ON THE INTONATION CONTOURS OF THE VOS ORDER IN GREEK[*]

Michalis Georgiafentis   UNIVERSITY OF READING

Abstract

Σε αυτή την εργασία επανεξετάζω τη σειρά Ρήμα-Αντικείμενο-Υποκείμενο (Ρ-Α-Υ) με εστίαση πληροφόρησης στο αντικείμενο ή στο υποκείμενο μέσα στα πλαίσια του Μινιμαλισμού και συγκεκριμένα με βάση την έννοια της φάσης (phase) (Chomsky 2000, 2001). Η διαφορά επιτονισμού ανάμεσα στη σειρά Ρ-Α-Υ με εστιασμένο αντικείμενο και στη σειρά Ρ-Α-Υ με εστιασμένο υποκείμενο εξηγείται από τη διάκριση ανάμεσα σε μετακίνηση έξω από τη φάση και μετακίνηση μέσα στη φάση (βλ. Legate 2003). Επιπλέον, χρησιμοποιώ τον μηχανισμό της προσάρτησης που ακολουθεί τον κύριο συντακτικό κύκλο (late adjunction) (Nunes & Uriagereka 2000 και Stepanov 2001) για τις περιπτώσεις όπου έχουμε επιτονισμό με παύση και κόμμα. Αυτός ο μηχανισμός εξηγεί ικανοποιητικά γιατί τα προσαρτήματα που εισάγονται σε μεταγενέστερο χρόνο δεν παίρνουν τόνο.

Keywords
Word order, Greek, information focus, phase, movement out of/within a phase, late adjunction.

1.   Introduction

The goal of this paper is twofold. On the one hand, it aims at elucidating the properties of a particular word order pattern in Greek within the Minimalist framework, and on the other, it attempts to explore the extent to which the Minimalist Program can account for word order variation in Greek. To achieve this goal, I direct my attention to the syntactic derivation of the Verb-Object-Subject (VOS) order, as in (1):

(1)   efaje   tin turta   o janis
       ate-3SG the cake-ACC   the janis-NOM
       'John ate the cake.'

I intend to re-examine the issues concerning the VOS order with object and subject information focus, as in (2) and (3) respectively, within the recent theoretical advances of the Minimalist Program (Chomsky 2000, 2001), and specifically with respect to the concept of *phase*:

(2)   efaje   <u>tin turta</u>[1]   o janis   (object focus)
       ate-3SG   the cake-ACC   the janis-NOM
       'John ate the cake.'

(3)   efaje   tin turta   <u>o janis</u>   (subject focus)
       ate-3SG   the cake-ACC   the janis-NOM
       'John ate the cake.'

In particular, the difference between (2) and (3) will be accounted for in terms of the distinction between movement out of a phase and movement within a phase, as proposed by Legate (2003).

The present paper is organized as follows: In section 2, the general properties of the VOS order are briefly outlined. In section 3, I present three tree diagrams, which correspond to the different intonation patterns of the VOS order. In section 4, I refer to Chomsky's *phase*, to Legate's *movement out of/within a phase* and to the idea of late adjunction (Nunes & Uriagereka 2000 and Stepanov 2001), which constitute the basis for the proposed analysis of the VOS order (in section 5). Finally, there is a concluding section summarizing the discussion.

2.   The VOS order in Greek

The VOS order in Greek has been recently discussed by Alexiadou (1997, 1999), Philippaki-Warburton (2001), Haidou (2000), Georgiafentis (2001), Roussou (2001), Roussou & Tsimpli (2002) and Sifaki (2003). It is one of the six alternative constituent linearization patterns of Greek. Despite its limited use, VOS is one of those orders that can be rendered with a neutral intonation, without the necessary presence of a clitic. The neutral intonation is the one realized by the Nuclear Stress Rule (NSR) (Chomsky & Halle 1968, as revised by Cinque 1993, and Zubizarreta 1998), where the constituent located at the end of the sentence and in the lowest node in the c-command ordering bears the main stress (information focus), as in (4):

