Configurationality and Greek clause structure*

DIMITRA IRINI TZANIDAKI

Abstract

This paper discusses the issue of configurationality, with particular reference to Greek clause structure and word order. First it offers an overview of phrase-structure approaches to word order and discusses issues related to stylistic movement and the configurationality parameter. Then I go on to present and critically evaluate existing accounts of Greek word order, focusing upon the distinction between a configurational and a non-configurational approach to Greek clause structure. My conclusion is that fully configurational approaches fail to account for a number of data, whereas existing GB-based 'flat' accounts, which invoke a universal configurational parameter, are incompatible with the latest evolutions of the Government and Binding Model, as instantiated by the Minimalist Program.

1 Introduction

In this paper I discuss the issue of configurationality, with particular reference to Greek clause structure and word order. It should, however, be stressed that what follows is not meant to be a thorough and exhaustive survey of all the questions related to configurationality for which there already exist a number of primary sources (Chomsky 1981, Hale 1982, 1983). Rather, my overview of these issues is intended as an exploration of the theoretical background for various accounts of Greek clause structure and word order, and of the extent to which a configurational account of Greek clause structure is independently motivated. In particular, I look at two of these accounts, Tsimpli (1990) and Catsimali (1990), as most representative of the distinction between a configurational and a non-configurational approach to Greek clause structure. These two accounts along with a few others (Philippaki 1987, Horrocks 1994) - to which brief references will be made - share a common theoretical framework, i.e. that of Principles and Parameters theory, which is why this framework is the focus of my discussion rather than the more

^{*}I am very grateful to Dick Hudson, Neil Smith and Christian Kreps for valuable comments on an earlier version of this paper and for their constant support. I also wish to thank the State Scholarships Foundation in Greece for funding my postgraduate studies at UCL.

recent Minimalism Program (Chomsky 1995).

The paper is organized as follows: Section 2 offers an overview of configurationality. Section 3 outlines the theory of movement with particular reference to the so-called stylistic movement. It also presents the issue of the configurationality parameter. Sections 4 and 5 present and critically evaluate a fully-configurational and two flat accounts of Greek clause structure and word order. Finally, section 6 highlights two problems for the proposed flat accounts.

2 Configurationality: background

The term *configurationality* refers to a mode of formally representing syntactic structure. At the core of this formalism is the X-bar schema, shown in (1) below, which illustrates the sort of layered binary branching configuration assumed in GB (Chomsky 1970, Jackendoff 1977):



This schema regulates the phrase structure component of the grammar in - what has been traditionally called - an endocentric fashion. That is, all phrases are headed by a zero bar category X. Furthermore, two levels of projection are distinguished: an intermediate X' level which is formed by the combination of the head X and its complement, and a maximal XP level which contains a combination of the intermediate X' level and its specifier. Both the specifier and complement of the head are determined to be maximal phrases (XPs) by a condition of Modifier Maximality (Jackendoff 1977). Finally, X may be either a lexical category, i.e. noun, verb, adjective, preposition, or it may be a functional category such as complementizer, inflection, etc.

Sentential structure is then built by interwining blocks of this general X-bar schema. (2) below illustrates the basic clause structure headed by a transitive verb, with certain details omitted for the time being:



Thus, a number of functional projections such as CP, IP are associated with the lexical projection of the verb. Note that at the core of both the functional and the lexical projections are constituents such as V, I, etc, that is, linguistic units which form part of these larger constructions. The occurrence of some of these constituents in the sentence is licensed by certain structural conditions. For example, the appearance of NPs (or DPs following Abney 1987) in a sentence is licensed by Case-assignment. Case is a structural relationship, defined in terms of government by a head. Thus the object complement, in (2) above, is Case-marked under lexical government by the verb. On the other hand, the subject NP in the [spec, IP] gets its nominative case under government by the functional head I.

The configurational approach outlined above has two significant implications as far as word order is concerned. In the first place, it makes possible the expression of abstract geometrical relations such as government, c-command, etc. The relevance of these relations to word order comes from the fact that entering and satisfying these relations is, often, what determines the position of a unit in the phrase structure. Thus, in (2) above, as seen, the subject NP, satisfying the condition of government within its IP, is licenced to occur in that position, whereas failure of the subject to do so in (3) below prompts its further movement to the matrix [spec, IP], at which it can enter into a government relation with the matrix head I.

(3) [$_{IP}$ Peter [$_{I}$ seems [$_{IP}$ e to be clever]]]

Secondly, the X' structure, as shown above, may refer to distinct structural positions

such as complements and specifiers for which general ordering principles can be predicated. For instance, from (2) above it could be said that all specifiers uniformly precede their heads while all complements uniformly follow their heads. In addition, the order of specifiers and complements in relation to their head may be parametrized so that cross-linguistic differences in terms of word order can be accommodated. Note, however, that the X' schema in (1) bears an in-built limitation on the type of order it potentially sanctions. This is so since the constituency of the intermediate projection necessitates that the two units it directly dominates, i.e. X and its complement cannot be interrupted by the specifier. Thus, out of six logically possible orderings of specifier, head and complement only four are possible. These are illustrated in (4):



Assuming that X stands for verb, spec stands for subject and comp stands for object (4a, b, c, d) could be translated into SVO, SOV, VOS and OVS orders respectively. This fourfold typology would then be predicted to be potentially available to the grammar. To account for languages with VSO or OSV orders, the X' system will have to be supplemented by some other mechanism such as movement. Various areas of the grammar of the language in question will determine which of these potential schemas will be instantiated as the D-structure representation, from which the surface orders would be, consequently, derived by means of a theory of movement to which I now turn.

3 Word order and the theory of movement

3.1 Adjunction and substitution

In the configurational model outlined above, movement is heavily involved in the description of word order cross-linguistically. Surface order is often seen to be the result of a transformational operation, called move- α , which maps D-structure representations onto S-structures. According to Chomsky (1986b) there exist two types of movement, namely **adjunction** and substitution; adjunction affects either maximal categories (XPs) or zero ones (X⁰s) which are adjoined to any category of the same type (referred to also as XP-to-XP, and head-to-head movement), though adjunction to arguments is banned (Chomsky 1986b, 1993). Heavy NP-shift and V-to-I movement are two examples of adjunction to an XP and to a head respectively. The configurations in (5a, b) below illustrate the relevant structures :



Substitution, on the other hand, involves movement of an XP or X^0 to an empty specifier or head position respectively. Wh-movement and I-to-C movement are instances of these two forms of substitution respectively. The two types of this operation are schematized in (6a, b):



3.2 Scrambling

Movement, in the form of substitution and adjunction, is also employed in accounts of word order variation within the same language. In these cases, one of the orders shown in (5) is hypothesized at the D-structure level of the grammar which is transformationally mapped onto an S-structure order. Further movement, called **scrambling** or **stylistic movement** accounts for any alternative orders although the level of grammar at which this movement takes place is controversial as is its existence. Thus, arguments have been advanced for scrambling as an instance of syntactic movement taking place between D-and S-structure (Mahajan 1990). Alternatively, scrambling has been proposed to be a phonetic operation occuring between S-Structure and phonetic form (Koster 1978: 232, Rochemont 1978, cited in Haegeman 1991: 547), assuming a so-called T-model of grammar.

More importantly, apart from the aforementioned controversy surrounding the syntactic or phonetic nature of the operation in question, scrambling itself has been criticized as a rather inadequate way of approaching word order variation (Ross 1967, Hale 1982, Huang 1982, ch.3, Horvath 1986). The details of this criticism need not concern us here. It should, however, be briefly stressed that there seem to be three main objections to a scrambling approach to so-called free word order phenomena. Firstly, this type of movement is different from the structurally-motivated operation of move- α . Stylistic movement is not structurally motivated, e. g. by Case. In Ross's words (ibid: 52-53): "... rules like [these] are so different from other syntactic rules that have been studied in the generative grammar that any attempt to make them superficially resemble other transformations is misguided and misleading. They are formally so different from previously encountered rules that the theory of language must be changed somehow so

that scrambling can be placed in a different component from other syntactic rules, thereby reflecting the difference I have been discussing."

Secondly, the mechanism of scrambling has been shown to be rather stipulative and unconstrained. Consequently, its theoretical value is reduced by the fact that it makes rather few real predictions about the languages it is applied to (Hale 1981). Finally, as Hale (1983) has pointed out, the scrambling approach fails to account for a number of typological properties exhibited by free word order languages, in that it merely addresses one dimension of them, i.e. word order. This is not necessarily the most criterial. Thus, properties such as the use of discontinuous expressions, frequent pronoun drop, lack of NP-movement, absence of pleonastics, complex verb-words, etc. (Hale 1982: 86) often associated with this family of languages remain unpredicted and unaccounted for.

These problems with scrambling have in fact lead to the formulation of a different approach; the recognition of a distinction between two types of languages, namely **configurational** and **non-configurational** (Chomsky 1981, Hale 1981, 1982, 1983) to which I turn briefly in the next section.

