Conjunctions versus discourse markers in Greek: the interaction of frequency, position, and functions in context[1]

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Abstract

Most studies of discourse markers, including the classic Schiffrin (1987), fail to distinguish properly between considerations of local and global discourse organization. The present study argues for the introduction of a distinction between conjunctions and discourse markers, on the basis of each element's contribution to the local binding of discourse as opposed to the global discourse unfolding. This suggestion is based on the analysis of five connectives (alá, lipón, telospándon, and étsi) in Greek, studied in large corpora spanning the two basic discourse continua (Georgakopoulou and Goutsos 1997), spoken–written and narrative–nonnarrative. Typical patterns relating the distribution of connective forms with unmarked or preferred positions and functions in specific contexts were identified. The analysis specifically suggested that connectives that predominantly operate as discourse markers tend to appear in initial position. Furthermore, discourse markers are characterized by a wider range of functions in spoken than in written genres. The suggested distinction between conjunctions and discourse markers concurs with current views on the role of contextualization cues in discourse and has significant implications for the teaching and lexicography of Modern Greek.

1. Introduction

Since the publication of Schiffrin's classic work on discourse markers (1987), research on the tiny linguistic items that help segment and string together units in discourse has proliferated. According to Schiffrin's definition, discourse markers are "textual coordinates of talk that bracket units of it" (1987: 31). This vital role of discourse markers as signposts or frames in the process of discourse organization is widely recognized in discourse analysis. Discourse markers occupy a central place in the

study of text-building mechanisms across genres and languages. This study aims at contributing to the research on form–function relations in discourse by focusing on the roles and uses of a set of connective forms as discourse markers in Greek. Our objective is to uncover the structural and functional properties of these elements and examine their textual and contextual variation. Both these analytic interests have been under-represented in the relevant literature: the role of position in relation to discourse-marker functions is largely overlooked, while the majority of studies focus on one text type, mainly conversations. The starting point of the present study is the comparison of patterns of structure and contextual use across registers. Our analysis is further based on extended corpora of authentic contextualized data. These two conditions of research are indispensable, in our view, for an integral understanding of the role of discourse markers.

The five connectives studied are the traditionally called "adversative" *alá* and *ómos*, and the "resultatives" *lipón, telospándon*,[2] and *étsi*.[3] The semantic area covered by them is equivalent to that covered in English by *but, however*, for the former, and *so, thus, anyway, in this way*, for the latter.[4] The choice of these connectives is, first of all, based on criteria of frequency and saliency in everyday discourse constructions, borne out by qualitative and quantitative analyses of our corpora. As we will suggest below, both their frequency in discourse and their multiple functions indicate that these elements play a crucial role in discourse signalling in Greek. Furthermore, all five connectives exhibit significant similarities in the type of connection they establish. In Redeker's (1990) terms, they can be classified as "semantically rich" connectives as opposed to "semantically simple" ones. The latter category comprises connectives such as *and*, which do not give the addressee information about the specific relation between two units. By contrast, semantically rich connectives follow a different linking strategy by specifying a particular type of semantic relation. In view of the above, the connectives selected for this study can be argued to lie at the heart of discourse connectivity in Greek.

Our framework for illuminating the role of connectives as discourse markers derives from current multilevel views of discourse organization that distinguish between two interrelated but analytically separable activi-ties of connectivity: the linear ordering of discourse connections along a horizontal axis and the projection of this horizontal axis onto an implicit vertical axis (e.g. see Karmiloff-Smith 1985; Berman and Slobin 1994). The former orientation works at the local level of adjacent clauses, that is, relating one clause with the previous and subsequent clause. The latter is concerned with signalling higher-level relations, that is, with how units are grounded in one another and how they are to be understood with

respect to the overarching global organization of discourse. The former can be called local discourse organization and the latter global discourse organization or, following Bamberg and Marchman (1991), *binding* and *unfolding*, respectively. We maintain that connective forms can contribute to the discourse's binding, unfolding, or both. The act of unfolding entails that of binding: when a connective operates at the level of integrating discourse parts into the whole, it creates local ties first. The opposite is not necessarily true: the scope and function of a connective form can be confined in the boundaries of a sentence or successive clauses and not be extended to the creation of more global links between discourse parts. Our category of discourse markers includes only those connective forms that contribute to the unfolding of discourse; other connectives that operate only on a local level are not eligible for this category as advocated in this study. Thus, by our definition, discourse markers are those connec-tives that operate on both a local and a global level. Their function on the local level is shared by all textual elements, as a result of the linearity of discourse.

By introducing a distinction of connectives into conjunction and dis-course markers, more traditional criteria can be incorporated in an overall textual framework. For instance, it has been suggested in the literature (Schiffrin 1987; Fraser 1990) that discourse markers are independent from the sentence configuration, are not bound to any phrases, are commonly used in initial position, usually have little (if any) referential meaning, and do not contribute to the propositional content or truth conditions of their host unit.[5] Although in our analysis we refer to such criteria, it is the contribution of each element in the binding or unfold-ing of its surrounding discourse that guides us in the identification of discourse markers.

The distinction between conjunctions and discourse markers allows us to overcome the heterogeneity in the treatment of discourse markers in the literature, which commonly conflates the local-cohesion with the global-marker definition, thus failing to create a category that is substan-tially distinct from Halliday and Hasan's (1976) interclausal "conjunc-tions."[6] The same heterogeneity of definitional criteria also applies to linguistic elements that originate in other word classes (e.g. verbs, inter-jections, adverbials) and are also characterized as discourse markers. These fall outside the scope of our study; instead, we focus on the word class of conjunctions in order to draw a principled distinction between conjunctions and discourse markers.

Schiffrin's approach is characteristic of the general ambiguity in the definitional criteria of a discourse marker. While her definition postulates that "discourse markers are not dependent on the smaller units of talk

of which discourse is composed" (1987: 37), the analysis is very vague in specifying the nature of these units. As a result, it fails to distinguish between local and global functioning, treating both local and global cohesion connectives as discourse markers. As Redeker (1991) also points out, the definitional criterion of bracketing "discourse units" rather than clauses is not strictly adhered to in Schiffrin's work. Redeker's solution involves postulating the notion of a discourse operator that clearly works at the local level of an utterance, defined as "an intonationally and structurally bounded unit, usually clausal" (1991: 1268). In this way, Redeker's approach systematizes the treatment of connectives and detaches itself from Schiffrin's original aim of operationalizing discourse markers as something more than just connective forms. Schleppegrell (1990), tackling the same gray area, employs the criterion of interactional uses in order to set apart discourse markers from conjunctions. However, she ends up creating an unconvincing and weak distinction between textual and interactional uses as characteristic of conjunctions and discourse markers, respectively. By contrast to the above, our study addresses the problem by invoking a textually based refinement of functions (binding vs. unfolding) that is in line with current research in the area of discourse analysis and is also upheld by developmental studies.

In the light of our definition, textual positioning or placement of a connective is bound to be an essential criterion for deciding on its role as a discourse marker. Our hypothesis is that a discourse marker would occur at the boundaries or endpoints (opening or, less frequently, closing) of higher-level units such as episodes or paragraphs and at transitional locations operating as a signal of shift relative to the preceding discourse. At the local level, initial placement is also a feature of saliency and strategic role. This is in accordance with the widely endorsed view that first position in the linear order of constituents assigns salience to an element (see e.g. Firbas 1992, among others). Initial position is implied in the most widely accepted definitions of markers (e.g. Schiffrin 1987; Fraser 1990; Redeker 1990), but it has not been made clear how it relates to function or, equally, how cases of noninitial position are to be accounted for.

This view of discourse markers assumes that global segmentational use is the dominant function of a discourse marker but need not be its only one. As has been amply shown in the literature, discourse markers, like any other linguistic form in text, as a rule exhibit a multifunctional role. They can, for instance, assume interactional uses, that is, act as a marker of interpersonal relations between addresser and addressee(s) and a signal of the subjective elements of linguistic communication (e.g. feelings, attitudes, stances, etc.). In order to capture this multifunctionality of

discourse markers, it is necessary to refer to a scheme like Halliday's (1985) tripartite division of language meta-functions into *ideational, interpersonal*, and *textual*, as systematized and revised to account for functions in discourse (e.g. Traugott 1982; Fleischman 1990). We have chosen this scheme over Schiffrin's problematic "planes of talk," since it is not unnecessarily restricted to interactional talk. Furthermore, the sequential function is accommodated in a fairly straightforward way and assigned the appropriate salience, and, most importantly, the three functions are defined independently of the markers, while in Schiffrin's model it is not clear whether and how coherence options can be realized without a discourse marker (for a discussion of these points, see also Redeker 1991). Finally, Halliday's scheme is a much more widely accepted account of linguistic functions.