(4)   *(Revised) Nuclear Stress Rule*:
C-NSR (constituent-driven NSR): Given two sister categories C_i and C_j, the one lower in the asymmetric c-command ordering is more prominent.
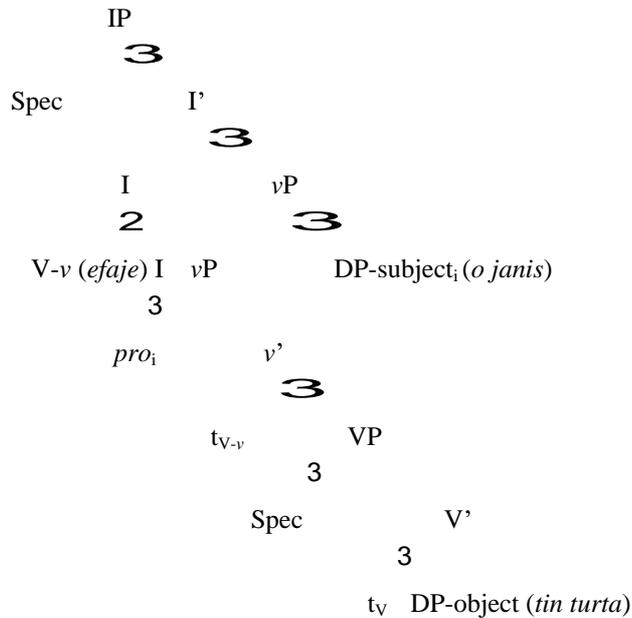
It has been claimed that the VOS order can involve more than one intonation pattern. More specifically, it can involve focus either on the object, the verb, the VP or the subject. This has also been shown by Georgiafentis & Sfakianaki (to appear) on the basis of experimental data (see also Keller & Alexopoulou 2001). The question that arises is how these intonation patterns are formally derived.

3.   The analysis of the VOS order

Before proceeding to the *phase* based analysis of the VOS order, let me briefly present three tree diagrams, which have been forward and represent the different intonation patterns of the VOS order.
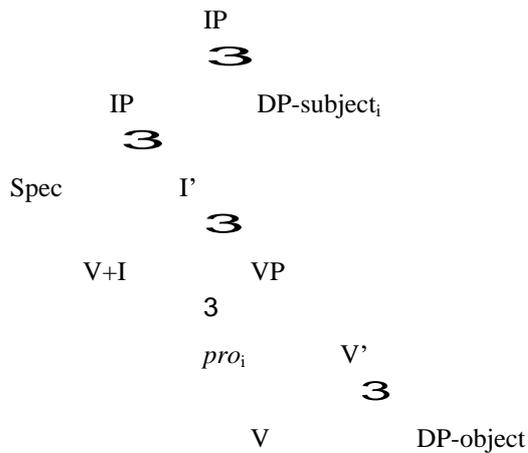
Under (5) the VOS order with object focus and no comma intonation for the subject is represented. The subject is right adjoined to the *v*P (see Philippaki et al. to appear; cf. Tsimpli 1990, 1995 and Philippaki-Warburton 2001); the object is in the lowest node in the c-command ordering and is thus assigned main prominence via the NSR:

(5)   *VOS with object focus, no comma intonation for the subject*

```
                IP
              3
   Spec            I'
                    3
        I              vP
      2             3
 V-v (efaje) I   vP        DP-subjecti (o janis)
         3
     proi        v'
                  3
        tV-v         VP
                   3
            Spec          V'
                          3
                     tV   DP-object (tin turta)
```
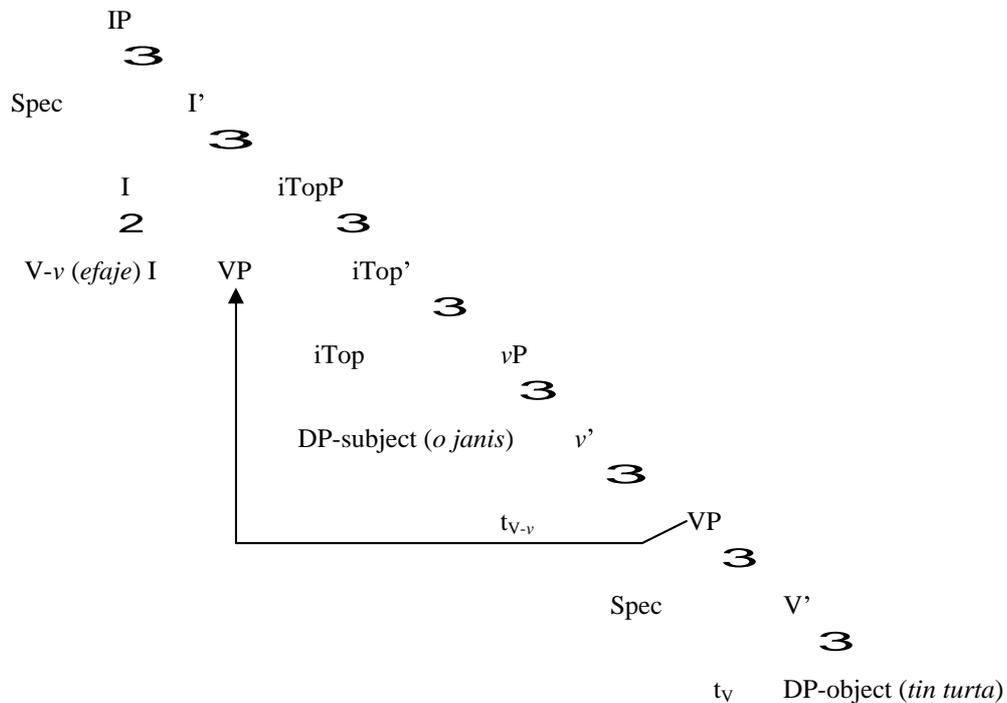
The tree diagram in (6) depicts the VOS order with object focus again, but with comma intonation for the subject this time. Here the subject is adjoined to the IP (Philippaki-Warburton 2001):

(6)   *VOS with object focus, comma intonation for the subject*

```
               IP
             3
    IP            DP-subjecti
   3
Spec       I'
            3
  V+I           VP
   3
   proi        V'
                 3
        V            DP-object
```

Finally, (7) represents the VOS order with subject focus. This VOS pattern can be derived in the following way: The VP which contains only the object p-moves (Zubizarreta 1998) to a position immediately above the subject, namely to [Spec, iTopP]. Thus, the subject ends up in the lowest position in the c-command ordering and receives main prominence via the NSR (Georgiafentis 2001, cf. Alexiadou 1997, 1999).

(7)   *VOS with subject focus*

       IP

Spec   I'

     I   iTopP

V-*v* (*efaje*) I   VP   iTop'

           iTop   *v*P

           DP-subject (*o janis*)   *v*'

                         $t_{V\text{-}v}$ VP

                        Spec   V'

                        t_V DP-object (*tin turta*)

Due to space limitations, I will not discuss further any of these tree diagrams or any other analyses of the VOS order. I refer the reader to Alexiadou (1997), (1999), Philippaki-Warburton (2001) and Georgiafentis (2001) for a detailed discussion. I will only point out that the above diagrams provide a descriptively adequate account for the various intonation patterns of the VOS order in Greek. However, this account is not very economical since two completely different derivations are put forward, one for the object focus and another for the subject focus case. What is more, when the object is focused, two different adjunction sites are postulated for the subject (no comma vs. comma intonation).

Given that according to the Minimalist Program, a syntactic account should be as parsimonious as possible, let us now investigate an alternative approach to the derivation of the VOS order, which looks more promising with respect to this goal.

4.   Theoretical framework

4.1.   Chomsky′s (2000, 2001) *phase*

For Chomsky (2000, 2001), syntactic derivation proceeds in phases. A phase is a self-contained subsection of the derivation, beginning with a lexical subarray, which is part of the numeration/ lexical array, and ending with Spell-Out. In other words, a phase is an active part of a derivation, namely a syntactic chunk consisting of a set of certain lexical and functional projections. For each sentence, an array of lexical items is selected from the lexicon. For each phase, a subarray of lexical items is selected from the array, and is used to construct a phase. When this is done, and the phase is sent to Spell-Out, another subarray is selected for a new

phase, until the array is used up. There are two functional categories that are crucial for identifying phases: the light verb *v* and the complementizer C. The main phases then are *v*P and CP.