3.3 The configurationality parameter

Hale (1982) has proposed that in addition to the X-bar schema outlined in section 2.1 another schema be made operational by Universal Grammar, shown in (7) (ibid: 88) (ellipses represent the positions of potential specifiers and complements):

 $(7) \qquad X' \rightarrow ... X...$

Single-bar languages of this type, in contrast with the so-called configurational languages, would be characterized by a much greater 'looseness' in grammatical layout. For one thing, theta-role assignment is handled lexically in these languages and Case is not structurally assigned. Rather it is inherent, i.e. the result of the word-formation process.

Configurationality, therefore, is interpreted as a universally available parametrized principle of grammar which is positively set in some languages and negatively in some others. This is Hale's Configurationality Parameter. In Hale (1983) this principle is stated on the basis of the Projection Principle. In configurational languages, the projection principle holds at both phonetic and logical forms whereas in the non-configurational languages, the projection principle holds of logical form alone (ibid: 26).

Although current linguistic thinking (Kayne 1993, Chomsky 1993, 1994, 1995) appears

to render the above distinction meaningless for reasons which will become apparent later on the distinction has induced interesting work in the field of description and explanation of free word order languages. Greek clause structure and word order is a case at hand. Thus a number of proposals have been put forward ranging from strict configurational to more 'flat' accounts. The next sections present and critically evaluate some of them.

4 A configurational account of Greek clause structure

4.0 Outline

This section concentrates on Tsimpli's (1990) configurationally-based account of Greek word order. The discussion in each subsection is organized in a two-stage format: first I present Tsimpli's proposed structure for each order and then I evaluate her proposal.

4.1 VSO as the basic order

According to Tsimpli (1990) the basic word order of MG is VSO. However she also claims that the underlying (D-structure) order in Greek is SVO, from which VSO is derived by the application of move- α . Consider (8) below which is the proposed structure for the sentence 'Peter admires Helen' in Greek:

(8)	[_{CP} [_{TP} [_T thaumazi _j [_{AGRP}	o Petros _i $[_{AGR}t'_{j}]_{VP}t_{i}$ $[_{V}t_{j}]_{VP}t_{i}$	[_{NP} tinEleni _k]]]]]]]
	admire-3s	the Petros-nom	theHelen-acc

The structure in (8) assumes the split-INFL hypothesis (Pollock 1989, Chomsky 1988, Ouhalla 1988) according to which AGR and T project and head their own maximal projections. The subject is generated VP-internally, at D-structure, following the so-called VP- internal hypothesis (Sportiche 1988, Larson 1988, Fukui and Speas 1986, Kitawa 1986, Diesing 1990, Koopman and Sportiche 1991). Moreover, all movement operations respect successive-cyclicity in the sense that no movement crosses more than one barrier and all the traces are properly governed in accordance with the Empty Category Principle (ECP).

According to this analysis, the basic status of VSO arises from the fact that this order is the product of just two obligatory movements, as may be seen in (8): the verb has to

move to AGR and then to T, since by adjoining to these heads the verb may acquire its overt morphology¹. This movement clearly takes place across the subject, which originally occupies the [spec, VP] position and is moved up to [spec, AGRP], in order to be assigned Nominative Case by the AGR head. It is in this sense that Tsimpli claims [spec, AGRP] to be the canonical subject position in MG. Note, however, that such an account is problematic. Below I present some of these problems.

The first problem is the lack of independent evidence for both the D-structure and the derived VSO order in (8). In the first place, the D-structure SVO order seems to be simply assumed and no independent evidence is provided for it. Furthermore, there is no justification for why, say, the subject and object in Greek have to be hierarchically distinguished, especially given some evidence to the contrary, such as facts relating to ECP effects, subject-verb idioms, weak-crossover, binding, etc. (cf. Catsimali 1990, Horrocks 1994).

Secondly, the idea that the subject obligatorily moves from [spec, VP] to [spec, AGRP] to be assigned Case, in parallel with English, would fail to account for the lack of pleonastics and raising - at least as a case-driven operation - in MG.

Thirdly, in a GB-based account such as Tsimpli's the verb has to raise to AGR to pick up the relevant features of number, person, etc. A mechanism known as spec-head licensing ensures that the subject, raised to [spec, AGRP], is only licensed to occur in this position provided that it shares the same agreement features with the inflectional head AGR. This accounts for subject-verb agreement phenomena, thus predicting the grammaticality and ungrammaticality of (9) and (10) below respectively:

- (9) John loves linguistics.
- (10) *John love linguistics.

However, Greek displays some notable inconsistencies with regard to so-called subjectverb agreement which would be extremely difficult to accommodate within a purely syntactic account of subject-predicate formation. Consider (11) below:

¹The operation in question follows from what is referred to as Lasnik's Filter: " an affix must be lexically supported at or prior to the S-structure level" (Lasnik 1981). See also Baker (1988), Pesetsky (1989).

(11) (a) O Petros pirane diamerisma. [the Peter]nom bought-3pl [flat]acc 'Peter (and his family) got a flat'.

> (b) Enas enas irthane. one one came-3pl 'They came one by one'.

In the examples above a singular constituent can optionally be the subject of a verb with plural agreement. Such a situation results in ungrammaticality in English, as shown in (10). By contrast, no ungrammaticality is induced by the lack of subject-verb agreement in the examples in (11) above. Thus, in (11a) 'o Petros' (Peter) is the third-singular subject of the third-person plural verb 'pirane', and in (11b) the singular pair 'enas enas' (each one) can also be the subject of the plural 'irthane' (came). Facts such as these coupled with a number of others, which will be detailed in section 5, have led some (Philippaki 1987, Catsimali 1990) to suggest that there is no subject position in the syntax. In their view, subject is encoded in verbal morphology, and the very presence of a full nominal subject in a Greek clause is purely optional and pragmatically-driven.

Finally, there is a danger, I think, in saying that a given order of constituents is 'basic' just because it happens to fulfil certain theory-internal criteria. VSO is then said to be basic, as pointed out above, as it is derived by just two obligatory movements of the verb to [spec, AGRP] and [spec, TP]. However, the fact that VSO satisfies theory-internal principles does not automatically entail that it is basic. This is so especially since VSO is derived from a SVO D-structure with a hierachical distinction between the subject and object positions in spite of the absence of subject-object asymmetries in Greek. In fact, VSO cannot be considered as any more basic than other orders in terms of many standard criteria such as frequency of occurrence, discourse content, or even ambiguity. The latter criterion has been suggested by Chomsky (1965) as a diagnostic for eliciting the 'basic' word order in languages exhibiting free word order, the point being that a particular word order is preferred in potentially ambiguous environments (see Hawkins 1983, Mithun 1987 for discussion).

In Greek, however, even sentences with ambiguous Case-marking are not exclusively associated with a particular order. Consider the examples in (12) below:

- (12) (a) Agapoun ta koritsia ta agorja.
 love-3pl [the girls]nom/acc [the boys]nom/acc
 'The boys love the girls/The girls love the boys.'
 - (b) Idhan ta agorja ta koritsia.
 saw-3pl [the boys]acc/nom [the girls]nom/acc
 'The girls saw the boys/the boys protect the girls.'
 - (c) Ide to skili to tiflo agori.
 saw-3s [the dog]acc/nom [the blind boy]nom/acc
 'The blind boy saw the dog/the dog saw the blind boy.'
 - (d) Efage to agrimi to pedi.
 ate-3s [the wild animal]acc/nom [the child]nom/acc
 'The boy ate the wild animal/the wild animal ate the boy.'
 - (e) Efage to puli to koritsaki. ate-3s [the bird]acc/nom [the little girl]nom/acc
 'The little girl ate the bird/the bird ate the little girl.'

In (12a-e) the nominative and accusative cases of the nouns are morphologically identical. None the less, the decisive criteria for which of the two neuter nouns is the subject and which is the object seem to have nothing to do with any fixed order, in this case VSO vs.VOS. In particular, the context, the intonation (in spoken language), the semantics of the verb as well as general knowledge appear to be operational in these cases. I distributed sentences (12a-e) to thirty native speakers, non-linguists (cf. Labov 1975), and asked them to indicate who did the action to whom and who was the receiver in each sentence. (12a and b) were uniformly judged to be ambiguous between the two readings where the two neuter nouns may alternatively undertake the subject and object roles. In (12c and d), however, general knowledge (perhaps in the form of ready-made scripts or frames²) seems to influence judgements. In (12c), for instance, the NP 'the blind boy' was taken as the object and 'the dog' as the subject since commonsense logic means that a blind person cannot 'see'. In the same vein, in (12d) the NP 'the boy' was interpreted as the object and 'the wild animal' as the subject since there is easily available a scenario in which wild

²See Barlett (1932), Schank and Abelson (1977).

animals eat humans rather than the other way round. Similarly, in (12e) the first NP was interpreted as the object and the final one as the subject since again a scenario or schema in which humans eat birds can be easily instantiated whereas the reverse state of affairs is hardly obtainable unless in a strongly biased context.

