

Non-verbal vs Copular Clauses in Ancient Greek

What news from a treebank?



Francesco Mambrini

Deutsches Archäologisches Institut

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Outline of the talk

1. Introduction

- the constructions studied
- the corpus used

2. **Distribution** among the genres of AGDT

- ## 3. Consider (briefly!) **three** factors that may/may not influence the choice:
- POS of the subject
 - constituent order
 - complexity/length of the phrase

Two constructions for nominal predicates

“This is how things are”:

- (1) **toiáuta** mèn **tád’** **estín**
 such.NOM PART these.NOM is.3SG
 ‘So stands the case.’
 (Aesch. *Eum.* 480)

- (2) **toiáuta** mèn dē **taût’**
 such.NOM PART PART these.NOM
 ‘This [is] how things are’
 ([Aesch.] *PV.* 500)

“General truths”?

Omnia praeclara rara

- (3) *all' est' alēthē he brotôn paroimía,*
 but **is.3S** true DET mortals.GEN proverb,
echthrôn adōra dôra
 enemies.GEN no-gift gifts

‘But it **is** true what mortals say: the gifts of the enemy **[are]** no gifts’
 (Soph. Ai. 664-5)

- (4) *palaià paroimía hōti chalepà tà kalá estin*
 old proverb that hard DET good_things is.3SG
 ‘It [is] an old say that good things are hard to gain’
 (Plato, Crat.. 384,a-b)

AGDT

<https://github.com/francescomambrini/pAGDT>

Author	Works	Genre	Date	N. nodes
	<i>Il., Od.</i>	Epos	8th?	236,097
Hesiod	<i>Th., Op., Sc.</i>	Epos	7th?	19,285
Aeschylus	Complete	Tragedy	5th	48,448
Sophocles	<i>Ai., Ant., OT, El., Tr.</i>	Tragedy	5th	50,095
TOT				353,925

Table : AGDT: poetry (all dates BCE)

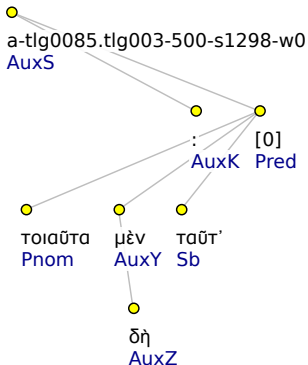
AGDT

<https://github.com/francescomambrini/pAGDT>

Author	Works	Genre	Date	N. nodes
Herodotus	bk.1	History	5th	33,105
Thucydides	bk.1	History	5th	25,360
Lysias	1,12,14,15,23	Oratory	4th	12,857
Plato	<i>Euthyphro</i>	Dialogue	4th	6,349
Polybius	bk.1,9,10	History	2nd	54,950
Diodorus Sic.	bk.11	History	1st	25,692
Plutarch	bk.11	History	1st/2nd*	22,152
Athenaeus	bk.12,13	Dialogue	2nd/3rd*	45,588
TOT				226,053

Table : AGDT: prose (*-dates AD)

Methodological problems



- nominal predication annotated as **verb ellipsis**
- no way of distinguishing between types of ellipsis
- so how do you look for something that **is not** there?

...and what do we count?

General sample

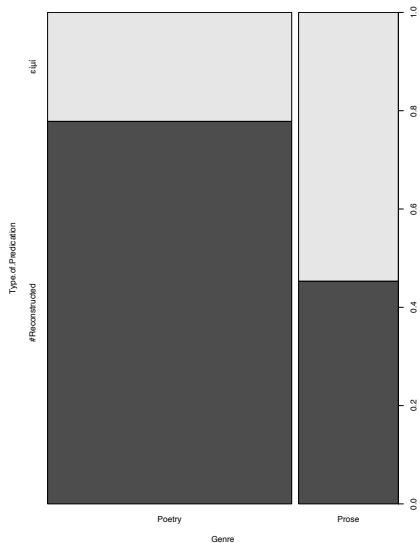
- all Pnom governed by *einai* / #Reconstructed
- distribution of the governing nodes: *einai* VS #Reconstructed
- 6419 observations (3554, 2865)

Restricted sample

- all Pnom governed by *einai* / #Reconstructed in
 - 3rd p., pres., ind.
 - main clauses only
 - both Pnom and Subjects are expressed
- distribution of the governing nodes: *einai* VS #Reconstructed
- 1489 observations (1058, 431)

