Pragmatic factors that determine main clause constituent order variation in Greek: a diachronic perspective

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Abstract: This article sets out to empirically assess the theoretical claim that there is a move towards syntacticization in Modern Greek. This is conducted within Lambrecht’s (1994) theoretical framework of different information-structure types, which had to be specially adapted for Greek. In Classical Greek, it is not possible to identify a single word order pattern as the unmarked one. Furthermore, there is no direct mapping between syntactic constructions and pragmatic contexts. By contrast, in Modern Greek, SV(O) has been ‘promoted’ to the status of the unmarked word order type. There is also a more direct correlation between syntactic configurations and pragmatic functions.

Keywords: diachronic syntax, pragmatics, Greek language, constituent order, information structure

1. Introduction
A recurring commonplace in descriptions of Greek word order is that all six logically possible permutations of the major clausal constituents [S V O] yield grammatical linearization patterns. Nonetheless, there are two major arguments that point towards word order reorganization in Greek. First, Taylor (1994), Horrocks (1997: 59-60) and Atchison (2001: 162-64 & 195-96) among others put forth the claim that word order change of the OV→VO type is attested in the history of Greek. Furthermore, Dover (1960:10ft, 68) arrived at the tentative conclusion-based on intuition or independent observation rather than thorough empirical investigation-that syntactic determinants of word order have emerged in Hellenistic Greek that were irrelevant in Classical Greek (CG). If Dover’s suggestion is substantiated by extensive corpus analysis, it could theoretically lead support to the proposal that post-Classical Greek exhibits the first traces of syntacticization.

In relation to Modern Greek (MG), the statistical prevalence of SVO in main declarative clauses is uniformly agreed by all researchers in the field (Tzanidaki 1994; Lascaratou 1989, 1998 inter alia). Most importantly, the research project on information structure (hereafter, IS) in MG by Georgakopoulos et al. (2006) sets out to empirically assess the claim that “…contemporary Modern Greek shifts towards a language type with rigid SVO word order, allowing for alternative word orders only to express topicalization or focus on a constituent”. All the above point towards rigidification of Greek word order. It remains to be assessed, in the context of this research project, whether there is a move from pragmatically motivated towards syntactically motivated word order in Greek, in line with English, Latin/Romance, and other Indo-European languages.

Once the fact that linear restructuring has taken place in Greek is established, the
immediate next step is to identify the motivating forces behind it. I argue that there are pragmatic factors at work, having their locus at the level of clausal information structure. It is instructive to elucidate this latter concept before proceeding any further. As is evident even to the casual observer, there are several structural options available to the speaker who wants to communicate a piece of information. The underlying assumption of any theory of information structure is that the ‘packaging’ of the message expresses her communicative goals, which are to be deduced by the speech receiver on the basis of the utterance. A range of constructions are used in different contexts, which induce certain information structural effects. Certain grammatical structures that are repeatedly used under specific contextual conditions become more entrenched and are conventionalized in due course (usage-based models of language, see Barlow and Kemmer, 2000; Langacker 2000). They thus constitute a useful expressive tool at the speaker’s disposal. Inevitably, this process occurs in cycles. As far as linearization is concerned, “grammatical structures arise diachronically under pressure from information-structure constraints” (Lambrecht 1994: 29). This theoretical statement most accurately sums up the view on the motivations behind word order change as advocated within the context of this study.

