

MODAL VERBS: TYPOLOGY AND CONCEPTUALISATION IN GREEK AND ENGLISH

EVANGELINE MANIKA
Hellenic American Union, Athens
manike@tellas.gr

ABSTRACT

The purpose of this paper is to compare the Greek and English conceptual categories of directives and conclusions so as to present the cognitive dimension of cross-linguistic influence in Foreign Language Learning (FLL). This comparison entails a *tertium comparationis*, namely, a taxonomy based on cross-linguistic semantic categories, which share comparable linguistic expressions. *Modality*, being a general cross-linguistic semantic category, lends itself to the requirements of a comparative tool. A cross-linguistic discussion of modality, however, is not limited only to those aspects that comprise the knowledge of these linguistic units and the rules of joining them together at the level of sentence. It also seeks to anticipate possible difficulties Greek EFL learners may encounter while using specific English modal verbs in a variety of contexts, which situationally constitute representations of different conceptual aspects of the speech acts of directives and conclusions. Hence the emphasis is on the pragmatic component as well. The cognitive perspective is borne out by viewing certain English modal verbs and their Greek counterparts as interconnected members of conceptual categories, i.e. Idealised Cognitive Models (ICMs; Lakoff 1987), being run through by the unifying element of *force* (Talmy 1988).

KEYWORDS: modal verbs; cognitive pragmalinguistic comparison; directives; conclusions; transfer.

1. Introductory remarks

As the main objective of the present article is a linguistic comparison between English and Greek, it is necessary to clarify which direction this comparative analysis will take so as to avoid the criticism the classical Contrastive Analysis (CA) received in the past. The negative reaction against it was mainly due to the fact that it claimed it could predict the learners' errors by comparing the native language (NL) and the target language (TL).

Similarities between the two languages were considered facilitative to learning, while differences were thought to be inhibitory to the learning process. Thus, the role of *transfer* was rather controversial, since in the case of convergences, the contribution of transfer was taken to be positive, while in the event of divergences, it was conversely judged to be negative.

Studies of transfer, however, which identify a cognitive dimension in this process (Kellerman 1979, 1983; Gass 1983; Zobl 1980a, 1980b; Sharwood-Smith 1979), support the learners' decisive role in *what* to transfer. Thus, contrary to CA's strict claim about the bidirectionality of transfer, differences and similarities are dependent on the direction of learning. In other words, learners do have their own share in the decision making process of what is transferable (Zobl 1980a).

Taking issue with classical CA, this venture is aimed at a cognitive grounding of the cross-linguistic approach with regard to modality. In particular, the comparison concerns modal verbs used in the English and Greek speech acts of directives and conclusions.¹ As such, the whole idea of comparing and contrasting is revisited within a pragmatics framework with a psychological underpinning. The implication is that CA will include a comparison of communicative functions – language in use – and it will be approached from a psychological perspective, since transfer has a psychological dimension (Kellerman 1995). Furthermore, the position advanced refers to a broadening of the field of cross-linguistic inquiry so as to gain insights into the development of L2 pragmatic competence. This is deemed necessary, as pragmatic competence is not subordinated to knowledge of grammar. Effective communication in the foreign language (FL) requires acquiring both linguistic and pragmatic competence so that EFL learners can produce and understand the speech acts dictated by the sociopragmatic constraints of the situations in which they are involved (Bardovi-Harling 1999: 686). So the aim of the comparison will be to outline the role of L1 knowledge and the role of L2 knowledge in the creation of the relevant interlanguage, in terms of the cognitive dimensions this knowledge acquires when packaged inside conceptual wholes – i.e. *Idealised Cognitive Models* (ICMs; Lakoff 1987) of directives and conclusions. It is convenient at this point to explain these terms. The former are speech acts concerned with making an attempt to bring about a particular action and include orders, advice, asking for permission, etc. (Vanderveken 1998: 171). The latter consist in representing an actual state of affairs (Vanderveken, 1998: 171).

The next section briefly outlines the cognitive theoretical framework along the lines of which the speech acts of directives and conclusions constitute Idealised Cognitive Models unified by the element of *force*.

¹ Salsbury and Bardovi-Harlig (2000) report that the expression of modality has been shown to have important pragmatic functions (Blum-Kulka 1989; Coates 1987; Faerch and Kasper 1989; House 1989; House and Kasper 1981, 1987; Stephany 1995; von Stutterheim 1993).

2. The ICMs of directives and conclusions

Following Rosch (1973, 1975), Cognitive Linguistics postulates that all linguistic units are arranged in semantic sets or categories. Along such lines directives and conclusions constitute conceptual categories, i.e. they are systems made of concepts. In keeping with this argument, they can be taken to constitute Idealised Cognitive Models (ICMs; Lakoff 1987). These models are conceptual categories characterised by the relations of intension and extension (Seiler 1993: 116).² Centrally located in each of these categories is its prototype. This is the most typical member linguistically representing each category's most characteristic semantic property. In this respect the prototypical example of a category is that in which cluster all the prototypical features, i.e. those specifying an item as the best exemplar, and as such it is assigned full membership. Less prototypical or non-prototypical members have a degree of membership, which is proportionate to the amount of prototypical features they possess (Cruse 1990). In other words, membership in a set does not depend on a series of equally weighted criteria, which must be met by all instances to the same degree. It is rather a matter of gradation, established by the number of features shared by more or less central members (Rosch 1973, 1975). Consonantly, the members of the category of directives and conclusions, by demonstrating prototype effects, do not all have equal status. Moving away from the centre towards the periphery of the categories, less prototypical members are found, i.e. peripheral or atypical exemplars (Taylor 1993: 208). The schematic representation of English and Greek directives and conclusions is fully compatible with all their members. It is indeed a single super-ordinate abstraction, a schematising *force* acting as a unifying element of all the semantic properties included in these categories. However, the fact that these categories are graded themselves entails linguistic members with gradable semantics. As such, each of the linguistic members is mentally represented by a sub-schema instantiating by degree the semantic specificities of this particular exemplar.

2.1. The notion of "degree" in the conceptualisation of directives and conclusions

Langacker (1987: 59–60) refers to prototypical items as the ones which are the most thoroughly entrenched in the cognitive system. Given as well that prototypes are characterised by cross-linguistic spread of use, acquisitional priority by children and generalisation of their use for less or non-prototypical instances (Seiler 1993: 116), the suggestion is that an L2 prototype can also exhibit the aforementioned kinds of behaviour

² It has been said that to know the meaning of any expression that denotes a natural kind is to know its intension: its defining property (Lyons 1995: 92). The extension of a term or expression is the class of entities that it defines (Lyons 1995: 82).

in Foreign Language Learning (FLL). The prototypical member of a semantic category in a specific language is a linguistic marking of a property featuring in the centre of a schematic representation of a concept, as this is formed in the minds of the speakers of the particular language community. As such, prototypes are linguistic instantiations matching central abstract aspects of scene construal (Langacker 1987: 39), as a result of the mental operations involved in conceptualising.