In our approach, the three functions of discourse markers are as follows. The ideational function is concerned with propositional relations: a discourse marker relates two discourse units ideationally, if it specifies a semantic relation that corresponds to its propositional meaning. As already suggested, discourse markers very often do not relate units ideationally but interpersonally and/or sequentially. The interpersonal (or expressive) function refers to the relation of two units according to their contribution to a purpose and the underlying intentions of the text producer to achieve certain effects on the text receiver. In this case, what is prominent in the relation is not the propositional or logical content but the perlocutionary effect of the relation, as well as the indication of interpersonal or social relations between the interlocutors. Finally, Halliday's textual meta-function corresponds to our segmentational or sequential (in terms of Goutsos 1997) function, which has already been suggested as a central part of the definition of a discourse marker (for further discussion, see Georgakopoulou and Goutsos 1997: 83ff.). In our view, the strongest relation established by a marker is not that between the state of affairs or intentions in the two units, but rather lies in the segmentation and stringing together of the units. This segmentational concern, which has already been suggested as the definitional criterion of a discourse marker, is necessarily linear but does not depend on adjacency. It is rather double-edged, comprising the two acts of binding and unfolding: that is, it allows for the sequential signalling of topic shift, continuity, or reintroduction (e.g. after a digression or interruption) and the nonlinear signalling of organizational patterns (see Goutsos 1997 for a detailed treatment of sequentiality). Any other functions of a discourse marker follow upon its global sequential role and are, in this respect, secondary.

To sum up, the basic criteria of identifying an element as a discourse marker in our approach are its contribution to the discourse's unfolding, as appears in its operation on a global level, and its sequential function. Conjunctions, by contrast, are distinguished by the restricted local, propositional role they play in discourse. According to these criteria, the function of *alá* in the first example below is clearly local and propositional, in contrast to its function in the second example, where it assumes a global, segmentational role:

(1) tin kalí omáða ðen tin kánun ta sistímata, *alá* i nootropía.
     'A good team is not made by systems *alá* by mentality.'
(2) B: ímuna ðjo vðomáðes ce káti, ce mja forá móno vríka θési sto tréno.
     A: *alá* eγó vlépo to gózmo, léo pu íne aftí i ánθropi, pos borúne káθe méra!
     B: 'I (recently) spent about two weeks [in Athens], and I only managed to get a seat on the train once.'
     A: *alá* l (emphatic) look at all those people, and say what are those people doing, how can they take this every day?'

In our terms, *alá* functions as a conjunction in (1) and as a discourse marker in (2). The identification of *alá* as a discourse marker is based on its signalling the global discourse topic of the conversation, namely that life in big cities, and especially Athens, is unbearable. By using it, speaker B enhances the main argument in alignment with the other speaker's contribution. As we will argue later in detail, *alá* also has clear interactional properties in this use, in accordance with the noted multi-functionality of discourse markers.

The above assumptions have framed our analysis of the five connectives in Modern Greek. Greek language grammar books have systematically shunned the discussion of the functions or textual positioning of these elements (e.g. Mackridge 1985; Joseph and Philippaki-Warburton 1987; and, more recently, Holton et al. 1997), although, as early as 1946, Tzartzanos, in his distinction between "conjunctions" and "particles," implicitly recognized that their role cannot be accounted for only in terms of the logical relations they establish at a micro-level (1991 [1946]). However, his sweeping category of particles comprises a heterogeneous mix of items, including complementizers (*na*, *θa*), pronouns (*ópu*), interjections (*am*, *de*), etc. Furthermore, no underlying theory can be discerned in Tzartzanos's (1991 [1946]) approach to connectives; his most interesting observations, even if groundbreaking at the time, are intuitive and lack systematic evidence from a wide range of data from different discourse types. Evidence from different discourse types and contexts is also

missing from recent linguistic studies of Greek connectives, which have mostly adopted a cognitive emphasis on the role of connectives in discourse processing (e.g. Nikiforidou 1990; Kalokerinos and Karantzola 1992).[7]

2. Data

The data used in our study were carefully chosen to present significant textual variation by spanning the basic continua of discourse types, namely spoken – written and narrative – nonnarrative (Georgakopoulou and Goutsos 1997). The spoken data comprise narratives and conversations, more particularly a corpus of over 500 everyday narratives (of about 60,000 words), recorded in informal conversations between intimates, and a smaller corpus of conversations (20,000 words) (for details, see Georgakopoulou 1997). The written data come from the European Corpus Initiative (ECI) corpus (for details, see Goutsos et al. 1994a) and is organized into two subcorpora, comprising academic essays and newspaper articles (1.5 million words), on the one hand, and literary narratives (800,000 words), on the other. We have thus made use of a double pairing of four corpora, namely spoken narrative, spoken nonnarrative (conversations), written narrative (literary texts: novels, etc.) and written nonnarrative (essays, etc.).

There is clearly a major discrepancy in the amount of spoken and written data. This is due to the nature of the data and, particularly, the difficulty of collecting and transcribing spoken discourse. The collection of data in electronic corpora has rather increased this gap, since technical developments have allowed the gathering of vast quantities of written material, in contrast to spoken data, for which there is no comparable easy means of collection (Goutsos et al. 1994a). Although we recognize the problems arising from such an imbalance, especially from a statistical point of view, we consider the contribution of spoken material, even if restricted, indispensable for our purposes.

3. Findings

3.1. *Frequency*

The first insights into the genre-specific use of the five connectives were obtained by the count of their frequency. Table 1 presents the frequency of these items per ten thousand words.

Table 1.   *Relative frequency per 10,000 words*

	Spoken narrative	Spoken nonnarrative	Written narrative	Written nonnarrative	Average across corpora
alá	22	95	33.2	25	43.8
ómos	7.1	24	24.7	15.4	17.8
lipón	30.6	16.6	8	4.6	14.9
telospándon	10.8	10.6	0.2	0	5.4
étsi	0.83	0	1.8	7	2.4

Although we lack as yet systematic information about the most frequent words in Greek, comparable to the list given by Sinclair (1991: 143) for English, it can be argued on the basis of Table 1 that the elements under analysis are quite frequent in the four subcorpora, which corroborates our assumption that they are central in the construction of Greek discourse.[8]

As regards the connectives individually, *lipón* and *telospándon* clearly emerge as related to spoken discourse and *étsi* as a written nonnarrative connective. *alá* is very frequent in conversations, while *ómos* shows a preference for written narratives and is least frequent in spoken narratives. As will be shown below, the examination of frequency has a significant bearing on our discussion, because it provides us with the frame in which individual functions and patterns of preference for the five connectives should be interpreted. Any claims about the use of these items as discourse markers must be understood in relation to their distribution in the four subcorpora.

3.2.   Patterns of position

The major problem in establishing the preferred patterns of placement for each connective in discourse concerns the establishment of comparable units of analysis in the spoken and written modes. One of the best-suited models for achieving such a comparison identifies three basic units in spoken discourse, namely the idea unit, the verse, and the stanza (Hymes 1977; Chafe 1980; Longacre 1989). Though postulated for spoken narrative discourse, these units are also applicable to spoken nonnarrative discourse and could be thought of as roughly equivalent to clause, sentence, and paragraph in the written mode. The difference between the two sets of items lies in the criteria used for the postulation of these units: along with syntactic and thematic criteria, intonational criteria are

prominent in spoken discourse, in contrast to written discourse where orthographic criteria also usually apply.

In particular, an idea unit can be defined as an intonation unit that ends with an intonation contour that can be called clause-final. From a syntactic point of view, it is one clause long, usually consisting of one verb phrase and any accompanying noun phrases. While discrepancies between intonational and syntactic fit can occur, in the majority of cases, idea units have the grammatical form of single clauses (see Chafe 1994: 142ff.). A stanza, in turn, represents a thematically constant unit that stands in contrast to prior units by introducing a change of character, event, and/or location in narrative and a change of course of action in nonnarrative (cf. the unit of exchange, Sinclair and Coulthard 1975; and the notion of activity, Heritage and Sorjonen 1994). It thus roughly corresponds to a (short) written paragraph. Finally, a verse covers the intermediate level between idea unit and stanza (Gee 1989).

In this way, it is possible to establish a near equivalence of units with regard to the binding of discourse in the two modes. Our findings below refer to the intermediate verse/sentence level and distinguish three positions within this unit, initial, medial (referring to both position within a clause and interclausal position), and final. Findings at this level are complemented by the analysis of the unfolding of discourse, which requires reference to macro-structural categories such as Labov's (1972) categories for storytelling and Hoey's (1979) patterns of argumentation. The same word of caution should apply to unfolding, too: while frequently employed as part of discourse-analytic work, any comparison between units in the spoken and the written mode is based on the understanding that an absolute equivalence cannot apply, due to the different cognitive constraints in operation in each mode (Chafe 1994: 296ff).

