.

  In his system, oblique case is a P- feature assigned by a P to its complement.
Diachrony of Greek Ps, DOs & IOs

**a) Classical Greek:**
Prepositions assign oblique; Dative/genitive IOs and DOs involve a covert preposition.

**b) Hellenistic Greek /Koiné:**
Prepositions start losing their oblique case assigning capacity (reinforcement/doubling)

**c) Medieval Greek:**
Prepositions have lost their oblique case assigning capacity

- Learners acquire them as prepositions;
- learners can acquire them as PPs exactly because they bear overt oblique case morphology.
- Learners cannot straightforwardly acquire them as such (Grammars in competition)
- In argumental position Ps cannot be analysed as prepositions anymore;
- Learners reanalyse DOs and IOs as DPs;
- These DPs cannot receive case by anything phrase internal;
- Greek genitive IOs and DOs get reanalysed as DPs receiving dependent case, in opposition to a lower (GEN) or higher (ACC) DP argument within the VP.
Summary

- CG dative/genitive IOs are inherent/lexical cases, assigned by a zero P;
- SMG genitives are DPs that receive dependent case configurationally within vAPPL;
- The change in Greek is a category change in the structural makeup of Greek DOs and IOs, from PPs to DPs.
- Trigger for change: changes in the case-assigning properties of prepositions;
- the loss of morphological dative case and its syncretism with genitive and accusative was not the main cause of the observed syntactic change.
- Variation in two ways of assigning dative case cross-linguistically (Baker, 2015) is confirmed diachronically too (cf. Polinsky 2016 for two types of ergative case and the evolution from a PP-ergative to a DP-ergative).
Thank you!

Any comments, email us:  

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