2. Methodology
The first part of this section is devoted to a concise presentation of the theoretical framework employed in this study, namely Lambrecht’s (1994) theory of IS. One of the basic theoretical prerequisites of Lambrecht’s account is overt linguistic manifestation of IS. In English this is expressed by means of prosody. It should be pointed out, though, that different languages use different formal means of marking IS like morphological particles, word order variation, or even specific constructions, all of which are exploited either solely or in combination. Lambrecht’s (1994) analysis generates a taxonomy of declarative information-structure types presented in tabular form below:

<table>
<thead>
<tr>
<th>IS types</th>
<th>Topic-comment (TC)</th>
<th>Identificational (ID)</th>
<th>Thetic (TH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Context Q</td>
<td><em>What happened to your car?</em></td>
<td><em>I heard your motorcycle broke down?</em></td>
<td><em>What happened?</em></td>
</tr>
<tr>
<td>Clause structure</td>
<td>My car/It broke DOWN⁴</td>
<td>My CAR broke down</td>
<td>My CAR broke down</td>
</tr>
</tbody>
</table>

As can be seen from the table above, English uses the same clause structure but different prosody for encoding the three major IS types. The associative relation among different sentence structures is, in essence, the backbone of this IS theory. Paradigmatic comparison of *allosentences*⁵ (i.e. of multiple structures expressing the same proposition) inevitably points to their differentiation in terms of markedness: TC is marked out by the accent on the predicate, whereas the other two are identified by the accent of the subject. TC is classified as the unmarked IS type, (and, incidentally, SVO the unmarked word order) due to its higher frequency and wider distribution in

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⁴ The place of the accent is marked by capitalization.

⁵ This term has been introduced by Daneš (1966). See Lambrecht 1994: 6, 35, 235 inter alia.
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discourse. Any deviations from this type are exploited, so as to avoid an unintended TC pragmatic interpretation. This is why thetic and identificational structures are so markedly differentiated from the topic-comment ones.

The most advisable way to conduct my research was to assemble a corpus of historical narrative texts, on the basis of which to assess diachronically any linearization changes. I primarily drew on the digital database Thesaurus Linguae Graecae (TLG)\(^6\), which was also supplemented by authoritative published sources. The texts in the corpus are written in the narrative mode, more specifically, in the genre of historiography and its subgenres, that is history/chronicle\(^7\), biography, and autobiography/personal memoirs. Such a decision was dictated by the requirement to minimize the influence of metrical patterns on word order. As long as information on intonation is unavailable in written corpora, IS had to be determined by word order rearrangements and context/co-text. Text selection was based on availability of material (thus only extant extensive works are included in the corpus, and not fragments) and, primarily, choice of linguistic code. Therefore, I have opted for texts closer to the vernacular, at the expense of texts with classicizing tendencies. To a lesser degree, literary merit was also taken into account, with a predilection for texts included in the canon of Greek literature. I also set out to avoid translated works, dialectal literature, and texts attributed to non-native speakers of the language.

The database is limited to the following three major historical stages: Classical Greek, Early and Middle Byzantine Greek, and Modern Greek. Early and Middle Byzantine Greek has been used as an intermediate stage, so as to capture the aftermath of the sweeping linguistic changes, which have taken place over the Hellenistic era. In this modified corpus, I have set an upper limit of 1000 words per text and 5 texts per historical period. This corpus size was judged sufficient for my purposes, as it would yield a representative sample of all IS types. The extracts were selected at random. I strived for, roughly, an equal representation of texts from the different subgenres of historiography-to the extent that this was feasible. I have tried to adopt a prototypicality approach to the analysis of genre according to which certain features would 'identify the extent to which an exemplar is prototypical of a particular genre' (Swales, 1990: 52)\(^8\).

The first methodological step was to devise special coding for Lambrecht’s taxonomy of three basic declarative IS types and their subtypes:

\begin{itemize}
  \item **TC**: topic comment (\textit{TCC}: continuing topic-comment; \textit{TCS}: shifted topic comment)
  \item **TH**: thetic (\textit{TP}: presentational; \textit{TE}: event-reporting)
  \item **ID**: identificational (\textit{IS}: subject identificational; \textit{IC}: complement identificational)
\end{itemize}

The interaction of three interrelated parameters was first investigated: functional structure, which describes the actual order of elements in the clause (i.e. S-V-O), constituent structure, and information structure (Brown & Miller 1996: xix).