The “degree”, therefore, to which certain semantic characteristics are shared by linguistic members of conceptual categories (ICMs) is a key feature in Langacker’s process of scene construal (1987) as it is inextricably involved in their conceptualisation. Let us see how this idea of “degree” defines the rank of each modal verb within the internal structure of directives and conclusions. In this attempt we draw on Talmy’s (1988) notion of *force-dynamics*, whereby the linguistically delimited set of modal verbs is analysed in terms of a structured whole governed by the element of *force*. Metaphor is the cognitive mechanism responsible for the transferring of force from the physical domain to the language domain (Johnson 1987; Sweetser 1991), wherein *deontic* and *epistemic* modal meanings are described in terms of forces. In particular, the notion of force represents the speaker’s intentions in the deontic domain or the force of the evidence in the epistemic domain. Counteracting this force is another force or combinations of forces.

The rank of each modal verb within the internal structuring of directives and conclusions is a function of its force. Thus, central to these categories are the members denoting the highest strength of deontic and epistemic force. These are the best exemplars of the categories in the minds of the native speakers at a given time. Arranged around these prototypical members are those which extend from them in various directions. Consequently, the way that the English modal verbs (*must, should, may*) as well as the Greek modal verbs (*πρέπει, μπορεί(ς)*) differ among themselves, when seen as parts of cognitive wholes (ICMs of directives and conclusions), unified by the common element of force, is in principle the varying degrees of force inherent in the semantics of each one of them. The point is that the modal verbs representing the conceptual content of force will also constitute a scalar ordering of options representing the range of graded linguistic variation (Seiler 1993: 116). As a result, force itself is taken, here, to define these ICMs as graded categories. Consonantly, Huddleston and Pullum (2002) as well as Halliday (1994) in their discussion of modal verbs have employed the notion of a continuum or scale along which the meanings of modal verbs are ranked, according to the degree of deontic manipulation or of epistemic certainty they denote. Huddleston and Pullum (2002: 175) call it strength of commitment (i.e. prototypically the speaker’s commitment) to the factuality or actualisation of the situation. They identify three types of strength: high, medium and low. By the same token, Halliday (1994: 358) also draws a parallel distinction (i.e. high, median, and low). Halliday, however, calls the degree of commitment *value*. The distribution of modal verbs along the two scales of these linguists is broadly the same.

The next section explains how the degree of *membership* in these categories is further underpinned by the way the strength of force³ interacts with other concept-features.

2.1.1. Force and expected realisation of directives and conclusions

Along with force, another concept-feature defining the categories of directives and conclusions is that of *expected realisation* of the content of the proposition. The suggestion in this paper is to employ henceforth the terms *expectorealisable* and *non-expectorealisable* to denote expected realisation and non-expected realisation, respectively, of the content of directives and conclusions. *Expectorealisability* is somehow a gradable notion. The different grades are a function of the pressure exercised by the speaker's authority (*manipulative force*) in directives or the authority of the evidence (*epistemic force*) in conclusions. Different strengths of force entail different kinds of expectorealisability. In directives, the grade of expectorealisability decreases symmetrically and increases inversely as the pressure reduces (weakening of strength) when moving from orders to advice and then moving from advice to permission-granting, respectively. In conclusions, it merely decreases proportionately to the lowering of strength of certainty when moving from strong certainty to medium and then to low certainty statements.

2.2. Language use and conceptualisation: symmetry and effects

Before pursuing similarities and dissimilarities between the Greek and English ICMs of directives and conclusions, it is necessary to consider what is involved in a particular instance of language use, so as to define the prototypical members in each category both in Greek and in English.

Langacker (1987: 65) refers to the process of matching a linguistic expression with a conceptualisation as "coding". This comes to fruition with the selection of a target structure, which is deemed by the speaker appropriate for the specific purpose, under the specific circumstances. There are, however, a number of constraints involved in the process of selecting a particular instance of language use. These include:

- the amount of information considered relevant by the speaker;
- the aspects of the conceptualisation the speaker chooses to focus on;
- the speaker's social relationship to the hearer;
- the speaker's assessment of the amount of the hearer's knowledge of the context and the notion to be imparted;

³ The term *strength* is considered more relevant for the discussion of the various degrees of force represented by the modal verbs, as it bears a conceptual kinship to this idea. It is, therefore, adopted in the presentation of the various degrees of force henceforth.

- the expression's integrativeness with the context;
- the speaker's desired effect on the hearer.

When there is a perfect match between the conventional unit in the grammar of a language and the specific choice of language use, then we can speak of “legitimation” of the usage. Langacker (1987: 66) calls this proportionate matching “sanctioning”, and he adds that since there are degrees of conventionality (i.e. how grammatical a choice is), this coincidence of usage and conventional unit is not always symmetrical, in that there can be instances of language use that deviate from conventional units.

It can also be claimed that there are degrees of “transparency” of a linguistic unit, that is how clear, with regard to understanding the degree of expectations concerning the actualisation of a proposition, a choice is. Again the implication is that the matching of usage and “transparent” unit is not always perfect since there can be instances of conceptualisations requiring semantically less “transparent” linguistic choices.

In a nutshell, the range of prototypicality, as this is exhibited by the linguistic instantiations of the semantic properties of a graded category, is characterised by the qualities of “conventionality” and “transparency”. These are also graded proportionately to the degree of strength coded by each modal verb. This implies a gradient transition from a more preferred (conventionalised) to a less preferred (unconventionalised) and from a more transparent to a less transparent, with symmetrically graded options in between. A more detailed presentation of this idea is undertaken below.

3. Expectorealisability and prototypicality in the Greek and English ICMs of directives and conclusions

This section investigates the inner structuring of the Greek and English conceptual categories of directives and conclusions in order to identify how their core and periphery overlap or differ. The vehicle for this purpose is a comparison of the way Greek and English come to linguistically realise various aspects of their cognitive make-up. Linguistic similarities and differences will possibly reveal overlapping and digressions with regard to their conceptual constitution. The aim is to show how a theory of transfer can be applied to a cognitive comparison of the modal verbs used by Greek and English in the speech acts of directives and conclusions whereby the notions of categories, image-schemata and prototypes are intertwined.

Central to this venture is the way Greek and English handle the previously mentioned parameter of Langacker's scene construal when it comes to high and medium strength of force. The way the two languages realise linguistically these concepts differs in certain respects.⁴ Such asymmetries may mask conceptual differences. According to

⁴ Conversely, the low strength of force concept being similarly realised in both languages (by the modal verb *may* in English and by the modal verb *μπορεί(ς)* [*bori(s)*] in Greek) is not of particular interest in the present paper. Therefore, no mention will be made to it.

this parameter, the speaker's sense of force and of the ensuing expectorealisability or reduced expectorealisability, being dependent on his/her perceived estimate of certain situational factors, triggers the use of a particular modal verb.

In this light, the issue of pragmatic competence becomes topical and underpins the need to investigate how particular and well-defined interlanguage development relates to pragmatics. As a consequence, it is necessary to discuss first the relation of transfer to "conventionality", and secondly, the relation of transfer to semantic "transparency" by drawing on Cognitive Linguistics theory again. The argument goes that transfer intersects L1 and L2 prototypical relationships of linguistic members within the ICMs (Clark and Clark 1977). The next section discusses *membership* and prototypical relationships first within the Greek and then within the English ICMs so as to identify "conventional" and "transparent" members in them. The underlying assumption is that transfer is a gradable concept (Kellerman 1995: 134) whose extent can be measured in terms of the degree of "conventionality" and of the degree of semantic "transparency" (Gass 1983) of the modal exponents.

