

## Argument CPs as frozen *in situ* DPs in Classical Greek

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- Evidence from Classical Greek finite complement clauses (henceforth CCs)
- Classical Greek = Greek, 5-4th Centuries BCE
- Corpus (1246 finite complement clauses)
  - Aeschylus
  - Sophocles
  - Thucydides
  - Lysias
  - Xenophon



## Two major questions

• Are CCs NPs/DPs?

Rosenbaum 1967, Roussou 1991, Baunaz and Lander 2017, Angelopoulos 2019, a.o.

[do they denote entities/abstract objects? properties?]

Chierchia 1984, Asher 1993 vs. Kratzer 2006, Moulton 2009 etc.

 Are CCs in a (non-)canonical position? (extraposed/topicalized?)

# Reasons for extraposition or topicalization

- Lack of Case (Stowell 1981)
- S-selection mismatch (Moulton 2015)
- C-selection mismatch (Takahashi 2010)

### CP as DP = reparation



 Subject CCs can be in Spec, IP if they are DPs (Davies and Dubinsky 1998 etc., Hartman 2012, a.o.)

≠ Object CCs



All CC-embedding predicates c-select for DPs

#### HYPOTHESIS

### CCs as DPs $\leftrightarrow$ non-extraposition CCs as CPs $\leftrightarrow$ extraposition

## **Classical Greek**



- 1. CCs are DPs of some sort
- 2. CCs are not extraposed

(cf. Zwarts 1993, Haider 2010, on Dutch and German)

## (But why are they obligatory in final position in the clause?)

## **Classical Greek**



- 1. CCs are DPs of some sort
- 2. CCs are not extraposed

(cf. Zwarts 1993, Haider 2010, on Dutch and German)

## (But why are they obligatory in final position in the clause?)

They lack case and are not visible for movement They remain *in situ* 

## Outline



**Complement clauses** 

- 1. are DPs
- 2. are not extraposed
- 3. are deficient DPs, thus remain in situ



## Complement clauses are DPs

## Like distribution CC/DP



 All the clause-embedding predicates also take DPs with no meaning change

(To the exception of the verb *erōtáō* 'ask', under investigation)



## Coordination CC/DP

(I.25) hópōs, Th. 1.65.2

| boulómenos   | tà  | epì   | toú | tois   | par | askeuázein   |                   |
|--|-----|-------|-----|--------|-----|--------------|-------------------|
| wanting  | the | on    | the | se     | pre | paring       |                   |
| <del>tà epì toútois</del>  | kaì | hópōs | tà  | éxōth  | en  | héxei        | hōs árista        |
|  | and | that  | the | outsic | de  | he.will.have | the best possible |
| Lit. Desiring to prepare [the future and that he have things outside in the best |     |       |     |        |     |              |                   |
| posture possible].   |     |       |     |        |     |              |                   |

### "Law of the Coordination of Likes" (Chomsky 1957, Dik 1968, Williams 1978)

## Complementary distribution D

Powerful article: anything can be substantivized

(Kühner and Gerth 1898: 594-597, §461.6 and 461.7)
(I.30) Ésti dè presbýteron âr' ouch hótan katà tòn nŷn chrónon êi gignómenon tòn metaxỳ
toû ên te kaì éstai? ou gár pou poreuómenón ge ek toû potè eis tò épeita
hyperbésetai tò nŷn. (Pl. Prm. 152b3-6)

And it is older (is it not) when in becoming older it is in the present time, between the past and the future; for in going from the past to the future it cannot avoid the present. (Fowler)

toû ên te kaì éstai: the was and will.be

*toû potè, tò épeita, tò nŷn*: the once, the then, the now

• Only exception: finite clauses

(to the exception of indirect questions)

\*tò hóti, \*tò mḗ, \*tò hópōs => Same category

## Compatibility with external determiners



(cf. Davies and Dubinsky 1998 > DP modifier)

Demonstratives

## Compatibility with external determiners



• Emphatic *autó* 'itself'

(cf. Davies and Dubinsky 1998 > DP modifier) Pl. Chrm. 161c7

Ei heurésomen autò échei, kaì hópēi ge if we.will.find itself-acc.n.sg how it.is PTC even thaumázoim' ainígmati gár tini éoiken. án: I.am.surprised-OPT PTC enigma since it.looks.like some If we find even the very [answer to the question as to] how it stands, I would be surprised, since it looks like an enigma.