A phase can be either strong or weak, depending on whether its main functional category is phi-complete. Chomsky proposes that if the light verb *v* is part of a transitive verb, then it is phi-complete. Furthermore, finite and control C are also phi-complete. Phi-complete *v* and C head strong phases. A strong phase, once completed, immediately proceeds to the C-I interface for interpretation. A weak phase, on the other hand, waits until the next strong phase in order to proceed to C-I.

4.2. Legate′s (2003) *movement out of/within a phase*

It is for the analysis of such examples as (8) and (9) that Legate (2003) invokes the distinction between movement out of a phase and movement within a phase. More specifically, for Legate the difference between (8) and (9) is the following:

(8)   Mary liked <u>the proposal</u> that George left.
(9)   Please put them/?the dishes <u>away</u>.
        (examples taken from Legate 2003)

In (8), the primary stress has been assigned to the shifted object, which has moved out of the *v*P phase (movement from the object position of the embedded clause, see Vergnaud 1974, Kayne 1994).[2] On the other hand, in (9), the primary stress has been assigned to the rightmost element in the verb phrase, which is not the object this time, since this has moved higher up, yet within the *v*P phase (short movement within the verb phrase). Assuming that the phrasing algorithm separately applies to products of each Spell-Out, the input to PF on the first phase (*v*P) of (8) is [*left the proposal*], whereas the input to PF on the first phase (*v*P) of (9) is [*put the dishes away the dishes*].

Legate assumes that the PF operation that deletes non-initial copies in a chain treats each phase as a separate unit. In (8) the phase contains only one occurrence of the DP *the proposal*, and thus the PF operation which deletes non-initial copies in a chain cannot apply to it. The phase [*left the proposal*] proceeds to the application of the NSR and primary stress is assigned to *the proposal*.[3] In (9), on the other hand, the input to PF contains two occurrences of *the dishes*, i.e. [*put the dishes away the dishes*]. The PF operation deleting non-initial copies applies, and deletes the lower copy. Thus, in the input to the NSR, *away* is the rightmost element in the verb phrase, and receives primary stress accordingly.

4.3. On late adjunction: Nunes & Uriagereka (2000) and Stepanov (2001)

Recent advances in syntactic theory put forward a derivational system that allows for syntactic chunks to be manipulated in separate derivational workspaces. The proposed algorithm enforces a particular timing in the application of ′substitution Merge′ and ′adjunction Merge′. Thus, adjuncts are said to be merged non-cyclically/ postcyclically in overt syntax, in a different

workspace. In other words, there is a main component, where *phases* succeed each other, and another component, where parts of the syntactic structure (e.g. adjuncts) are created and merge with the main component at a later stage (Nunes & Uriagereka 2000 and Stepanov 2001). Consider the following example, taken from Stepanov (2001):

(10)   Adeola fixed the car with a hammer.

The array for this sentence is listed in (11):

(11)   The array: C, [D], [N *Adeola*] T, *v*, [V *fixed*], [D *the*], [N *car*], [P *with*], [D *a*], [N *hammer*]

The derivation proceeds in phases and we reach the stage where C is merged with TP, as in (12):

(12)   [$_{CP}$ C [$_{TP}$ [$_{DP}$ *Adeola*] [$_{TP}$ T [$_{vP}$ t$_S$ [$_{vP}$ *v* [$_{VP}$ *fixed* [$_{DP}$ *the car*]]]]]]]

At this stage [$_{PP}$ *with a hammer*], already separately assembled, is the only remaining object in the derivation. It can then merge postcyclically.

5.   Towards a *phase* based analysis of the VOS order

5.1.   VOS with object or subject focus

As mentioned earlier, phases are chunks of syntactic structure that are sent off to PF and LF for interpretation before the derivation continues. Thus, a difference in phase structure can give rise to syntactic and phonological differences. As we will see, this prediction is confirmed.