3.1. Greek ICMs of directives and conclusions

Within the Greek ICMs of directives and conclusions the high strength zone appears to be conflated with that of the medium strength, forming a complex semantic sub-whole served linguistically by the prototype *πρέπει* (*prepi*). The implication is that this modal verb, because of its pragmatically-regulated variability of strength, occupies a semantically wide area. This extends from the centre to the pre-periphery – before the periphery, which is covered by *μπορεί(ς)* (*bori(s)*) – of the ICMs (see Figure 1).

More specifically, the Greek modal verb *πρέπει* is used to express strong or medium strength of deontic manipulation (examples 1, 2) or of epistemic certainty (examples 3, 4). As a result, the notions of expectorealisability and reduced expectorealisability tied with the idea of force are semantically built in *πρέπει*.

- (1) Πρέπει να πάς μια βόλτα. Είσαι κουρασμένος και χρειάζεσαι διάλειμμα.
'You must go for a walk. You are tired and you need a break.'
- (2) Πρέπει να πάς μια βόλτα όταν τελειώσεις τα μαθήματά σου.
'You should go for a walk when you finish your homework.'
- (3) Ο «Μονομάχος» πρέπει να είναι καλή ταινία. Κύττα όλους αυτούς που στέκονται στην ουρά για να την δούν.
'*Gladiator* must be a good film. Look at all those people queuing up to see it.'
- (4) Ο «Μονομάχος» πρέπει να είναι καλή ταινία. Όσοι την είδαν είπαν ότι τους άρεσε.
'*Gladiator* should be a good film. People who saw it said they liked it.'

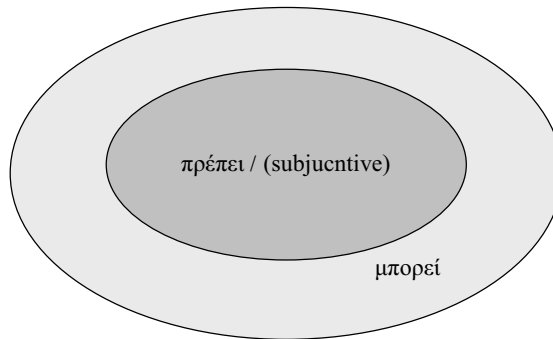


Figure 1. The interior of the Greek ICM of directives.

Within a cognitive framework, the fact that the same form is used to denote different strengths of force and, by entailment, different degrees of expectorealisability in a variety of circumstances, has a significant bearing on the image-schema evoked to describe this semantic characteristic. When pragmatic constraints dictate the use of *πρέπει* in its “strong” version then it is a full instantiation of the image-schema of compulsion,⁵ i.e. the most characteristic type of the force image-schema. Coding high strength of manipulative force and epistemic certainty, it entails high expectations of compliance with the directive or verification of the belief stated in the conclusion. In this sense, *πρέπει* is the most representative modal verb for expressing the idea of expectorealisability. This relation of full compatibility between the specifications of the image-schema and *πρέπει* entails full “sanctioning”. Figure 2 presents schematically the structured whole of the force of compulsion whereby a dark arrow depicts an actual force vector and a broken arrow symbolises a potential force vector or trajectory (see examples 1 and 3).

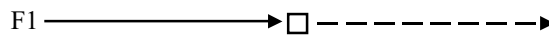


Figure 2. Compulsion.

When used to express medium strength of force, *πρέπει* carries with it implicit tones of reduced expectorealisability. This hint of reduced expectorealisability can underpin the

⁵ This sense matches the image-schema of *compulsion* described by Johnson (1987: 45–47). In particular, compulsion is presented as one of the seven force structures whose operation is ever-present in our socio-physical functioning. Johnson supports the view that everyday experiences in our socio-physical world are constantly subject to the exertion of different degrees of power originating in various sources (physical – wind, water; or social – family, professional relations).

claim for regarding the relatively “weak” sense of *πρέπει* as relatively “less transparent” than the “strong” sense. The idea is that the implicit tones of non-actualisation of either a directive or of a conclusion add some sort of “opacity” to the sense here. By entailment, when used in its “weak” sense, *πρέπει* is not the most conventional unit of expressing either strong obligation or strong commitment to the truth of a proposition, i.e. the most characteristic type of directives and conclusions, respectively.

On this view, choosing this particular instance of language use for ordering or strongly asserting the truth of a conviction does not fully correspond to the specifications of the image-schema of *compulsion*. Consequently, there is not full “sanctioning” either, since the speaker’s judgement is not fully compatible with all the “varied constraints inherent in the situation” (Langacker 1987: 66). The sanctioning as such is said to be partial and, by entailment, it can be synonymous with inaccuracy (Langacker 1987: 69). In this vein, the sense of *πρέπει* matches the image-schema of *counterforce*. Here, F1 stands for the force exercised by the speaker (i.e., moral, social/legal expectations – directives) or the force of the evidence (conclusions), and F2 stands for the internal force exercised by the hearer (i.e., hearer’s resistance to meet the expectations in directives possibly counter-acting the speaker’s imposition of authority) or for the force of evidence in conclusions originating in different sources from those of the existing evidence (possibly neutralising its effect; examples 2, 4; see also Figure 3).



Figure 3. Counterforce.

3.1.1. Distinguishing between different forms expressing the same meaning in L1 (*πρέπει* vs. the subjunctive)

The existence in Greek of the *subjunctive* mood, used alongside with the modal verb *πρέπει* to express directives, further necessitates looking at the concepts of expectorealisability and reduced expectorealisability from the L1 point of view. This mood expresses the speaker’s attitude towards the prepositional content of the utterance (Veloudis and Philippaki-Warburton 1983; Philippaki-Warburton and Veloudis 1984; Veloudis 1987). The utterance *να φύγεις!* ‘you must/should go’ expresses the speaker’s evaluative judgement (obligation, manipulation, desire, intent, etc.) with respect to the content of the proposition *εσύ φεύγεις* ‘you go’ (Givón 1993). The *subjunctive*, as well as the *imperative*, is future-projecting and as such it is associated with *irrealis*⁶ (Givón

⁶ Semantically, *irrealis* refers to “non-actualised” events or states (Mithun 1995: 382). Bybee (1995) suggests that *irrealis* is a simple, uni-dimensional semantic feature, essentially dependent on the logician’s binary distinction of “real” (*realis*) vs. “unreal” (*irrealis*). The failure of *irrealis* to abide by this simple

1993). It also indicates less immediacy than the *imperative*⁷, which has been described as the grammaticalisation of this notion (Veloudis and Philippaki-Warbuton 1983: 153). Consider the examples:

- (1') Να πάς μια βόλτα. Είσαι κουρασμένος και χρειάζεσαι διάλειμμα.
'Go for a walk. You are tired and you need a break.'
- (2') Να πάς μια βόλτα όταν τελειώσεις τα μαθήματά σου.
'Go for a walk when you finish your homework.'

