Modality in Grammar and Discourse
An Introductory Essay*

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This volume is the result of a symposium on Mood and Modality held at the University of New Mexico in 1992, the goal of which was to bring together linguists whose research has targeted this area of grammar but whose approaches to it reflect differing perspectives on functional linguistics. The symposium was planned so as to include a diversity of languages, of foci (synchronic and diachronic), and of theoretical orientations, especially with regard to the interaction of morphosyntactic, semantic and discourse-pragmatic factors.

Given the complexity of this linguistic domain, the many and diverse ways it comes to be expressed in different languages, and the tendency of researchers to work narrowly within the confines of their own theoretical and methodological frameworks, there was reason to fear that symposium participants might not find adequate common ground nor a sufficiently common metalanguage to be able to communicate with one another. However, just as a similar symposium on tense and aspect a decade earlier (Hopper 1982) confirmed the status of those categories as valid cross-language categories of grammar—what we refer to, following Bybee & Dahl (1989), as 'gram types'—, so too the current symposium succeeded in demonstrating that despite differences in terminology, language areas, and theoretical perspectives, we were in effect all examining similar phenomena and could participate in meaningful dialogue about our data and analyses. Thus while the papers in this volume present a wide range of topics and perspectives, they

nonetheless converge around a number of key issues, and in the aggregate seem to have succeeded in moving us toward a better understanding of the functions of modality and its forms of expression in natural language.

In the course of the symposium several essential issues came up repeatedly regarding both the categories in question and the levels of linguistic analysis at which they operate. One of the most basic of these issues concerns the relationship between 'mood' and 'modality'.

Mood and modality

As used here, **mood** refers to a formally grammaticalized category of the verb which has a **modal** function. Moods are expressed inflectionally, generally in distinct sets of verbal paradigms, e.g. indicative, subjunctive, optative, imperative, conditional, etc., which vary from one language to another in respect to number as well as to the semantic distinctions they mark. **Modality**, on the other hand, is the semantic domain pertaining to elements of meaning that languages express. It covers a broad range of semantic nuances—jussive, desiderative, intentive, hypothetical, potential, obligative, dubitative, hortatory, exclamative, etc.—whose common denominator is the addition of a supplement or overlay of meaning to the most neutral semantic value of the proposition of an utterance, namely factual and declarative.[1]

In the terms of the framework set forth in Bybee and Dahl (1989), modality is a *semantic domain*, while moods, as formal categories of grammar, can be either cross-language *gram types* (e.g. conditional or subjunctive) or *language-specific categories* (e.g. the Delayed Imperative in Buriat, an Altaic language; note that we distinguish these two levels by use of an initial upper case letter to signal language- or family-specific categories, retaining lower case for cross-language gram types.)

Modality is expressed in language in a variety of ways: morphological, lexical, syntactic, or via intonation. These are not mutually exclusive. Thus in the Spanish sentence *dudo que haya ganado el premio* 'I doubt (that) he won the prize', the 'dubitative' modality is conveyed redundantly by both the lexical meaning of the main verb and the subjunctive mood of the subordinate-clause verb. In this volume we will be concerned primarily with grammatical (morphological and syntactic) expressions of modality, including forms that may be currently undergoing grammaticalization.

Function and its relation to linguistic form

A second issue we wish to clarify at the outset of our discussion concerns the relationship between domains of modality and their expression in natural languages. In some approaches to modality, function is studied for its own sake. In this volume we take the position that analysis of function should explain distribution of form. That is, the modal categories we operate with do not lead an autonomous existence in some abstract logical or semantic space; rather, they correspond to—indeed are determined by—(a) the formal distinctions made in particular languages, (b) documented pathways of language change, and (c) prominent cross-language patterns of form-function correlation.

In the area of modality, however, cross-language comparison has been a difficult task, for several reasons. First, because the semantic/functional domain of modality is so broad; second, because modality, as we have discovered, lends itself best to investigation in social, interactive contexts (elaborated below); third, and conceivably most important, because of the extent to which languages differ in their mapping of the relevant semantic content onto linguistic form. A case in point that came up repeatedly in the course of our discussions concerns the category **irrealis** and the nature of the realis/irrealis distinction. The languages that came under our scrutiny differed in terms of what they classify as realis and what they classify as irrealis, prompting us to question whether the distinction is cross-linguistically valid at all, and if so, whether it corresponds to a gram-type distinction, such as perfective/imperfective, or whether it more closely resembles a supercategory such as mood.