In view of our assumptions about discourse markers, positioning is crucial for (a) distinguishing between a discourse marker and a conjunction and (b) determining the segmentational power of a discourse marker. As regards local placement, some characteristic similarities between *lipón* and *telospándon* appear in Tables 2 and 3. To compare along the same subcorpora,[9] both elements overwhelmingly appear in initial position in spoken narrative, whereas they overwhelmingly appear in medial position in written nonnarrative.

It is important that the two items are found to show an explicit preference for initial position in the spoken subcorpora, where they are also more frequent (see section 3.1). In written discourse, by contrast, where they are less frequent, they show a preference for the medial position. These findings would suggest that *lipón* and *telospándon* are

Table 2.   *Distribution of* lipón *in the four corpora*

lipón	Total	Initial (%)	Medial (%)	Final (%)
Spoken narrative	184	168 (91)	16 (9)	–
Spoken nonnarrative	25	18 (72)	7 (28)	–
Written narrative	1010	373 (37)	563 (56)	74 (7)
Written nonnarrative	580	–	578 (99)	2 (1)

Table 3.   *Distribution of* telospándon *in the four corpora*

telospándon	Total	Initial (%)	Medial (%)	Final (%)
Spoken narrative	65	59 (91)	6 (9)	–
Spoken nonnarrative	16	12 (75)	4 (25)	–
Written narrative	36	19 (51)	11 (33)	6 (16)
Written nonnarrative	1	–	1 (100)	–

prominent discourse markers in spoken discourse. This is supported by the analysis of higher units, which has shown that in a striking majority of cases they are located at paragraph or episode endpoints. In particular, *lipón* is overwhelmingly fronted, while *telospándon* is either the very first or the very last element of a higher-level unit. Furthermore, in half of their instances, their strategic positioning is maximized by their occurrence as separate intonation units. As such, they exhibit an intonational rise that suggests that "there is more to come," or, when unit-final, a sentence-final intonational contour marked by a low fall. This intonational extra coding is an additional salience-creating device for the two markers, which, as will be seen below, is intimately related to their functions.[10]

Comparably, the connective *étsi* as a written discourse marker tends to be situated at the final rather than initial boundaries of higher-level units. This positioning is again intertwined with its sequential function of establishing continuity with and acting as a recapitulatory reference (Longacre 1989) of the prior segment.

The correlation between position and function is also evident in the case of *ómos. ómos*, which, as we will see in our qualitative analysis, was found to be a conjunction in most cases, is as a rule located in the midpoints of clauses and paragraphs. At the level of verse/sentence, *ómos* shows a preference for medial position in all subcorpora, as can be seen from Table 4.

At the level of clausal positioning, *ómos* exhibits an unmarked placement, common to all discourse genres, namely, that of second position,

Table 4.   *Distribution of* ómos *in the four corpora*

ómos	Total	Initial (%)	Medial (%)	Final (%)
Spoken narrative	43	6 (14)	37 (86)	10 (27.5)
Spoken nonnarrative	36	2 (5.5)	24 (67)	
Written narrative	3089	339 (11)	2750 (89)	–
Written nonnarrative	1933	149 (8)	1784 (92)	–

as can be seen from Table 5 (the same finding is suggested in Goutsos et al. 1994b).

On the basis of this data, we would suggest that the placement of *ómos* has acquired a high degree of fixity in the language. We should note here that the figure of 90% for second (clausal) position is particularly significant, since it satisfies the hypothesis of skew versus equi systems, that is, systems in which the frequency of options can be expressed in terms of probabilities as 0.9:0.1 versus those where probabilities are 0.5:0.5 (Halliday and James 1993). In Halliday and James's terms, the distribution of frequencies is a strong indication of markedness in language. In our case, this would mean that in the unmarked case *ómos* has been established as a conjunction that is well integrated into its host clause rather than as a discourse marker. It can be argued that the relatively fixed pattern of distribution is interrelated with the restricted scope and lack of discourse-marker uses of *ómos*, noted in our qualitative discussion below.

Of the five connectives in question, *alá* is the only one that does not occur at final position. It is interesting to note that tendencies of developing a skew system also appear in its distribution, as can be gathered from Table 6.

Here the same skew probability, in the terms mentioned above, appears between initial and medial position in spoken narrative and with the reverse order in written nonnarrative. It is significant that these findings should appear at the opposite sides of the two poles. This would suggest the existence of opposing probabilities for spoken and written discourse,

Table 5.   *Distribution of medial* ómos *in the four corpora*

ómos	Medial	2nd in clause (%)
Spoken narrative	37	29 (78.3)
Spoken nonnarrative	24	16 (66.6)
Written narrative	2750	2545 (92.5)
Written nonnarrative	1784	1608 (90)

Table 6. *Distribution of* alá *in the four corpora*

alá	Total	Initial (%)	Medial (%)
Spoken narrative	132	119 (90)	13 (10)
Spoken nonnarrative	140	114 (81)	26 (19)
Written narrative	4153	1036 (25)	3117 (75)
Written nonnarrative	3146	261 (8)	2885 (92)

tending to establish *alá* in initial position in the former and in medial in the latter, as we found to be the case for *lipón* above. Let us also note here that these probabilities appear in the clearest way in the two subcorpora in which *alá* is less frequent, suggesting thus that the patterns of preference have not as yet been established across genres (see discussion in section 4 below). At higher-level units, *alá* also seems to exhibit both tendencies, that is, to occur in places of maximal shifts and within units showing continuity.

Our analysis of the distribution of connectives has confirmed our assumption that discourse markers are related to initial placement from the perspective of both binding and unfolding. It can be suggested that the patterns of preference for *lipón* and *telospándon*, on the one hand, and *ómos*, on the other, correlate with their tendency to be used as discourse markers and conjunction, respectively. Similarly, although *alá* is syntactically required to be clause-initial, in terms of interclausal position it also tends to occur either at the beginning or in the middle of local-level units.

A further tendency that emerged in the analyses is that in spoken texts discourse markers are almost unexceptionally initialized, that is, positioned in discourse-strategic places. By contrast, in written discourse, second clausal (or medial) position is an equally strong candidate for the placement of a discourse marker. This is nicely illustrated in the case of *lipón*. As can be seen from Table 2, 91% of its occurrences in spoken narrative are initialized. By contrast, in written narrative only 37% of its occurrences are in initial position. More strikingly, there are no instances of *lipón* in clause-initial position in written nonnarrative. Similar evidence can be found in the distribution of *alá*, as discussed above.

A full explanation of this tendency would require a thorough study of connectivity patterns in the discourse types examined. Here, we could tentatively suggest that the difference in positioning of the markers points to different connectivity patterns emerging from the contextual constraints of each modality. As has been found in Georgakopoulou (1995), connectivity in Greek spoken narratives relies on a closed set of signals,

which include shifts in temporal and person deixis to signal new narrative segments. *lipón* and *telospándon* emerge in this study as powerful macroconnectors, compared to the scarcely used temporal and adverbial discourse markers that achieve a more explicit signposting of segment relations.

On the whole, connectivity in Greek narratives instantiates an oral-based, topic-associating style (cf. Gee 1989), which makes up for the reduced use of explicit links by means of a tendency toward greater involvement. By contrast, in written discourse, the analysis of the markers' cooccurrence with other text-building devices has shown that they are normally preceded by nominal phrases, adverbial phrases, and impersonal verbs (usually in passive voice). This is corroborated by studies that have demonstrated that, due to its prototypical features (e.g. decontextualization, lack of a physically present addressee, etc.), written discourse tends to employ a wide variety of lexical and syntactic devices to signal discourse relations (Chafe 1980; Gee 1989). We could assume that Greek written discourse, choosing from a more varied repertoire of devices and working toward maximization of explicitness, does not opt for assigning as much macro-segmentational power to the connectives in question. It thus saves the initial position for other information highlighters.

Finally, the interaction between position and function is clearly evidenced in the placement preferences that bring to the fore an unmarked position for Greek connectives. Significant patterns of preference (such as the preference of *ómos* for medial placement), appearing either in a particular genre or cross-generically, indicate that the use of connectives as conjunctions or discourse markers has been established as part of the system of the Greek language. A diachronic study could illuminate the interaction between functional tendencies and the development of positioning preferences.

4. Functions in discourse

4.1. *lipón* and *telospándon*

In accordance with our objectives, the aim of our qualitative and quantitative analyses was to establish the exact connectivity role of each of the five conjunctions. This required constituency analyses as well as analyses of the patterns of cooccurrence with other text-building mechanisms (e.g. tense/aspect markers, reference, etc.). These analyses suggested, first of all, that *lipón* and *telospándon* function in the majority of their occurrences

as discourse markers. This mainly applies to spoken discourse, and in particular spoken narratives, where they exhibit a typically broader range of functions, mainly textual and interactional ones.