In (1') and (2'), the subjunctive mood is used, broadly, to express advice. It could be claimed, however, that the subjunctive in (1') is not the same pragmatically as the subjunctive in (2'). In Greek, the degree of immediacy expressed by the subjunctive is a function of situational constraints, namely of the power relations between the participants. Comparatively speaking, the subjunctive can either approximate the use of the imperative or of *πρέπει*, thus bearing out the reversibility of Slobin's contention, i.e. the distribution of (the same) concepts across (different) forms. In this connection, it can be possibly assumed that the subjunctive mood is the result of an elliptical form from which the modal verb *πρέπει* is missing. Thus, if attempted to be intralinguistically translated as *πρέπει*, (1') and (2') would read as (1) and (2) in which *πρέπει* naturally reads as the missing (elliptical) information.

- (1) (Πρέπει) να πάς μια βόλτα. Είσαι κουρασμένος και χρειάζεσαι διάλειμμα.
'You must go out for a walk. You are tired and you need a break.'
- (2) (Πρέπει) να πάς μια βόλτα όταν τελειώσεις τα μαθήματά σου.
'You should go out for a walk when you finish your homework.'

The fact that the use of the subjunctive mood (*να* + verb forms) in Greek is pragmatically regulated, and can thus code either high or medium manipulative force, lends credence to the claim for considering it, in its situationally strong version, as an alternative to the prototype *πρέπει* in the Greek ICMs of directives and conclusions. As for its situationally "weaker" version (when contextual factors dictate a medium strength usage), this can be seen as an extension from the sanctioning unit, whether this is *πρέπει* or the subjunctive.

nary distinction of "real" (*realis*) vs. "unreal" (*irrealis*). The failure of *irrealis* to abide by this simple logical definition is taken as a ground for rejecting its unified category status.

⁷ The imperative signals a sense of "temporal closeness/proximity" with regard to the realisation of the directive issued and as such it is prototypically used to express orders (Clairis and Babiniotis 1999: 39). However, depending on pragmatic factors, this mood is characterisable by some latitude in its strength reflected in the functionality it has, either as an order or piece of advice (Figure 5a).

In this vein, in (1') and (1) the necessity of going for a walk is stronger than in (2') and (2), since the interlocutor is tired and consequently he/she needs a break. In a context, however, of a parent talking to his/her child, these directives could very well be situationally softened and sound less commanding (Huddleston and Pullum 2002: 177); see also Figure 5a), without disregarding immediacy of the need.

In (2'), on the other hand, the necessity of going out is less strong since the speaker believes it is better for the interlocutor to go for a walk after he/she has finished studying. Thus here, there is no pragmatic weakening and the subjunctive is indeed used to convey advice (see Figure 5b).

The framework in which these concepts have been formulated so far needs a slight modification in order to be able to accommodate cases where the strength of certain modal exponents is not constant, but varies and depends on the pragmatics of the utterance, i.e. the way in which we use language in context. The assumption is that whether the Greek modal verb *πρέπει* in directives and conclusions or the subjunctive is used with a high or a medium strength in coding directives, or whether these modal devices entail expectorealisability or reduced expectorealisability, is a matter of situational reading. Similarly, with *πρέπει*, the image-schema matching the “strong” and the “weak” version of the subjunctive is that of compulsion and counterforce, respectively.

The issue of differentiating between high and medium strength of deontic and epistemic certainty will also be pursued in English in order to establish whether and in what form these strengths exist in this language. Establishing whether this conceptual contrast is linguistically distinctively expressed or remains “oblique” in L2 as well aims to delimit the scope of similarity between the two languages. Cases of divergences can be possibly held responsible for the difficulties facing Greek EFL learners, when using *must* and *should* in the speech acts of directives and conclusions.

3.2. English ICMs of directives and conclusions: distinguishing between forms expressing similar meaning in L2 (*must* vs *should*)

Within the English ICMs of directives and conclusions, the sub-area of high deontic manipulation and of high epistemic certainty, respectively, contains features of maximum necessity and sufficiency, i.e. strong pressure exercised by the authority of the speaker in directives, or strong pressure exercised by the evidence in conclusions. This pressure results in the maximisation of expectorealisability. The modal verb, which is mapped onto this sub-concept both in directives and conclusions is *must*. Consequently, this is the most conventional modal verb for expressing high strength of force. The image-schema matching this sense is compulsion (the same as that matching *πρέπει* in its “strong” version). There is full compatibility between the specifications of the image-schema and *must* and by entailment full “sanctioning”. It is also noteworthy that in *must* the idea of non-compliance with the directive or of non-verification of the conclusion is rather not debatable. As such, the position advanced is that the sense of *must* can be re-

garded as “transparent”. The high strength of force in orders and the high strength of force in strong certainty statements results in “clearly” understanding the high degree of expectations with regard to the realisation (expectorealisability) of the proposition. It consequently leaves no room for “opacity” concerning the meaning of *must* (1a, 3a).

(1a) You must go out for a walk. You are tired and you need a break.

(3a) *Gladiator* must be a good film. Look at all those people queuing up to see it.

The English modal verb *should*, on the other hand, being weaker⁸ than *must*, as it is used for advising (2a) and expressing medium strength of certainty (4a), carries with it implicit tones of reduced expectorealisability. This hint of reduced expectorealisability can underpin the claim for regarding *should* as “less transparent” than *must*. The idea is that the implicit tones of non-actualisation of either a directive or of a conclusion add some sort of “opacity” to the sense of *should*. Here, expectorealisability is reduced. Given the “weaker” strength of force, it is not the most “conventional” unit of expressing either strong obligation or strong commitment to the truth of a proposition, i.e. the most characteristic type of directives and conclusions, respectively.

(2a) You should go out for a walk when you finish your homework.

(4a) *Gladiator* should be a good film. People who saw it said they liked it.

On this view, choosing this particular instance of language use for ordering or strongly asserting the truth of a conviction does not fully correspond to the specifications of the image-schema of compulsion. Consequently, there is not full “sanctioning” either, since the speaker’s judgement is not fully compatible with all the “varied constraints inherent in the situation” (Langacker 1987: 66). The sanctioning as such is said to be partial and, by entailment, it can be synonymous with inaccuracy (Langacker 1987: 69). In this vein, the sense of *should* (2a, 4a) matches the image-schema of counterforce (the same as that matching *πρέπει* in its relatively “weak” version).

Moreover, since a category is defined in terms of prototypicality, the class membership of *should* is measured in relation to the perceived similarities that enable the speaker to view this linguistic unit as “an extension” from the prototype *must*, in the ICMs of directives and conclusions. Therefore, the medium strength coding English

⁸ Various researchers have commented on the relationship between *must* and *should*. Wierzbicka (1987:35) describes it as one of “degree”: “both are said to express obligation, but this obligation is said to be weaker in the case of *should* than in the case of *must*”. Halliday (1970) explains *should* in terms of obligation and *must* in terms of compulsion, whereas Leech (1987) explains *must* in terms of both obligation and compulsion, seeing in *should* rather a weakened obligation. In Huddleston and Pullum’s (2002: 175, 186) as well as in Halliday’s scales (1994: 357), *must* ranks first, showing maximal deontic manipulation and epistemic certainty. Compared to *should*, it codes stronger manipulation and certainty while *should* less strong (weaker).

modal verb *should* is placed between the central *must* and the peripheral *may*, in the English ICMs of directives and conclusions (see Figure 4).

