# Marking the discourse in Greek wh-in situ questions\*

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# Περίληψη

Στο παρόν σύντομο άρθρο παρουσιάζεται ένα σαφές θεωρητικό επιχείρημα βασιζόμενο σε εμπειρικά δεδομένα τα οποία είναι καταγεγραμμένα στη σχετική βιβλιογραφία. Πιο συγκεκριμένα, υποστηρίζεται ότι οι in situ ερωτηματικές λέζεις δεν σχετίζονται με την αριστερή περιφέρεια της πρότασης στα ελληνικά. Ένα βασικό επακόλουθο αυτής της έλλειψης συσχέτισης αφορά στις ιδιότητες των in situ ερωτηματικών λέξεων στο λόγο, βασιζόμενοι στην τυπική υπόθεση ότι το C (εν μέρει) κωδικοποιεί τις ιδιότητες του λόγου. Εν συντομία, παρατηρείται ότι οι ερωτήσεις μερικής αγνοίας με in situ ερωτηματική λέζη, πρέπει να είναι αγκιστρωμένες στο λόγο, σε αντίθεση με τις ερωτήσεις μερικής αγνοίας οι οποίες έχουν την ερωτηματική λέζη στην την αριστερή περιφέρεια της πρότασης.

Keywords: ερωτήσεις μερικής άγνοιας, ερωτήσεις 'in-situ', λόγος, ελληνικά

#### 1 Introduction

Information-seeking wh-questions in Greek, with a single wh-element, may come in two forms: alongside the default wh-fronting strategy (cf., (1a)), a wh-in situ configuration may also be available (cf., (1b)) (see, e.g., Sinopoulou 2009; Vlachos 2010, 2012, 2014, 2019, Roussou et al. 2013, Chiou & Vlachos 2017; Σινοπούλου 2019; Vlachos & Chiou 2020).

(1) a. ποιόν είδες? who-ACC saw-3SG 'Who did you see?'

> είδες ποιόν? saw-3SG who-ACC 'You saw who?'

είδα Γιάννη c. saw-1SG the-ACC John-ACC

'I saw John.'

In (1), the wh-phrase pjon ("who") is the internal argument of the predicate idhes ("saw"), and may appear either at the left periphery of the clause, as in (1a), or in a position where a non-wh-argument of the verb typically surfaces, as the comparison between (1b) and (1c) demonstrates (note that, here and throughout, we translate wh-in situ questions in English following the Greek format, but we do not wish to raise any implications about English wh-in situ; for a discussion of the latter, see Pires & Taylor 2007).

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Cross-linguistically, all the approaches that have been proposed to account for information-seeking wh-in situ questions (hereafter, 'wh-in situ'), despite their distinct technical implementations (see Vlachos 2012 for an overview), assume that wh-in situ is associated with the C-layer (i.e., the clausal left periphery). This assumption, in turn, reduces wh-in situ to a strategy that is 'alternative' to wh-fronting, as the latter is typically assumed to be linked to C (Chomsky 2000).

In this short contribution, we make the following argument: putting together empirical evidence from distribution and interpretation, already documented in the relevant literature, we show that Greek *wh*-in situ is not associated with C (section 2). Now, on the standard assumption that the C-layer encodes the discourse properties of the clause (see Rizzi 1997), we further propose, on empirical grounds, that lack of association with C affects the discourse properties of *wh*-in situ in certain respects (section 3). Section 4 concludes the discussion.

### 2 "In situ" means in situ

Let us begin with the evidence from word order, in the context of (2) (from Kotzoglou 2006: 95, (3a), (3b) & (3d) respectively):

- (2) a. η Μαρία αγαπάει τον Ηλία the-NOM Maria-NOM love-3SG the-ACC Ilias-ACC 'Maria loves Ilias.'
  - b. ποιόν αγαπάει η Μαρία?
     who-ACC love-3SG the-NOM Maria-ACC
     'Who does Maria love?'
  - c. \* ποιόν η Μαρία αγαπάει? who-ACC the-NOM Maria-NOM love-3SG 'Who does Maria love?'

Kotzoglou (2006), among others, notes that wh-fronting questions obligatorily trigger inversion of the clausal S(ubject) over the V(erb), yielding a VS order. So, against the typical SV order of declaratives (cf., (2a)), wh-fronting must yield a VS order (cf., (2b)), whereby S cannot surface between the wh-element and V (cf., (2c)).

On the other hand, wh-in situ falls under a clearly distinct pattern. (3) demonstrates:

(3)	a.	η	Μαρία	αγαπάει	ποιόν?	
		the-NOM	Maria-NOM	love-3SG	who-ACC	
		'Maria loves	'Maria loves who?'			
	b.	(?)αγαπάει	η	Μαρία	ποιόν?	
		love-3SG	the-NOM	Maria-NOM	who-ACC	
		'Maria loves who?'				

As we may observe, wh-in situ assumes the SV order (cf., (3a)), while S may appear between V and wh-in situ (cf., (3b)), without leading to ungrammaticality (albeit, perhaps, to a slight deviance).