## Compatibility with external determiners



• Demonstratives

## The DP in Classical Greek



• Pivotal role of the article (Biraud 1991)

| (1.39) | toûto   | tò            | chōríon     | <b>. (</b> Th. 4  | .3.3)                          |
|--------|---------|---------------|-------------|-------------------|--------------------------------|
|        | this    | the           | village     |                   |                                |
|        | This v  | illage        |             |                   |                                |
| (1.42) | tò      | <u>chorio</u> | n toû       | i <b>to.</b> (Th. | 4.102.3)                       |
|        | the     | village       | this        | 5                 |                                |
|        | This vi | illage        |             |                   |                                |
| (I.43) | toûto   | labòr         | ı           | tò                | chōríon. (X. <i>HG</i> 7.5.11) |
|        | this    | havin         | g.taken     | the               | village                        |
|        | After t | taking th     | nis village | e                 |                                |
| (I.45) | *tò l   | abồn          | c           | hōríon.           |                                |
|        | the ł   | naving.ta     | aken v      | /illage           |                                |

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(I.52) Antipho 5.32

Oîmai hymâs epístasthai toûto<sub>i</sub>,

I.think you-acc know-INF this

[hóti eph' hoîs àn tò pleîston méros tễs basánou, pròs toútōn eisìn hoi basanizómenoi légein hó ti àn ekeínois méll ōsi charieîsthai]<sub>i</sub>.

I think that you know it [that witnesses under torture are biased in favor of those who do most of the torturing; they will say anything likely to gratify them]. (Maidment adapted)

(I.54) 1. a. D complement: [D [CP]]

b. A null N: [D  $Ø_N$  [CP]

2. a. CP is a sentence adjoined element (or afterthought) to D(P): [DP]....[CP]

b. DP and CP form a constituent but are in apposition (e.g. *My sister, Alice,* where CP adjoins at the DP level)

Moulton (2018)

From Bertrand (2010)

## Demonstrative behaves like a boolers fide determiner

- No extraction is possible when there is a demonstrative.
- Demonstratives are not just dummies announcing the complement clause (like *it that*). They are endowed with φ-features.
- Demonstratives are not cataphoric (announcing the complement clause). They are deictic.

## No extraction



| Predicates               | A-Extraction | Demonstrative | A-Extraction                 | Nothing | Total              |
|--------------------------|--------------|---------------|------------------------------|---------|--------------------|
|                          |              |               | +Demonstrative <sup>31</sup> |         |                    |
| Category1                | 0            | 0             | 0                            | 565     | 565                |
| Category2 <sup>32</sup>  | 43           | 0             | 0                            | 159     | 202                |
| Category 3 <sup>33</sup> | 20           | 19            | 0                            | 220     | 259                |
| Category4 <sup>34</sup>  | 0            | 33            | 0                            | 188     | 221                |
| Total                    | 63           | 52            | 0                            | 1132    | 1247 <sup>35</sup> |

Table 1 : Demonstratives and extractions are exclusive from each other



## Variation in number

- b. taûta 'this' medial, X. HG 2.3.53
- kaì <u>taûta</u> gignốskontes
- also this-ACC.N.PL knowing
- *hóti* oudèn tò emòn ónoma euexaleiptóteron è tò hymôn hekástou. that nothing the mine name more.erasable that the of.you each-GEN Especially when you know that my name is not easier to erase than that of each of you.

## Deictic force: Referentiality



 Other demonstratives are possible tóde refers to the speaker/the discourse itself

(I.61) X. HG. 2.3.33

*Hōs* eikóta poioûmen, kaì <u>tád</u>' ennoésate that proper we.do even this-ACC.N.PL consider

"kallístē mèn gàr dḗpou dokeî politeía eînai hē Lakedaimoníōn..."

And in proof that what we are thus doing is proper, consider this fact also. "The constitution of the Lacedaemonians is, we know, deemed the best of all constitutions..." (Brownson)

## Summary



|                            | DP/D         | CC/C         | Indirect questions |
|----------------------------|--------------|--------------|--------------------|
| Same distribution          | $\checkmark$ | $\checkmark$ | ×                  |
| Coordination               | $\checkmark$ | $\checkmark$ | ×                  |
| Complementary distribution | ✓            | ✓            | ×                  |
| φ-features                 | $\checkmark$ | $\checkmark$ | ?                  |
| Referentiality             | $\checkmark$ | $\checkmark$ | ?                  |
| Islandhood with Dem        | $\checkmark$ | $\checkmark$ | ?                  |
| Islandhood without Dem     | ×            | ×            |                    |



## Complement clauses are not extraposed



## Liberal word order within VP

(I.1) Th. 1.64.2

Proségagetêi Poteidaíāi tòn stratòn.ledthe Potidaea-DAT the army-Acc(Phormion) led the army to Poteidaia.