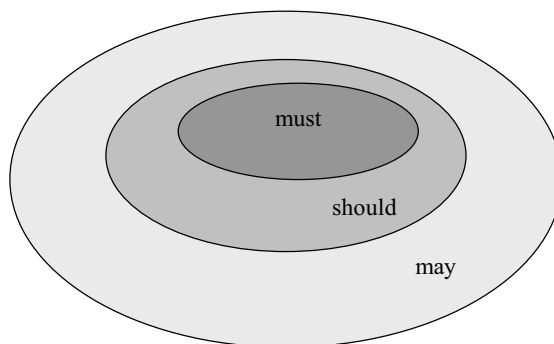


Figure 4. The interior of the English ICM of directives and conclusions.

It is of interest that when it comes to *may*, the representative modal verb of low strength *modality*, the amount expectations concerning the realisation increases inversely to the weakening of strength in directives while it decreases proportionately to the lowering of strength in conclusions.

The next section discusses the nature of the distance perceived between L1 and L2, so as to specify how predictive this distance can be in relation to transfer from L1 to L2. This venture will further help us gain insights into how Greek learners' EFL learning can be affected.

3.3. Typological distance between L1 and L2

This comparative discussion is motivated by the fact that, unlike English, in Greek the semantics of the modal verbs *must* and *should* are morphologically packaged in one modal verb, i.e. *πρέπει*, in which both the idea of expectorealisability, as well as that of reduced expectorealisability are built. Pertinent to the *must–should* relative contrast is also the translatability of the Greek modal verb *πρέπει*. Whether it is translated in English as *must* or *should* is a matter of situational reading of the utterance, i.e. pragmatics.

As mentioned already, the Greek speaker also has at his/her disposal the subjunctive mood to express directives. Similarly to *πρέπει*, this mood tends to behave neutrally. So, in order to distinguish whether their strength is high or medium, it is important to direct the cross-linguistic examination to the semanticopr pragmatic aspects of the similarities and differences. In this connection, two questions arise. One concerns the intra-

typological, and the other – the inter-typological, cognitively-grounded comparison. Both of them branch out as follows:

- (1) In the intra-typologically comparative framework, the question is about the context of situations that influences the construing of directives and conclusions as either denoting high or medium strength of force. For instance, in producing English directives and conclusions, what are the situational factors that lead Greek EFL learners to conceive *πρέπει* as carrying expectorealisability undertones – “high degree of expectations concerning the realisation” of the proposition; or alternatively as carrying reduced expectorealisability undertones – “medium degree of expectations concerning the realisation” of the proposition, and thus render it as *must* or *should*, respectively? (See Table 1.)

Table 1. Cross-linguistic (intra-typological) examination of the same form

		Medium strength	High strength
Deontic domain	English	<i>should</i> You should put on your sun-tan lotion. It's sunny today.	<i>must</i> You must put on your suntan lotion. Your skin is very sensitive.
	Greek	<i>πρέπει</i> Πρέπει να φορέσεις το αντηλιακό σου. Έχει ήλιο σήμερα.	<i>πρέπει</i> Πρέπει να φορέσεις το αντηλιακό σου. Το δέρμα σου είναι πολύ ευαίσθητο.
Epistemic domain	English	<i>should</i> <i>Gladiator</i> should be a good film. People who saw it said they liked it.	<i>must</i> <i>Gladiator</i> must be a good film. Look at all those people queuing up to see it.
	Greek	Subjunctive Ο «Μονομάχος» πρέπει να είναι καλή ταινία. Όσοι την είδαν είπαν ότι τους άρεσε.	Subjunctive Ο «Μονομάχος» πρέπει να είναι καλή ταινία. Κύττα όλους αυτούς που στέκονται στην ουρά για να τη δούν.

- (2) In the inter-typologically comparative framework, the question is about the context of situation that influences the construing of directives as signaling either high or medium strength of force. This case is similar to the one above, that is, interpreting the underlying expectorealisability assumptions carried by the pragmatic factors. Their decoding accordingly will lead to a “safe” rendering of the subjunctive, as either *must* or *should*. (See Table 2.)

Table 2. Cross-linguistic (inter-typological) examination of different forms

	Medium deontic strength	High deontic strength
English	<i>should</i> You should put on your suntan lotion. It's sunny today.	<i>must</i> You must put on your suntan lotion. Your skin is very sensitive
Greek	Subjunctive Να φορέσεις το αντηλιακό σου. Έχει ήλιο σήμερα.	Subjunctive Να φορέσεις το αντηλιακό σου. Το δέρμα σου είναι πολύ ευαίσθητο.

At this point, it should be mentioned that the term “context” refers to the set of assumptions available to and employed by an addressee to interpret an utterance. Context, in this sense, is utterance-specific (Klinge 1996: 37). In other words, the meaning we choose to assign to a given utterance is a function of pragmatic constraints, whose degree of accessibility determines which direction the interpretation of the utterance will take.

Figure 5 represents schematically how the English modal verbs (*must* and *should*) and the Greek modal exponents (*πρέπει* and the subjunctive) rank along the cline of deontic strength. Each modal device is presented in a different shading. The position of each one of them on the cline depends on its strength. As a result, certain modal markers can appear in two positions along the cline by virtue of their pragmatics. Slobin (1997: 291) has talked about this phenomenon as the distribution of (the same) form in (different) contexts. The dashed line on the perimeters in the circles of the imperative and of the subjunctive moods, in Figures 5a and 5b, indicates how the same form can also have the corresponding strength (indicated on the figures), depending on the pragmatics of the situation. The claim is, however, that the basic strength of each modal form is the one represented by the circle with the continuous line in the perimeter.

Figure 6 shows schematically how cross-pragmalinguistic correspondences can vary as a function of situational constraints (pragmatics).

3.4. Intra-typological comparison between L1 and L2

Must and *πρέπει* are the conventional units in the English and Greek ICMs of directives and conclusions, respectively. Drawing on Langacker (1987: 68), who claims that conventional units “define categories”, it can be argued, in turn, that *must* and *πρέπει* are the modal verbs connected to the prototypical concepts of the English and Greek categories of directives and conclusions. By entailment, they can be claimed to be prototypes themselves in the corresponding linguistic categories. Their being prototypical members in the specific categories can be demonstrated by the relation they sustain