4.2 SVO and VOS: topicalization as base-generated adjunction

In Tsimpli's theory, the subject, in both SVO and VOS orders does not occupy the canonical subject position ([spec, AGRP]), but occupies instead a clause-peripheral illustrated in (13) and (14) respectively:

(13) $[_{CP} [_{TOPP} o \text{ Petros}_i [_{CP} [_{TP} [_{T} thaumazi_j [_{AGRP} pro_i [_{AGR} t'j [_{VP} t_i [_{V} t_j [_{NP} tin Eleni_k]]]]]]]]]]$

(14) $[_{CP} [_{CP} [_{TP} thaumazi_j [_{AGRP} pro_i [_{AGR} t'j [_{VP} t_i [_{V} t_j [_{NP} tin Eleni_k]]]]]] [_{TOPP} o Petros_i]]$

In both representations above the assumption is that due to the rich morphological agreement of MG a non-overt subject resumptive pronoun in the form of a pro can be licensed so as to satisfy theta-and case-assignment. This pro raises to [spec, AGRP] from [spec, VP] in the same way as an overt argument.

However, as far as SVO is concerned, the proposed structure seems problematic for a number of reasons: For one thing, assuming that SVO is generated the same way in matrix and embedded clauses, the outlined account would actually disallow SVO from occurring embedded in a complement clause, as in (15) below:

(15) I Eleni mu ipe [_{CP}oti o Petros agapai ti Maria] [The Eleni]nom me told that [the Petros]nom love-3s [the Maria]acc 'Helen told me that Peter loves Mary.'

(15) above is perfectly grammatical in Greek. However, Tsimpli's account predicts that (15) shouldn't be possible and that the complementizer position, hosting 'oti' (that) would actually follow the embedded subject, adjoined to the left of CP, as illustrated in (16):

(16)	I Eleni	mu	ipe	[_{CP} o Petros	[_{CP} oti	agapai	ti Maria]]
	[The Eleni]nom	me	told	[the Petros]nom	that	love-3s	[the Maria]acc

One possible solution to this problem would be to seek recourse to what is known as

recursive CP. According to this, the example in (15) above would require a representation such as (17). The CP to which the subject is adjoined is housed within another CP, which hosts the complementizer. This is represented in (17) below:

(17) verb [$_{CP1}$ [$_{C'}$ that [$_{CP2}$ topic [$_{CP3}$ 0 [verb [$_{IP}$...]]]]]

However, as I argued in Tzanidaki (1993), following Iatridou and Kroch (1992), CPrecursion is not a plausible hypothesis for MG. According to Iatridou and Kroch, CPrecursion is theoretically and empirically motivated only in a group of languages which display a particular behavior with respect to v/2 order. In particular, the licensing of CPrecursion accounts for why embedded v/2 occurs in some environments but not in others. According to Iatridou, extending CP-recursion to languages other than these would unnecessarily introduce extra structure in their representation. This would not conform to Chomsky's 'least-effort condition' according to which "... both derivations and representations are required to be minimal...with no superfluous steps in derivations and no superfluous symbols in representations" (Chomsky 1991: 447). If that is so, then we cannot seek recourse in the recursive CP, empirically unmotivated in MG. If then a recursive CP analysis is not available to us then either the embedded SVO order would be impossible, or it would require a different derivation than the one proposed for matrix SVO.

Furthermore, no independent evidence is provided in Tsimpli's analysis for subject topicalization as a base-generated adjunction to CP. Why, for example, cannot it be the product of movement? Generally, it has been argued that in some languages (Yiddish (Santorini 1989, Diesing 1990) and Icelandic (Rognvaldsson and Thrainson 1989)) topicalization is not adjunction to CP which requires the non-independently- motivated CP-recursion, but a product of movement to [SPEC, IP] as seen in (18):

(18) $[_{CP} [_{C'} [_{IP} topic_i [_{I'} verb_j [_{VP} ...t_j ...t_i]]]]$

According to the latter the topicalized subject moves to [spec, IP] position. A similar analysis has been suggested by Philippaki (1987) for Greek.

In fact, both features that Tsimpli uses as distinctive of topicalization (vs. focusing), i.e. the existence of a pause after the topicalized element and its cooccurrence with a resumptive pronoun are the hallmarks of Left- Dislocation and not of topicalization. These, according to Ross (1967: 253-7), are two clearly distinct phenomena. The subjacency diagnostic (see 4.3.1 below) which she uses too to disprove topicalization as

a movement process is similarly indicative of left-dislocated structures (Haegeman 1991: 213, 369).

Quite apart from the above problems, there are, I think, a variety of further problems raised by Tsimpli's account of SVO and VOS. These concern the putative 'topical' nature of the subject in this account. Generally, the recognition of topic, and as we will see in section 4.3, of focus too as separate projections in the clause has led to a classification of this type of theory as **discourse-configurational**. The term is from Kiss (1995). According to Kiss, discourse-configurationality is a property of those theories within the Chomskyan family which take topic and focus to be associated with structural positions in the clause.

However, the term is rather misleading, at least as far as *discourse* is concerned since despite the claimed *discourse*-configurational property, the outlined theory is essentially a sentence-based approach, which, as I shall argue in what follows, presents some rather interesting problems. To start with, confining myself to topic, there exists a general definitional problem with respect to the postulated 'topic' status of pre- and post-verbal subjects in Greek declarative clauses. As we saw, according to this analysis, pre- and post-verbal subjects are represented as left- and right-adjoined topics respectively. No definition, however, is provided for the term of topic, which is, I think, a serious weakness, specially given the many various aspects this 'umbrella' term is accociated with.

Traditionally, topic expresses an 'aboutness' relation between a discourse entity and a predication (Dik 1978). Tied to the notion of topic is the notion of 'given'. The latter, in its relational sense, depends on the degree of informativeness an item assumes in a discourse setting. As an example, consider the Greek data in (19) below:

- (19) A: Pjos aghorase spiti; who-nom bought house-acc 'Who bought a house?'
 - B: O Petros (aghorase spiti). [the Petros]nom (bought house-acc) 'Peter (did).'

Thus, 'spiti'(house) in B's answer above is topical insomuch as it is already given in the previous discourse. 'O Petros' (Peter), on the other hand, cannot qualify as topic here, and, in fact, it is the focus of the utterance insomuch as it is the most salient piece of

information in the exchange above, i.e. the one which answers the question word 'pjos' (who) in A's utterance, in accordance with the standard operational test for focus assignment. Note, however, that according to Tsimpli's account the preverbal subject in B's utterance would have to be taken as a topic constituent, left-adjoined to the predication, contrary to the facts. Therefore, the postulated categorical mapping between preverbal subject and topicality would fail to account for the focus status of the subject in (19) above. Although, undoubtedly, there exists a strong cross-linguistic correlation between subjecthood and topicality and objecthood and focality, any absolute grammatical equation of these concepts could not accommodate the observed diversions. In fact, according to Siewierska (1991), even in languages with morphological marking of topics such categorical correlations between, say, topics and subjects do not hold. In Japanese, for example, the topic particle 'wa' can also be used for coding contrastive foci (see Siewierska ibid: 164 for further discussion and examples).

Tsimpli's account would face a similar problem with cases such as (20) below, where the informational content of the clause is all new:

- (20) A: Ti sinevi; what happened-3sgl 'What happened?'
 - B: O Petros agorazi spiti [the Petros]nom is buying-3s [house]acc 'Peter is buying a house.'

B's utterance, rather than introducing a referent as a topic for a predicate, serves to establish the whole proposition as new. In this case, the topic/focus distinction does not apply, and these so-called **thetic propositions** are analysed as either representing a 'broad focus' or as having a pragmatic status which does not depend on the topic/focus distinction³. Note that the outlined account of preverbal subject as left-adjoined topic would again falsely predict that the subject in (20) above is topical, contrary to the facts.

³Siewierska (1991, ch. 6) offers a very illuminating discussion on the issue of topicality (and focality) and on the history of the term 'thetic' as opposed to 'categorial' in philosophy and linguistic theory. See also Kiss (1995) for references on the introduction of the distinction into generative grammar. According to Kiss whether a language encodes thetic and categorial propositions in a structurally distinct way is taken as criterion of topic-prominence (vs. subject-prominence) (Li & Thompson 1976, among others).

There is a further problem that a formal account of topicality would raise in the light of more recent approaches to topic (and focus), where the 'aboutness' relation as defined above seems to be replaced by a relation between the referent of a discourse entity and the overall structure of the discourse rather than just the oncoming predication. In this view, topic ceases to be a sentence-based atomic and uniform entity, and it is rather perceived as a scalar utterance-based notion (Givón 1988, Sperber & Wilson 1986, among others). What matters in this perception of topic is not the relational sense of a topical element as given in a discourse setting but the so-called referential sense, which has to do with the cognitive status and degree of activation (Chafe 1987, Prince 1981) of the topical referent in the communicators' mind. This new approach to topicality is partly reflected in the postulation of various distinct kinds of topic such as the one proposed by Dik (1989).

All in all, the amount of artificiality involved in the context-free treatment of topic, makes very difficult, if not impossible, a proper evaluation of formal claims involving such categories. I think one has to agree with Givón that (1990: 740) "...topicality is *not* a clause-dependent property of referents, but rather a discourse-dependent one. This is often masked by the fact that one can examine a well-coded clause out of context, and observe that its subject is more topical than its object, [...]. But such isolated clauses are only artifacts. What makes their participant topical is *not* the fact that they are grammatically coded as topical (subject, object) in the self-contained clause. Rather, they are so coded because they are topical *across a certain span* of multi-clausal discourse."