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\(^6\) TLG corpus is provided by the cognominal research centre at the University of California, Irvine. It encompasses most Greek literary texts from the 8th century B.C. up to the Fall of Byzantium (1453), and it is being constantly updated (for more information look at http://www.tlg.uci.edu).

\(^7\) I subscribe to the view purported by J.K. Ljubarskij, (1992, 1993) which maintains that history and chronicle are not two separate branches in Byzantine historiography, but rather different stages in the development of the genre.

\(^8\) Genres are here viewed as 'fuzzy' categories which cannot be defined by necessary and sufficient conditions. This choice gave me the flexibility to include a variety of texts that might actually significantly depart from the 'core' texts representative of the genre in question.
Occasionally, when deemed necessary, I also had to resort to semantic structure e.g. for passive constructions. Summarized tables of textual analyses were then implemented to indicate correspondences among IS type, [S V O] linearization and syntactic construction.

3. Elaborations and modifications to Lambrecht’s theoretical framework as dictated by the Greek data

Lambrecht’s theoretical framework had to be specially adapted to accurately describe Greek data. All the necessary additions, modifications and enhancements to theory will be explicated below.

3.1. Topicality as a gradient notion

As a starting point, I will briefly outline the two categories that delineate the boundaries of topicality, as there are compelling reasons to believe, which will be developed in due course, that this concept can more accurately be conceived along a continuum (and not as a binary system). I thus subscribe to the view that topicality is a gradient notion9. The two above-mentioned hitching posts are continuing topic comment (TCC) and shifted topic comment (TCS). TCC picks up the topic of the immediately preceding proposition. As a continuing topic, it is preferentially encoded by free and bound pronominals (i.e. indexation morphemes), or zero. It is considered to be the cognitively preferred topic expression (Lambrecht 1994: 165-166, 172-75). TCS, on the other hand, is used to signal a marked shift from the discourse referent, which assumes the role of the topic in the immediately preceding proposition. It therefore requires explicit encoding by means of full nominal arguments.

New topic-comment categories were extrapolated from the data, namely semi topics (TCsemi) and subtopics (TCsub). The former label is used for ‘semi-topical’ referents in presupposed constructions (Lambrecht’s backgrounded clauses10) encoded by subordinate clauses, whereas the latter are used for inferrable/accessible topics11 in main clauses. I will cite some typical examples of both topic subcategories in the literature:

[Lambrecht’s (2.11)]
(1) I finally met the woman who moved in downstairs (Lambrecht 1994: 51); (my italics)
[Prince’s (17b)]
(2) He passed by the Bastille and the door was painted purple (Prince 1992: 305)

In the first example, the discourse referent ‘the woman’, also encoded by the relative pronoun who, functions as the semi-topic within the context of the relative clause. In the second example, the referent encoded by the nominal ‘the door’ functions as a subtopic which is inferentially accessible, as it is linked to the already evoked referent Bastille.

These two topic subtypes used to be conflated in my mind due to their correspondence in function as ‘once’ topics of subsidiary importance in discourse. Nevertheless, they have to be kept apart due to the internal/external IS distinction, as advocated in Lambrecht & Michaelis (1998) and Lambrecht (2004). Lambrecht (1994:16) argues for recursiveness in IS, which principle implies that the subordinate construction embedded within another main or subordinate clause preserves its own

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9 This view is also advocated by a significant portion of the psycholinguistic research on reference (See Givón 1983; Ariel 1990; Prince 1981, 1992; Gundel et al 1993)
10 Lambrecht (1994: 125-26)
11 Prince (1992), Chafe (1994)
internal IS. We are thus urged to tell apart the internal information structure of an embedded clause and its external information structure, that is, its pragmatic role within a larger proposition. As a matter of exemplification, note than in example (1) above the relative clause which is classified as a TCsemi, is in itself embedded within a main clause, and it is part of its focus domain.