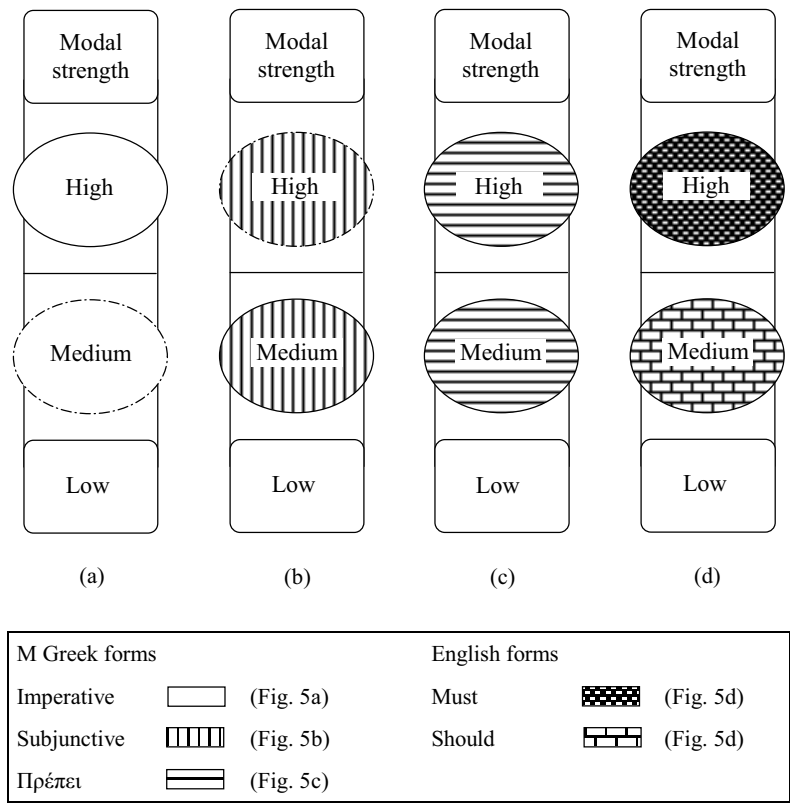
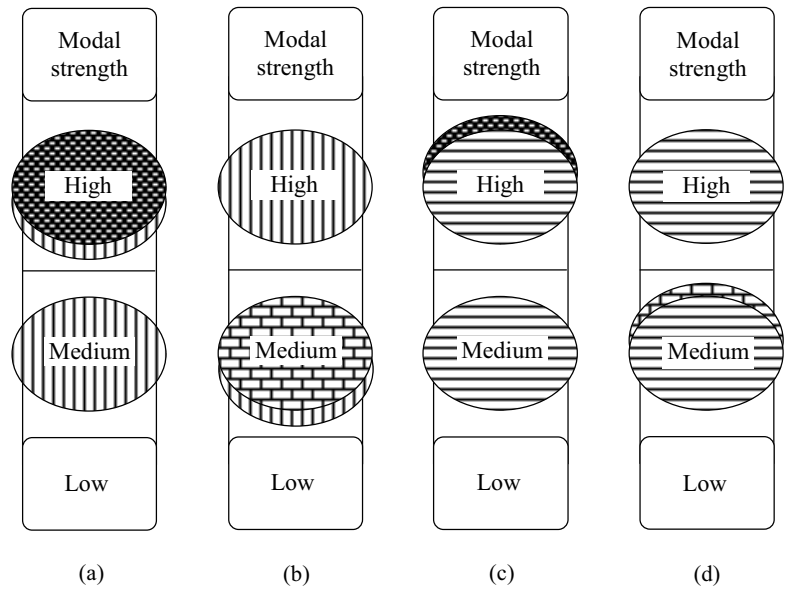


Figure 5. Pragmalinguistic ranking of Greek and English forms.

with their schematic representations. Both of them are full instantiations of the image-schema of compulsion, i.e. the most characteristic type of the force image-schema. Coding high strength of manipulative force and epistemic certainty, they entail high expectations of compliance with the directive and verification of the belief stated in the conclusion. In this sense, they are both the most representative linguistic markings of the idea of expectorealisability, in the two languages.

This relation of full compatibility between the specifications of the image-schema and the structures entails full “sanctioning”. More specifically, the structures *must* and *πρέπει* in its “strong” version coincide with the conventional units in the two languages respectively, and thus they are considered to define the categories of directives and conclusions. Being, therefore, the prototypes, they occupy the central region of semantic space in the interior of the ICMs of directives and conclusions (see Figures 4 and 1).

As for the medium strength of the force sub-area which in the English ICMs is covered by *should*, there is not a single member to distinctively occupy the same position in



Inter-typological comparisons		Intra-typological comparisons	
Subjunctive– <i>must</i>	(Fig. 6a)	<i>πρέπει–must</i>	(Fig. 6c)
Subjunctive– <i>should</i>	(Fig. 6b)	<i>πρέπει–should</i>	(Fig. 6d)

Figure 6. Pragmalinguistic comparison of Greek and English.

the corresponding Greek ICMs, since Greek, when it comes to modal verbs, does not linguistically distinguish medium strength. The medium strength zone appears to be conflated with that of high strength, instead, thus forming a complex semantic sub-whole served linguistically by the prototype *πρέπει*. The implication is that, unlike the core member *must* of the English ICMs of directives and conclusions, the corresponding *πρέπει* of the Greek ones, because of its pragmatically-regulated variability of strength, occupies a semantically wider area. This extends from the centre to the pre-periphery – before the periphery, which is covered by *μπορεί* (*bori*) – of the ICMs (Figure 1).

3.5. Inter-typological comparison between L1 and L2

English and Greek have a somehow different overall conceptual organisation of what is important to mark linguistically in the deontic domain. Whereas English uses only mo-

dal verbs *must* and *should* and the imperative mood to code high and medium strength of manipulative force, Greek uses the *subjunctive* mood along with *πρέπει* and the imperative.

Depending on pragmatic constraints again, the subjunctive can range from high to medium strength, and allows as a translation option either *must* or *should* (Figures 6a and 6b), respectively. Consider the following English versions (1a, 2a) of (1') and (2') above, in which the principle of pragmatic weakening is also in use:

- (1a) You must go out for a walk. You are tired and you need a break.
- (2a) You should go out for a walk when you finish your homework.

The remarks made for (1') and (2') are also applicable for (1a) and (2a), respectively. Though (1') is interlinguistically rendered with *must* and (2') with *should*, to indicate this difference in strength, the former is not used as an instruction. In a context of a parent seeing his/her child tired from studying, the modality would be considerably less imperative and would be taken to sound more as advice, despite the emergency of the situation (Huddleston and Pullum 2002: 177).

Thus, with regard to interlinguistic equivalences, the Greek subjunctive is translatable into either *must* or *should*, insofar as its strength is not a constant but a specified dimension varying across contexts. In this spirit, the subjunctive circle overlaps with either the *must* or *should* circle, indicating the latitude this mood exhibits in Greek (Figures 6a and 6b, respectively). This happens as English shows a higher degree of grammaticalisation when it comes to modal verbs and moods, as opposed to Greek, which leaves more conceptual leeway. What this difference means is that although Greek does possess an additional modal device, i.e. the subjunctive mood, it does not include variations, which linguistically distinguish between different pragmatic conditions. Thus, the semanticopragmatic dimension of either high or medium strength remains linguistically oblique across types. Furthermore, it forces the EFL learner/translator to make choices. What his/her task consists in is extracting from the original depiction of the scene that which best fits the scene as construed by the speaker in English, by relativising the generalities of the abstract image-schema to the specificities of the scene situation (Langacker 1987: 39).

The next section foreshadows the implications such theoretical issues have for Greek EFL learners' language with respect to the English modal verbs used in the speech acts of directives and conclusions.

4. The psychological reality of transfer: Implications for Greek EFL learners

Comparatively speaking, the speech acts of directives and conclusions are common in both English and Greek. Both of them also employ modal verbs to linguistically express

them. Such cross-language similarity can be said to invoke Andersen's (1983) idea of "transfer to somewhere", whereby FL learners can capitalise on resemblances to promote learning, while differences can restrain it. Relevant to Andersen's notion of "transfer to somewhere", but in a complementary fashion, is Kellerman's notion of "transfer to nowhere". This refers to transfer not of cross-language similarities but of inter-conceptual dissimilarities, whose existence can be taken to account for the way speakers of particular languages are conditioned to conceptualise experience (Kellerman 1995: 137). Let us see how this theory can be applicable here.