(I.2) X. HG 6.4.3

ágeitền stratiàneistềnBoiōtían(X. HG 6.4.3)leadsthe army-AccintotheBoetia(Cleombrotos)leads his army into Boetia.



## Fixed word order for CC

- Hóti: intervener : Indirect object. X. HG 1.6.32
- Hérmōn (...) eîpe <u>pròs autòn</u> *hóti* eíē kalôs échon apopleûsai. H-NOM said to him that was well having to.sail.away Hermon said to him it was well to sail away.

## Fixed word order for CC



Hóti: intervener: adjunct X. HG 2.2.16

Thēraménēs eîpen <u>en ekklēsíāi</u> hóti

T-NOM said in assembly that

ei boúlontai autòn pémpsai parà Lýsandron, eidồs hếxei Lakedaimoníous póteron exandrapodísasthai tền pólin boulómenoi antéchousi perì tồn teichồn ề písteōs héneka.

Theramenes said in the Assembly that if they were willing to send him to Lysander, he would find out before he came back whether the Lacedaemonians were insistent in the matter of the walls because they wished to reduce the city to slavery, or in order to obtain a guarantee of good faith. (Browson)

## Complement clauses seem to be extraposed

- 87 are topicalized (= clause-initial) or focalized (= preverbal)
- 1160 are clause-final
- No exception
- Looks like real and obligatory extraposition







#### Extraposition-adjunction hypothesis

In situ hypothesis

## Contra extraposition Binding facts



"indirect" or "semi-reflexive" or "logophoric" pronoun *spheîs* 

Must be bound by an antecedent in the matrix clause >> must be c-commanded by the antecedent



#### (I.72) Not adjunct to VP

a. Th. 1.55.2

|        | aitía  | haútē    | prốtē      | egéneto   | toû polémou     | [toîs Korinthíois] <sub>i</sub> | es      | toùs Athēnaíous |
|--------|--|----------|------------|-----------|-----------------|---------------------------------|---------|-----------------|
|        | reason   | this     | first      | was       | of.the war      | for.the Corinthians             | against | the Athenians   |
|        | hóti   | sphísin  | <u>)</u> i | en        | spondaîs        | enaumáchoun.                    |         |                 |
|        | that   | spheîs-  | DAT        | in truce  | e fought        | .by.sea                         |         |                 |
|        | The first cause of war against the Athenians was for [the Corinthians] $_{ m i}$ that they |          |            |           |                 |                                 |         |                 |
| fought | them <sub>i</sub> v  | with the | e Corc     | yraeans o | during the truc | e.                              |         |                 |





that they fought them<sub>j</sub> during the truce first reason of the war against the Athenians-





## Stranding



#### (I.77) Lysias 6.38

|          | Hōs o     | udèn                | prosḗke              | ei Andok            | ídēi  | tồn synthēkồn,           |                        |
|----------|-----------|---------------------|----------------------|---------------------|-------|--------------------------|------------------------|
|          | that no   | othing              | is.relate            | ed to.A.            |       | the agreement-gen.pL     |                        |
|          | perì      | toútou              | léxō                 |                     |       |                          |                        |
|          | about     | this                | I.will               | .speak              |       |                          |                        |
|          | hōs ouc   | <del>lèn pros</del> | <mark>ékei An</mark> | dokídēi <u>t</u> or | n syn | thēkôn                   |                        |
|          | oúte      | mà tờ               | on Día               | tốn                 | pros  | Lakedaimoníous ()        | oúte ()                |
|          | neither   | by Jo               | ve                   | the-gen.pl          | with  | Lacedaemonians           | nor                    |
|          | Lit. Tha  | t Andok             | ides has             | no part in          | thos  | e agreements[GEN], I wil | l speak about that, no |
| (part ir | n) those[ | GEN] (ag            | reemen               | t) with the         | Lace  | daemonians.              |                        |

### Coordination



Xen.HG 2.4.42

**Eipồn [taûta kaì álla toiaûta kaì hóti oudèn déoi taráttesthai].** having.said this-N.PL and other such-N.PL and that nothing needed be.in.trouble having said this and more to the same effect and that there was no need of their being disturbed.

### Reanalysis



Pl. *Cri.* 53.a4

tồn állōn Athēnaíōn **é**resken diapheróntōs Hoútō soi you-dat differently from the rest of the Ath.-GEN thus pleased hē polis hoi nómoi hēmeîs dēlon=óti <del>hoútō</del> kaì te clear=that the city-NOM the law-NOM and we PTC The city and, clearly, we, the laws, we satisfied you more than the other Athenians.