4.3 OVS and the theory of focus

4.3.1 OVS and focus. According to Tsimpli's theory, OVS in Greek is taken to arise from the object's moving to a Focus Phrase (FP), as defined by Brody (1989). According to Brody's analysis, Focus (F) is postulated as an independent functional category which heads its own XP projection. In Brody's account, the FP is optional, i.e, it occurs only within a sentence containing a focalised category. The FP is taken to dominate the VP shown in (21) below (adopted from Brody ibid: 207):



The specifier of the FP serves as the landing-site for a focalised constituent. The focus nature of this constituent may be realized syntactically, in which case it will move to [spec, FP] overtly at S-structure. Alternatively, a focus may be realized phonetically, in which case the focalised consituent only need move covertly to [spec, FP] at LF. Focus interpretation arises from the V assigning a +f feature to F, when V moves there. This phonetic feature is then assigned by F to [spec, FP] via spec-head agreement. V-to-F movement, an instance of head-to-head movement, is forced by the F-criterion, analogous to the Wh-criterion (May 1985, Rizzi 1990). According to the F-criterion: (i) the spec of an FP must contain a +f feature, and (ii) all +f phrases must be in an FP, though this may apply either at S- structure or at LF.

As far as the status of the focus phrase is concerned, it is taken to be universal, though there exists a certain parametrization which concerns the level of representation at which the F-criterion applies. Thus, languages with syntactic focus (Hungarian) must satisfy the criterion overtly in the syntax, whereas languages with purely phonetic focus (English) satisfy the criterion at LF.

Thus assuming a theory of FP such as the one outlined above, the fronted object in Greek is said be moved to the [spec, FP] immediately dominating TP. This is depicted in (22) below, with the intermediate VP/AGRP/TP adjunctions of the subject omitted for the sake of simplicity:

(22) $[_{CP} [_{FP} tin Eleni_k [_F thaumazi_j [_{TP} o Petros_i [_T t''_j [_{AGRP} t'_i [_{AGR} t'j [_{VP} t_i [_V t_j [_{NP} t_k]]]]]]]]$

Apart from the construction in (22) above in which the fronted object is assigned focal stress, Tsimpli identifies another type of construction containing a fronted object which is associated with the absence of heavy stress and the presence of a resumptive clitic pronoun as in (23):

(23) Tin Eleni tin thaumazi o Petros.[the Eleni]acc her admire-3s [the Petros]nom 'Helen, Peter admires her.'

Unlike the focus construction in (22), (23) is described as a topic construction which formally differs from the former in that the fronting of the 'topicalized' object is not taken to be the product of movement; rather it is base-generated in its S-structure position and coindexed with a clitic pronoun. It is this clitic which serves as the true argument of the verb. Once again, however, there are some points to be raised concerning this analysis.

Firstly, as already pointed out, the account of these fronted object foci (22) and topics (23) relies respectively on the notions of 'topic' and 'focus', for which no specific definition is provided in Tsimpli's account. Thus, for example, the term 'focus' is widely used to denote many distinct concepts such as emphasis, contrast, newness, rhematicity, etc. (Couper-Kuhlen 1986, among others). The presence of focal stress associated with the feature, which Tsimpli takes as an indication of focus, is one, phonological attribute which gives no insight, however, into any other aspect of the term's content⁴. Thus, there might be other non-phonological aspects of focus which should be taken into consideration in a theory of focus and its interaction with word order. As an example, consider the sentences in (24a, b) below which respectively contain a pre- and postverbal focused object shown in capitals:

- (24) (a) TIN ELENI sinantise o Petros. [the Eleni]acc met-3s [the Petros]nom 'It was Helen that Peter met.'
 - (b) O Petros sinantise TIN ELENI.

According to Tsimpli's theory, both object NPs in (24a, b) are foci, the difference between them being that in the former movement of the object to [spec, FP] takes place in the syntax, whereas in the latter the operation can be executed covertly at LF. However, as I argue in Tzanidaki (1995 and forthcoming), each of the object constituents in examples such as (24) above is associated with a different type of focus, which,

⁴In fact, there is not even any one-to-one association between stress and focus. Thus, Siewierska (1991) points out that, in English, for example, constituents which are analysed as topics are often accentuated (see also Givón 1990: 705-6).

consequently, makes them felicitous in two different contexts. Thus, in (24b) the postverbal focused object NP merely encodes new information. This type of focus is often referred to as 'wide' focus. This means that the focus either denotes new information, or it is not quantified over a closed set of entities with which it is contrasted (Kiss 1995). The situation is rather different, however, in (24a). Here, the preverbal occurrence of the focused object assumes a more restricted, or 'narrow' sense, in which the entity identified as focus expresses exclusion with respect to some closed set of alternative entities, with which it stands in contrast. Hence, subsuming pre- and postverbal instances of objects under the same term focus just because they bear focal stress cannot hope to reveal potential correlations between the object's order in relation to the verb (OV, VO) and kinds of focus.

In addition, as we saw, according to Tsimpli's theory the basic difference between OVS and Oclitic-VS is that OVS involves syntactic focusing, i.e. a substitution movement process whereas in Oclitic-VS the fronted object is base-generated and adjoined to the rest of the clause. The main evidence for the postulated distinction comes from island effects and Chomsky's chain condition (Chomsky 1986a). However, as I will show below the situation is far from clear-cut when some further data are taken into consideration. Let us look at the relevant arguments.

4.3.2 Island-effects. The first piece of evidence supporting the distinction between 'topicalized' and 'focused' fronted objects concerns their behavior in relation to extraction out of NP-islands. Consider first the examples cited below in (25) (Tsimpli ibid: 240):

(25)	(a)	Afto	to vivlio,	gnorisa to	sigrafea	pu	to egrap	pse.
		this-acc	the book	met-1s the	author		who	it-wrote-3s
		'This bo	ok, I met the a	author who w	rote it.'			
	(b)	*AFTO	TO VIVLIO	gnorisa to	sigrafea	pu	egrapse	÷.
		this-acc	the book	met-1s	the-acc aut	hor	who	wrote-3s
		'I met th	e author who	wrote THIS I	BOOK.'			

According to Tsimpli, extraction of a topicalized NP out of complex NP does not result in ungrammaticality as in (25a) while extraction of the focused object out of the NPisland does, as indicated in (25b). This difference in grammaticality is explained, in her view, if topicalization is taken to not involve movement whereas focusing does. However,

as mentioned earlier, in the 'topicalized' example in (25a) the fronted NP (i) is construed as coreferential with the clitic object pronoun and (ii) is separated by the rest of the clause by a pause indicated by commas. Both these attributes are standardly considered as the hallmarks of left-dislocation rather than topicalization, two rather different phenomena (Ross 1967: 253-7).

As with the case of NP-island effects discussed above, Tsimpli's examples of 'topicalized' and 'focused' fronted objects in relation to adjunct-islands seem also problematic.

4.3.3 The chain condition (Chomsky 1986a). Let us now examine the other type of evidence Tsimpli cites in favour of the postulated distinction between focused and topicalized objects. Consider the examples in (26) below (ibid: 241):

(26)	(a)	I Galli/tus Gallus, tus ematha	kala	menontas	sto Parisi
		the-nom/the-acc French them-understood-1s	well	staying	in Paris
		'The French, I understood them well w	vhen	I was in Pari	.s.'

(b) TUS GALLUS/*I GALLI ematha kala menontas sto Parisi the-acc /the nom-French understood-1s well staying in Paris 'I understood THE FRENCH well when I was in Paris.'

(26a) is an example of focused object NP whereas (26b) contains a topic object NP. According to Tsimpli, the chain condition, discussed in Chomsky (1986a) can explain the difference in grammaticality in the pair above. This condition requires that a chain contain only one Case-position. Thus, the grammaticality of (26a), where the object clitic 'tus' may be coreferential with a topicalized NP bearing nominative or accusative Case, suggests that the fronted NP in (26a) cannot be the product of movement, since this would create a chain with two Case-positions which would result in ungrammaticality. On the other hand, (26b) above can only be grammatical when the fronted object NP bears accusative case coindexed with the accusative clitic. This suggests that the fronted NP forms part of a chain (i.e. it has been moved) and this is why it can only bear a single Case. The argument seems to be well-motivated from a theory-internal perspective. However, it wrongly predicts that the pair shown below in (27) would also be similar to the one just discussed:

(27)	(a) Tu th	s ematha em-understood-	1s	kala well	menont staying	as sto Paris in Paris,	i, tus Gallus/*i the-acc/the-n	Galli. om French
	(b) En une	natha derstood-1s	kala well	menont staying	as	sto Parisi in Paris	TUS GALLUS/*1 the-acc/the-nom	GALLI. French

(27a, b) above are exactly as (27a, b) respectively but the NP 'I Galli/Tus Gallus' (The French-nom/-acc) here occupies the clause-final position. Tsimpli's theory, as seen, allows for both left and right base-generated adjunctions (recall the analysis for SVO and VOS in section 4.2). The fact that the right-adjunction in (27) would be base-generated would again predict, following the chain condition, that the chain of the clitic and the right-adjoined topics NPs may bear both cases. But, as (27a) suggests, it cannot. (27a), thus, in which the clitic is coreferential with the right-adjoined NP in nominative, is predicted fine by Tsimpli's account, but it is not.