A similar range of functions is shown in written nonnarrative texts, albeit not to the same extent. A typical example from the use of *lipón* as a discourse marker in nonnarrative discourse follows:

(3)   "[...] an ipárçi énas óros pu prépi na δjaγrafí apó to epistimonikó leksilójio, aftós íne i léksi noimosíni." Pos praγmatopiíte *lipón* i γnosticí anáptiksi tu anθrópu ce ti tin eksijí; γnorízume práγmati óti i máθisi apotelúse méχri prótinos [...]
   '"[...] if there is a term that needs to be deleted from the scientific vocabulary, that is the word intelligence." How is *lipón* man's mental development achieved and how is it explained? We know indeed that learning was until recently [...]'

In the example above, *lipón* is used in medial position to indicate a sequential shift, associated with a topic shift. (An additional signal of shift is the use of question.) Contrast (3) with the following example, where *lipón* is exceptionally used as a conjunction:

(4)   aftí i katakórifi ptósi mas δíχni tin metatópisi ton paraγojikón ilikión epoménos o δiktis mas éprepe na prosarmostí ja na min alióni tin praγmatikótita. To katótato ório ton 14 i 15 etón ja ti simetoçí ston OEP ítan anagjéo *lipón*.
   'This steep decline shows us the removal of the productive age group, so our index should be adapted in order not to distort reality. The lower limit of 14 or 15 years for participation in OEP was necessary *lipón*.'

This is a characteristic case in which *lipón* is employed as a resultative conjunction (although segmentational uses cannot be excluded here). A final position for *lipón* is found in only 7% of its instances in written narrative and only 1% (two instances) in written nonnarrative. As suggested in section 3.2 above, this preference for a certain position is not unrelated to its preferred function in discourse.

Comparably, following is an example of a nontypical use of *telospándon* as a conjunction from a written nonnarrative text, indicating an alternative. The item is in medial position.

(5)   étsi, táksis pu ifístande ekmetálefsi δéχonde tin iδeolojía ton ekmetaleftón tus, i *télos pándon* apotinχánun n'anaptíksun mja iδeolojicí apóripsi aftís tis iδeolojías me ámesus órus.

'Thus, social classes that are exploited accept their exploiters' ideology or *telospándon* fail to develop an ideological rejection of this ideology in direct terms.'

In spoken narrative discourse, both *lipón* and *telospándon* overwhelmingly exhibit textual and interpersonal functions at the expense of their ideational role as resultative markers. Their contribution to global segmentation is evidenced in their occurrence at boundaries with shifts relative to the preceding discourse. More specifically, they are both found to operate as hypotactic markers (Redeker 1990), in that they lead into and out of a commentary, correction, paraphrase, aside, digression, interruption segment, etc. Both markers connect asymmetric segments, such as nonaction with action segments in narratives, and only in this direction.[11] In this way, they function as pushes or pops on a focus stack (Polanyi 1988): pushes, when they close a nonaction segment and open a segment that pushes the action forward; pops, when they take the narrative back to the point of action that was interrupted by some kind of a parenthetical segment. In both cases, they signal passage to the story's main event line. It can thus be argued that the instructions they give to the hearers are about integrating information as part of the main event line and not as background to it. In sequential terms, they exhibit a (mild or strong) discontinuity function; they mark changes in perspective and indicate shifts in the relevant context.[12]

The following examples illustrate their common marker uses (cf. Georgakopoulou 1997: 100–103).

(6)   M: ... δem báme mja vólta ce stin ajía parasceví tu léo .. símera;, les; mu léi, ja pAme re peδí mu c'ecí léo, borí na vrúme, ómos borí ce na mi vrúme, ce na púme píγame psáksame c'ecí. *lipón* sikonómaste .. páme ajía parasceví, páme pros ta ci, afú jenikós íne kalí perioçí//
      T: // eγó éleγa na psáksume stim betrúpoli, ná'maste kápu kondá me ti váso, c'éleγa óti δem borúsame n'agjíksume puθená alú. ce tsakoθíkame ce sto δrómo, jatí mu léi i maría na páme ajía parasceví.
      A: oríste θía .. pu teliká ítane δicí su iδé:a-
      T: =c'eγó δe léo //ot 'ítane
      M: //*telospándon* .. páme ci, ksecináme, c'arçízume tóra na psáχnume polikaticía pros polikaticía [further down] ... kápça stiγmí kurastíkame, íçe pái ce mjámisi .. δío pará, .. ptóma c'emís ap'to proí, ce ta peδjá móna tóra, íçe pçási ce to mesiméri. *lipó:n* vlépume ecí-, tin óra pu févγame, mja — afi gjóni, táδe tiléfono.

M: '... why don't we go for a walk to Agia Paraskevi I tell him
.. today? you think so? he says, let's go there too I tell him,
we may find something, or we may not, but at least we will
have gone there and looked. *Lipón* we set off .. go to Agia
Paraskevi, we go to that neck of woods, since it's a good area
on the whole//'

T: '// I was saying that we should go and look in Petrupoli, so
that we can be close to Vaso, and I thought that we couldn't
afford a place anywhere else. And we had a row on the way
there, 'cause Maria was saying that we should go to Agia
Paraskevi.'

A: So there aunt .. it was your idea after all='

T: '=I didn't say // that it was'

M: '// *telospándon* .. we go there, start looking at one block of
flats after the other [further down] at some point we got tired,
and it was half one .. quarter to two, we were knackered, and
the children were on their own, and it was past noon. *Lipón*
we see –, as we were leaving, an ad by "Afi Gioni" ring.'

In example (6), the first *lipón* occurs after a direct-speech segment,
signalling shift to an upcoming action unit. Both *lipón* and *telospándon*
frequently indicate shifts to or out of (characters') speech, in accordance
with their overall sequential role. Comparably, the second *lipón* is a push
of the action after a segment of background commentary. Its occurrence
as a discontinuity marker is highlighted by the tense shift to the narrative
present (*vlépume* 'we see'). In a similar vein, *telospándon* terminates the
addressee's interruption and signals return to the main action. A similar
usc is found in the following extract.

(7) aristerá líɣo gremós .. ce paralía káto párɣa, ðeksiá káti vraχáca,
ce sto ðrómo tóra kséris .. éna χadáci psiló ... meɣálo. *lipón* ecí pu
pijéname kanoniká sto ðrómo, vlépo éna bemvé ... tu kósta to
bemvé ... se kápça fási ce févji ap to ðrómo aeráto, miláme aeráto,
pái me oɣðóða çiljómetra e. pap pái ce béni sto χadáci >kanoniká
kanonikótata>, ce metá apó líɣo .. skó:ni kséris χalíca píso, ce ðe
béfti o kóstas káto//
//parénθesi, ðen ípes óti o kóstas ítan pára polí kalós oðiɣós, ce
bórese na kratísi ti miχaní sto ðrómo
ne pá:ra polí kalos oðiɣós, ísos ítan ce líɣo kolófarðos, ðen
gzérume ... to eksetázume akóma. *lipó:n* se kápça fási vlépume as
púme ton gósta, gap kaválái to pezuláci, bap ksérete .. i miχaní
kódepse na spási sti mési as púme.

'on the left cliffs ... and down in the background Parga beach, on
the right a few rocks, and now on the road ... a big ditch. *Lipón*
as we were driving, I suddenly see a BMW bike ... Kosta's BMW
... and goes off the road swiftly [lit: 'like air'], I mean going off
... "like air," and it goes at sixty miles right. And it goes and falls into
the ditch regular, and soon after ... dust gravel you know, and
Kostas does not fall off//
'//in parenthesis, you didn't mention that Kostas was a very very
good driver and managed to keep the bike on the road=
'=yes very very good driver indeed, maybe he was a bit fluky
too, we don't know about that ... still working on it. *Lipón* at some
point we see Kostas, he hits the barrier, the bike broke in two
you know.

The two instances of *lipón* in (7) above also exemplify shift to the
narrative action after a background commentary and an interruption.
The former occurrence of *lipón* signals passage to the story's climax and
emphasizes the macro-segmentational significance of the upcoming unit.
The latter occurrence reiterates the climactic event after the digression
from it due to a contribution from the audience.

On the basis of their primary sequential function, both *lipón* and
telospándon also gain secondary interpersonal functions. The marking of
sequential narrative segmentation is interrelated with marking the speak-
er's shifts of perspective or orientation toward discourse. This is particu-
larly evident in the occurrences of the markers as closing signals of
addressee contribution. In such cases, the tellers communicate their inten-
tion to regain the floor.