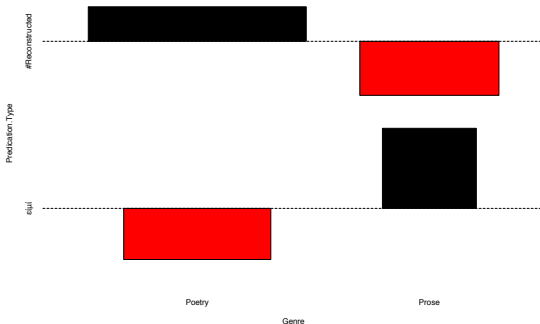
1. Distribution: Genres

Distributions



Genre and type of predication with Phnom

Restricted sample



χ^2 test: $\chi^2 = 149.185, df = 1, p < 2.2e - 16$

Distribution per prose author

Restricted sample

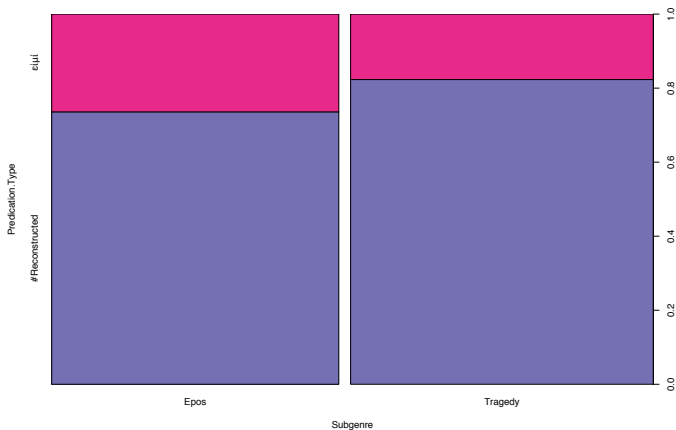
Author	Nominal	Copula	Tot
Herodotus	24	73	97
Thucydides	34	18	52
Plato	22	14	36
Polybius	44	44	88
Diod. Sic.	2	4	6
Plutarch	7	11	18
Athenaeus	51	66	117

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Just poetry VS prose?



χ^2 test: $\chi^2 = 11.716, df = 1, p = 0.0006$

Direct speech VS Narrative

The Odyssey

- <q direct="unspecified">

- <l>

<milestone unit="para" ed="P"/>

ὣ πόποι, οἶον δὴ νῦ θεοὺς βροτοὶ αἰτιώωνται:

</l>

<l>ἐξ ἡμέων γάρ φασι κάκ' ἔμμεναι, οἱ δὲ καὶ αὐτοὶ</l>

<l>σφήσιν ἀτασθαλίῃσιν ὑπὲρ μόρον ἄλγε' ἔχουσιν,</l>

<l n="35">ὥς καὶ νῦν Αἰγισθος ὑπὲρ μόρον Ἀτρεΐδαι</l>

<l>γῆμ' ἄλοχον μνηστήν, τὸν δ' ἔκτανε νοστήσαντα,</l>

<l>εἰδὼς αἰπὺν ὄλεθρον, ἐπεὶ πρὸ οἱ εἶπομεν ἡμεῖς,</l>

<l>Ἑρμείαν πέμψαντες, εὐσκοπον ἀργεῖφόντην,</l>

<l>μήτ' αὐτὸν κτείνειν μήτε μνάσθαι ἄκοιτιν:</l>

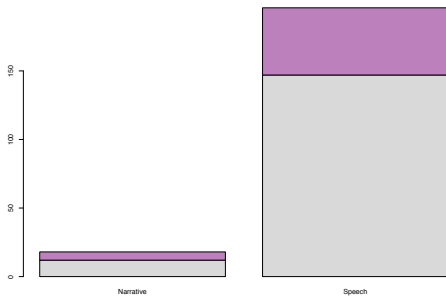
<l n="40">ἐκ γὰρ Ὀρέσταις τίσις ἔσσεται Ἀτρεΐδαι,</l>

<l>ὀππότε' ἂν ἡβήσῃ τε καὶ ἥς ἰμείρεται αἴης.</l>

<l>ὥς ἔφαθ' Ἑρμείας, ἀλλ' οὐ φρένας Αἰγίσθοιο</l>

<l>πεῖθ' ἀγαθὰ φρονέων: νῦν δ' ἄθροα πάντ' ἀπέτισεν.</l>

Only 18 cases in narrative...