Consider the example under investigation, which involves a transitive *v*P, and thus qualifies as a strong phase. A sample derivation of the sentence is sketched in (13) – (17). First, the array is listed in (13). It is a selection of lexical items, including five functional heads and three lexical words.[4]

(13)   The array: C, [D *o*], [N *janis*] T, *v*, [V *efaje*], [D *tin*], [N *turta*]

From (13) the six-item subarray in (14) can be selected. As required, it contains one instance of *v*.

(14)   Subarray 1: [D *o*], [N *janis*], *v*, [V *efaje*], [D *tin*], [N *turta*]

Now the operation Merge recursively combines elements in subarray 1 pairwise, as in (15):

(15)   a. Merge D, N: [$_{DP}$ [$_D$ *o*] [$_N$ *janis*]]
        b. Merge D, N: [$_{DP}$ [$_D$ *tin*] [$_N$ *turta*]]
        c. Merge V, DP: [$_{VP}$ [$_V$ *efaje*] [$_{DP}$ *tin turta*]]
        d. Merge *v*, VP: [$_{vP}$ *v* [$_{VP}$ *efaje* [$_{DP}$ *tin turta*]]]]
        e. Merge DP, *v*P: [$_{vP}$ [$_{DP}$ *o janis*] [$_{vP}$ *v* [$_{VP}$ *efaje* [$_{DP}$ *tin turta*]]]]

At stage (15e) all the items in subarray 1 are used up and Merge cannot be applied again. At this point another subarray can be selected, (16).

6

(16)   Subarray 2: C, T

This is a subarray because it contains one instance of C. It also happens to exhaust the array. Now these items can be combined with the *v*P constructed in (15). Specifically, T may be combined with *v*P as in (17a). Assuming that T has strong features, Move will apply immediately as in (17b), attracting V to T, so that V picks up/ checks its inflectional features.[5] Finally, C may be Merged with TP, as in (17c).

(17)   a. Merge T, *v*P:

[TP T [vP [DP *o janis*] [vP *v* [VP *efaje* [DP *tin turta*]]]]]

b. Move V:

[TP [TP V-*v*-T *efaje* [vP [DP *o janis*] [vP tV-*v* [VP tV [DP *tin turta*]]]]]]

c. Merge C:

[CP C [TP [TP V-*v*-T *efaje* [vP [DP *o janis*] [vP tV-*v* [VP tV [DP *tin turta*]]]]]]]

Let us now see how the VOS order with object and subject focus is derived.

(18) = (2) efaje   <u>tin turta</u>   o janis   (object focus)
ate-3SG   the cake-ACC   the janis-NOM
'John ate the cake.'

(19) = (3) efaje   tin turta   <u>o janis</u>   (subject focus)
ate-3SG   the cake-ACC   the janis-NOM
'John ate the cake.'

In the light of Legate's proposal, I would like to maintain that the crucial distinction between (18) and (19) is that in (18) the object *tin turta* 'the cake' moves out of the *v*P phase, whereas in (19) the object *tin turta* moves within the *v*P phase. Thus, in (18) the object ends up in a position above *v*P, while in (19) the object ends up in a position within the *v*P.

If we accept the assumption that the NSR applies to the phase (see also Adger 2001), then an element moving from a position final in the verb phrase out of the phase should bear primary stress (as in 18), while an element moving from a position final in the verb phrase within the same phase should not (as in 19). More specifically, the input to PF on the first phase of (18) is [vP *o janis tin turta*], whereas the input to PF on the first phase of (19) is [vP *tin turta o janis tin turta*].

The PF operation that deletes non-initial copies in a chain treats each phase as a separate unit. In (18) the DP *tin turta* is a copy. The phase contains only one occurrence of this DP, and as a result, the PF operation that deletes non-initial copies in a chain cannot apply to it. The phase proceeds to the application of the NSR and the DP *tin turta* is assigned primary stress. At a later phase, this occurrence of *tin turta* will be deleted in favour of a higher occurrence, where primary stress will be assigned. This is how (18), with primary stress on the object *tin turta*, is derived, i.e. this is how the VOS order with object focus is generated.