3.2. Contrastiveness as a pragmatic overlay above all IS types
Another methodological issue relates to whether clauses with contrastive topics and foci will be treated as a distinct category. Contrastiveness is a gradient rather than a categorical concept for Lambrecht. It is not lexicogrammatically evoked in utterances, as it falls under the rubric of ‘conversational implicatures’. It has been aptly characterized as ‘a separate pragmatic overlay over both topical and focal expressions’ (Floor 2004:45) i.e. it is viewed as orthogonal to the topic/focus distinction. Furthermore, contrastiveness extends beyond the level of the clause; typically the relationship between the two clauses is one of opposition or contrast in meaning. The basic criterion applied is the explicit mentioning of alternatives. Contrastive clauses are also signaled by morphological means in the form of contrastive particles. A typical example (from *Porphy.*12) immediately follows:

(3a) disembarking
(3b) leaving men rest of the goods on the land on board the ‘monoxyla’

There are two options available to the analyst: either postulate a fourth IS type, polarity focus or counter-assertive (PF), or treat contrastiveness as a cross-cutting parameter of the three major IS types already identified i.e. as a ‘pragmatic overlay’ (See Floor 2004:183-85). In the former case, PF usurps the function of encoding counterfactual information. There is solid evidence though against such a theoretical assumption. First, PFs extend beyond the level of the clause (they are cross-sentential), and second, they tend to co-occur with all three already established IS types. The following taxonomy of PF constructions has been identified in the corpus:

<table>
<thead>
<tr>
<th></th>
<th>TOP</th>
<th>FOC</th>
</tr>
</thead>
<tbody>
<tr>
<td>i)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iii)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>iv)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Contrastive topics and foci occur either in concert (i & ii) or independently (iii & iv). Beyond the contrastive overlay, the IS type of each construction has to be determined. The first and the third are clear TC types. The third always co-occurs with presentationals, which introduce new discourse referents into the discourse, whereas the fourth is a typical contrastive identificational.

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4. Evidence that Greek is in the process of syntacticization

4.1. SV(X) as the most prevalent syntactic structure in MG

After unfolding the different TC subclasses, we are now called to confirm or refute the prevalence of overt topics and SV(X) construction in Greek. If this hypothesis is substantiated by the data, it would validate our argument that Greek is in the process of syntacticization.

From CG up to MByz\textsuperscript{13}, there is no shift of balance in favour of overt or covert topics. The differentiation in the frequencies cross-textually might be attributed to genre. This is equally valid for main and subordinate clauses. In MG, though, if we exclude personal narratives from consideration, there is an overwhelming predominance of clauses with overt topic, which is mainly encoded as a subject (subject takes precedence over object as the optimal topic exponent). Attained percentages range from 77.77% to 92.85%. Even in Kolokotronis’s selected extract from Memoirs though, overtly expressed topics have reached a far from negligible 62.06%. Subsequently, I have set out to estimate the diachronic distribution of SV(X) in Greek main clauses only. A summarizing table of the obtained results therein is presented below:

Table 1 Diachronic distribution of SV(X) in Greek main clauses

<table>
<thead>
<tr>
<th>Hist. periods</th>
<th>n</th>
<th>%</th>
<th>IS type</th>
</tr>
</thead>
<tbody>
<tr>
<td>CG</td>
<td>53/280</td>
<td>19.28</td>
<td>TCS (50)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TCSUB (3)</td>
</tr>
<tr>
<td>EByz</td>
<td>37/250</td>
<td>14.8</td>
<td>TCS (20)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TCSUB (13)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IS ID (4)</td>
</tr>
<tr>
<td>MByz</td>
<td>47/274</td>
<td>17.15</td>
<td>TCS (37)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TCC (7)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IS ID (3)</td>
</tr>
<tr>
<td>MG (I)\textsuperscript{14}</td>
<td>117/420</td>
<td>27.85</td>
<td>TCS (48)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TCSUB (57)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TCC (8)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TE (4)</td>
</tr>
<tr>
<td>MG (II)</td>
<td>160/220</td>
<td>72.72</td>
<td>TCS (33)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TCSUB (62)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TCC (14)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TE (45)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>IC ID (6)</td>
</tr>
</tbody>
</table>

