Review

“You may think that; I couldn’t possibly comment!”

Modality studies: Contemporary research and future directions. Part I

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Abstract

This two-part article critically reviews eight recent works in the field of mood and modality. Part I explores three different theoretical approaches – generative, cognitive–pragmatic, and typological – with the main focus on languages other than English. Within the framework of generative grammar, research issues include: the epistemic-root interpretations of modal verbs; transitive–intransitive (dyadic–monadic) alternations; modal verb complementation, and the interaction of the modals with other systems, including negation, and alternate ways of encoding modality. The cognitive–pragmatic approach hones in on epistemic modality, and focuses on the cognitive mechanisms that become activated once speakers express evaluations of given states of affairs, involving various modal expression types. Reflecting mounting interest in grammatical typology as a whole, typological approaches to modality recognize this domain as a valid cross-language grammatical category, similar to tense and aspect, and establish a range of typological categories, which include propositional modality (epistemic and evidential) and event modality (deontic and dynamic). Part I also includes a descriptive account of the modal verb system in Danish. In Part II, the emphasis is on work in relation to (primarily) English, much of which is corpus-driven, and on non-verbal as well as verbal carriers of modal meanings. Thus, description and analysis move purposefully towards a more comprehensive account of the field, to embrace modal expressions such as modal lexical verbs, modal adverbs, and modal adjectives. The pragmatics of modality; the discursive functions of modal expressions, especially modal adverbs; and the treatment of modality in modern descriptive grammars of English are also covered.
The article reflects mounting interest in recent years in modality studies. Whilst broadening the scope of modality studies to include treatment of non-verbal modal expressions is to be welcomed, comparatively little attention has so far been given to how different types of modal expression may combine in text to create modal synergy. Following a case study investigation into pragmatics and modality in Part II, the paper outlines an agenda for further research within a discourse and pragmatic perspective.

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Keywords: Epistemic; Deontic; Propositional modality; Event modality; Realis; Irrealis; Typology; Modal expressions; Modality; Evidentiality

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Titles reviewed in Part I

1. Modality and its interaction with the Verbal System

2. Modal verbs in Danish


4. Mood and Modality (2nd Edition)

Titles reviewed in Part II

1. Modal adverbs and discourse: two essays

2. Modality in Contemporary English

3. ‘Mood and modality’,

4. ‘Modals and semi-modals’,
Le propre du réel est de pouvoir être toujours regardé à un autre point de vue... être interprété encore d’une autre façon – représenté autrement, et ceci sans limite, sans dérivée. (Paul Valéry, 1973: 533)

‘It is characteristic of reality that it can always be looked at from another point of view, interpreted in yet another way, depicted otherwise, and this in limitless, equally original ways.’ [trans. Leo Hoye]

Preamble

This essay on modality is divided into two parts. In the first part, we examine recent scholarship with an emphasis on the expression of modality in languages other than English. Even in these cases, however, English is often used as the default frame of reference or as an exemplar of modal categories, especially in cross-linguistic studies with a typological orientation. In the second part, the focus is on the description of mood and modality in English, and a more general discussion of pragmatic aspects of the modal system, with specific reference to English.

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1. General introduction

In the preface to the second edition of his typological survey ‘Mood and Modality’, Palmer (2001: xv) records the surge of interest in modality studies that has taken place since the publication of the volume’s predecessor in the mid-nineteen eighties. On the evidence of the range and number of works in the field, published over the intervening years, not to mention the present sample under review, there can be little doubt that ‘modality’, as a unique and challenging field of enquiry into human thought and language, has truly come of age and that it has now achieved a status in linguistics scholarship which puts it on a par with, as Palmer (2001: xv) remarks, “tense and aspect”. The various symposia on Mood and Modality held throughout the 1990s (Palmer, 2001: xv), the workshop on ‘Modality in Generative Grammar’, held at the University of St. Andrews (Scotland) in 1998, or the recent conference on ‘Modality in Contemporary English’ held at the University of Verona, Italy, in 2001 are events, which further attest the considerable vitality of the subject. Yet it is not solely in the realm of academic discourse that modality
has made its mark. In the popular British TV comedy series of the 1980s and 1990s, ‘Yes, (Prime) Minister’, offering a caricature of British political life, the machinating Senior Civil Servant, Sir Humphrey Appleby (Nigel Hawthorn), was often to engage his (Prime) Minister (Paul Eddington) in many a modalized dialogue, the most renowned being the Probably wouldn’t sketch, which we discuss in some detail in Part II. Francis Urquhart (played by Ian Richardson), the scheming, ruthless Prime Minister in another BBC TV mini series, ‘House of Cards’, was renowned for the catchphrase, which lends this article its title. In short, modality is in the news, and there is every sign it will remain there.