In (19), on the other hand, the input to PF contains two occurrences of *tin turta*, i.e. [$_{vP}$ *tin turta o janis tin turta*]. This means that the PF operation that deletes non-initial copies can apply, and delete the lower copy, as in [$_{vP}$ *tin turta o janis* ~~*tin turta*~~]. The phase proceeds to the application of the NSR and the DP *o janis 'John'* receives primary stress, since it constitutes the rightmost element in the verb phrase, i.e. it is in the lowest position in the c-command ordering. This is how (19), with primary stress on the subject *o janis*, is derived, i.e. this is how the VOS order with subject focus is generated.

5.1.1. Further questions

Two questions immediately arise. The first concerns the trigger for these movements and the exact location that they target. I am afraid I cannot offer an explanation for this issue at the moment. My only suggestion is that probably this movement is due to some P-feature of the peripheral system, such as force, focus etc. (as described in Chomsky 2000: 107). Moreover, I think that independent evidence is needed from other areas, which will decide whether the proposed movement actually exists.

The second question that arises concerns the ordering of the PF processes such as copy reduction and application of the NSR. Following Legate's (2003) assumptions, copy reduction takes place before the application of the NSR. However, one could argue for the opposite order since the elimination of movement copies is one of the very last operations within PF. In other words, we would expect the NSR to be ordered before and not after copy reduction. Given that this is rather a theory-internal problem, I will refrain from discussing it further.

5.2.   VOS with comma intonation for the subject

Let us now turn our attention to the VOS order with comma intonation for the DP-subject. Consider the array for such a derivation in (20):

(20)   The array: C, [D *pro*], T, *v*, [V *efaje*], [D *tin*], [N *turta*], [D *o*], [N *janis*]

Following Nunes & Uriagereka (2000) and Stepanov (2001), I wish to maintain that the adjunct DP-subject *o janis 'John'* can be linearized with respect to the rest of the structure in the following way: The DP *o janis* is spelled out separately and is later 'plugged in' in the position that belongs in the whole structure. In particular, the derivation proceeds as follows: From (20) the subarray in (21) can be selected. As required, it contains one instance of *v*.

(21)   Subarray 1: [D *pro*], *v*, [V *efaje*], [D *tin*], [N *turta*]

Now the operation Merge recursively combines elements in subarray 1 pairwise, as in (22):

(22)   a. Merge D, N: [$_{DP}$ [$_D$ *tin*] [$_N$ *turta*]]
       b. Merge V, DP: [$_{VP}$ [$_V$ *efaje*] [$_{DP}$ *tin turta*]]
       c. Merge *v*, VP: [$_{vP}$ *v* [$_{VP}$ *efaje* [$_{DP}$ *tin turta*]]]]
       d. Merge DP, *v*P: [$_{vP}$ [$_{DP}$ *pro*] [$_{vP}$ *v* [$_{VP}$ *efaje* [$_{DP}$ *tin turta*]]]]]

At stage (22d) all the items in subarray 1 are used up and Merge cannot be applied again. At this point another subarray can be selected, (23).

(23)   Subarray 2: C, T

This is a subarray because it contains one instance of C. Now these items can be combined with the *v*P constructed in (22). Specifically, T may be combined with *v*P as in (24a). Assuming that head movement is part of narrow syntax, Move will apply as in (24b), attracting V to T. Finally, C may be Merged with TP, as in (24c). Thus, by merging C, the next strong phase (i.e. CP) has been constructed; the *v*P phase is Spelled-Out and proceeds to the application of the NSR. The DP-object *tin turta* is assigned primary stress, since it constitutes the rightmost element in the verb phrase.

(24)   a. Merge T, *v*P:
[TP T [*v*P [DP *pro*] [*v*P *v* [VP *efaje* [DP *tin turta*]]]]]
b. Move V:
[TP [TP V-*v*-T *efaje* [*v*P [DP *pro*] [*v*P t_{V-*v*} [VP t_V [DP *tin turta*]]]]]]
c. Merge C:
[CP C [TP [TP V-*v*-T *efaje* [*v*P [DP *pro*] [*v*P t_{V-*v*} [VP t_V [DP *tin turta*]]]]]]]

