

When A and \bar{A} -movements work together: Classical Greek proleptic extraction

Richard Faure, Université Côte d'Azur, CNRS, BCL, France

In this talk, working in the frame of Phase Theory, we are going to address Classical Greek cases of long-distance topicalization that are a challenge to the current accounts of extractions out of a finite complement clause, because they involve extractions out of islands, apparent look-ahead movements and improper movements (forming a mixed chain of A and \bar{A} -positions). I show that contrary to appearances every step is a topic position and every movement is motivated by a topic feature so that all these problems are overcome, without resorting to labeling (*à la* Chomsky 2013). Crucially, long-distance DP-topicalization is enabled only when the DP is case-marked by the matrix verb. These data provide new evidence for van Urk (2015)'s proposal that the A/ \bar{A} distinction must be rephrased in terms of features. Let us start with the pair under (1). [Note that the phenomenon described here arises with every type of finite complement clauses in Classical Greek: assertive, declarative, interrogative, exclamative]

- (1) a. $\acute{\epsilon}\delta\epsilon\iota$ **$\alpha\upsilon\tau\acute{\omicron}\nu$** $\acute{\eta}\omicron\tau\iota$ $\mu\epsilon\sigma\omicron\nu$ ~~$\alpha\upsilon\tau\acute{\omicron}\nu$~~ $\acute{\epsilon}\kappa\eta\omicron\iota$ ‘He knew that he (the king) was in
he.knew him-ACC that in.the.middle was the middle.’ (Xen. Anab. 1, 8, 21-2)
b. $\text{E}\theta\acute{\epsilon}\lambda\omicron$ $\zeta\acute{\epsilon}\tau\epsilon\iota\nu$ **$\alpha\rho\epsilon\tau\grave{\epsilon}$** $\acute{\eta}\omicron$ $\tau\iota$ ~~$\alpha\rho\epsilon\tau\grave{\epsilon}$~~ $\acute{\epsilon}\sigma\tau\acute{\iota}\nu$. (Plato, *Meno*, 81e2)
I.want inquire virtue-NOM what is ‘I want to inquire into the nature of virtue’

In both cases, the subject of the embedded clause was topicalized in the left periphery of the embedded clause. That *autòn* and *aretè* are topics of the embedded clause was shown by Panhuis (1984) and Christol (1989). That we are dealing with extraction is shown by Q-float and split DP-data (part of the DP only is topicalized, the rest remaining in the subordinate, as in (2), where the N *apología* remains in the subordinate, while the article and the adjective *tèn dikaían* rise). That the DPs are in the left-periphery of the subordinate and did not rise to an object position is shown by a number of constituency tests like coordination with another subordinate clause as in (2) (displacement, anaphoric resumption in correlative structures, absence of intervening material between the DP and the CP point towards the same conclusion).

- (2) $\text{E}\pi\iota\delta\epsilon\iota\chi\alpha\iota$ $\kappa\alpha\iota$ $\acute{\eta}\omicron\tau\iota$ $\text{p}\sigma\epsilon\upsilon\sigma\epsilon\tau\alpha\iota$ ‘to show both that he is going to
to.show both that he.will.lie
 $\kappa\alpha\iota$ **$\tau\acute{\epsilon}\nu$ $\delta\iota\kappa\alpha\acute{\iota}\alpha\nu$** $\acute{\eta}\tau\iota\varsigma$ $\acute{\epsilon}\sigma\tau\acute{\iota}\nu$ ~~$\acute{\eta}\tau\iota\varsigma$ $\delta\iota\kappa\alpha\acute{\iota}\alpha$~~ **$\alpha\pi\omicron\lambda\omicron\gamma\acute{\iota}\alpha$** . (Dem. 19.203)
and the just-ACC what is defense-NOM

Despite these common points, (1)(a) and (b) differ in two respects. First, in (a) but not in (b) the topicalized DP is in the accusative (we expect it to be in the nominative), a case assigned by the embedding verb (when the verb assigns genitive, the DP is in the genitive). This structure is called *Prolepsis* in traditional grammar (Kühner & Gerth 1898-1904), a phenomenon cognate but distinct to what was described for Japanese, Passamaquoddy and a number of other languages by (Bruening 2001) and others. Second, when the DP is case-assigned by the matrix verb, but not otherwise, it can be further topicalized in the matrix, as in (3).