As noted above, it also became clear over the course of our discussions at the symposium that many of the functions of modality are inextricably embedded in contexts of social interaction and, consequently, cannot be described adequately apart from their contextual moorings in interactive discourse. Several papers in this volume explore particular modalities specifically as they occur in contexts of face-to-face communication. But even in those that do not make explicit reference to contexts of social interaction, this factor is nonetheless in evidence.

Modal categories and their associated nomenclature

Our linguistic understanding of modality has its roots in modal logic (a branch of philosophy of language) and in particular in the distinction between 'deontic' and 'epistemic' modality. Modal logic has to do with the notions of possibility and necessity, and its categories epistemic and deontic concern themselves with these notions in two different domains. Epistemic modality has to do with the possibility or necessity of *the truth of propositions*, and is thus involved with knowledge and belief (Lyons 1977:793). Deontic modality, on the other hand, is concerned with the necessity or possibility of acts performed by morally responsible agents (Lyons 1977: 823), and is thus associated with the *social functions of permission and obligation.*

The epistemic notion is of considerable use to linguists, given that many languages have grammatical markers which function explicitly to express an evaluation of the truth of a proposition. Accordingly, most linguists understand epistemic modality as expressing the degree of a speaker's commitment to the truth of the proposition contained in an utterance. Thus, one way epistemic possibility is expressed in English is by *may* and *might* (*we may/ might lose the election*), while epistemic necessity is expressed by *must* (*they must have won the election*). However, as applied to natural language, there is no reason to restrict the epistemic notion just to necessity and possibility, as is traditional in philosophy of language. For one thing, commitment to the truth of a proposition is often a matter of degree. For another, epistemic modality can be seen as overlapping with, or even encompassing, another grammatical category, namely evidentiality.[2] For our purpose, the former expansion of the epistemic notion will be adhered to (i.e. construal along a continuum) but not the latter. The symposium from which this volume emerges deliberately excluded the study of evidentials, which were the subject of an earlier meeting in this same series (see Chafe and Nichols 1986).

Deontic modality has also proven to be a useful concept for linguists; however, its translation into linguistic categories has not been as smooth as in the case of epistemic modality (cf. Bybee 1985, Bybee, Pagliuca and Perkins 1991). As understood in philosophy of language, deontic modality focuses on the notions of obligation and permission. It is found in directives that grant permission (*you may go now*) or impose obligations (*eat your vegetables!*), as well as in statements that report deontic conditions (*Yeltsin should slow down reforms in Russia*; *graduate students can check out books for the whole semester*).

A problem with the deontic notion for linguists, however, is the imperfect nature of its fit with the corresponding linguistic categories that we encounter in the world's languages as well as in language change: i.e., it is at once too broad and too narrow. For one thing, unlike 'agent-oriented' modality—a supercategory label that will be used by most papers in this volume in preference to 'deontic'[3]—deontic modality fails to distinguish subcategories that are expressed *inflectionally* (i.e. as grammaticalized moods), such as imperative, from *lexical* or *periphrastic* (i.e. auxiliary) expressions of obligation or permission. Furthermore, deontic modality as traditionally understood excludes certain semantically related notions such as ability (physical and mental) and desire that have linguistic expression similar to that of permission and obligation. While one argument for the category 'deontic' might be the well-documented pathway of change whereby deontic modals over time come to acquire epistemic functions, in actual fact this change affects a broader range of meanings than the term 'deontic' indicates.