Note that formally speaking the examples with left- and right -adjoined units are identical in the sense that they make use of the same formal apparatus (base-generated adjunction). Their respective functions, however, are different. Terminologically, this difference has been captured by virtue of the terms **topic** and **antitopic** in the functional literature. Thus the left-placed nouns are topics in the sense that they "...set a general frame of reference which permits a very loose connection with their subsequent predication..." (Valiouli 1990: 58). By contrast, the right-placed nouns are antitopics in the sense that they pick up a referent which is antecedently available in what precedes the antitopic.

Topics in contrast to antitopics, are characterized by a loose connection to the upcoming predication. It is this loose connection that has been argued to sanction the appearance of the two Cases in the examples in (27a) above. With topics the speaker is at freedom to postpone the assignment of the semantic role of the referent of the NP. Thus the speaker may initiate the utterance with the nominative, the agentive case par excellence, and subsequently change it to accusative. This construction is referred to in traditional grammar as the 'psycholochical subject' construction. By contrast, antitopics, i.e. the right-placed NPs, do not display such a freedom. This is so, for the preceding object clitic has already established the semantic role and case of its referent. Hence the upcoming coreferential antitopic has but to comply with this, as the ungrammaticality of (27a) suggests. If this explanation is correct, then it follows that the disparity displayed by the object NPs in (26) above as far as being associated with two Cases is concerned, provides no relevant evidence for Tsimpli's distinction between focusing and

topicalization.

4.3.4 Some further arguments. A further point in relation to the postulated distinction is also the following: it seems that there is more to this matter than a simple topicalization/focusing distinction, as the examples in (28) below indicate:

- (28) (a) Afto to ergo echo tin entiposi oti to idame ke persi [this the film]acc have-1s [the impression]acc that it-saw-1pl last year 'This film I have the impression that we saw it last year.'
 - (b) AFTO TO ERGO echo tin entiposi oti idame ke persi. [this the film]acc have-1s[the impression]acc that saw-1pl last year 'It was this film I have the impression that we saw last year.'

In both examples above fronting the object - be that coreferential with a clitic or not - out of the complex NP 'tin entiposi' (the impression) does not result in any ungrammaticality. What differs crucially, however, is the interpretation under which these fronted objects are to be accepted. That is, (28b) requires a contrastive reading of the fronted object which is, so to speak, singled out of a set of potential films as the one that the speaker thinks they saw last year, whereas such a reading is not necessary for (28a), in which the speaker merely states the proposition that they have seen that film last year.

Similarly, examples such as in (29) below show that there is more to the point than the postulated distinction between topicalization and focusing:

(29)	(a)	Polus nek	rus	echo		tin esth	isi		oti	tha		
		[many dea	d-pl]acc	have-	·1s	[the fee	eling]a	сс	that	will		
		(*tus)	thrinisum	e	ke	afto	to	savat	okirjako			
		them	mourn-1	ol	and	this	the	week	end			
		'Many de	ead I hav	e the	feeling	that w	ve wil	l moi	urn *them	n again	this week	ekend.'

(b) POLUS NEKRUS echo tin esthisi oti tha thrinisume ke afto to savatokirjako.

(29) is another instance of a construction containing a complex NP within which an oti-(that) clause is embedded. According to Tsimpli's analysis the predictions here would be:(i) the structure with the topicalized NP coreferential with the object clitic is grammatical,(ii) the structure with the fronted focus NP is ungrammatical showing an expected island effect in its movement out of the complex NP. In fact, neither prediction is borne out. Surprisingly, the reverse state of affairs obtains. Thus, in (29a) above, coreferentiality of the topic NP with an object clitic results in ungrammaticality whereas the fronted focus NP in (29b) shows no island effects. Definiteness seems to be the key criterion involved in the explanation here. That is, the referent of the focus NP 'many dead' is indefinite and non-specific. Hence it cannot be coreferential with the definite and specific referent of the clitic. Let us now look at the two remaining orders, i.e. SOV and OSV.

4.4 SOV

Tsimpli does not discuss the derivation of SOV which, however, within her proposal, could be accounted for by a combination of a base-generated left-adjoined topic-subject as with SVO and a movement of the object to the specifier of the focus phrase as with OVS. A possible structure is shown in (30):

 $(30) \quad \left[_{CP}\left[_{TOPP} o \text{ Petros}_{i}\left[_{CP}\left[_{FP} ti \text{ Maria}_{k}\left[_{F} \text{ thaumazi}_{j}\left[_{TP} t''_{i}\left[_{T} t''_{j}\left[_{ARP} t'_{i}\left[_{AGR} t'j\left[_{VP} t_{i}\left[_{V} t_{j}\left[_{NP} t_{k}\right]\right]\right]\right]\right]\right]\right]\right]\right]$

This derivation, however, would face the same sort of problems pointed out above with respect to embedded SVO orders. That is to say, it would wrongly predict that SOV cannot occur in an embedded complement clause, even though it can, as shown in (31) below, with capitals showing focused material:

(31) I Eleni mou ipe oti o Petros TI MARIA agapai [The Helen]nom me told that [the Peter]nom [the Mary]acc love-3s 'Helen told me that Peter loves MARY'

Clearly, if the subject 'o petros' occurs in the [spec, CP] it cannot follow the COMP 'oti' (that). (31) could be generated by means of a recursive CP creating an additional specifier position for the subject NP of the embedded SOV. But, following the discussion in section 4.2, this seems rather an ad hoc solution.

4.5 *OSV?

Finally, we come to the last of the six logically possible orders for subject, object and verb: OSV. According to Tsimpli's account, the order is actually ungrammatical in Greek.

Furthermore, Tsimpli assumes that in all structures involving an object moved across the verb, this object is focus. Following Brody (1989) Tsimpli holds that an adjacency requirement must obtain between the head F, occupied by the verb, and the specifier position of the focus phrase⁵. If then, this [spec, FP] position were to be occupied by a focused object then an adjacency requirement would automatically obtain between the object and the verb. In OSV, assuming that the object is focused, the occurrence of the subject between the FP and the verb would give rise to a violation of Lasnik's Filter, for its presence in the [spec, AGRP] would imply that V-movement to F has failed to take place. As a result, the affix F would then be left improperly scattered among the words of the sentence. Hence the claimed ungrammaticality of OSV, schematized in (32) below:

(32) [_{FP} object [_F [_{TP} [_{AGRP} subject [_{AGR} verb [_{VP}]]]]]

$$\uparrow ___ \times __$$

However, according to my judgment and that of the thirty native speakers whom I consulted, the OSV order is perfectly grammatical in Greek, though quite marked. More importantly, in the course of my research I have been able to collect a number of OSV utterances from various spoken and written sources (see Tzanidaki 1996). In fact, the number of OSV structures I have collected along with those found in other existing corpora (Laskaratou 1984, 1989) indicates that OSV is grammatically licensed in Greek and cannot be attributed to some performance error. In addition, OSV is listed as a grammatical alternative order of constituents in most relevant literature on Greek word order (Kakouriotis 1979, Laskaratou 1984, 1989, Catsimali 1990, Philippaki 1985, etc.) Thus, for example, Philippaki (1985) includes OSV as a grammatical order, although she offers no representation nor insight into its structure. She particularly points out that OSV sentences "can be rendered only with the first constituent stressed" (ibid: 118). This stress pattern serves as a means of expressing the speaker's surprise or, alternatively, it establishes a contrast between the prominently stressed constituent and a potential alternant.

Quite apart from making a false prediction in relation to the grammatical status of OSV order, Tsimpli's account faces another, more general problem: if the outlined focus theory has any universal validity at all, then it would be difficult to see how languages with canonical OSV order (e.g. Apurinâ, Urubui, Xavante) could be accounted for, given that,

⁵In Brody's terms this adjacency condition rests on the assumption that the [+f] feature assignment to the FP by the verb (F criterion) can take place only under strict locality.

according to Siewierska (1988), in these languages too, the object tends to be focused.

4.6 Some residual problems with the outlined focus theory

As seen above, Tsimpli's analysis of some of the logically possible word orders in Greek relies heavily on Brody's theory of focus. However, there exist some cases which would be difficult to accommodate within the countenanced focus theory. These concern verbfocusing and what I call cases of more 'inclusive' foci. In relation to the former, as we saw, in this syntactic approach to focus only the specifier of FP can host focused material. This means then that only XPs can be focused. Given that verbs fill the head position of the FP, it follows that verbs cannot be focused. The problem has already been pointed out by Agouraki (1993), although no solution has been proposed. Undoubtedly, there is a cross-linguistic tendency for focus to be associated with nouns, particularly, object nouns, rather than with verbs. According to functional approaches to language this "...is connected with the predisposition of humans to be more interested in the participants or consequences of events rather than in the events themselves" (Siewierska 1988: 101). As Siewierska reports, the correlation of object and focushood vis-à-vis the verb has been stated repeatedly by Praguian linguistics⁶. True though this tendency may be, there certainly arise situations where the verb needs to be focused, and surely, the grammar should make available the relevant machinery.