As is typically the case of discourse markers with partially overlapping
distributions (e.g. see Mosegaard Hansen 1997), it is worth noting that
the functions of *lipón* and *telospándon* by no means coincide. Thus,
telospándon commonly exhibits a secondary interpersonal function that
seems to be lacking in the case of *lipón*. It is very frequent in exits from
a subjective context (i.e. evaluate utterances) and entry into narrative
action as a more objective context, as in the following examples:

(8) endometaksí kséris .. kséris .. apó cíni ti stiɣmí ce péra ta práɣmata
mávra, apelpisía, mavríla ce ásta na páne. *telospándon* páme sto
nosokomío, páme sto jatró ...
'and so you know ... from that point onwards everything seemed
bleak, (there was) despair, darkness and all the rest. *Telospándon*
we go to the hospital, we go to the doctor ...'

(9) se kápça fási .. sc mja aristerí strofí, úte pinacíðes úte típota,
>frenáro.. frenáro frenáro<, típota, katalavéno óti óso ce na

frénara ... píjena apénadi, ce pái i psiçí mu stin gúluri, δjakósçus palmús. *telospándon* strívo óso m'épcrnc ...   •
'at some point .. at a left turning, no sign-posting no nothing, I brake .. brake, brake, nothing happens. It hits me that no matter how hard I was going to brake ... I was going to the opposite lane, and my heart starts beating fast, goes up to two hundred pulses. *Telospándon* I turn as much as I could ...'

In (8) above, in addition to its sequential function, *telospándon* marks a shift out of evaluation. In (9) the shift relates to the teller's experiential subjectivity; the narrator briefly steps out of his story to encode his latter-day attitudes and emotive reactions to the events and then cues his stepping back into action with *telospándon*.

An additional difference between *lipón* and *telospándon* is to be found in their particular sequential functions: specifically, *lipón* is more associated with the initial framing of discourse units, whereas *telospándon* is more associated with their closure. The framing capacity of *lipón* is very evident in cases like (10) below, where *lipón* prefaces the telling of a story.

(10)   *lipó:n.* ti éjine tóra ti δéfteri forá sti scáθo, pu írθe mazí mas c'o jánis.
       '*Lipón.* Listen to what happened the second time in Skiathos, when John came with us too.'

This difference is also reflected in the order of the two markers in cases of cooccurrence. As suggested, *telospándon* frequently keeps a turn on its own to emphasize the closing boundary of a segment. Evidence for this is its cooccurrence with *lipón*, which emphasizes the initial point of the upcoming unit:

(11)   páo na pliróso, póso tu léo, ekatón penínda mu léi, ckatón pení::nda tu léo, ekatonpenínda mu léi .. i δío. endometaksí XODRO tóra, pu na plirósis evδomínda pénde δraχmés to frapé, δen éçi ksanajíni. eδó tom blirónume sto kolonáci cftakósçes c'ímaste efχaristiméni. *telospándon. lipón* .. tu skáme ecí δjo katostárika, tu afínume ce purbuár na púme ...
       'I go and pay, I say how much, a hundred and fifty hc tclls mc, a hundred and fifty I tell him, a hundred and fifty he tells me .. for the two. Well UNHEARD of, you just can't pay seventy-five drachmas for an iced coffee [suggesting that the coffee placc was too cheap], this is a first. I mean we pay seven hundred drachmas for a coffee in Kolonaki [smart area in the center of Athens] and we think it's all right. *Telospándon. Lipón* .. wc givc him two hundred, leave him a tip too ...'

As can be seen in (11), *telospándon* marks the closure of the segment that encodes the narrator's reactions to the events narrated, while *lipón* follows it as an opening signal for the new upcoming action unit.

4.2.   *alá*

The role of *alá* varies in relation to discourse type. In conversations, its occurrences as a discourse marker are predominant, as can be seen in the following in extract from a discussion on the pros and cons of living in a city like Athens:

(12)   A: vévea íne fríci.
       B: *alá* óso katévena ce perpatúsa apó ti mja vivlioθíci stin áli, étsi ce perpatúsa káto sto Síndaγma telíose, aftó ítane, δen iθela típote álo.
       B: ímuna δjo vδomáδes ce káti, ce mja forá móno vríka θési sto tréno.
       A: *alá* eγó vlépo to gózmo, léo pu íne aftí i ánθropi, pos borúne káθe méra!
       C: δe borúne =
       B: eména i icojenjá mu íne sti jermanía ce zúne san da zóa. δilaδí zúne oréa *alá* δe vjénune.
       A: 'Of course it's awful [living in Athens].'
       B: '*alá* when I used to go from one library to the other, when I'd walk past Sindagma .. that was it. I didn't have the energy for anything else.'
       B: 'I (recently) spent about two weeks there, and I only managed to get a seat on the train once.'
       A: '*alá* I (emphatic) look at all those people, and say what are those people doing, how can they take this every day?'
       C: 'They can't ='
       B: 'My family live in Germany and they live a dog's life. I mean they have a good life *alá* they don't go out at all.'

In the above example, all the discourse-marker uses of *alá* are turn-initial, in contrast to the use of *alá* in the last turn as a conjunction. It has been argued that *alá* is a common marker of disagreement in Greek conversations, commonly prefaced by *ne* 'yes', as a device for mitigating the dispreferred turn (Tannen and Kakava 1992). However, in (12), there is no disagreement between the speakers. The two discourse-marker uses of *alá* have the sequential function of a floor-securing device that signals the beginning of a speaker's turn as well as a subsequent shift in

orientation within the same topic ("living in a big city"). The same use can be found in (13) that follows. The extract comes from a conversation in a car; there has already been some discussion about a restaurant that one of the speakers strongly recommends:

(13)   A: tóra páme pros to cédro to pistévete
      B: *alá* áma to sistínis na kanonísume na páme.
      A: 'We're now heading towards the center of the town, do you believe this?'
      B: '*Alá* if you recommend it [i.e. the restaurant], we should arrange to go there.'

Here again, *alá* is used as a discourse marker to signal the sequential status of return to a previously introduced topic and thus to highlight the significance of the upcoming part.

In contrast to the above, the majority of the uses of *alá* in written discourse are purely localized and thus conjunctive. Some typical examples of this are (14) and (15) below, from written narrative and written nonnarrative discourse, respectively:

(14)   ... óçi epiδí íme i aravonjasticá tu Aciléa, *alá* jatí íme cenúrja.
      '... not because I'm Achilles' fiancée, *alá* because I'm new in the group.'
(15)   [=(1)] tin kalí omáδa δen tin kánun ta sistímata, *alá* i nootropía.
      'A good team is not made by systems *alá* by mentality.'

Note that in both these examples *alá* is found in medial position, syntactically embedded in nominal groups. Initial *alá* in nonnarrative discourse may also be localized, as in example (16):

(16)   Méso tis katanóisis ton sinartíseon enós epimérus ciménu pros aftá ta sínola íne δinatí ce i katanóisi tu meriku. *alá* ce i katanóisi tu jeniku proipoθéti me ti sirá tis tin katanóisi mjas olótitas merikón periptóseon.
      'Through understanding the connections of a particular text with these wholes it is possible to understand the particular. *Alá* the understanding of the general also presupposes in its own turn the understanding of the totality of particular cases.'

However, as we can see from example (17) below, *alá* may also be used in nonnarrative discourse as a discourse marker to indicate sequential shift:

(17)   [...] prostatévi ton θeorúnda tóso apó ton cínδino na apolési tin aksía tu práɣmatos. óso ce na ipovaθmísi ti ɣlósa tu anθrópu pu katanoí ce erminévi [...]

alá as δúme pos orízi iδikótera o Gadamer to nóima tu θeorú ce tis θeorías.
'[...] protects the beholder from both the danger of losing the thing's value and that of undervaluing the language of the person who understands and interprets [...]
'*alá* let us see how Gadamer defines more particularly the meaning of beholder and beholding.'

Note again that *alá* cooperates here with other kinds of signalling such as paragraphing and advance labelling (see Goutsos 1997) to indicate the sequential shift. Finally, *alá* may be used in initial position to achieve the indication of an interpersonal relation between text units as in the following:

(18)   Isos, ótan o Habermas θéti to próvlima ja ti sínδesi me tis zondanés paraδósis, na δiafénete kápça morfi kritikís alilegjíis me ti filosoficí erminefticí. *alá* to próvlima íne an ta provlímata tis neotericís epoçís borún na liθún, an δimiurjiθí mja ijiís scési me tin paráδosi.
      'Perhaps, when Habermas poses the problem of relation to living traditions, there appears a certain form of critical allegiance with philosophical hermeneutics. *alá* the point is whether the problems of modernity can be solved if a healthy relation to tradition is created.'

In example (18), *alá* does not indicate an ideational antithesis between the two sentences of the extract ("the point is ..." is not in contrast with "there appears"), but rather signals a pragmatic opposition to the illocutionary force of the previous section.[13]

4.3.   *ómos*

The connective *ómos* differs from the rest of the connectives under analysis in that it functions as a conjunction in the overwhelming majority of its uses in all discourse types examined. More specifically, it is in most cases confined at the boundaries of interclausal relationships and lacks a macrosegmentational power. This happens both in initial position and in the — much more frequent — medial position, as seen in the following examples from written narrative ([19], [20]) and spoken discourse ([21]):

(19)   Anarotçótan an éprepe na milísi s'aftón ton ánθropo. *ómos* ton íçe voiθísi ce fenótan éksipnos.
      'He was wondering if he should talk to this man. *ómos* he had helped him and looked smart.'

