## False optionality: When the grammar does mind

- **§1 Issue and claim.** In forming true information-seeking *wh*-questions, with a single *wh*-phrase, Greek may feature either a default *wh*-fronting strategy (cf. (1a)) or an optional *wh*-in situ one, as in (1b) (Sinopoulou 2009; Vlachos 2012):
  - (1) a. Pjon idhes? b. Idhes pjon?
    who-ACC saw-2sG saw-2sG who-ACC
    "Who did you see?"
    "Who did you see?"

Within the Generative theory of grammar, the upshot appears to be that optional strategies may be of two kinds: *Semantically contentful* (Chomsky 2000, 2004; Fox 2000; Reinhart 2006), or *Semantically vacuous* (Biberauer and Richards 2006). Optional strategies that are semantically contentful have interpretational effects distinct from the default counterparts. Let us assume, then, that, from this perspective, semantically contentful optionality is *false* optionality. On the other hand, optional strategies that are semantically vacuous have no distinct interpretational effects. This optionality, then, is *true*. Within this frame, the question is what kind of optional strategy is (1b): true (semantically contentful) or false (semantically vacuous)?

If true, it would be plausible (and welcome, perhaps) to unify *wh*-fronting and *wh*-in situ under an approach that distinguishes the two strategies solely at PF. Within the minimalist framework of Chomsky (2000), *et seq.*, this would amount to saying that *wh*-fronting and *wh*-in situ correspond to the same *wh*-chain, but differ as to which copy of the chain is spelled out: in a simplex sentence, *wh*-fronting assumes spell-out of the "higher" copy and deletion of the "lower" copy (cf. (2a)), while *wh*-in situ results from spell-out of the "lower" copy and deletion of the "higher" one (cf. (2b)) (see Reglero 2004 and Tsoulas and Yeo 2017 for two approaches in this direction):



If false, wh-fronting and wh-in situ should be distinguished in the syntax proper, where the formation of the two wh-chains differs: like (2a), wh-fronting assumes spell-out of the "higher" copy and deletion of the "lower" copy (cf. (3a)); yet, unlike (2b), wh-in situ features no "higher" copy, but only a single "low" copy (cf. (3b)) (see Sinopoulou 2009 and Vlachos 2012 for two approaches in this direction):



In this talk, I will claim that Greek wh-in situ optionality is false: empirical evidence from syntax, semantics, and prosody, shows clearly that wh-in situ is a distinct strategy from wh-fronting (§2). This necessitates an approach that distinguishes wh-fronting from wh-in situ in the syntax proper, like (3a) and (3b), and not solely at PF (§3).

- **§2** Facts. The empirical evidence shows that four major properties distinguish wh-in situ from wh-fronting. Wh-in situ:
  - (4) a. Lacks movement effects;
    - b. Lacks interrogative C;
    - c. Lacks wide scope;
    - d. Requires the presence (explicitly or implicitly) of conjunctive "and".

One example for each property above is enough to illustrate the point. Lack of movement effects (property (4a)) is apparent in strong islands: *wh*-extraction from adjunct islands is ilicit (cf. (5a)), but *wh*-in situ is grammatical inside an adjunct island (cf. (5b)):

(5) a.\* Ti timorise [epidhi ipes t<sub>ti</sub>]? b. Se timorise [epidhi ipes ti]? se what you-cl punished-3sg because said-2sg you-cl punished-3sg because said-2sg what "\*What did s/he punish you because you said?" "\*What did s/he punish you because you said?"

(Vlachos 2012: 24, (5))

Considerations revolving around selection suggest lack of interrogative C (property (4b)): unlike wh-fronting (cf. (6a)), a wh-in situ order cannot satisfy the selectional properties of a question-selecting predicate, unless the complementizer position is independently filled by a suitable complementizer (cf. (6b)). This means that C in whin situ lacks interrogative properties, otherwise (6b) would have been grammatical without the need of an overtly realized C, contrary to facts.

- (6) a. Rotisan [ti asked-3PL what said-3sG
- b. Rotisan [\*(an) ipe ti]. asked-3PL if said-3sg what

"They asked what s/he said."

"They asked if s/he said what?"

(Vlachos 2012: 23, (4))

Licensing of P(olarity) I(tems) (Giannakidou 1998) points at the lack of wide scope (property (4c)): unlike whfronting (cf. (7a)), wh-in situ does not licence PIs (cf. (7b)):

(7) a. Pjos exi pai pote stin Afriki? b.\* Exi pote stin Afriki pjos? pai who-NOM has-3sG go-3sG ever to-the Africa-ACC has-3sg go-3sg ever to-the Africa-ACC who-NOM "Who has ever been to Africa? "Who has ever been to Africa?

(Sinopoulou 2009: (44a) & (44b))

Finally, the following discourse shows the obligatory presence of "and" (property (4d)): Speaker B may use "and" in making a wh-fronting question (cf. (8b)), following Speaker's A utterance (cf. (8a)), but Speaker B' must use "and" in making a wh-in situ question (cf. (8c)):

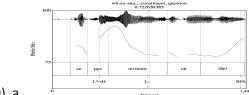
- (8) a. Speaker A: Pigha ja psonja.
  - went-2sg for shopping "I went shopping."
- (Ke) ti aghorases? and what bought-2sG

b. Speaker B:

c. Speaker B': \*(Ke) aghorases ti? and bought-2sg what "(And) what did you buy?"

Prosodic evidence corroborate the above facts from syntax and semantics: wh-fronting and wh-in situ, despite sharing the same question melody (L\*+H L- !H%), they differ in the way this melody is manifested: the question melody "spreads" across the entire utterance in wh-fronting (cf. (9a)), but "shrinks" in wh-in situ, concentrating on the wh-phrase (cf. (9b)):

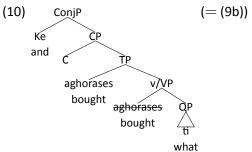
"(And) what did you buy?"



- (9) a.
- Stoch (Hz) b.

(Roussou et al. 2013: 485-6, (16-17) Figures 1-2)

§3 Analysis. The approach to wh-in situ that the facts underpin: (a) Assumes no movement to C (hence, the lack of the relevant effects, and the absence of PI licensing); (b) Takes the wh-phrase to be a question quantifier (hence, the availability of the relevant low scope despite the lack of association with interrogative C); (c) Structurally implicates the projection of a conjunctive head (hence, the obligatory presence of "and"). This approach is summarized in (10): the wh-phrase is a quantifier (QP), which surfaces inside vP, and whose scope is restricted to vP, while a Conjunction Phrase projects above C, the latter having no interrogative properties:



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