The diffusion of the notion of force into a gradient range of linguistic options (modal verbs) representing the conceptual content of the English ICMs is semantically more noticeable than that which characterises the linguistic options (modal verbs) marking the corresponding Greek ICMs. This typological asymmetry means that Greek, when it comes to modal verbs, has no distinct way of linguistically referring to certain pragmatic differences, i.e. situationally-dictated different strength of force in the deontic and epistemic domain. According to some linguists, such linguistic differences can be paralleled by cognitive differences (Brown 1976) and can possibly result in difficulties in both conceptualisation and expression for a speaker (Schwanenflugel et al. 1991: 75). For instance, a linguistic item in L2 which does not have a symmetrical match in L1 can make the learning burden heavier for a FL learner (Snow 1976). What this issue resolves into is a conflict between L1 and L2 perspectives. This conflict can affect the way Greek EFL learners seek to find in the English language "the particular perspectives on events permitted by their own language" (Kellerman 1995: 140–141). In practice, this means that their L1 perspective, as a long-established habit, is stronger than their L2 one. As such, it will tend to conceptually prevail, thus driving the learners to search for those linguistic tools which will permit them to maintain their L1 perspectives. Kellerman (1995: 141) has referred to such cases as instances of "transfer to nowhere" (or "blind transfer" – Kean 1986), meaning that the way we verbalise experience cannot be interlinguistically tampered, that is, it cannot be conditioned by language specific variations. Driven by his mild Whorfian relativist view, Slobin (Berman and Slobin 1994; Slobin 1991, 1993, 1996) considers such inter-conceptual differences not as resulting from linguistic differences, but as "being filtered by the way we use language to talk about them". He believes (Slobin 1996) that language is instrumental in selecting which aspects of experiences to talk about. Children come to acquire their native language through a filter-building process in which they train to be equipped with the necessary conceptual material for filtering their experiences and organising them into linguistic output relevant to their communicative goals and to the range of linguistic realisations offered in their L1 (Berman and Slobin 1994: 12). By entailment, FLL can be said to involve learning the nature of such filters.

Hence, Slobin (1993: 245–247), in his work on "thinking for speaking", that is using language to talk about perspectives of experience, supports the view that those L1 perspectives which are not shared by L2 will be hard to restructure and to acquire. At the same time, we realise that those linguistic options expressing finer semantic distinc-

tions in L2 (i.e. *must* and *should*) also represent perspectives peculiar to this language. The implication is that Greek EFL learners will seek those linguistic expressions, which will permit them to maintain their L1 perspectives (i.e. the non-graded concept of strong manipulation and strong certainty linguistically marked by *πρέπει*). In line with this argumentation, the best candidate for serving their L1 perspectives seems to be the English modal verb *must*. This claim can be briefly explained as follows.

Schmidt (1990, 1993) maintains that L2 filtering processes are inaccessible to learners, in the same way as the language-specific character of their own choices is. What this means is that *πρέπει*, by being the prototypical modal verb, as it expresses higher strength than *μπορεί(ς)* (*bori(s)*) in the Greek ICMs of directives and conclusions, subconsciously drives Greek EFL learners to render it as *must*, even when it codes medium manipulative force or medium epistemic certainty. This is a case calling for the activation of the principle of “transfer to nowhere”, since the learners, being unaware of the way the L2 does its filtering, as well as of the idiosyncratic character of their own choices, can be mistakenly led by the cross-linguistic similarity of *must* with *πρέπει* to equate them in the case of medium modal strength. The implication is that they are not sensitised by the inter-conceptual divergence towards adopting the L2 disposition so as to view things from a different perspective from the L1. Such a sensitisation amounts to using the “transfer to nowhere” theory that is, discovering those means in L2 which are appropriate for the linguistic marking of the different perspective (Kellerman 1995: 142). In this spirit, learning an FL involves gaining control of new modes of “thinking for speaking”, being achievable by the retrieval of those language specific means of dealing with experience (Schmidt 1993: 34). This includes moving from drawing attention to the semantic system as a whole to learning the conceptual distinctions, so as to end up mastering the linguistic exponents of these distinctions (Rivers 1983:162). Consequently, even dissimilarities can facilitate learning as they trigger transfer, which provides sensitisation towards the existence of inter-conceptual divergences. Thus, they can further prompt learners towards the discovery of the means for their expression.

REFERENCES

- Andersen, R. 1983. “Transfer to somewhere”. In Gass, S. and L. Selinker (eds.), *Language transfer in language learning*. Rowley, MA: Newbury House. 177–201.
- Bardovi-Harling, K. 1999. “Exploring the interlanguage of interlanguage pragmatics: A research agenda for acquisitional pragmatics”. *Language Learning* 49(4). 677–713.
- Berman, R. and D. Slobin (eds.). 1994. *Relating events in narrative: A crosslinguistic developmental study*. Hillsdale, NJ: Laurence Erlbaum.
- Blum-Kulka, S. 1989. “Playing it safe: The role of conventionality in indirect requests”. In Blum-Kulka, S., J. House and G. Kasper (eds.), *Cross-cultural pragmatics*. Norwood, NJ: Ablex. 37–70.
- Brown, R. 1976. “In memorial tribute to Eric Lenneberg”. *Cognition* 4. 125–153.