The titles under review in this article are concerned with the linguistic expression of modality and how the modal concepts of possibility, probability, certainty, and necessity are actually deployed in everyday human thought and talk. They largely eschew treatment of the philosophical background, although the interpenetration of linguistic and philosophical approaches inevitably results in some overlap, given the centrality of modal concepts to all human thinking. As Perkins (1983: 6) has argued, the human attitudes and behaviour from which such concepts are extrapolated can be understood in terms of a marked human tendency to conceive of things as they might be, may or must have been or could be, should or ought to have been. This desire to conceive of things being otherwise “constitutes an essential part of the fabric of our everyday lives” (Perkins, 1983: 6). Perhaps a more concrete way of viewing the role of modality in natural language and everyday life is by analogy to photography and the use of filters to manipulate how film responds to or represents subject colours and thereby creates an array of special effects, all of them a more or less significant departure from objective ‘truth’. In language, modality deploys various kinds of ‘meaning filter’ – types of modal expression – which variously colour and modify our conceptualizations of the world and enable us to represent it with such purposeful diversity.

Given the present role of English as the global lingua franca and its status as the most widely studied language in history, it is hardly surprising that the bulk of scholarship on modality is about the expression of modality in English, or uses English as the basis of comparison for how modality is expressed in cognate and other languages. In an attempt to strike a balance and in order to record that there are notable exceptions to this trend, the first part of this article opens with an exploration of scholarship which looks at mood and modality primarily in languages other than English, although English still looms large, for reasons already mentioned. Barbiers et al. (2002) is a collection of generativist-driven accounts of the modal verb system which, in addition to English, looks at the syntactic behaviour of modals in other languages such as Aromanian, Bulgarian, Catalan, Dutch, German, Greek, Icelandic, Macedonian, and West Frisian; Brandt (1999) gives a detailed study of the modal verbs in Danish, with reference to English; Palmer (2001) provides an extensive typological survey of over 100 different languages, too numerous to list here, whilst Nuyts (2001) offers a study of epistemic modal expressions in Dutch and German, again with extensive reference to English.

2. The modal coverage of the reviewed works: an overview of parts I and II

Traditionally, in the context of a synchronic approach, linguistic treatments of modality have focussed on the modal auxiliaries as the chief exponents of modal contrasts and
meanings. This focus continues to exercise a strong hold over contemporary modality research, as many of the works covered in this review attest. In a recent study on the root/epistemic divide, based on the work of Kratzer (1977) and Chomsky (1999), Butler (2003: 969) remarks that “Modality is realized in Standard English mainly by the use of the modal auxiliaries”. It is certainly true, as Palmer (1990: 2) has argued, that the study of the modals may be regarded as synonymous with the study of modality itself; “for the meanings expressed by the modal verbs in English represent, to a large degree, those that are to be included in a typological account of modality”. The centrality of modal verbs to the expression of modal concepts in language accounts for the prevalence of this focus in the works under review in the two parts of this article. That said, in what can be seen as a counter trend, there is a growing recognition of the need to provide accounts of modality which move the discussion beyond examination of its most grammaticalized exponents, namely the modal auxiliaries, to take into account other carriers of modal meanings.

Some time ago, Givón (1982: 187) observed that “New [modal] operators are still being introduced into the [modal] system; and both those and the system as a whole are in the process of being re-shaped”. Studies which recognize that the English modal system is in a state of flux herald a sea change in modality research, with their wider focus on modal expressions as a whole, rather than on the modal auxiliaries alone.