- (3) **$\text{H}\epsilon\rho\mu\omicron\gamma\acute{\epsilon}\nu\acute{\epsilon}$** $\gamma\epsilon$ $\mu\acute{\epsilon}\nu$ $\tau\acute{\iota}\varsigma$ $\acute{\eta}\mu\omicron\nu$ $\omicron\upsilon\kappa$ $\omicron\iota\delta\epsilon\nu$ $\acute{\eta}\omicron\varsigma$ $\tau\acute{\omicron}$ $\tau\alpha\upsilon\tau\acute{\epsilon}\varsigma$ $\acute{\epsilon}\rho\omicron\tau\iota$ ~~$\text{H}\epsilon\rho\mu\omicron\gamma\acute{\epsilon}\nu\acute{\epsilon}$~~ $\kappa\alpha\tau\alpha\tau\acute{\epsilon}\kappa\epsilon\tau\alpha\iota$?
Hermogenes-ACC ptc ptc who among.us not knows how by.its.love melts
‘As for Hermogenes, who of us does not know that he is pining away with this love?’ (Xen. *Symp.* 8.3)

At this point, we run into a number of issues. **First**, *Hermogene* is extracted out of a *wh*-island. But we have evidence (Adger & Quer 2001, Author to appear) that there is an additional layer above the projection where the *whP* is hosted. This layer serves as an escape hatch in dynamic view of phases *à la* (Bošković 2014).

Second, we build on Phase theory, according to which a clause is built stepwise, and an element has to end up at the very edge of the phase when the phase is complete to be able to move into the next phase (Phase Impenetrability Condition, strong version, Chomsky 2000). This means that, like *wh*-movement, Topicalization here must be successive-cyclic, in order to pass through every phase-edge. Thus, to reach the matrix left-periphery, *Hermogene* in (3) went through at least three positions since it left the subject position, as shown in (4). But this is problematic: movement of *Hermogene* is triggered, say, by a topic head in the matrix left-periphery, but this head has not been merged yet when *Hermogene* starts rising. This would be a case of look-ahead, and labeling-driven movement does not repair it, as noticed in (Cecchetto & Donati 2015: chap. 4), since the movement to CP2 is not motivated in the first place.

(4)_{[CP2 Hermogénē tís ouk _{[VP2(Herm.)} oíden _{[CP1 (Herm.)} hōs tō taútēs érōti _{[VP1 (Herm.)} katatēketai]]]}

But we have evidence that the movement to CP1 is also motivated. We saw that when the DP stops at the edge of CP1 as in (1)a, it is a topic of the embedded clause. Moreover, examples like (5) show that the two steps are motivated by two different topic features, so that the first topicalization feeds the second one. In (5), the DP *tòn sòn paída* is first topicalized in the embedded clause, and then a subpart of it, namely the possessive D, is targeted by a topic head in the matrix. It rises, stranding the N *paída* at the edge of the subordinate clause.

(5) *tòn sòn* pithéstai ~~*tòn sòn*~~ *paíd'* hópōs ~~*t-s-p*~~ estí kakós. (Eur. *Hipp.*, 1251)
 your-ACC to.believe child-ACC how is bad 'to believe your son was guilty'

Third, we are left with the absence of motivation for the vP2 step. The contrast between (1)a and b is helpful here. As noted above, the DP is able to enter the matrix only when it is case-assigned. With Chomsky (2001), I assume that (object) case-assignment happens through agreement with *v* (maybe as a co-effect of a ϕ -feature valuation). I take this agreement to optionally raise the DP to Spec, vP2 so that it makes it available for further movement. Crucially, when no case is assigned, the DP is stuck at the subordinate's edge as in (1)b. [Note that van Urk & Richards (2015) posit the same step for Dinka long distance movement on independent grounds. See Kayne (1989: 146-50) for Romance cases where this step is visible through agreement but the DP cannot stay there, maybe for labeling reasons as in Chomsky 2013].