### Movement



- Adjuncts are islands, thus no movement
- Exception for Ā-movement
- Only A-movement is a reliable test







#### Extraposition-adjunction hypothesis

In situ hypothesis



## Raising-to-object/Prolepsis

- c. Indirect interrogative: Wh-question, Lys. 6.5
- epeidàn ídōsi tòn basiléa hóstis tòn basiléa estí... when they.saw the king-ACC who-NOM he.is
- When they saw who the king is.

(Faure 2018, 2019)



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## Summary



|                                | <i>In situ</i> analysis | Extraposition analysis |
|--------------------------------|-------------------------|------------------------|
| Logophoric<br>binding          | $\checkmark$            | ×                      |
| Stranding in<br>Topicalization | $\checkmark$            | ×                      |
| Coordination                   | $\checkmark$            | ×                      |
| Reanalysis                     | $\checkmark$            | ×                      |
| Movement                       | $\checkmark$            | ×                      |
| Obligatory final position      | ×                       | $\checkmark$           |

## Summary



|                                | <i>In situ</i> analysis | Extraposition analysis |
|--------------------------------|-------------------------|------------------------|
| Logophoric<br>binding          | $\checkmark$            | ×                      |
| Stranding in<br>Topicalization | $\checkmark$            | ×                      |
| Coordination                   | $\checkmark$            | ×                      |
| Reanalysis                     | $\checkmark$            | ×                      |
| Movement                       | $\checkmark$            | ×                      |
| Obligatory<br>final position   | ×                       | $\checkmark$           |



## Why are complement clauses final?



Lys. 52.14

Édōkadyoîn androîntriákontadrachmàshekatérōi.I.gavethe two men-DAT30drachma-ACCeach-DATPl. Lg. 876e2Doûnaità paradeígmatatoîsi dikastaîstoûmépote baínein éxōtês díkēs.give-INFthe examples-ACCthe judges-DATof.the nevergooutsidethe caseto givethe judgesthe examples of (people) who neve leave the case aside.the casethe casethe casethe casethe casethe caseto givethe casethe case<

(vP, Chomsky 2000, Applicatives, Pyllkänen 2008)





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| Function           | Property   |
|--------------------|------------|
| Subject (never EA) | Nominative |
| Object             | Accusative |

Lack of case

+ \*P C

All these positions require that the DP that has access to them be Case-marked

#### CCs are not >> they remain *in situ* (Stowell 1981, Zwarts 1993)



## Summary



| Function           | Property   |
|--------------------|------------|
| Subject (never EA) | Nominative |
| Object             | Accusative |

NB: Ā-movements (Topicalization and Focalization) are ok

## Conclusion



- Classical Greek CCs are DPs, but not as a repair strategy (Cf. Pietraszko 2019 on Ndebele)
- They are able to satisfy the projection principle (θ-role)
- They do not extrapose >> they need not
- They are defective in that they aren't endowed with an unvalued Case-feature >> not an active goals for a probe >> remain *in situ*
  - (so two conditions to access Spec, IP:

being a DP, being case-marked)

Interface condition/Case as a morphological phenomenon?



## Appendix: Φ-feature valuation

- Satisfied by a proxy
- Demonstrative
- Proleptic DP
- Null dummy expletive (Classical Greek is subject and object pro-drop!)

## Appendix: Coordination facts CORPUS

- Recall: the CC is always second in coordination structures.
- Bruening and Khalaf 2020: only the closest element has to satisfy all the requirements.
- The CC is allowed to remain *in situ*!

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## Subject clauses are final



(I.35) Subject complement clause (passivized verb), Th. 2.6.3

Oukēngélthēautoîshótitethnēkóteseîen.NEGwas.reportedto.themthatdeadwere

It was not reported to them that they were dead.

## Subject clauses are final Exceptions?

- (I.38) Th. 1.34.2
  - Hōsdèēdíkounsaphésestin.thatptcthey.were.unjustclearisIt is clear that they were unjust.

#### Topics (see the particle *dé*)

(Koster 1978, Moulton 2013, a.o.)

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## Object clauses are final

- Th. 3.53.2
  - [Tón te agôna perì tôn deinotátōn eînai] eikótōs hypopteúomen the ptc trial about the most.important be-INF rightfully we.suspect [tón te agôna perì tôn deinotátōn eînai kaì hymâs mề ou koinoì apobête]. and you C NEG common you.prove.to.be
  - We have reason to suspect both that the trial is capital, and that you are partial.

#### Lit. We suspect the trial and that you are partial.