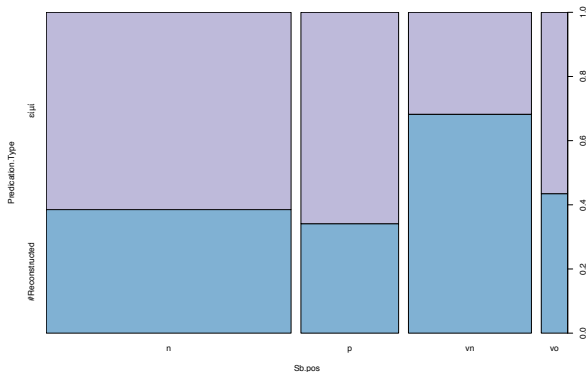


Type	Narr.	Speech
Nominal	12	147
Copula	6	49

2 Part of Speech of Subjects

Distribution per Subject's POS

Prose authors, restricted sample



χ^2 test: $\chi^2 = 30.9874, df = 3, p = 8.553e - 07$

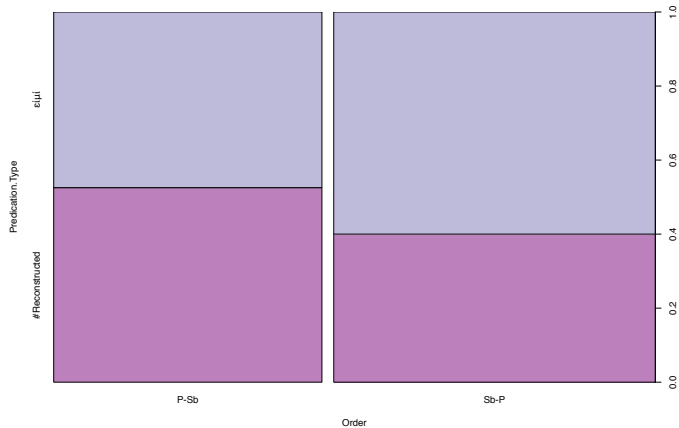
Subject POS

χ^2 residuals²

POS	Nominal	Copula
n	2.19176067	1.81710073
p	2.35629693	1.95351113
vn	12.37628866	10.26068376
vo	0.01734481	0.01437988

3 Order of the constituents

Pnom-Sb VS Sb-Pnom



Length of subtrees

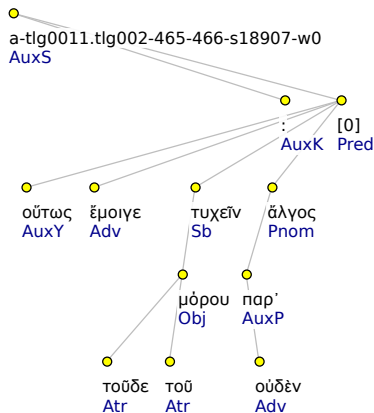
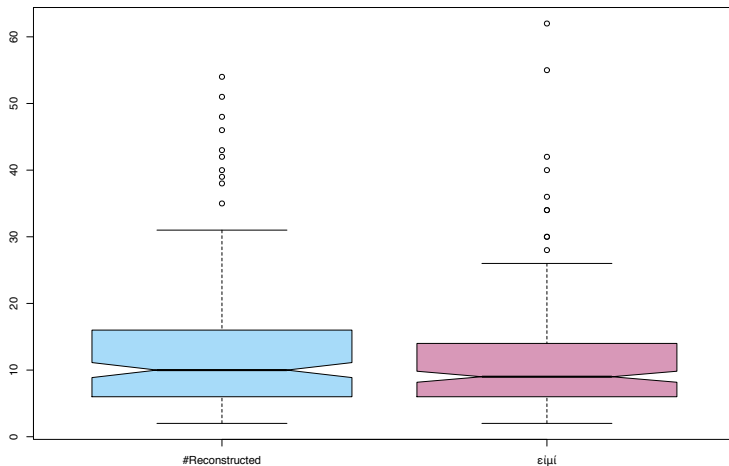


Figure : Length of subtree = 9

Length of subtree

Restricted sample: prose



Conclusions and future work

1. Nominal constructions are still relevant in the prose corpus of Classical and Hellenistic period
2. In the prose corpus, nominal construction are strongly associated with infinitives
3. Length does not seem to
4. some **ideas for the future**:
 - multifactorial analysis: what variable impacts the most? How do they combine?
 - diachrony in Classical and Hellenistic prose/poetry
 - perhaps, better crafted sample (?)