- Bybee, J. 1995. "The semantic development of past tense modals in English". In Bybee, J. and S. Fleischman (eds.), *Modality in grammar and discourse*. Amsterdam: John Benjamins. 503–517.
- Clairis, C. and G. Babiniotis. 1999. *Γραμματική της Νέας Ελληνικής* [Modern Greek grammar] (Vol. II). Athens: Ελληνικά Γράμματα [Ellinika Grammata].
- Clark, H.H. and E. Clark. 1977. *Psychology and language*. New York: Harcourt, Brace, Jovanovich.
- Coates, J. 1987. "Epistemic modality and spoken discourse". *Transactions of the Philological Society* 111–131.
- Cruse, D.A. 1990. "Prototype Theory and Lexical Semantics". In Tsohatzidis, S.L. (ed.), *Meanings and prototypes: Studies in linguistic categorization*. London: Routledge. 382–402.
- Faerch, C. and G. Kasper. 1989. "Internal and external modification in interlanguage request realisation". In Blum-Kulka, S., J. House and G. Kasper (eds.), *Cross-cultural pragmatics*. Norwood, NJ: Ablex. 221–247.
- Gass, S. 1983. "Language transfer and universal grammatical relations". In Gass, S. and L. Selinker (eds.), *Language transfer in language learning*. Rowley, MA: Newbury House. 68–82.
- Givón, T. 1993. *English grammar: A function-based introduction*. Amsterdam: John Benjamins.
- Halliday, M.A.K. 1970. "Functional diversity in language as seen from a consideration of modality and mood in English". *Foundations of Language* 6. 322–361.
- Halliday, M.A.K. 1994. *An introduction to functional grammar*. London: Arnold.
- House, J. 1989. "Politeness in English and German: The function of 'please' and 'bitte'". In Blum-Kulka, S., J. House and G. Kasper (eds.), *Cross-cultural pragmatics*. Norwood, NJ: Ablex. 96–119.
- House, J. and G. Kasper. 1981. "Politeness in English and German". In Coulmas, F. (ed.), *Conversational routine: Explorations in standardized communication situations and prepatterned speech*. The Hague: Mouton. 157–185.
- House, J. and G. Kasper. 1987. "Interlanguage pragmatics: Requesting in a foreign language". In Lorsch, W. and R. Schulze (eds.), *Perspectives on language in performance: Festschrift for Werner Hüllen*. Tübingen: Narr. 1250–1288.
- Huddleston, R.D and G. Pullum. 2002. *The Cambridge grammar of the English language*. Cambridge: Cambridge University Press.
- Johnson, M. 1987. *The body in the mind: The bodily basis of reason and imagination*. Chicago: University of Chicago Press.
- Kean, M.L. 1986. "Core issues in transfer". In Kellerman, E. and M. Sharwood-Smith (eds.), *Crosslinguistic influence in second language acquisition*. 80–90. Oxford: Pergamon Press.
- Kellerman, E. 1979. "Transfer and non-transfer: Where we are now". *Studies in Second Language Acquisition* 2(1). 37–57.
- Kellerman, E. 1983. "Now you see it, now you don't". In Gass, S. and L. Selinker (eds.), *Language transfer in language learning*. Rowley, MA: Newbury House. 112–134.
- Kellerman, E. 1995. "Crosslinguistic influence: Transfer to nowhere". *Annual Review of Applied Linguistics* 15. 125–150.
- Klinge, A. 1996. "The impact of context on modal meaning in English and Danish". *Nordic Journal of Linguistics* 19(1). 35–54.
- Lakoff, G. 1987. *Women, fire and dangerous things*. Chicago: University of Chicago Press.
- Langacker, R.W. 1987. *Foundations of cognitive grammar*. (Vol 1: *Theoretical prerequisites*.) Stanford: Stanford University Press.
- Leech, G.N. 1987. *Meaning and the English verb*. London: Longman.
- Lyons, J. 1995. *Linguistic semantics: An introduction*. Cambridge: Cambridge University Press.

- Mithun, M. 1995. "On the relativity of irreality". In Bybee, J. and S. Fleischman (eds.), *Modality in grammar and discourse*. (Typological Studies in Language 32.) Amsterdam: John Benjamins.
- Philippaki-Warbuton, I. and J. Veloudis. 1984. "Η Υποτακτική στις συμπληρωματικές προτάσεις" [The subjunctive in complementary clauses]. *Μελέτες για την Ελληνική Γλώσσα* [Studies for the Greek Language] 5. 149–167.
- Rivers, W. 1983. *Communicating naturally in a second language*. Cambridge: Cambridge University Press.
- Rosch, E. 1973. "Natural categories". *Cognitive Psychology* 4. 328–350.
- Rosch, E. 1975. "Cognitive reference points". *Cognitive Psychology* 7. 532–547.
- Salsbury, T. and K. Bardovi-Harlig. 2000. "Oppositional talk and the acquisition of modality in L2 English". In, Morris, B., F. Anderson, M.E. Klee and E. Tarone (eds.), *Social and cognitive factors in second language acquisition: Selected proceedings of the 1999 Second Language Research Forum*. Somerville, MA: Cascadia. 57–76.
- Schmidt, R. 1990. "The role of consciousness in second language learning". *Applied Linguistics* 11. 17–46.
- Schmidt, R. 1993. "Consciousness, learning, and interlanguage pragmatics". In Kasper, C. and S. Blum-Kulka (eds.), *Interlanguage pragmatics*. Oxford: Oxford University Press. 21–43.
- Seiler, H. 1993. "A functional view of prototypes". In Geiger, R. E. and B. Rudzka-Ostyn (eds.), *Conceptualisation and mental processing in language*. Berlin: Mouton de Gruyter. 115–139.
- Sharwood-Smith, M. 1979. "Strategies, language transfer and the simulation of the second language learner's mental operations". *Language Learning* 29. 345–361.
- Slobin, D.I. 1991. "Learning to think for speaking: Native language, cognition, and rhetorical style". *Pragmatics* 1. 7–25.
- Slobin, D.I. 1993. "Adult language acquisition: A view from child language study". In Perdue, C. (ed.), *Adult language acquisition: Cross-linguistic perspectives*. Cambridge: Cambridge University Press. 239–252.
- Slobin, D.I. 1996. "From 'thought and language' to 'thinking for speaking'". In Gumperz, J. and S. Levinson (eds.), *Rethinking linguistic relativity*. Cambridge: Cambridge University Press. 70–96.
- Slobin, D.I. (ed.). 1997. *The crosslinguistic study of language acquisition*. (Vol 5: Expanding the contexts.) Mahwah: Laurence Erlbaum Associates.
- Snow, C. 1976. "The language of the mother-child relationship". In Rogers, S. (ed.), *They don't speak our language*. London: Edward Arnold. 63–79.
- Stephany, U. 1995. "Function and form of modality in first and second language acquisition". In Giacalone Ramat, A. and G. Crocco Galèas (eds.), *From pragmatics to syntax: Modality in second language acquisition*. Tübingen: Gunter Narr Verlag. 105–120.
- Sweetser, E. 1991. *From etymology to pragmatics. Metaphorical and cultural aspects of semantic structure*. Cambridge: Cambridge University Press.
- Talmy, L. 1988. "Force dynamics in language and cognition". *Cognitive Science* 2. 49–100.
- Taylor, J. R. 1993. "Some pedagogical implications of cognitive linguistics". In Geiger, R. and B. Rudzka-Ostyn (eds.), *Conceptualisation and mental processing in language*. Berlin: Mouton de Gruyter. 201–223.
- Vanderveken, D. 1998. "On the logical form of illocutionary acts". In Kasher, A. (ed.), *Pragmatics: Critical concepts* (Vol 2). London and New York: Routledge. 170–194.
- Veloudis, J. 1987. "*Μη φύγω, μη φύγεις, μη φύγει.../να μη φύγω, να μη φύγεις, να μη φύγει,... ή η γραμματικοποίηση της αμεσότητας" [Mi figo, mi figis, mi figi or the grammaticalisation of immediacy]. *Μελέτες για την Ελληνική Γλώσσα* [Studies for the Greek Language] 8. 293–309.

- Veloudis, J. and I. Philippaki-Warbuton. 1983. "Η υποτακτική στα Νέα Ελληνικά" [The subjunctive in Modern Greek]. *Μελέτες για την Ελληνική Γλώσσα* [Studies for the Greek Language] 3. 151–169.
- von Stutterheim, C. 1993. "Modality: Function and form in discourse". In Dittmar, N. and A. Reich (eds.), *Modality in language acquisition*. Berlin: Walter de Gruyter. 3–26.
- Wierzbicka, A. 1987. "The semantics of modality". *Folia Linguistica* 21(1). 25–43.
- Zobl, H. 1980a. "The formal and developmental selectivity of L1 influence on L2 acquisition". *Language Learning* 30. 43–58.
- Zobl, H. 1980b. "Developmental and transfer errors: their common bases and (possibly) differential effects on subsequent learning". *TESOL Quarterly* 14. 469–479.