Secondly, there may be cases where not the whole XP is focused but only a part of it. Consider (33) below (as a convention I use Greek characters in order to distinguish attested examples from introspective ones):

(33) I Δ IAITEPO $\epsilon v \delta \iota \alpha \phi \epsilon \rho o v \epsilon i \chi \epsilon \eta o \mu \iota \lambda i \alpha \tau o v \pi \rho \omega \theta v \pi o v \rho \gamma o v$. Idietero endiaferon iche i omilia tu prothipurgu. [particular interest]acc had-3s[the talk of the prime minister]nom 'The talk of the prime minister was PARTICULARLY interesting.'

(33) has been uttered in a context where a journalist gives a live report on a political conference in Athens. The immediately preceding utterance states that all the talks delivered were interesting; (33) serves to state that the prime minister's talk had a 'particular' interest. Thus, the concept expressed by the noun ' $\epsilon v \delta \iota \alpha \phi \epsilon \rho \circ v$ ' (interest)

⁶See Firbas (1981 cited in ibid: 101), and Givón (1990) on the abscense of verb-clefting.

is contextually available, and in this sense it may be seen as topical. What (33) focuses on is the adjective ' $i\delta i\alpha i\tau \epsilon \rho \sigma$ ' (particular). However, both the focal adjective and the topical noun, in the FP analysis, will be hosted under the specifier of FP, as seen in (34) below:

(34) [_{FP} ΙΔΙΑΙΤΕΡΟ ενδιαφέρον[_F είχε [_{TP} η ομιλία του π.]]]

This way, both will be assigned the focus status but only one of them in the NP is in fact focused. One might, of course, counter that all the NP (or DP, following Abney 1987) is focused, irrespective of the adjective being assigned the focal stress, which is not plausible from a discourse perspective at least, since as explained the noun is topical in the particular discourse setting. But even so, unless a different mechanism is made operational for this focus assignment here, the outlined theory of focus will predict that the +f feature will 'percolate' from the head F to the whole specifier, with yet no account for the fact that this feature is assigned only to the adjective.

5 Two 'flat' proposals for Modern Greek clause structure

5.1 Catsimali 1990: α 'flat' structure

As we saw, within the traditional X-bar schema, the specifier and complement occupy asymmetrical positions; complements are sisters to the head whereas subjects are positioned higher up in the tree, as sisters of the intermediate X' projection. When the X' schema is extended to clausal structure, then this asymmetry between specifiers and complements was shown to be the basic distinction from which differences between subjects and objects can be derived.

The main motivation for this geometrically-defined distinction between subject and object comes from various data in which subject and object behave asymmetrically. Thus a fully configurational clause structure for MG can only be shown to be viable if such asymmetries between subject and object can be shown to be applicable to the language. Catsimali (1990) has, however, presented rather convincing evidence against the existence of subject-object asymmetries, supporting, perhaps, a 'flat' account of Greek clause stucture. The main arguments in favour of a flat clause structure in Greek come from the absence of ECP effects, subject-verb idioms, absence of rules sensitive to VP, weak crossover, the symmetrical behavior of subjects and objects with respect to extraction out

of secondary predicates and small clauses, binding, lack of pleonastics, lack of PRO, absence of NP-raising at least as a case-driven operation. As pointed out above, the majority of these arguments were first advanced in Greek by Catsimali (1990) and are fully discussed and exemplified in Tzanidaki (1996).

A similar 'flat' account has also been proposed by Horrocks (1994), following Speas' (1990) discussion of non-configurational languages. Below, I briefly introduce and discuss Catsimali's proposal and also I review Horrocks' highly relevant ideas concerning Greek configurationality.

In trying to accommodate the structural differences existing between English and Greek, Catsimali (1990) suggested a 'flat' Greek clause structure, following Kiss's proposal for Hungarian (Kiss 1987). According to her theory the positional variation of subject across the Greek sentence is accounted for by "...a floating branch which appears optionally filled with lexical content" (ibid: 148). This is illustrated in (35) below, with NP_i representing the optional subject argument coindexed with INFL:



The suggested flat argument structure in (35) relies heavily on the assumption that the subject argument indicated by the dotted lines lacks a Case-marking governor and is assigned a default Nominative Case lexically. It is, furthermore, licensed at S-structure by coindexation with INFL. Note that, as already said, this floating branch is only projected when filled with lexical content. At the core of this proposal is thus the insight that there is no syntactic position specifically reserved for subjects in Greek clauses, since subjects are always encoded in the verbal morphology. The presence of full subject nominals in the clause is thus pragmatically triggered, an idea which builds on Philippaki's (1987) proposal.

As far as topic and focus are concerned, Catsimali follows Kiss' (1987) proposed structure, shown in (36) below:

(36) $[_{CP} [topic [_{CP} [focus [_{C} [_{IP}...]]]]]]$

Thus, topic and focus are hosted in recursive CP projections, situated above the 'flat' IP, shown in (36) above. This structural arrangement, she argues, predicts the commonTOP-FOC linearization, rather than the reverse. She takes topics to be adjuncts, and foci to be arguments, though she does not specify whether the latter are derived by movement or by base-generated adjunction to [spec, CP]. The argument-status of foci accounts for the inability of clauses to contain more than one focus.

With respect to both the structures shown in (35) and (36) above, the following two points should be noted. Firstly, note that the flat structure in (35), though empirically motivated, would be hard to reconcile with the overall theory it assumes, i.e. GB. For one thing, in adopting a flat argument structure all the benefits GB theory gains from its 'steep' configurations are lost (e.g. the binary branching theorem and language acquisition (cf. Haegeman 1991, ch. 1)). All in all, the suggested flat structure amounts to a series of dependency relations/chains between the verbal head and its arguments, and hence it is conceptually much closer to a dependency-based approach to linearization (see Tzanidaki 1995, 1996).

Secondly, the representation in (36) and its associated analysis gives rise to at least two problems: the rather ad hoc postulation of CP recursion, and the terminological unclarity as to the nature and precise content of terms such as topic and focus.

Notice that even abstracting away from these problems, it is not sufficiently clear what motivates the steeply configurational left-periphery of the clause in the representation in (36) above, given that, as Siewierska (1988: 219) points out, whatever is hosted in the postulated topic and focus positions has been extracted, or can be construed with the relevant constituents inside the flat clause, as schematically shown in (37):

(37) [T [F[VX]]]

All one needs, therefore, is a system of licensing topic and focus dependencies, such as that adopted by, say, Functional Grammar (Dik 1978), or the dependency-based Word-Grammar (Hudson 1984, 1990).

5.2 Horrocks (1994)

Horrocks (1992, 1994) has developed a partly flat analysis of Greek clause structure, though different from Catsimali's account outlined above. Below I review Horrocks' account pointing tosimilarities and differences between his account and Catsimali's analysis. As a convenient point of departure, consider the structure shown in (38) below:

(38) $[_{CP} [_{C'} [_{IP} \text{ topic } S [_{\Gamma'} [_{VP} \text{ proper } S [_{V'} V S O]]]]]]$

As can be seen from the above representation, the projection of argument structure is flat, with subject and object arguments within V' rather than within I', as in Catsimali's account. Furthermore, there are a number of differences between these two 'flat' accounts. Thus, as already seen, in Catsimali's account all but the subject argument receive structural Case, the subject being assigned Nominative Case lexically. The subject occupies a 'floating' branch filled only when a lexical subject is projected and is licensed at S-Structure by coindexation with INFL. In Horrocks' analysis, however, the verb and its arguments are projected at D-structure within V' according to "...some version of the thematic hierarchy...' (Horrocks 1994: 90), and all but the subject are inherently Casemarked; the subject argument, bearing no case, raises to [spec, VP] to be assigned Nominative Case under government from V+I, following Drachman (1992).

Thus according to this analysis the traditional predication structure, with the subject external to the VP, actually holds at S-structure, arising from the subject's movement to satisfy the Case filter. According to Horrocks, this perception of predication structure allows two distinct types of languages: (i) Greek-type languages, including Ergative languages, in which all arguments are generated 'flat' within V' and subjects are then moved to [spec, VP] for case reasons; (ii) English-type languages where the subject-predicate split shows at D-structure and the subject is Case-marked at [spec, IP].

These two types of language are argued to derive from two types of Nominative Case assignment available to UG. That is to say, Greek-type subjects are Case-marked via head government whereas English-type subjects satisfy the case-condition through spec-head licensing. The choice is ultimately said to follow from the strength of the inflection system of the language; a morphologically 'strong' language (MG) opts for the first structural mechanism of Case-assignment while an inflectionally 'weak' language (English) selects the second option. Related to this morphologically-based distinction is a further structural distinction between two subject positions, one external to V' and the other within the V'. Thus if V+I can govern and Case-mark the [spec, VP] position then

all arguments are projected flat within V' and the most 'salient' of them is 'externalized' to [spec, VP], as in Greek-type languages. In effect, this means that Greek has two subject positions, one external to V' (SVO) and one within V' (VSO), following his earlier proposals (Horrocks 1983, 1984). In contrast, if V+I cannot govern and/or assign Nominative Case to [spec, VP] then the subject, generated in [spec, VP] raises further to [spec, IP] to receive Nominative under spec-head agreement, as in English..

Finally, as far as Greek is concerned, there is a further distinction between [spec, VP] and [spec, IP] positions. They can both host subjects but they are structurally different, the former being an A-position in which subjects proper are 'created', the latter being a mixed A-/A' position which serves to host either proper subjects or 'topicalized' subjects.