At this point the main cycle has ended. The adjunct DP-subject *o janis* can now be ′plugged in′. It constitutes an independent chunk, which was separately assembled, and merges with the main cycle after the application of Spell-Out has driven its derivation to PF and LF. According to Revithiadou & Spyropoulos (2003), this syntactic chunk is a phonological phrase (PPh) on its own, totally autonomous from the phrasing of the main cycle. As depicted in (25), the output of each Spell-Out enters PF for phonological phrasing independently of each other:

(25)   6   5

        Spell-Out   Spell-Out

            ↓   ↓

    [*efaje tin turta*]PPh   [*o janis*]PPh
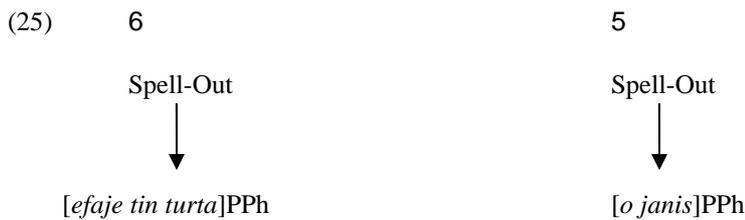
This algorithm then can account for the derivation of the VOS order with comma intonation for the DP-subject.

6.   **Conclusion**

In conclusion, this paper constitutes a first approach to the derivation of the VOS order in Greek within the minimalist framework and at the same time it is an attempt to test the extent to which this framework can account for word order variation. It exploits the notion of *phase*, according to which syntactic structures are submitted for LF and PF interpretation, not all at once, but at various well-defined points in the derivation.

The advantages of the proposed approach are as follows: First, there is no need to postulate two completely different representations (see section 3 above) for the VOS order, namely one for object focus and another for subject focus. Both realizations of this order can be captured within the *phase* based approach just by employing different movement (outside of the phase vs. within the phase, respectively). In essence, this is desirable, since it contributes towards a more economical derivation. Second, the idea of late adjunction advanced within the minimalist framework can be applied to those cases where comma intonation is involved, and can successfully explain why late adjuncts do not receive main prominence.

In the light of these facts, the present analysis seems appealing despite the fact that the exact mechanism involved in the triggering of the proposed movements remains to be explored.

Notes

[*] I wish to thank Eric Haeberli, George Kotzoglou and Irene Philippaki-Warburton for their constructive comments and useful suggestions on an earlier version of this work. I also wish to express my gratitude to the State Scholarships Foundation of the Hellenic Republic (IKY) for the financial support of my research. Needless to say, all inadequacies remain my own.

[1] Underlining denotes information focus, while capitalization signifies contrastive focus.

[2] This is, of course, one of the analyses that have been put forward for relative clauses (raising analysis of relatives). There are alternative analyses, which, nevertheless, are beyond the scope of the present discussion.

[3] Legate (2003: 512, fn. 10) assumes that phonology is able to modify previous phases. As she points out, this must be the case independently, however, since there exist prosodic units larger than the phase –for example, intonational phrases.

[4] Note that this has been simplified. Strictly speaking, the array should also include AspP and perhaps null values for Voice and Mood.

[5] The nature of head movement is somehow problematic within the recent developments of the Minimalist Program. Chomsky (2001) actually suggests that head movement is a PF operation and that its overt effect on word order is explained on the basis of linearization that takes place at PF. However, both Kotzoglou (2003) and Spyropoulos (2003) convincingly argue that in Greek head movement belongs to the narrow syntactic component.

References

Adger, David. 2001. "Syntax and prosody in Scottish Gaelic". Paper given at the University of Essex Colloquium Series, Essex, 25 October 2001.

Alexiadou, Artemis. 1997. *Adverb Placement: A Case Study in Antisymmetric Syntax*. Amsterdam: John Benjamins.

Alexiadou, Artemis. 1999. "Greek word order patterns". *Studies in Greek Syntax*, ed. by Artemis Alexiadou, Geoffrey Horrocks & Melita Stavrou, 45-65. Dordrecht: Kluwer Academic Publishers.

Chomsky, Noam. 2000. "Minimalist inquiries: the framework". *Step by Step: Essays on Minimalist Syntax in Honor of Howard Lasnik*, ed. by Roger Martin, David Michaels & Juan Uriagereka, 89-155. Cambridge Mass: MIT Press.