(20)   ... sineçízi o δiikitís me patrikó ífos. An *ómos* os to proí válιs`
mjaló páli eδó· ímaste ...
'... the chief constable continues in a paternal manner. If *ómos*
until morning you get into your senses here we are ...'

(21)   A: o tácis íçe tiz δicés tu parées, ítan álos típos//
Takis: vjéname *ómos* ce me tiz δicés su parées
A: 'Tacis would hang out with his own crowd, he had his own
life-style//'
Tacis: 'we used to go out *ómos* with your crowd too.'

In spoken discourse, the conjunction *ómos* may be preceded (immediately or not) by *alá*. The cooccurrence of the two connectives emphasizes the signalled relation of contrast, as can be seen in (22), which comes from the same conversation as (21):

(22)   A: *alá* ómos eγó se θimáme me tis parées tis sostés
'*alá* ómos I remember you hanging out with the right sort
of people.'

Most occurrences of *ómos* follow similar patterns of use, indicating its overall functioning as a conjunction in Greek.

4.4. *étsi*

The connective *étsi* was not found to be a salient discourse marker in spoken discourse. In written discourse, although more frequent, it as a rule exhibits a restricted scope in the confines of a sentence, as in example (23) below from nonnarrative written discourse:

(23)   Aftó ómos mas oδijí anapófefκta s'enan fávlo cíklo, δjóti ja na
vro ti méθoδo, prépi na χrisimopiíso íδi mja méθoδo pu ipotíθete
pos kséro. [...] *étsi* i érevna ja ti méθoδo katandá χorís nóima, afú
psáχnume na vrúme káti pu íδi ksérume ce óçi káti pu δen ksérume
[...]
'This, however, inevitably leads us into a vicious circle, since in
order to find the method I already have to use a method that I
supposedly know [...] *Etsi* the search for a method loses its meaning, since we are searching for something we already know and
not something we do not know [...]'

This is a typical use of *étsi* as a resultative conjunction, even if not confined within the boundaries of a single sentence.
In fewer cases, initial *étsi* functions as a discourse marker. In these

cases, it is important that it is not always easy to discern between the indication of a sequential shift and the ideational use to support a relation of exemplification, as can be seen in example (24):

(24)   Enó o orizmós ce idjétera i erminía tis énias tis iδeolojías eksartáte
katá polí apó ti jenicí θeoriticí andílipsi ecínu pu tin andimetopízi,
δen ipárçi kamjá δjafonía óson aforá tin proélefsi tu óru. *étsi* o
Hans Barth stin arçí tis praγmatías tu perí iδeolojías periγráfi ton
óro os eksís [...]
'Whereas the definition and, particularly, the interpretation of the
notion of ideology depends to a great extent on the general theoretical perception of the person who treats it, there is no disagreement
as regards the origins of the notion. *Etsi* Hans Barth at the
beginning of his treatise on ideology describes the notion as
follows [...]'

In the example above, *étsi* not only relates the propositions of the two sentences it connects but also indicates a clear sequential shift, opening a new thematic section.

5. Discussion and conclusions

We have attempted to capture the discourse behavior of a number of connective elements in Greek, by analyzing their frequency and distribution across four different corpora, as well as by identifying their patterns of positioning and the functions associated with them. Our findings regarding frequency and position indicate that the five elements under consideration exhibit varied patterns: *lipón* and *telospándon* are primarily found in initial position in spoken genres and in medial position in written genres. The same applies to *alá*, which exhibits a tendency for a medial, intrasentential position in written discourse. The other two connectives show opposite tendencies: *ómos* prefers medial position in its typical spoken environments, whereas *étsi* is found in initial position and written genres. Our analysis of the functions preferred by the connectives in question suggests that the uses of *ómos* are mainly related to binding, whereas those of *lipón* and *telospándon* are related to the unfolding of discourse. *alá* and *étsi*, on the other hand, contribute equally to binding and unfolding. In particular, with regard to the unfolding of discourse, *alá* commonly plays an ideational role that is closely related to its contrastive meaning. *lipón* and *telospándon* present a wide range of sequential

and interpersonal discourse-marker functions, mainly operating in spoken narrative discourse.

Table 7 summarizes our findings, in terms of preferences, matching preferred genres with the most frequent positions of occurrence, and typical functions (as conjunction or discourse marker).

Our analysis as outlined in Table 7 suggests that there are specific patterns of preference for each one of the Greek connectives, with regard to distribution, position, and function. More particularly, our analysis of connectives in the four subcorpora suggests that certain placement and function patterns are valid across discourse types. The most prominent of these involves the lack of discourse-marker functioning in the case of ómos, as well as its clause-second position. Other patterns have also emerged in our analysis, as indicated in Table 7. The overall interaction between position and function suggests that similar placement patterns (as e.g. between alá, lipón, and telospándon) relate to similar roles in discourse. Elements that show relative mobility with a tendency to be fronted in spoken discourse predominantly occur in the middle in written discourse and function as discourse markers. By contrast, elements with relative fixity in discourse tend to be used as conjunctions. Our quantitative analysis has further indicated that patterns of preference are influenced by relative frequency and distributed in different ways across genres, as we will further discuss below.

It must be stressed here that these findings refer to predominant and not exclusive patterns of preference. Our analysis should thus not be stated in absolute terms but as indicative of prototypical or probabilistic patterns. This probabilistic view links with our assumption about the multifunctionality of discourse elements (cf. Goutsos 1997). Our approach to the use of connectives as discourse markers regards these items as signals of discourse that act as both clues provided by the speaker-writer and cues addressed to the listener-reader (Goutsos 1997: 164–166). In this property, they call upon the addressers' and addressees' background knowledge, assumptions, sets of associations, and expecta-

tions or frames. The frequent cooccurrence of our discourse markers with specific prosodic marking in spoken discourse and thematic and orthographic signals in written discourse is further evidence for their use as contextualization cues (Gumperz 1992). Discourse markers are produced and interpreted in relation to a host of other types of signals functioning in a typically synergistic way (Goutsos 1997: 82–86; cf. Ferrara 1997). By these means, a redundancy of coding is achieved that synchronizes signalling on different levels in order to facilitate the process of inferencing.

Without entering the gray area of the computability of functions, we can thus suggest a picture of how discourse markers contribute to human communication. In particular, the interlocking of frequency, position, and function, as evidenced in our analysis in the preferred patterns of position, can be thought of as a major device developed to facilitate inferencing and understanding. Let us note here that this view seems to be comparable with pragmatic approaches such as those adopted within relevance theory (Blakemore 1987; Jucker 1993), according to which discourse connectives such as but and so carry procedural and not conceptual information about the inferential role of communication.[14] Nevertheless, our interest here has been discourse-analytic rather than cognitive or pragmatic, and, as a result, our emphasis has been on accounting for the role of connectives in relation to specific contexts of occurrence rather than as a result of abstracted pragmatic principles.

The interaction of genre with position and function has also been found to be important in our analysis. The differences between patterns of preference are primarily the outcome of variation in the spoken–written dimension. For instance, while discourse markers were found to be strategically positioned at lower and higher level units in the data, there was an overwhelming tendency for discourse markers to be fronted in spoken discourse. Written discourse showed a preference for medial positioning. An account of this may relate to Redeker's (1990) claim that there is a trade-off in the frequency with which ideational and pragmatic (i.e. nonideational, interactional) markers are used: if speakers choose to use many pragmatic markers, they should not find it necessary to be as explicit about the ideational relations these express. This play between implicitness and explicitness is interrelated with the listeners' participation and constant feedback in spoken discourse. In spoken discourse, participants are under cognitive and interactional pressure to manage their contributions so as to hold onto the floor and to constantly negotiate actions and meanings with their coparticipants. By contrast, written discourse, due to the lack of immediate feedback from the addressee and the availability of planning time, tends to be more explicit in the signalling

Table 7. *Preferred position and functions of connectives in relation to genre*

alá	spoken nonnarrative	initial	discourse marker
	written	medial	(sequential, ideational)
ómos	spoken nonnarrative	medial (2nd)	conjunction
étsi	written nonnarrative	initial	no preference
lipón	spoken narrative	initial, medial	discourse marker
			(sequential, interpersonal)
telospándon	spoken narrative	initial	discourse marker
	spoken nonnarrative		(sequential, interpersonal)

of ideational relationships between units and to rely less on the functional versatility of discourse markers.