A bit more than two third of the IS types in MG (II) are encoded by SV(X). There is also great differentiation in the distribution of IS types across different periods. From CG up to MByz, there is a clear predominance of shifted topic-comment clauses (TCS), whereas the other attested types of continuing topic-comment (TCC), subtopical (TCSUB), and subject identificational (IS ID) clauses are evidently underrepresented. In both subcorpora for MG, though, the only IS type that is not represented is subject identificational (IS ID), and this is due to the fact that it has not been attested in our MG corpus.

\textsuperscript{13} EByz and MByz stand for ‘Early Byzantine Greek’ and ‘Middle Byzantine Greek’ respectively.
\textsuperscript{14} MG (I) stands for historical texts, whereas MG (II) for autobiographical ones.
4.2. Compensation strategies pointing towards a less flexible word order in MG

Another argument in support of the view that topic is in the process of grammaticalizing as a subject comes from constructions which involve object promotion to a topic. These have been formed by the insertion of a pronominal clitic, which is coreferential to the object NP. There is a proliferation of research on the formative role of clitics in Greek linearization (see Horrocks 1990 in particular), which is, incidentally, diachronically attested. Through this clitic interposition, two constructions have emerged, namely CL (Clitic Doubling) and CLLD (Clitic Left Dislocation) in MG. All the identified examples are elicited from the autobiographical texts in my corpus. The following two instances of the constructions constitute two consecutive clauses in Makriyannis’s Memoirs (19th c.):

(4) τα ξετιμήσαμεν τα δύο μερδικά πεντάκοσια γρόσια
O: PROocl V O: ART(+)NUM(+)Nc C: NUM(+)Nc
these we.sold the two rations five.hundred groschen
“we sold the two rations at five hundred groschen”

(5) κι αυτά όποτε αρρώσταινα τ’ αφίνα εις την διαθήκη μου
O: PROpers O: PROocl V C: PP
and these whenever I.became.ill them I.left in the will my
“and when I became ill, I left them (i.e. the money) in my will”
(Makr 1957:53; transl. by Lidderdale 1966: 34)

Both constructions employ morphosyntactic trappings to mark the object as a topic, and thus be differentiated from topicalization and focus movement. The omission of the clitic results in less pragmatically acceptable clauses. In the case of CL, the object topic occurs as the focus in the immediately preceding clause. This construction is used to establish it as a clausal topic. In the immediately following CLLD, the anaphoric pronoun and its clitic copy are referentially linked to an inferrable nominal ‘the money’, evoked by the antecedents ‘two rations’ and ‘five hundred groschen’. A point that cannot be missed is that these pragmatic functions of the two constructions coincide with two different categories of subtopics (TCSUB) identified in the corpus, namely the ones who are activated in previous focus structure, and the ones indirectly evoked through a schema.

Clitic-doubled constructions constitute one of the most intensely studied issues in MG syntax (Anagnostopoulou 1994, 1999; Anagnostopoulou & Giannakidou 1995 for CL, and Alexopoulou & Kolliakou 2002; Anagnostopoulou 1997 for CLLD among others). Arguments of the former along the parameters of definiteness or referentiality for CL have been refuted by a number of counterexamples in the literature (See Agouraki 1993; Kallulli 2000; Kazazis & Pentheroudakis 1976). Hellmuth and Skopeteas (2007), on the other hand, have determined in the context of their study the implementation of CLLD for contrastive topicalization or bridging topics, i.e. inferentially available, as the one in our second example15. The two additional examples of CLLD in the corpus fit neatly into these categories.

Summing up, both CL and CLLD are used to promote object rather than subject (the default option) as topic expressions. Their functional difference is rather difficult to determine. It seems more likely though that it is somehow related to whether or not the object topics are interpreted as active or inferentially accessible to the hearer/reader by

the speaker/writer. Once again, it is worth mentioning that both topics, which are assigned these cognitive statuses, are encoded by TC_SUB, and exactly correspond to its two subcategories.