Fourth, the last movement will be an A-movement, sandwiched between two \bar{A} -movements, thus yielding a case of improper movement (mixed A/ \bar{A} chain). Note however that Spec, v is a multifunctional position in Classical Greek. Bertrand (2010: 213) has shown that it can host familiar objects like *Megareúsín* in (6), so that it is a topic-like position as well. It seems that both a topic and a case feature are checked at the same time, much as in Romanian Case and Evidentiality are checked in Spec, v, thus feeding further \bar{A} -movement (Alboiu & Hill 2016).

(6) *Hōs megála Megareúsín*_[FAM] _[VP] enébale tà klaúmata *Megareúsín*. (Ar. *Peace*, 248)

How big to.the.Megarians fell.on thetears 'What bitter tears there will be among the M.!'

To conclude, we have seen that Topicalization out of a complement clause to the matrix left periphery proceeds stepwise and successive-cyclically, but each step is motivated and a uniform \bar{A} /Topic chain is formed (note in passing that Rizzi's (2007) criterial freezing is voided). Case-assignment plays a crucial role in feeding the last step of the derivation. This result is interesting in two respects. First, my account makes the case against free/unprobed successive-cyclic movement in Topicalization in Classical Greek (whether this can be extended to cognate phenomena like Clitic left dislocation in Roman languages is matter for future research). Second, it shows that the A/ \bar{A} distinction must be revisited, thus independently replicating van Urk's (2015) results for a featural rather than a positional approach to this matter.

References : Adger, D. & J. Quer. 2001. The syntax and semantics of unselected embedded questions. *Language* 77.107-33. Alboiu, G. & V. Hill. 2016. Evidentiality and Raising to Object as A'-Movement: A Romanian Case Study. *Syntax* 19.256-85. Bertrand, N. 2010. *L'ordre des mots chez Homère : structure informationnelle, localisation et progression du récit*. Univ. Paris IV-Sorbonne. Bošković, Z. 2014. Now I'm a Phase, Now I'm Not a Phase: On the Variability of Phases with Extraction and Ellipsis. *LI* 45.27-89. Bruening, B. 2001. *Syntax at the Edge: Cross-Clausal Phenomena and The Syntax of Passamaquoddy*. Cambridge: MIT Ph.D. thesis. Cecchetto, C. & C. Donati. 2015. (Re)labeling Cambridge, MA: MIT Press. Chomsky, N. 2000. Minimalist inquiries: The framework. Step by Step: Essays on Minimalist Syntax in Honor of H. Lasnik, ed. by R. Martin, et al., 89-155. Cambridge: MIT Press. —. 2001. Derivation by phase. Ken Hale : A life in language, ed. by M. Kenstowicz, 1-52. Cambridge: MIT Press. —. 2013. Problems of projection. *Lingua* 130.33–49. Christol, A. 1989. Prolepse et syntaxe indo-européenne. Subordination and Other Topics in Latin, ed. by G. Calboli, 65-89: Benjamins. Kayne, R. S. 1989. Facets of past participle agreement in Romance. *Dialect variation and the theory of grammar*, ed. by P. Benincà, 85-103. Dordrecht: Foris. Kühner, R. & B. Gerth. 1898-1904. *Ausführliche Grammatik der griechischen Sprache II: Satzlehre* (1-2) Hanovre: Hahnsche Buchhandlung. Panhuis, D. 1984. Prolepsis in Greek as a discourse strategy. *Glotta* 62.26-39. Rizzi, L. 2007. On Some Properties of Criterial Freezing. *CISCL Working Papers on Language and Cognition* 1.145-58. van Urk, C. 2015. *A uniform syntax for phrasal movement : A case study of Dinka Bor*. Cambridge: MIT Ph.D. thesis. van Urk, C. & N. Richards. 2015. Two Components of Long-Distance Extraction: Successive Cyclicity in Dinka. *LI* 46.113-55.