Whilst modality is obviously the theme common to all the works under review, each has its own take and particular areas of focus. In Part I, Barbiers et al. (2002) espouse (and restrict themselves to) an examination of modality and its interaction with the verbal system in a generative framework; Brandt (1999) explores the grammar and semantics of Danish modal verbs; Nuyts (2001) establishes a cognitive-pragmatic base for scrutinizing four major expression types of epistemic modality in Dutch and German (modal adverbs and modal adjectives, mental state predicates, and modal auxiliaries) with frequent reference to English; Palmer (2001) provides a cross-language typological study of modality, contrasting it with the grammatical categories of tense and aspect. In Part II, Capone (2001) discusses a range of modal adverbs (such as obviously, certainly, honestly) in a pragmatic, specifically neo-Gricean, perspective; Facchinetti et al. (2003) offer richly diverse theoretical and descriptive accounts of modality in contemporary English and explore in an original way the semantics and pragmatics of core modal verbs (would, might, could), emerging modal expressions (had better, might as well, really), and stylistic and sociolinguistic variation; and, finally, the remaining two works, Huddleston and Pullum (2002) and Biber et al. (1999), represent major, yet very different reference grammars, which naturally include accounts of the English modal system. Both these grammars take a more inclusive view of modality than standard grammars have tended to do in the past and make reference to various linguistic expressions of modality (see below). Whilst Biber et al. (1999: 483–502) initially concentrate on the modal auxiliaries (with passing reference to the semi-modals got to, ought to, used to and the modal idiom had better), their corpus-driven account enables them to make novel observations about the lexical associations of modality and the co-occurrence of certain verbs, especially mental verbs, with the modals, as in: You can imagine what it’s like or I could just discern a faint nodding of the head. In a fresh approach, and in a separate chapter (Biber et al., 1999: 965–986), the semantics of a broad range of modal expressions (modal auxiliaries, modal lexical verbs, adverbs and
adjectives) are discussed in terms of “the grammatical marking of stance”. A brief section in the chapter on the semantics of adverbs (Biber et al., 1999: 557–558) also looks at stance.

In general, all these works represent a healthy trend, where a more extensive view of the modal system is starting to feature more prominently on the agenda. Each study is rooted in different theoretical perspectives and is sufficiently original in approach to warrant inclusion in this review. It cannot be said that together, they cover the entire field of modality studies if, indeed, that would ever be possible; but they certainly provide solid foundations for a comprehensive assessment of the current state of modality studies (especially in relation to English) and for informed discussion of what future directions modality studies might take, especially from a pragmatic and discourse-oriented standpoint.

A short note on terminology is called for. As with other areas of linguistics, the modal lexicon is far from standardized, the technical jargon adopted often reflecting the theoretical bias of scholars and their individual predilections for the coinage of particular terms or expressions. The modal camp has its own contribution to make to what Bolinger once aptly called “the endless flow of terminology” (cited in Crystal, 2003: vi). For instance, the term ‘extrinsic’ is often preferred to ‘epistemic’ (Biber et al., 1999: 485; Quirk et al., 1985: 219–220); Huddleston and Pullum (2002: 175–177) write of a scale of modal strength: ‘strong’, ‘weak’, and ‘medium’, to capture graduations in deontic as well as epistemic meaning, where other writers deal in scales of likelihood or estimations of probability (Close, 1975; Hoye, 1997; Matthews, 1991 are cases in point). More significantly, some scholars occasionally vacillate and confound terms used for basic concepts. Thus, in some accounts, we find the term ‘modality’ used to signal a grammatical category (on a par with ‘tense’ and ‘aspect’), whilst in others it is used to refer to the entire semantic field of modal contrasts, regardless of how they are signalled, lexically, grammatically or prosodically. That doyen of modality studies, Frank Palmer, argues that “Modality ... is a semantic term ...” (Palmer, 1979: 4), only to propose in a later work that “It is possible to recognize a grammatical category, that of modality, which is similar to aspect, tense, number, gender, etc.” (Palmer, 1986: 1) or “Modality is a cross-language grammatical category ...” (Palmer, 2001: 1). This could be confusing for the unwary. In practice, it is useful to distinguish between the ‘modal system’ – the various lexicogrammatical and prosodic means by which modal contrasts are made – and to contrast this term with ‘mood’, where such contrasts may be signalled through verbal inflection. Providing an inventory of terms, whilst worthwhile, would be a lengthy paper in itself and is beyond the scope of this review. Thankfully, Palmer (2001: 1–22), who draws on very broad scholarship, provides the modal community with an invaluable service by discussing basic concepts at the outset of his typological survey and proposing standardization of basic terms. Thus, for example, in place of the previously favoured practice of making a binary distinction between ‘non-modal’ and ‘modal’ or ‘factual’ and ‘non-factual’, Palmer (2001: 1) suggests that ‘realis’ or ‘irrealis’ are the more satisfactory terms since “they have the advantage that they are obviously technical, so that their use can avoid any possible connotations of the more familiar terms” (Palmer, 2001: 1). Elsewhere (Palmer, 2001: 7–8), he discusses the epistemic–deontic distinction in terms of ‘propositional’ and ‘event’ modality, yet uses both sets of terminology in tandem, thereby recognizing that the traditional terms are somehow irredeemably fixed in the modal pantheon. This first chapter is a must-read for anyone approaching the contemporary modal scene.
One last terminological point: In line with Perkins (1983), we use the phrase ‘modal expression’ to cover all lexico-grammatical realizations of modality, be these modal auxiliaries, lexical modal verbs, modal adjectives, modal adverbs, or combinations of modal carriers of meaning, such as modal-adverb collocations.