The traditional division of modality into epistemic and deontic reveals some interesting cases of polysemy in which the same form can be used for both types of modality. Thus English *may* can express either deontic permission (*you may come in now*) or epistemic possibility (*this may be your lucky day!*), while *must* can express deontic obligation (*you must be here by seven*) as well as inferred probability (*that must be the mailman at the door*). A diachronic view of this polysemy yields the observation, documented in many languages, that so-called deontic meanings typically evolve into epistemic meanings.[4]

With regard to the difficulties attaching to 'deontic' as a supercategory label, even this change from deontic to epistemic meaning in fact affects a broader range of categories. While it is true that obligation markers may come to be used for epistemic functions such as probability or inference, in the case of permission markers it is not 'permission' per se that licenses a meaning of epistemic possibility (e.g. in the case of *may*). Virtually all *permission* markers can be traced back to expressions of *ability*, permission being just one sense of a more generalized 'root-possibility' meaning that arises from ability (Bybee, Perkins and Pagliuca 1994). Root possibility predicates general enabling conditions (e.g. *it can take three hours to get there*). These include permission, which is a *social* enabling condition. Bybee (1988) has shown that it is the root possibility sense that gives rise to epistemic possibility.

A second instance of categories other than narrowly-defined deontic

categories developing epistemic meanings is that of verbs indicating desire (and obligation) evolving into futures. This development parallels the deontic to epistemic shift in that a change occurs from a modal expression predicating conditions on an agent—an 'agent-oriented' modality—to a modal expression that has an entire proposition in its scope and communicates the speaker's stance with regard to the truth of that proposition—a 'speaker-oriented' modality.

For the reasons suggested above, Bybee (1985) proposed a change in the categorial nomenclature of modals as follows: **Agent-oriented modality** encompasses all modal meanings that predicate conditions on an agent with regard to the completion of an action referred to by the main predicate, e.g. obligation, desire, ability, permission and root possibility. **Epistemic modality** retains its traditional definition: epistemics are clausal-scope indicators of a speaker's commitment to the truth of a proposition. Markers of directives, such as imperatives, optatives or permissives, which represent speech acts through which a speaker attempts to move an addressee to action, are called **speaker-oriented.**

It will be observed that the distinction between agent-oriented and speaker-oriented modalities cross-cuts the traditional category of deontic modality. Agent-oriented modals include deontic statements (statements that describe obligations and permission), while speaker-oriented modals include speech-act types such as imperatives that impose conditions of obligation. A prime motive for replacing the deontic category by an agent-oriented category is that the latter better reflects general morphosyntactic trends in expression type: i.e., there is a strong, quasi-universal tendency for agent-oriented modality to be expressed by verbs, auxiliaries or non-bound particles, whereas the remaining two types (speaker-oriented and epistemic) are often expressed inflectionally (Bybee 1985). A second universal pattern is diachronic, namely the tendency referred to above whereby the agent-oriented modalities develop predictably into the other two types (Bybee, Perkins and Pagliuca 1994).

Agent-oriented and epistemic modality

As noted above, many modal forms exhibit a systematic polysemy between agent-oriented and epistemic meanings. The theoretical issue raised by such polysemy is whether a form should be regarded as having a single underlying basic meaning (a so-called invariant meaning) that combines with contextual

factors to yield differing interpretations for individual tokens, or whether, alternatively, it has a complex set of semantic properties that by definition incorporate meanings derived from context. A more specific issue that this polysemy raises is that of targeting the particular contextual factors that favor one interpretation over the other. In this regard, **Bernd Heine**'s paper focuses on agent-oriented modals that can also express epistemic meanings, using data from German. His analysis isolates contextual factors as well as conceptual properties resident in the meanings of the modals that operate together to enable addressees to correctly choose an agent-oriented or an epistemic reading. **Jennifer Coates**' contribution builds on Heine's analysis and discusses the particular case of root possibility (in English). Applying the conceptual properties Heine proposes to contrast agent-oriented and epistemic interpretations of modals, Coates shows that this distinction is weaker with respect to the modal domain of possibility than with respect to other areas of modal meaning.

Analyzing the Spanish modals *poder* 'can' and *deber* 'ought to,' **Carmen Silva-Corvalán** also argues for the importance of context in the interpretation of modal meanings. However, she rejects the idea that these modals are inherently polysemous, positing instead an invariant meaning for each one: 'does not preclude X' for *poder* and 'favors, requires or entails X' for *deber*. These invariant meanings are more generalized than the agent-oriented meanings and require supplementation from context to produce their actual interpretations in particular utterances. Many of the contextual factors Silva-Corvalán points to resemble those proposed by Heine.