However, there are some problems with this account. Firstly, subjects are the only arguments which require structural Case in contrast with all others which are said to be inherently Case-marked. But why this has to be so remains unclear; in fact, the opposite situation, i.e. inherent Nominative Case for subjects and structurally Case-marked objects, as proposed by Catsimali (1990), could also work. Horrocks provides no explicitly dicussed motivation for the proposed Case-marking mechanisms.

Secondly, there is no account for the well-known fact that part of the Greek verb morphology expresses the subject argument, thus rendering the occurrence of the full argument NP a pragmatically marked, and indeed statistically infrequent, option (Philippaki 1987, Tzanidaki 1996). Related to this point is also the following: given that MG uses so-called null or pro subjects, the representation in (38) above would allow pro to occur in many different positions. This would result in multiple structural ambiguity which is vacuous.

Thirdly, although I think the proposed flat structure incorporates an interesting insight, it is not at all obvious why the argument structure should be generated in a VSO, rather than, say, SVO order at D-strucutre, as Horrocks suggests. Which criteria is this choice based on? Surely, it cannot be statistical frequency, for currently available statistics do not support that claim at all. In fact VSO is statistically a very infrequent order, representing only 1.1% in Laskaratou's corpus of 2530 clauses (Laskaratou 1984). Horrocks seems to justify VSO as the D-structure representation on the basis of some version of the thematic hierarchy. It is not, however, clear which precise formulation of the thematic hierarchy he assumes. Moreover, what the thematic hierarchy requires is that subjects be projected before objects. Thus, there is nothing to prevent subjects from being placed before verb in an SVO, or SOV arrangement, still in accordance with the thematic hierarchy.

Another problem with Horrocks' account is that it proposes a distinction between two kinds of preverbal subjects: proper subjects occupying the [spec, VP] position in (38)

above, and subject topics in [spec, IP], unlike Tsimpli's and Philippaki's proposals (Philippaki 1985, Tsimpli 1990). According to these two accounts preverbal subjects are always topics. In Horrocks' account, if a subject NP is not a topic, then it will be in [spec, VP]. An example of a sentence containing a subject which cannot be topical is given in B's answer in the exchange shown in (39) below :

(39) A: Ti sinevi; 'What happened?'

B:	O Petros	pire	aftokinito.
	[the Petros]nom	bought-3sgl	[car]acc
	'Peter bought a car.'		

According to Horrocks, the SVO sentence uttered by Speaker B above is an answer to a broad question 'what happened' in which nothing, including the subject, is given from the previous discourse. Thus, since 'o Petros' in (39) above cannot be a topic subject, it is a subject proper. Examples such as (39) above would thus support the distinction between these two types of subjects in MG. Further corroboration of this distinction comes from examples such as the first sentences of novels. Horrocks (1983) quotes the first sentence from a Greek novel.

However, the notion of topic Horrocks assumes to justify the postulated distinction is based on the given-new bipartition. According to this, topics represent 'given' information in relation to foci which constitute 'new' information. It is only this particular sense of topicality which cannot be applicable in a first clause of a novel or in an answer to a general question, since nothing can be taken as relatively given, owing to the absence of a previous context in which the subject in question can be evaluated as a previously accessed piece of information. However, as Siewierska points out, it is only this restrictive and rather controversial perception of topicality which would justify Horrock's distinction between a subject-topic and a subject-proper (Siewierska 1988: 218). In fact, current cognitively-oriented approaches to topicality show that 'givenness' is not even a necessary property of topic. According to the relevance-theoretic approach to the issue (Sperber and Wilson 1986), for example, topics are backgrounding devices which merely reflect the speaker's intention to project their referent as part of the hearer's background, irrespective of the referent being present or indeed recoverable from the previous discourse. In this approach to topicality, nothing would prevent a subject of the first sentence of a novel, or a subject of an answer to a broad question from being the topic,

in the sense that that speaker intends the referent of this subject to be projected as part of a background or contextual premis on which the rest of the utterance builds its effects.

There is also another reason which arguably undermines the postulated distinction between subject-topic and subject-proper. The first sentence of a novel, or, for that matter, the answer to a general question as in (39) above, belongs to the type of 'thetic' propositions, discussed in 4.2 above. In such statements, as already pointed out, the informational content of the clause is all new and we have a kind of broad-focus proposition (a proposition whose every constituent bears focus (De Jong 1981)), or, alternatively, distinctions such as topic-focus are altogether irrelevant and unoperational (Dik et al. 1981)⁷.

6 Non-configurationality and recent linguistic developments

Following the discussion above, plausible though a 'flat' account may be - espesially in the light of empirical evidence for the lack of subject/object aymmetries in Greek - it is clear that there are problems with both Catsimali's and Horrocks' partly flat accounts. Quite apart from that, their 'flat' analyses of Greek has to appeal to a distinction between configurational and non-configurational languages, first proposed by Hale (1981, 1982, 1983), as outlined in section 3.3. This bifurcation, however, appears to be incompatible with current thinking in GB/Principles and Parameters theory, as exemplified by the work of Kayne (1993) and Chomsky (1992, 1993, 1994, 1995).

Kayne (1993) has proposed a theory of word order according to which a strict linearization of elements is governed by their participation in a structural relation, antisymmetric c-command. If an item x anti-symmetrically c-commands y, then x will precede y. This is known as the **Linear Correspondence Axiom**, the technicalities of which need not concern us here. The theory predicts certain word order facts, the core of which is that SVO is the universal underlying order and every other order has to be achieved by means of leftward movement. Clearly such an approach presupposes that a strictly configurational structure will be operational in all languages; in order for the elements of a language to be ordered, they must enter into an antisymmetric c-command relation. However, as I pointed out in section 2 a relation such as c-command is only expressible in terms of a branching configurational structure. In addition, with the Minimalist program, Chomsky (1993), like Kayne, takes the X-bar binary branching

⁷See Sewierska (1991: ch. 6) for details and further references on the issue.

schema to hold universally, word order facts being also derived by morphologically-driven movement.

The second problem with these flat accounts, is that they rely on the architecture of the so-called T-model of the Grammar, shown in (40) below:

(40)	Lexie	con
	Ļ	
	D-str	ucture
	↓ me	ove-a
	S-str	ucture
	move-α ∠	× move-α
	PF	LF

Thus, as seen Horrocks 'flat' account of MG clause structure crucially employs the distinction between D- and S-structure. However, in the Minimalist program, Chomsky provides extensive arguments for dispensing with D- and S-structure, the main point being that they both are conceptually redundant. That is to say, the main motivation for them, i.e. Projection Principle and Theta-theory for D-structure, and surface order and Binding Principles for S-structure can be derived by virtue of a new apparatus, in which the role of Economy is ever increasing. Therefore, only two stages are postulated in the course of a derivation, i.e. Spell Out and LF, as seen in (41) below:

Thus, fully-inflected lexical items, carrying all their verbal and nominal features, are inserted from the lexicon in the syntax to have their features checked along the course of a derivation to LF. At some stage of this derivation, Spell Out takes place which constitutes a phonetic realization of that particular point in the derivation. Thus, the order in which each item is placed in the clause at Spell Out follows from parametrized morphological properties of these items, for movement and placement of an item to a

position is driven by the requirement on lexical items to have their features checked⁸.

In the light of these new developments, then, it is hard to see how such flat accounts of Greek clause structure could be accomodated in a theory of language which: (i) assumes a universal configurational structure, and (ii) rejects D- and S-structure levels of representation.

7 Conclusion

This paper discussed the concept of configurationality, with particular reference to Greek clause structure and word order. Firstly, I presented and evaluated Tsimpli's configurational account of Greek clause structure, and I argued that a number of assumptions and predictions this account makes seem problematic. A main problem of this account is that it is based on a hierarchical distinction between subject and object positions which fails to account for a number of empirical data, such as lack of ECP-effects, weak-crossover, subject-verb idioms, etc. These data seem to support 'flat' accounts of Greek clause structure, such as the ones proposed by Catsimali (1990) and Horrocks (1994). However, these 'flat' analyses, exploiting as they do a universal configurational parameter, were argued to be incompatible with the latest evolutions of the grammatical framework on which they are based.

The picture that emerges, then, is that we need an account of Greek word order able to accommodate the facts of the language and provide a way of distinguishing among orders, thus capturing native speakers' intuitions with respect to the degree of 'naturalness' associated with each order⁹. The point of departure for any such alternative is the belief that word order is a reflex of several interdependent factors, and thus, studying it with exclusive reference to a system of formally generating and representing the various word orders is inadequate.

⁸See, however, Wilder and Cavar (1993) for problems this theory of word order presents in relation to word order variation.

⁹In Tzanidaki (1995) I sketched the broad lines of such an account which involves a dependency-based clause structure following Hudson (1990), complemented by a system of processing-motivated grammatical preference principles in the spirit of Jackendoff (1988). This account is fully-fledged in Tzanidaki (1996).