4.3. MG towards a more syntactically-governed word order
Based on obtained results, this is how the end points of the transition from a discourse-governed to a more syntactically-governed word order in Greek could be represented in conceptual space:

- **Classical Greek (CG)**

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> event reporting

> topic-comment

> identificational

SV inversion
Subject -Predicate
Argument reversal for IC (Subject- first construction for IS)
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Figure 1 *Conceptual space for CG word order*
Modern Greek (MG)

Subject-first construction for IS/SV inversion
Subject-Predicate
Argument reversal IC
(Subject-first construction for IS/SV inversion)

Figure 2 Conceptual space for MG word order

At this point, Lambrecht’s acute observation on the importance of allosentences in information structure cannot be overstated. Paradigmatic comparison constitutes an indispensable methodological technique at our disposal, which can be used for making important generalizations in relation to IS. The cognitive mechanism at work is that each given structure is interpreted against the background of available but unused alternative structures (Lambrecht, 1994: 6). This paradigmatic approach is inextricably linked to the distinction between marked and unmarked structure, as it has already been explicated in the methodology section. Lambrecht has identified topic-comment clauses as the unmarked IS type, and SVO as the unmarked constituent order. Conversely, thetics, and occasionally identificationals, are patterned as ‘formal reversals’ of the unmarked TC by means of SV inversion.

In CG, the SV construction is restricted to shifted topic-comment clauses, as noted above, which are also numerically underrepresented in relation to the other TC subclasses. SV inversion, though, can be clearly associated with theticity. Complement identificationals tend to be identified with argument reversal, whereas, in subject identificationals, the subject appears typically in the preverbal position. In the case of Modern Greek, SV is primarily used for the encoding of topic-comment clauses, whereas its inversion for thetic, or even subject identificationals (if this is substantiated by additional data, it could count as an instance of partial homophony between the non-TC clauses). OVS emerges as the single common syntactic configuration for

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16 This term alludes to formal identity, “where two distinct meanings are encoded in one form”. Partial or total homophony of thetic and identificational clauses is commonly attested cross-linguistically (Lambrecht 1994: 321).
subject and complement identificationals, which is actually a mirror image of their default positions.

The first research hypothesis states that a language with discourse-governed or free linearization is primarily characterized by the inability to unequivocally determine an unmarked word order. Moreover, there is a more or less direct mapping between pragmatic contexts and word order patterns. Conversely, in a language with fixed or dominant linearization, there is an uncontroversial unmarked syntactic configuration, which can be used in a variety of pragmatic contexts. As it has been argued in this paper, it is not possible to identify a single word order pattern as the unmarked one in CG. SV(X) is restricted to TCS clauses, a topic-comment subcategory. In MG, on the other hand, the abovementioned construction has been ‘promoted’ to the status of the unmarked word order type. This is typically linked to topic-comment clauses. It is also attested in the pragmatic contexts which call for thetic and subject identificational clauses.

5. Conclusion

New topic categories have been introduced, which were dictated by the Greek data, suggesting that topicality can be better conceptualized as a gradient notion. Subtopics and semi-topics share the property that they are what could be dubbed as ‘once topics’ of subsidiary importance in discourse. Contrastiveness, on the other hand, is not treated as a distinct topic category, but rather as a cross-cutting parameter to information structure. As such, it can be viewed as a pragmatic overlay above all IS types.

It has been noted that overt topics and the SV(X) construction showed a significant rise in frequency in Modern Greek period. This is especially true for texts in the history genre. Moreover, new constructions have emerged for the topic promotion of object. As there is an evident gap in the corpus, data prior to this era have to be examined, in order to obtain a clearer picture of the change taking place. Nevertheless, it seems justifiable to argue at this stage that current evidence points to a move towards a more syntactically-governed word order for Greek.

References