Most importantly, however, our research has suggested that a multigenre analysis is necessary in order to account fully for the role of elements in discourse. In our study, the function of connectives was found to relate to sets to contextual factors that cannot be reduced to a single spoken–written analysis. A significant role is played by text-type distinctions, which are in our case encapsulated in terms of narrative and nonnarrative, a distinction that increasingly appears to gain in importance in discourse studies (see Georgakopoulou and Goutsos 1997). The concern of the speaker or writer to reconstruct a narrative action or to model a nonnarrative entity proved to affect the choice of contextualization cues and their patterns of occurrence. Thus, elements such as *lipón* and *telospándon*, which have a range of discourse functions, are associated with narrative contexts in contrast to *ómos* and *étsi*. Furthermore, preferences of placement seem to be more clear-cut in genres at the endpoints of our data like spoken narrative and written nonnarrative rather than in intermediate subcorpora (see e.g. the distribution of *alá*).

Our findings should be related to the developing structure of Greek discourse in diachronic terms. Our analyses attest to Traugott's (1982) widely endorsed view of the tendency of certain language expressions to move from propositional toward textual and interpersonal meanings. Recourse to the etymology of the connectives in question can support such a process. Items that are now more remote from the ideational–propositional core have developed from primarily propositional uses: *lipón* derives from the nominal phrase *to lipón*, meaning 'the rest' and *telospándon* from a lexical phrase, functioning originally both as an indicator of purpose and a summarizer.[15] On the other hand, connectives such as *alá* and *ómos* that stay closer to a propositional meaning have followed a less complex route, having derived from adjectives developed to adverbs (*állos–álli–állon*: other > *alá*, *hómoios-a-on* > *ómios-omía-ómion*: similar > *ómos*), in the direction that Traugott (1982) predicts. Our findings would suggest that *alá* is still in the process of developing pragmatic meanings, although at a rather stable pace related to individual genres. By contrast, *ómos* does not show any considerable evidence of development: its relative fixity in a certain position reflects this stability and projects minimal or no further movement.

The most characteristic example of the process toward nonpropositional meanings is *étsi*, derived from an adverb of manner (*útos*: thus) and coexisting with the more frequent adverbial uses (see note 3). As noted in our qualitative analysis above, its ideational and sequential meanings are still not clearly differentiated. This would indicate that the

item is in a process of change, expected to acquire more pragmatic functions in the future. More research into the historical aspects of the language is needed, along with closer investigation of the interaction with issues of semantic change (Veloudis 1997). However, this study's results firmly suggest that Greek connectives show the tendency to move from more accessible, physical, or propositional areas of meaning toward less accessible, structural, or expressive-subjective meanings (cf. Sweetser 1993). Our identification of an increased drive toward textual and interactional functions exhibited by the connectives in spoken discourse would also seem to support the view that face-to-face spoken discourse is a prime site for this process of pragmatic change. We can assume that this is due to its prototypical features such as the speakers' increased involvement with the message and the interactants and their tendency toward implicitness and greater variation of functions.

Finally, the present analysis has a wide range of applications, especially in the area of language teaching and learning. Cross-generic studies of real data are crucial means for testing assumptions about language use and creating pedagogical material that is not divorced from everyday usage (see Biber et al. 1994). Thus, the area of teaching of Modern Greek as a foreign language could significantly profit from approaches like ours. This is particularly evident in view of the fact that materials for Greek language learning do not reflect the distributional frequencies and functions of language items in authentic language situations, for example by giving equal weighting to marginal or rare and significant or common patterns and devices (cf. Beeching 1997).

While it cannot be expected that current teaching materials should reflect up-to-date linguistic findings, it is not unreasonable to suggest that some of the issues raised in our study could be taken into consideration. In the teaching of Modern Greek, both introductory textbooks (Arvanitakis and Arvanitakis 1994) and learners' dictionaries (Stavropoulos 1988) show a disturbing lack of naturalness and almost no sensitivity to the discourse conditions of connective elements. As we show in Georgakopoulou and Goutsos (i.p.), this is due to the traditional mechanistic approach that is still preferred over the discourse-communicative methods of teaching. The emphasis on authentic instances of discourse rather than invented material is imperative as a means of reorienting teaching practice to actual patterns of use in a multiplicity of genres. These actual patterns reflect the interaction of frequency, position, and functions, as unravelled in this paper, and, in our view, are indispensable in authentic teaching and lexicographic material. In turn, this enquiry presupposes sensitivity to the ways in which grammatical items function in discourse and interact with contextual parameters. Our present study

is intended as a contribution to a growing line of research with this emphasis.

Notes

1. A much earlier version of this paper was presented at the 16th Annual Meeting on Greek Linguistics (Thessaloniki, Greece, 1995) and was included in the Proceedings (Georgakopoulou and Goutsos 1996). We would like to thank two anonymous reviewers of *Linguistics* for their most insightful comments. Correspondence address: Dionysis Goutsos, Department of Foreign Languages and Literatures, University of Cyprus, P.O. Box 537, CY 1678 Nicosia, Cyprus. E-mail: dionysis@ucy.ac.cy.

2. The connective originates in the meta-discourse lexical phrase *télos pándon* 'end of all', which is also the commonest way of spelling in our corpus. Here, we follow the one-word spelling variant on the basis of synchronic considerations.

3. We should note that we are only interested in the connective *étsi* and not in the other basic use of the word traditionally described as an adverb of manner, shown in the following phrases from our corpora. (It was suggested to us that a more appropriate description of *étsi* in these phrases would be "demonstrative adverb.")

   (i)   ...ipirétisa ti Meɣáli Ciria: *étsi* apokalún tin omáδa tis Juventus stin Italía.
         '... I served in the Grande Damme: *étsi* they call the team of Juventus in Italy.'

   (ii) ... ópos ci o Kriós, *étsi* ci o Léon borí na ekpémbi mja sineçí posótita enérjias.
         '... like Aries, *étsi* Leo can transmit a continuous amount of energy.'

4. Stavropoulos (1998), not very helpfully, gives the following translations: *alá* = 'but, yet, however', *ómos* = 'but, yet, still, however, nevertheless, though', *lipón* = 'so, then, therefore, consequently, well, now then, now', *telospándon* = 'anyway', *étsi* = 'like this, in this way', etc. It is clear that, as shown in Goutsos (1997: 124), in authentic translated texts, there is no one-to-one mapping of the individual words, but multiple or "zigzag" patterning of the corresponding areas in the two languages, involving also elements like *yet*, etc., in English, and *ostóso, entútis*, in Greek. This is one of the reasons why we avoid an English translation of the connectives in our presentation.

5. It would be misleading to suggest that all these criteria are well defined and agreed upon. For instance, whether certain discourse markers are truth-conditional or not has been a controversial issue, in particular in the cognitively oriented literature. Doubt has even been cast upon the universal validity of sentence-initial position for discourse markers (Ferrara 1997: 376). In addition, there is no agreement on how all the different elements that have been characterized as discourse markers (e.g. conjunctions, parenthetical expressions, sentence adverbials, interjections, etc.) relate to each other, let alone if they are all discourse markers.

6. According to these criteria, the category of discourse markers significantly overlaps with that of "connectives" in Halliday and Hasan's (1976) framework, and especially the category of "void connectives" (see Goutsos 1997: 51). It also includes elements from both categories of "discourse adjuncts" and "conjunctions," in Halliday's (1985) terms.

7. The same can be said of Archakis (1996), who considers the function of discourse markers as "reflexive."

8. It is interesting to compare the above findings to the relative frequency per 10,000 words of *but, so, now,* and *well* in the 18 million Cobuild corpus: this is 16.4, 9.6, 5.6, and 5.3, respectively, making these elements occupy the 21st, 42nd, 68th and 70th position in the frequency count of the most frequent 113 forms in English (Sinclair 1991: 143). This would seem to suggest that discourse markers are quite frequent across languages.

9. For comparisons across subcorpora, we would have to resort to tests of statistical significance, something that is necessary but, for lack of space, is reserved for another occasion.

10. For a similar view about the American English *like* as a discourse marker, see Miller and Weinert (1995). Similar claims are made about *anyway* in Ferrara (1997).

11. This is a much more precise description of their discourse function than simply suggesting that they mark progression and transition, as Brewster (1991) suggests for *lipón*.

12. See Payne (1992) for a comparable finding about a marker in Yagua narratives. See also Mosegaard Hansen (1997) for a similar finding for the French *alors*.

13. Compare this to Sweetser's (1993) discussion of *but* in English.

14. However, see Rouchota (forthcoming) for a challenge to this view, within relevance theory.

15. This dual meaning relates to the ambiguity of *télos* in the lexical phrase, whose original meaning in Greek was that of (ideational) 'purpose' before developing that of the (sequential) 'terminal' or 'ending point'.