In this article, we occasionally use authenticated language samples drawn from the spoken and written parts of the British National Corpus (and abbreviated, respectively, as BNCS or BNCW) and, in one or two cases from the Survey of English Usage (SEUS/SEUW). The examples and their wider contexts can be accessed and retrieved through the filenames or reference codes indicated in brackets, following each citation. The benefits of using naturally occurring data are emphasized throughout this paper: the data record instances of language in actual use and the illustrations they provide are more realistic and reliable than the products of fanciful invention (see further de Beaugrande, 1996).

The article situates the eight works under review within the broad field of modality studies. This serves as a background to discussion, in Part II, of different modal themes which are considered pertinent to a pragmatic perspective on this elusive domain of human thought and language. The books are discussed in the order in which they are listed above: Part I covers titles 1–4 and Part II titles 5–8.

3. Modality and its interaction with the modal system (Barbiers et al., 2002)

The collection of papers edited by Barbiers et al. (2002) is the only study in the present selection which addresses modality in terms of a generative paradigm where, as Barbiers writes in his introduction (Barbiers, 2002a: 15), the focus is on the syntactic properties of modal verbs and modal constructions, including the argument structure of modals, the position of modals, and the relation between syntactic properties and semantic ambiguity. It would not be unfair to assert that this collection is the least pragmatically oriented of the works under review. The papers in this volume offer valuable insights into current preoccupations of scholars investigating modality in terms of generative theoretical models. They are perhaps of less interest to linguists and pragmaticians who look beyond language as system and situate it firmly in terms of its users and its contexts of use.

The papers mostly derive from a workshop presentation on ‘Modality in Generative Grammar’, held at the University of St Andrews (Scotland) in 1998. These have been supplemented by solicited articles. In all there are 11 contributions: six of these focus on languages other than English (Dutch, German, Lele [an East Chadic language], Macedonian, Slovene); five deal with modality and negation or polarity; and two take a diachronic snapshot of late Middle English and Middle Dutch. The papers mostly focus on modal verbs, although two look at other types of modal expression, such as verbal inflection, word order, auxiliary verbs and modal particles and adverbs, imperatives (Frajzyngier, 2002: 165–184), and imperatives (Sheppard and Golden, 2002: 245–259). We shall briefly discuss the findings of each paper in turn.

Barbiers’ (2002a: 1–17) scene-setting exercise offers an overview of the research questions addressed in the framework of generative grammar. His starting point is the “systematic semantic ambiguity” between the epistemic and root (‘monadic’ and ‘dyadic’) meanings of the modals (Barbiers, 2002a: 1–2):
John must be at home at six o’clock can be glossed, epistemically as ‘(Given what I, the speaker, know), I predict that John will be home at six o’clock’ or, in its root guise, as ‘John is obliged to be at home at six o’clock’. Various ways of representing the alternation between the two senses are discussed. For instance, it is found that reducibility of the dyadic–monadic alternation to a transitive–intransitive alternation applies neither to English, whose modals are defective, nor to languages such as Dutch or German, where the modals share properties in common with main verbs. Likewise, a (generative) raising-control analysis poses serious problems. Analysis of the structural positions of the modals is equally problematic since “a simple and universal picture seems virtually impossible given the empirical facts” (Barbiers, 2002a: 7). It appears that the epistemic-root distinction can be more beneficially studied from the perspective of the modal’s complement, which may force an epistemic or root interpretation (Barbiers, 2002a: 12–14). The article concludes with a brief overview of the interaction between modality and negation, and the different lexico-grammatical codings of modality (Barbiers, 2002a: 14–15).