Chomsky, Noam. 2001. "Derivation by phase". *Ken Hale: A Life in Language*, ed. by Michael Kenstowicz, 1-52. Cambridge, Mass.: MIT Press.

Chomsky, Noam & Morris Halle. 1968. *The Sound Pattern of English*. New York: Harper & Row.

Cinque, Guglielmo. 1993. "A null theory of phrase and compound stress". *Linguistic Inquiry* 24. 239-297.

Georgiafentis, Michalis. 2001. "On the properties of the VOS order in Greek". *Reading Working Papers in Linguistics* 5. 137-154.

Georgiafentis, Michalis & Anna Sfakianaki. to appear. "Syntax interacts with prosody: the VOS order in Greek". *Lingua.*

Haidou, Konstantina. 2000. "Word order, DP-focusing and the PF interface: the case of Modern Greek". *SOAS Working Papers in Linguistics* 10. 161-192.

Kayne, Richard S. 1994. *The Antisymmetry of Syntax*. Cambridge, Mass.: MIT Press.

Keller, Frank & Theodora Alexopoulou. 2001. "Phonology competes with syntax: experimental evidence for the interaction of word order and accent placement in the realization of information structure". *Cognition* 79. 301-372.

Kotzoglou, George. 2003. "Obligatory inversion and head movement in Greek". Paper given at the 6th International Conference on Greek, Linguistics, Rethymno, 18-21 September 2003.

Legate, Julie Anne. 2003. "Some interface properties of the phase". *Linguistic Inquiry* 34. 506-516.

Nunes, Jairo & Juan Uriagereka. 2000. "Cyclicity and extraction domains". *Syntax* 3. 20-43.

Philippaki-Warburton, Irene. 2001. "Γλωσσολογική θεωρία και σύνταξη της Ελληνικής: Η ποικιλία στη σειρά των όρων και η ερμηνεία της". *Proceedings of the 4th International Conference on Greek Linguistics*, University of Cyprus, September 1999, 217-231. Thessaloniki: University Studio Press.

Philippaki-Warburton, Irene, Spyridoula Varlokosta, Michalis Georgiafentis & George Kotzoglou. to appear. "Moving from theta-positions: pronominal clitic doubling in Greek". *Lingua.*

Revithiadou, Anthi & Vassilios Spyropoulos. 2003. "'Trapped within a phrase': effects of syntactic derivation on p-phrasing". *Proceedings of IP2003 Prosodic Interfaces*, ed. by Amina Mettouchi & Gaelle Ferre, 167-172. University of Nantes: Nantes.

Roussou, Anna. 2001. "Review of Artemis Alexiadou, Adverb Placement: A Case Study in Antisymmetric Syntax". *Journal of Linguistics* 37. 393-403.

Roussou, Anna & Ianthi-Maria Tsimpli. 2002. "On VSO again!". Paper given at the Workshop on Greek Syntax & the Minimalist Seduction, Reading, 20-22 September 2002.

Sifaki, Evi. 2003. "Deriving VOS and VSO in Greek". Ms. University of York.

Spyropoulos, Vassilios. 2003. "Μετακίνηση κεφαλής: Σύνταξη ή φωνολογία;". Paper given at the 6th International Conference on Greek, Linguistics, Rethymno, 18-21 September 2003.

Stepanov, Arthur. 2001. "Late adjunction and minimalist phrase structure". *Syntax* 4. 94-125.

Tsimpli, Ianthi-Maria. 1990. "The clause structure and word order in Modern Greek". *UCL Working Papers in Linguistics* 2. 226-255.

Tsimpli, Ianthi-Maria. 1995. ″Focusing in Modern Greek″. *Discourse Configurational Languages*, ed. by Katalin E. Kiss, 176-206. Oxford: Oxford University Press.

Vergnaud, Jean-Roger. 1974. *French Relative Clauses*. Ph.D. dissertation. MIT.

Zubizarreta, Maria Luisa. 1998. *Prosody, Focus and Word Order*. Cambridge, Mass.: MIT Press.