References

- Abney, S. P. (1987) The English NP in its sentential aspect. Ph.D Thesis, MIT.
- Agouraki, Y. (1993) Spec-head licensing: The scope of the theory. Ph.D Thesis, UCL.
- Baker, M. (1988) Incorporation. Chicago: The University of Chicago Press.
- Barlett, F. C. (1932) Remembering. Cambridge: CUP.
- Brody, M. (1989) Some remarks on the focus field in Hungarian. In J. Harris (ed.) UCLWPL 2, 201-205.
- Burzio, L. (1986) Italian Syntax. Dordrecht: Kluwer.
- Catsimali, G. (1990) *Case in Modern Greek: some implications for the Greek clause structure.* Ph.D. Thesis, Reading.
- Chafe, W. (1987) Cognitive constraints on information flow. In R. S. Tomlin (ed.) Coherence and grounding in discourse. *Typological studies in language* 11. Amsterdam: J. Benjamins, 21-51.
- Chomsky, N. (1965) Aspects of the theory of syntax. Cambridge: MIT Press.
- (1970) Remarks on nominalization. In R. Jakobs and P. Rosebaum (eds) *eadings in English transformational grammar*. The Hague: Mouton.
- (1981) Lectures on government and binding. Dordrecht: Foris.
- (1986a) Knowledge of language: its nature, origin, and use. New York: Praeger.
- (1986b) Barriers. Cambridge: MIT Press.
- (1988) *Generative Grammar, studies in English linguistics and literature*. Kyoto University of Foreign Studies.
- (1991) Some notes on the economy of derivation and representation. *MIT Working Papers in Linguistics* 10, 43-74.
- (1993) A minimalist program for linguistic theory. In K. Hale and S. J. Keyser (eds) *The view from the building 20*. Essays in linguistics in honour of Sylvan Bromberger. MIT Press, ch. 1.
- (1994) Bare phrase structure. Ms.
- (1995) The Minimalist Program. Cambridge: The MIT Press.
- Couper-Kuhlen, E. (1986) An introduction to English prosody. London: Edward Arnold.
- De Jong, R. (1981) On the treatment of focus phenomena in functional grammar. In T. Hoekstra et al (eds) *Perspectives on functional grammar*, 89-116.
- Dick, S. C. (1978) Functional grammar. London: academic Press.
- (1989) The theory of functional grammar. Part I: The structure of the clause. Dordrecht: Foris.
- Dick, S. C. et al (1981) On the typology of focus phenomena in functional grammar. In T. Hoekstra et al (eds) *Perspectives on functional grammar*, 39-74.
- Diesing, M. (1990) Verb-movement and the position of subject in Yiddish. In Natural Language.
- Drachman, G. (1992) Adjunct adjunction and economy. In *Studies in Greek linguistics* 12, Thessaloniki, 225-43.
- Firbas, J. (1981) Scene and perspective. Brno Studies in English 4, 37-79.
- Fukui, N. and Speas, M. (1986) Specifiers and projections. MIT Working Papers in Linguistics.
- Givón, T. (1988) The pragmatics of word order predictability, importance and attention. In M. Hammond et al (eds) Studies in syntactic typology. *Typological studies in language* 17. Amsterdam: J. Benjamins, 243-84.
- (1990) Syntax. A functional typological introduction. Vol. II. Amsterdam: J. Benjamins.
- Haegeman, L. (1991) Introduction to government and binding theory. Oxford: Blackwell.

- Hale, K. (1981) *On the position of Walbiri in a typology of the base*. Reproduced by the Indiana University Linguistics Club, Bloomington Indiana.
- (1982) Preliminary remarks on configurationality. In J. Pustejovsky and P. Sells (eds) Proceedings of NELS 12. Amherst, Mass, 86-95.
- (1983) Walpiri and the grammar of non-configurational languages. *Natural Language and Linguistic Theory* 1, 5-47.
- Hawkins, J. (1983) Word order universals. New york: Academic Press.
- Horrocks, G. (1983) The order of constituents in Modern Greek. In G. Gazdar et al (eds) *Order, concord and constituency*. Dordrecht: Foris, 95-111.
- (1984) The lexical head constraint, X-bar theory and the 'pro-drop parameter'. In W. de Greest and Putseegs (eds) *Sentential complementation*. Dordrecht: Foris.
- (1987) Generative grammar. London: Longman.
- (1994) Subjects and configurationality: Modern Greek clause structure. *Journal of Linguistics* 30, 81-109.
- Horvarth, J. (1986) Remarks on the configurationality-issue. In A. Werner and S. de Meij (eds) *Topic*, *focus, and configurationality*. Amsterddam: J. Benjamins, 65-87.
- Huang, Y. (1982) Logical relations in Chinese and the theory of grammar. Ph.D Thesis, UCLA, Los Angeles, Calif.
- Hudson, R. A. (1990) English Word-Grammar. Oxford: Basil Blackwell.
- Jackendoff, R. (1977) X-bar syntax: a study of phrase structure.
- (1988) Semantics and Cognition. Cambridge: MIT Press.
- Iatridou, S. and A. Kroch (1992) The licensing of CP-recursion and its relevance to the Germanic verbsecond phenomenon. Ms., University of Pensylvania.
- Kakouriotis, A. (1979) Some aspects of Modern Greek syntax. Ph. D. Thesis, SOAS.
- Kayne, R. (1993) The antisymmetry of syntax. Ms. CUNY.
- Kiss, E. (1987) Configurationality in Hungarian. Akademiae Kiado, Budapest.
- (1995) Discourse configuartional languages. New York: OUP.
- Kitawa, Y. (1986) Subject in Japanese and English. Ph.D Thesis. Mass, Amherst.
- Koopman, H. and d. Sportiche (1991) The position of subjects. Lingua 85. North Holland, 211-58.
- Koster, J. (1978) Locality Principles in syntax. Dordrecht: foris.
- Labov, W. (1975) What is a linguistic fact? LISSIE: The Peter de ----idder Press.
- Larson, R. (1988) On the double object construction. Linguistic Inquiry 19 (3), 335-92.
- Laskaratou, C. (1984) The passive voice in Modern Greek. Ph. D. Thesis, Reading.
- (1989) A functional approach to constituent order with particular reference to Modern Greek. In *Parusia journal monograph series* 29, Athens.
- Lasnik, H. (1981) —estricting the theory of transformations: a case study. In N. Hornstein and D. Lightfoot (eds) *Explanation in linguistics: the logical problem of language acquisition*. London: Longman.
- Li, C. and S. A. Thompson (1976) Subject and topic: a new typology of languages. In C. N. Li (ed.), 457-89.
- Mahajan, A. K. (1990) The A/A-bar distinction and movement theory. Ph. D. Thesis, MIT.
- May, R. (1985) Logical form: its structure and derivation. Cambridge: MIT Press.
- Mithun, M. (1987) Is basic word order universal? In R. S. Tomplin (ed.) Coherence and grounding in discourse. *Typological studies in language* 11, 281-328.
- Ouhalla, J. (1988) The syntax of head movement. Ph.D Thesis, UCL.

- Pesetsky, D. (1989) Language particular processes and the earliness principle. Ms. MIT.
- Philippaki-Warburton, I. (1985) *Word order in Modern Greek*. Transaction of the philological society, 113-43.
- (1987) The theory of empty categories and the pro-drop parameter in Modern Greek. *Journal of linguistics* 23, 289-318.
- Pollock, J. Y. (1989) Verb movement, UG and the structure of IP. Linguistic Inquiry 20, 365-424.
- Prince, E. (1981) Towards a taxonomy of given-new information. In P. Cole *Radical Pragmatics*. New York: Academic Press.
- Rizzi, L. (1982) Issues in Italian syntax. Foris: Dordrecht.
- (1990) Relativized minimality. Cambridge: MIT Press.
- -ochemont, M. S. (1978) A theory of stylistic rules in English. New York: Garland Press.
- Rögnvaldsson, E. and H. Thráinson (1989) On icelandic word order once more. In J. Maling and A. Zaemen (eds) *Syntax and Semantics* 24, New York: Academic Press.
- Ross, J. R. (1967) Constraints and variables in syntax. Ph.D Thesis, MIT.
- Santorini, B. (1989) *The generalization of the verb-second constraint in the history of Yiddish*. Ph.D Thesis, Pennsylvania.
- Siewierska, A. (1988) Word orde rules. London: Croom Helm.
- (1991) Functional Grammar. London: Routledge.
- Speas, M. J. (1990) Phrase structure in natural language. Dordrecht: Kluwer.
- Sperber, D. and D. Wilson (1986) Relevance: Communication and cognition. Oxford: Blackwell.
- Sportiche, D. (1988) Clitic constructions. Ms. UCLA.
- Tsimpli, I. M. (1990) The clause structure and word order of Modern Greek. UCLWPL 2, 226-55.
- (1995) Focusing in Modern Greek. In E. Kiss (ed.) *Discourse configurational languages*. New York: OUP, ch. 7.
- Tzanidaki, D. I. (1993) Word-order in Modern Greek. M.A. dissertation, UCL.
- (1995) Greek word order: towards a new approach. In J. Harris (ed.) UCLWPL 7, 247-277.
- (1996) *The syntax and pragmatics of subject and object position in Modern Greek.* Ph. D. Thesis, UCL.
- Valiouli, M. (1990) Anaphora, agreement and the pragmatics of right-dislocations in Greek. Ph. D Thesis, Thessaloniki.
- Wilder, C. and D. Cavar, (1993) Word-order variation, verb-movement and Economy Principles. Sprachwissenschaft in Frankfurt 10, 1-60.