References

Archakis, Argyris (1996). δíktes oryánosis tu lóɣu: to *δilaδí* ce i sçési tu me sinafís ekfrásis [Markers of discourse organization: *δilaδí* and its relation with relevant expressions]. Unpublished Ph.D. dissertation, University of Thessaloniki.

Arvanitakis, Kleanthis; and Arvanitakis, Froso (1994). *Communicate in Greek*, vols. 2 and 3. Athens.

Bamberg, Michael; and Marchman, Virginia (1991). Binding and unfolding: towards the linguistic construction of discourse. *Discourse Processes* 14, 277–305.

Beeching, Kate (1997). French for specific purposes. The case for spoken corpora. *Applied Linguistics* 18(3), 374–394.

Berman, Ruth; and Slobin, Dan (1994). *Relating Events in Narrative: A Crosslinguistic Developmental Study*. Hillsdale, NJ: Erlbaum.

Biber, Douglas; Conrad, Susan; and Reppen, Randi (1994). Corpus-based approaches to issues in applied linguistics. *Applied Linguistics* 15, 169–189.

Blakemore, Diane (1987). *Semantic Constraints on Relevance*. Oxford: Blackwell.

Brewster, Christopher (1991). Discourse and relevance: the case of Modern Greek *lipon*. *Studies in Greek Linguistics* 12 (Thessaloniki).

Chafe, Wallace L. (1980). The deployment of consciousness in the production of a narrative. In *The Pear Stories: Cognitive, Cultural and Linguistic Aspects of Narrative Production*, Wallace L. Chafe (ed.), 9–50. Norwood, NJ: Ablex.

—(1994). *Discourse, Consciousness and Time. The Flow and Displacement of Conscious Experience in Speaking and Writing*. Chicago: University of Chicago Press.

Ferrara, Kathleen W. (1997). Form and function of the discourse marker *anyway*: implications for discourse analysis. *Linguistics* 35(2), 343–378.

Firbas, Jan (1992). *Functional Sentence Perspective in Written and Spoken Communication.* Cambridge: Cambridge University Press.

Fleischman, Suzanne (1990). *Tense and Narrativity: From Medieval Performance to Modern Fiction.* Austin: University of Texas Press.

Fraser, Bruce (1990). An approach to discourse markers. *Journal of Pragmatics* 14, 383–395.

Gee, James Paul (1989). Two styles of narrative construction and their linguistic and educational implications. *Discourse Processes* 12, 287–307.

Georgakopoulou, Alexandra (1995). Narrative organisation and contextual constraints: the case of Modern Greek storytelling. *Journal of Narrative and Life History* 5, 161–189.

—(1997). *Narrative Performances. A Study of Modern Greek Storytelling.* Amsterdam and Philadelphia: Benjamins.

—; and Goutsos, Dionysis (1996). Connectives as discourse markers in Greek. In *Studies in Greek Linguistics* 16, 411–422 (Thessaloniki).

—; and Goutsos, Dionysis (1997). *Discourse Analysis: An Introduction.* Edinburgh: Edinburgh University Press.

—; and Goutsos, Dionysis (i.p.). *Clmeno ce epicinonia* [Text and Communication]. Athens: Ellinika Grammata.

Goutsos, Dionysis (1997). *Modeling Discourse Topic: Sequential Relations and Strategies in Expository Text.* Advances in Discourse Processes 59. Norwood, NJ: Ablex.

—; Hatzidaki, Rania; and King, Philip (1994a). Towards a corpus of spoken Modern Greek. *Literary and Linguistic Computing* 9(3), 215–223.

—; King, Philip; and Hatzidaki, Rania (1994b). I χrísi ton corpus sti leksikoγrafía ce periγrafí tis Néas Ellinicís [The use of corpora in the lexicography and description of Modern Greek]. *Studies in Greek Linguistics* 15, 843–854 (Thessaloniki).

Gumperz, John (1992). Contextualization and understanding. In *Rethinking Context*, Alessandro Duranti and Charles Goodwin (eds.), 229–252. Cambridge: Cambridge University Press.

Halliday, M. A. K. (1985). *An Introduction to Functional Grammar.* Oxford: Edward Arnold.

—; and Hasan, Ruqaiya (1976). *Cohesion in English.* London: Longman.

—; and James, Zoe (1993). A quantitative study of polarity and primary tense in the English finite clause. In *Techniques of Description: Spoken and Written Discourse*, John Sinclair, Michael Hoey, and Gwynneth Fox (eds.), 32–66. London: Routledge.

Heritage, John; and Sorjonen, Marja-Leena (1994). Constituting and maintaining activities across sequences: *and*-prefacing as a feature of question design. *Language in Society* 23, 1–29.

Hoey, Michael (1979). *Signalling in Discourse.* Birmingham: University of Birmingham.

Holton, David; Mackridge, Peter; and Philippaki-Warburton, Irene (1997). *Greek: A Comprehensive Grammar of the Modern Language.* London: Routledge.

Hymes, Dell (1977). Discovering oral performance and measured verse in American Indian narrative. *New Literary History* 8, 431–457.

Joseph, Brian; and Philippaki-Warburton, Irene (1987). *Modern Greek.* London: Croom Helm.

Jucker, Andreas (1993). The discourse marker *well*. A relevance-theoretical account. *Journal of Pragmatics* 19, 435–452.

Kalokerinos, Alexis; and Karantzola, Eleni (1992). *Ma, ómos, alá.* Opsis tis andíθesis ston kaθimerinó lóγo. [*Ma, ómos, alá.* Aspects of contrast in everyday discourse]. *Studies in Greek Linguistics* 13, 391–407 (Thessaloniki).

Karmiloff-Smith, Anita (1985). Language and cognitive processes from a developmental perspective. *Language and Cognitive Processes* 1, 61–85.

Labov, William (1972). *Language in the Inner City.* Philadelphia: University of Pennsylvania Press.

Longacre, Robert E. (1989). Two hypotheses regarding text generation and analysis. *Discourse Processes* 12, 413–460.

Mackridge, Peter (1985). *The Modern Greek Language. Descriptive Analysis of Standard Modern Greek.* Oxford: Oxford University Press.

Miller, Jim; and Weinert, Regina (1995). The function of *like* in dialogue. *Journal of Pragmatics* 23, 365–393.

Mosegaard Hansen, Maj-Britt (1997). *Alors* and *donc* in spoken French: a reanalysis. *Journal of Pragmatics* 28, 153–187.

Nikiforidou, Kiki (1990). Enandiomatikés protásis, praγmatolojía ce γramaticés iδjeteró-tites [Contrastive sentences, pragmatics and grammatical particularities]. *Studies in Greek Linguistics* 11, 205–224 (Thessaloniki).

Payne, Doris (1992). Narrative discontinuity versus continuity in Yagua. *Discourse Processes* 15, 375–391.

Polanyi, Livia (1988). A formal model of the structure of discourse. *Journal of Pragmatics* 12, 601–638.

Redeker, Gisela (1990). Ideational and pragmatic markers of discourse structure. *Journal of Pragmatics* 14, 367–381.

—(1991). Linguistic markers of discourse structure: review of *Discourse Markers* by D. Schiffrin. *Linguistics* 29, 1139–1172.

Rouchota, Villy (forthcoming). Procedural meaning and parenthetical discourse markers. In *Discourse Markers*, Andreas Jucker and Yael Ziv (eds.). Amsterdam: Benjamins.

Schiffrin, Deborah (1987). *Discourse Markers.* Cambridge: Cambridge University Press.

Schleppegrell, Mary (1990). Paratactic "because." *Journal of Pragmatics* 16, 291–306.

Sinclair, John (1991). *Corpus, Concordance, Collocation.* Oxford: Oxford University Press.

—; and Coulthard, Malcolm (1975). *Towards an Analysis of Discourse.* London: Oxford University Press.

Stavropoulos, D. N. (1988). *Oxford Greek-English Learner's Dictionary.* Oxford: Oxford University Press.

Sweetser, Eve (1993). *From Etymology to Pragmatics. Metaphorical and Cultural Aspects of Semantic Structure.* Cambridge: Cambridge University Press.

Tannen, Deborah; and Kakava, Christina (1992). Power and solidarity in Modern Greek conversation: disagreeing to agree. *Journal of Modern Greek Studies* 10, 11–34.

Traugott, Elizabeth C. (1982). From propositional to textual to expressive meanings; some semantic-pragmatic aspects of grammaticalisation. In *Perspectives in Historical Linguistics*, W. P. Lehmann and Y. Malkiel (eds.), 245–271. Amsterdam: Benjamins.

Tzartzanos, Achilleus (1991 [1946]). *Neoelinicí Síntaksis* [Modern Greek Syntax]. Thessaloniki: Kyriakides.

Veloudis, Ioannis (1997). Opposing human experience to universal quantification (in Greek). Paper presented at the 3rd International Greek Linguistics Conference, Athens, 25–27 September, 1997.