Edith Bavin takes a diachronic and comparative approach to some of these same issues, examining the development of obligation markers in Western Nilotic languages. While obligation markers in these languages have developed from sources different from those found in European languages (i.e. from impersonal constructions rather than from agent-oriented modal verbs), the same sorts of contextual factors influence addressees' interpretations of them as agent-oriented or epistemic.

Sherman and **Phyllis Wilcox** present one of the first analyses of modality in American Sign Language, showing once again the familiar pathway of change whereby agent-oriented modals eventually acquire epistemic meanings. The Wilcoxes also isolate a set of linguistic parameters that distinguish the meanings of ASL modals, and describe further a set of *gestural* parameters that iconically mirror the semantic properties of the modal markers.

The interactional basis of modality

In recent years, an increased understanding of many grammatical categories has come about through examination of these categories in the actual contexts in which they are used—what is referred to as 'discourse' or 'situation' context. Whereas for the analysis of tense, aspect, transitivity, ergativity, reference, etc., linguists have looked for the most part at narrative discourse, and with good result, modality cannot be studied solely with respect to narrative, since many modal functions surface only in face-to-face interactive discourse. That is, they typically depend not just on a monologic speaker (the narrator in narrative discourse), but on a dialogic (explicitly or by implication) speaker-addressee interaction. This is the case in the imposing of obligations (through statements or through directives), in the giving and receiving of permission, and in exchanges of information, with appropriate expressions of commitment to the truth of that information. In fact, modals can be viewed as strategic linguistic tools for the construction of social reality, as demonstrated by Julie Gerhardt (1985, 1990) in detailed studies of the use of modals in child language.

Two papers in this second section of the volume highlight the social functions of modality by analyzing chronologically the development of the functions to which children put modal forms. **Soonja Choi**'s paper on sentence-ending particles in Korean shows how children learn to integrate information they have to offer into the aggregate of information shared by speaker and addressee. Because of the strong interactive function of the Korean particles and the way they figure in the construction of appropriate discourse, these particles are acquired earlier by Korean children than are the more purely epistemic markers of languages such as English. **Jiansheng Guo**'s study of the acquisition of Mandarin *neng* (roughly 'can') emphasizes that children's command of a modality marker depends on their association of that marker with particular contexts of interaction. The meanings of modals in general, Guo argues, are rooted in the social, interactional functions of language; and in the case of *neng*, which he interprets as functioning in various ways as a challenge to the addressee, the information-exchanging function is clearly subordinate to the interactive function.

The interactional functions of modals can also be observed in adult language. Using texts that represent interactive discourse in written form (i.e., conversations in written texts of several different genres), **John Myhill** and

Laura Ann Smith undertake to make cross-linguistic comparisons of the use of obligation markers in languages of different types (English, Mandarin, Biblical Hebrew and Hopi). An important finding of their study is that obligation expressions can carry a range of subtle nuances that render them appropriate for carrying out speech-acts other than simply imposing obligations or making reference to obligations already in force. These include evaluating the effects of actions, explaining actions that might be construed as impolite, expressing lack of sympathy, and persuading one's conversational partner to do something.

Also included in this section is **Frantisek Lichtenberk**'s comparative study of the functions of the 'apprehensional epistemic' modality found in various Austronesian languages. While the methodology of his study differs from that of the three preceding papers in this section in not being based on a data corpus of explicitly interactive discourse, the forms Lichtenberk investigates—whose functions include issuing a warning to the addressee ('watch out! you may get sick') as well as conveying the speaker's apprehension about something that might happen to the addressee—are clearly suited to negotiatory discourse. Moreover, the changes they undergo in certain of the languages investigated clearly demonstrate their dependence on speaker-addressee interaction.

We also include in this section a highly original—and unorthodox (in the context of traditional analyses of modality)—paper by **John Haiman** that helps delimit the range of grammaticalizable modalities by targeting a set of speaker attitudes (the 'sarcastive', the 'guiltive', the 'mass-productive') that as far as we know have never become grammaticalized as moods. Although sarcasm functions like a mood, insofar as it expresses a speaker's attitude toward the proposition of an utterance produced in a dialogic exchange, its formal markers (segmental or suprasegmental) never seem to make it into the service sector of natural languages, i.e. they never become grammatical. Haiman speculates on why this is the case.