On the standard assumption that reordering of V around S, in languages like Greek, is triggered by *wh*-movement (see Rizzi 1997, for a first discussion), word order facts

in (3) clearly point at lack of movement for wh-in situ. A piece of corroborating evidence for this comes from islands. Witness the minimal pair in (4):

```
(4)
         *τι
                           τιμώρησε
                                         [επειδή
                                                                    <τι>]
     a.
                σε
                                                       είπες
         what you-CL
                           punish-3SG
                                         because
                                                       said-2SG
         "*What did s/he punish you because you said?"
                    τιμώρησε
                                 [επειδή
                                             είπες
                                                         τι]
         you-CL
                    punish-3SG
                                because
                                             said-2SG
                                                         what
          'S/he punished you because you said what?'
```

As has long been observed (see Horrocks & Stavrou 1987; Kotzoglou 2006, among others), Greek abides by the typical islandhood pattern, an example of which is (4) (from Vlachos 2012: 24, (5)). (4a) shows that extraction of *ti* ("what") out of a so-called *strong*-island (see Ross 1967 for a first discussion), which is the adjunct clause headed by *epidhi* ("because"), leads to an ungrammatical result (henceforth, copies of extracted items will be enclosed in angle brackets). Now, the grammaticality of (4b) says that *wh*in situ resides inside the adjunct island.

Next, let us turn to issues revolving around clausal complementation. Typically, predicates that select interrogative clauses as complements fall into two major classes (see, e.g., Lahiri 2002): *Rogative* and *responsive*. A *wh*-fronting question can be the complement of either class of predicates, as shown in (5a) and (5b) respectively:

```
(5)
        αναρωτιέται
                       ποιόν
                                   είδες
                                             (Rogative)
    a.
                       who-ACC
         wonders-3SG
                                  saw-2SG
        "S/he wonders who you saw."
    b. ξέρει
                      ποιόν
                                  είδες
                                             (Responsive)
                                  saw-2SG
         knows-3SG
                      who-ACC
        "S/he knows who you saw."
```

Now, a *wh*-in situ question may also be the complement of either class of predicates, but only if an appropriate complementizer is independently realized at the left periphery of the complement clause, that is, the clause that the *wh*-in situ element surfaces at (by 'independently', we mean a lexical item other than the *wh*-in situ element). This is shown in (6a), with the rogative *anarotjeme* ("wonder") and in (6b), with the responsive *ksero* ("know"):

```
αναρωτιέται *(αν)
(6)
                              είδες
                                        ποιόν?
                                                     (Rogative)
                              saw-2SG
         Wonder-3SG if
                                        who-ACC
        "S/he wonders *(if) you saw who?"
    b. ξέρει
                        *(\alpha v)
                                   είδες
                                             ποιόν?
                                                        (Responsive)
        knows-3SG
                        if
                                   saw-2SG
                                             who-ACC
         "S/he knows *(if) you saw who?"
```

The ungrammaticality of (6), in the absence of an overt complementizer, says that the C-layer of wh-in situ does not carry interrogative properties, by default; if it did, a null C would satisfy the selectional properties of the matrix predicates in (6), contrary to facts. Supporting evidence for this observation comes from the grammaticality of cases like (7):

- (7) ξέρει είδες ποιόν? (Rogative) a. οτι Wonder-3SG that who-ACC saw-2SG "S/he knows that you saw who?" νομίζει είδες ποιόν? (Antirogative) οτι think-3SG that saw-2SG who-ACC "S/he thinks that you saw who?"
- (7) says that the complementizer introducing wh-in situ may be declarative, under selection from a relevant predicate. In particular, a wh-in situ may surface in a that-clause, which serves as complement to either a responsive predicate (cf., (7a)), or an antirogative predicate that typically selects that-clauses (cf., (7b)). So, clausal complementation facts show that the interrogative properties of wh-in situ are not encoded in the C-layer that introduces the wh-in situ construction. This becomes clear with (7): if the C-layer of wh-in situ was obligatorily interrogative, as in the case of wh-fronting (say, (5)), then (7) would have been illicit, contrary to facts, because the same C-head cannot encode both interrogative and declarative features (see, e.g., Rizzi 1990).

An additional prediction tied to the above facts is that, since wh-in situ is not associated with C, the scope of a wh-in situ element is not encoded in C. This prediction is borne out, as becomes apparent in the case of wh-adjuncts. More in particular, witness (8) (from Vlachos 2012: 62, (15a)):

- (8) από πάρτι? και έφυγες τόσο νωρίς το πως and how left-2SG such early from the party
- a. 'How did you leave the party that early?'
  b. 'How come you left the party that early?'
  (fact-related)

Building on Starke's (2001) independently motivated observation regarding French whquestions, Vlachos argues that Greek wh-fronting adjuncts like pos ("how") bear two readings: an event-related one (cf., (8a)), where the question is about the "manner" you left the party (thus, pos translates to a manner adverb); and, a fact-related reading (cf., (8b)), where the question is about the "reason" you left the party (accordingly, pos translates to a reason adverb). The two readings reflect two distinct scope positions of the wh-adverb. Specifically, the event-related interpretation derives from the 'low', so to speak, scope of the wh-adverb, presumably restricted to the area surrounding the predicate, while the fact-related reading reflects a 'high' scope of the wh-adjunct, associated with entire proposition, and encoded in the clausal left periphery.