Irrealis modality and subjunctive

A term widely used in discussions of modality, especially with respect to Native American and Indo-Pacific languages, is 'irrealis', often contrasted with 'realis.' Irrealis refers to a very broad conceptual category that covers a wide range of **non-assertive** modal meanings and receives formal expression

in certain languages. Unfortunately, it is difficult to determine in many instances whether the modal meaning of an utterance is contributed specifically by the so-called Irrealis marker or by some other element (lexical or morphosyntactic) of the discourse context, in which case the Irrealis marker is functionally redundant. This ambiguity calls into question the labeling of certain language-specific forms as Irrealis markers. A similar problem arises in the description of Subjunctives in European languages; like Irrealis markers, Subjunctives occur in a wide range of non-assertive contexts, and the status of their semantic content is very much in question.

A second and not insignificant problem with irrealis as a cross-language gram-type is the degree to which languages vary in their assignment of notional categories to the grammatical category Irrealis. Each language that operates with this category seems to make its own determination as to which notional categories will be considered irrealis. Thus, for both irrealis and subjunctive, it is difficult to circumscribe a focal meaning for the gram-type. Several approaches to the latter problem are demonstrated in the papers of our third section.

For **Wallace Chafe**, the realis/irrealis distinction is based on a fundamental assumption on the part of language users—an assumption which presumably operates in the same way for users of any given language—that some of their ideas belong to the domain of objective reality while others have their source in the imagination. This basic cognitive principle of judged reality vs. unreality is expressed formally by the Realis/Irrealis distinction in Caddo and the Northern Iroquoian languages, albeit in slightly differing contexts and through the use of different formal devices. Chafe sees another instantiation of this distinction in English speakers' judgments about the referentiality or non-referentiality of indefinite arguments.

Marianne Mithun also treats Irrealis categories in Native American languages in a paper that foregrounds the theoretical problem of the cross-language variability of irrealis as a gram-type. Appealing to the same underlying distinction as that described by Chafe, Mithun argues that this common cognitive distinction gets applied in different ways in different languages, a state of affairs which accounts for the fact that Irrealis functions vary so widely across languages. She insists, however, that this cross-linguistic variation is not random, and explains the different language-specific construals of irrealis described in her paper as the respective outcomes of differing diachronic developments.

The paper by **Suzanne Romaine** takes a diachronic look at the Tok Pisin particle *bai*, which now functions primarily as a future marker but which also has a variety of modal functions (as do most future markers). Drawing on an extensive corpus of data (synchronic and diachronic, spoken as well as written), Romaine traces the stages through which the clause-initial time adverb *baimbai* 'by and by' grammaticalizes into the reduced pre-verbal marker *bai* and in the process acquires a set of future and 'irrealis' functions. Her study also points out the striking conformity of these developments to cross-linguistically established trends.

Irrealis modality is also a primary focus of **Suzanne Fleischman**'s paper, summarized in the section below on the interaction of modality with other categories of grammar.

As noted above, there are certain similarities between Irrealis categories and the Subjunctives of European languages. **Patricia Lunn**'s paper is representative of recent work on the Spanish Subjunctive in its appeal to pragmatic considerations—contextual and interactional factors—to account for the use of Subjunctive vs. Indicative forms in several varieties of discourse. Lunn shows that Subjunctive coding is not limited to unreal and non-assertive propositions, as suggested in traditional accounts of the Spanish Subjunctive; this mood can also be used to signal background information in literary texts, and in journalistic discourse to mark particular information as 'common knowledge'.

Modality and other categories of grammar

In the final section of this volume we group together four papers that in different ways explore the interaction between modality and other domains of grammar, specifically: negation, complementizers, past tense, and imperfective aspect. In these papers we see once again the crucial role that interactive contexts play in shaping the meanings that result from the combinations of grammatical categories.

Frank Palmer's contribution investigates the systematic irregularity (this is not an oxymoron) that we find across languages in the behavior of modals and in the meanings that emerge when modals appear under the scope of negation. A particularly widespread irregularity involves the strategies languages use to express the semantic notions of 'necessary-not' and 'not-necessary'. This may involve use of a different verb altogether from the one

normally used in affirmative contexts, as in English *mustn't* vs. *needn't*, or a 'displacement' of the negative marker for 'necessary-not' to a syntactic position that corresponds formally to 'not-necessary', as in French and Italian (Fr. *il **ne** faut pas partir*, It. ***non** deve venire*).

Zygmunt Frajzyngier's paper advances the claim that in various unrelated languages modality appears to be expressed by complementizers, which function to code the modality of embedded clauses. More specifically, he links the presence of one or more complementizers (treated as a parametric variation within the GB framework), as well as their syntactic position in embedded clauses, to the presence or absence (synchronic or diachronic) of certain modalities in the sentence as a whole. Of particular interest in this paper are cases of clauses with multiple complementizers expressing different types of modality, e.g. agent-oriented and epistemic. The paper also has implications for formal syntactic theories that posit COMP as a component of the sentence.

When agent-oriented modals combine with past tense the resulting unit often undergoes a meaning change, losing the past-tense component of its meaning and coming to signal a weakened version of its original modal meaning in the present tense. **Joan Bybee**'s paper explores the reasons for this development by studying the uses of *would* and *should* in texts from Middle English and Early Modern English. Bybee argues that these modals lose their past sense because of the implication that a modal condition in past tense continues into present time, pointing to the conclusion that modal meaning is heavily influenced by the interactive contexts in which it is used.

The last paper in the volume, by **Suzanne Fleischman**, surveys a wide range of evidence pointing to an overlap (synchronic and diachronic) between the aspectual gram-type imperfective and irrealis modality, and poses the question of why, in so many unrelated languages, verb forms marked for imperfective aspect come to acquire meanings subsumable under the broad modal heading of irrealis. Since none of the languages Fleischman refers to has a formally grammaticalized Irrealis category, and in light of the notorious elusiveness of irrealis pointed out above, her definition of irrealis is worth noting here. She characterizes 'irrealis' as prototype category, at the semantic level, expressing a spectrum of meanings that signal a speaker's lack of belief in or lack of commitment to any of the following: the reality or referentiality of a situation; the possibility that an agent's wishes, hopes or intentions will effectively be realized; the authenticity of an utterance or a chunk of dis-

course; or the normalcy of a discourse or of a communicative situation. These parameters are illustrated with data from various languages and discourse genres.

So, here goes, readers. We hope you enjoy the papers. And don't be put off by the realization that mood is a grammatical category with an attitude! We'll get it straightened out one of these days.

NOTES

* We are grateful to Greg Thomson for assisting the editors and authors in manuscript preparation and copy editing. The indexes were prepared by Lisa Dasinger and Jacki Trademan.

1 In this volume we avoid the term 'mode' because of the problematic ambiguities it presents, being used with widely different meanings in the grammars of different languages. In many European languages it translates what is here referred to as 'mood', while in the grammars of certain non-European languages it is used to label categories whose meanings fall under the headings of tense and aspect. We are aware, of course, that languages often bundle tense, aspect, and mood information into portmanteau morphology, thereby making it difficult to decide how to label such categories.

2 The term 'evidential' was first introduced by Jakobson (1957) as a tentative label for a verbal category that indicates the source of the information on which a speaker's statement is based. As currently understood, evidentiality covers a range of distinctions involved in the identification of the source of one's knowledge. Various languages have grammaticalized evidential markers indicating whether or not the speaker vouches personally for the information contained in a statement. (See Chafe and Nichols 1986, Willett 1988).

3 In place of the traditional distinction of linguistically-relevant modals into 'epistemic' and 'deontic', Bybee (1985) recategorizes the modals into 'agent-oriented,' 'speaker-oriented', and 'epistemic'. These categories will be defined and elaborated on below. Other categories distinguished in modal logic, e.g. 'dynamic' and 'alethic' modalities (cf. Lyons 1977:791, Palmer 1986:102-103), will not be discussed here, being less germane to the analysis of modality in natural language.

4 The earlier 'deontic' meanings may or may not be preserved. English *must*, for example, retains its obligative meaning, whereas *might* has lost its earlier abilitative meaning.

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