Now, within this frame, consider the available readings of the wh-in situ counterpart in (9) (from Vlachos 2012: 62, (15b)):

(9) Kai έφυγες τόσο πάρτι νωρίς από πώς? το left-2SG such and early from the party how a. 'How did you leave the party that early?' (event-related) b.# 'How come you left the party that early? (fact-related)

As we may observe from the infelicity of (9b) (the sign '#' stands for infelicity to context), the wh-in situ adjunct scopes only 'low' in the structure (cf., (9a)), while the 'high' reading, which related to C, is unavailable.

By way of summary, let us take the empirical argument in this section home: the facts show that wh-in situ is not associated with C, neither via (any kind of) movement

(SV order; islands), nor via (long-distance) Agree (scope). C in wh-in situ is not interrogative by default, which is shown in cases of selection, where C surfaces in the guise required by the matrix predicate, be it interrogative or declarative.

In the next section, we examines some of the implications that the lack of association with C raises for the discourses properties of *wh*-in situ.

## 3 Discourse properties of wh-in situ

As Rizzi (1997: 283) phrases it, "[w]e can think of the complementizer system as the interface between a propositional content (expressed by the IP) and the superordinate structure (a higher clause or, possibly, the articulation of discourse, if we consider a root clause)." So, in part, C encodes the discourse of the clause. If so, then, we contend that lack of association with C affects the discourse properties of wh-in situ. More in particular, as has long been observed in the relevant literature on Greek (and not only), wh-in situ must be anchored (or, tied, which will use interchangeably) to the immediate (extra-)linguistic environment (see Vlachos 2012, for a first discussion of the discourse properties of wh-in situ in Greek, where the idea of "anchoring" is introduced). Here, we argue, based on already reported empirical data, that this anchoring is manifested in at least two respects.

One piece of empirical evidence which shows that *wh*-in situ must be associated with the discourse is its infelicity in, so called, "out-of-the-blue" contexts. (10) demonstrates (see also Vlachos 2012):

(10) #γειά, γίνεται τι?
hi is-happening what
intended: "Hi, what's going on/how's it going?"

What (10) clearly shows is that a *wh*-in situ question cannot initiate a discussion just "out of the blue".

Another (and perhaps, more interesting) fact which shows that *wh*-in situ is tied to the discourse is the obligatoriness of the conjunction marker *ke* ("and"). More in particular, as a first step of the argument, consider the *wh*-fronting question in (11):

(11) #και, τι γίνεται?
and what is-happening
"(#And) what's going on/how's it going?"

A wh-fronting question in an out-of-the-blue context strongly resists discourse anchoring, by definition. Under the presence of ke, the question becomes infelicitous. This means, in turn, that ke anchors the utterance it heads to the discourse. Within this part of the argument in place, next, let us turn to wh-in situ.

As Vlachos (2019) observes, ke is necessarily implicated in the structure of wh-in situ, and in some contexts (about which we have nothing more to contribute, at present), its overt realization is strongly preferred. An example of this is the dialogue in (12):

```
(12)
        Speaker A:
                                           ψώνια
        πήγα
                            για
                                           shopping
        went-1SG
                            for
       'I went shopping.'
           Speaker B:
           *(και)
                                                          τ1?
                           αγόρασες
                                                           what
           and
                           bought-2SG
           '*(And) you bought what?'
```

In (12b), the phonological realization of *ke* seems necessary to the extent that its null counterpart (which is what the parentheses stand for) render the sentence ungrammatical (and not just infelicitous; hence, the asterisk notation instead of a hash symbol).

To conclude the discussion in this section, we have argued that the discourse properties of *wh*-in situ are a reflex of the latter's lack of association with C, which renders *wh*-in situ infelicitous in contexts that do not assume some kind of anchoring with the immediate (extra-)linguistic environment.

### 4 Conclusion

The present short contribution makes a straightforward theoretical argument (based on empirical evidence already documented in the relevant literature): wh-in situ elements in Greek are not associated with the clausal left periphery. One effect of this lack of association concerns the discourse properties of wh-in situ, on the standard assumption that the C-system (partly) encodes the discourse properties of the clause (and partly, its propositional properties). In short, a wh-in situ question must be anchored to the discourse (in ways that its wh-fronting counterpart does not have to).

It goes without saying that this paper raises far more (interesting) questions than it answers. For example, some among them are: What is the syntax of wh-in situ (compared to that of wh-fronting)? How is the 'question' reading available in wh-in situ, if C is not involved in its encoding? How is the conjunction marker ke ("and") implicated in the wh-in situ structure? For further elaboration on these questions (among others), we cite the interested reader to Vlachos & Chiou (2020).

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