It could be argued that, from a discourse point of view, the issue of epistemic-root ambiguity is something of a red herring. Situate the utterance in context and the ambiguity disappears, certainly at the extremes of the epistemic/root scales of meaning, involving uses of may and must. In the case of should and suppletive ought to, there appears to be indeterminacy, or what Coates (1983: 17) calls a “merger” between epistemic and root meanings, where disambiguation is impossible, if not immaterial:

(2) I’m not suggesting that you, you’re right, I don’t think you should speak to <name> but I can’t see that that’s well maybe they’re more efficient now they bloody well ought to be, there’s twice as many people in there. (BNCS/JN7 307)

In terms of natural language users and the contexts of authentic language use, language, fortunately, does not have to be so cut and dry. Ambiguity only seems to become an issue once sentences are de-contextualized or where context is ignored altogether. Pragmatics is an excellent antidote to the pretensions of ambivalence! In an article on the role of modality in legal contracts, Klinge (1995: 650), argues that once the gap between linguistic form and communicated meaning is bridged “it will become possible to account for the synergetic effect of the combination of vague linguistic semantic input and situational, pragmatic factors contributing to meaning. As a result, many, if not all, of the ambiguities and indeterminacies traditionally predicted by linguistic theory will be superfluous”. This systemic invocation of ambiguity in relation to the epistemic/root divide is a feature of several of the articles in the present collection.

Abraham’s essay ‘Epistemics in German and English’ (Abraham, 2002: 19–50) looks at modality cross-linguistically and, initially, in a diachronic perspective. The paper shows that the development of auxiliarized modal meanings in English can be accounted for through that language’s gradual loss over time of aspectual or Aktionsart properties. Conversely, modals in German have full verb status which means that, in contrast to English, they can occur as infinitives and as participles. As a result, German and English
modals obey different distributional criteria. The far-reaching process of auxiliarization results in the fact that, in American English, “will and shall serve no deontic or epistemic purposes any longer” (Abraham, 2002: 46). Certainly shall is comparatively rare and restricted to formal genres, such as legal or academic discourse (Biber et al., 1999: 495–497), but it does not appear to have totally relinquished its modal function, especially if prediction is considered to be epistemic in the sense that what is predicted – what lies in the future – is necessarily not known:

(3) We shall have the four day working week. Of course we shall. (S.5.5.304/5)

In ‘Modality and polarity’, Barbiers (2002b: 51–73) argues that the interpretations of modal verbs primarily depend on the nature of their complements. The illustrations, which, as is the case with most of the examples found in the collection, are contrived inventions, neatly lead to the conclusion that “the ambiguity of modal verbs is primarily determined by syntactic and semantic properties of the complement of the modal” (Barbiers, 2002b: 70).

Yet again, and in keeping with the generative paradigm, no appeal is made to matters contextual.

‘Modals, objects and negation in late Middle English’ by Beukema and van der Wurff (2002: 75–102) is a diachronic study, which primarily explores object–verb word order, the relation between modality and negation and the implications this had for language acquisition in England in the 15th century. The (potentially) most interesting conclusion is a Middle English acquisition scenario: “for 15th-century children, the place of negated constituents like nothing is established on the basis of simplex clauses, i.e. clauses with a single finite verb like He said nothing. Sentences containing modals appear to have played no role in this process” (Beukema and van der Wurff, 2002: 98).

Blom (2002: 103–131) also explores language acquisition and modality: ‘On the use and interpretation of root infinitives in early child Dutch’. Based on a corpus of root infinitives used by six Dutch children, the author demonstrates that the children’s ability to use finite verb forms enables them to analyze the infinitive as a verb rather than a noun although, it is suggested that initially, children may analyze infinitives as nouns.

Cormack and Smith (2002: 133–163) return to the theme of modality and negation in their article, ‘Modals and negation in English’. In connection with the relative scope of epistemics and deontics, their findings suggest that it is a cognitive requirement that an epistemic cannot be in the local scope of a deontic. This would explain why epistemics are classed higher than deontics.

In ‘System interaction in the coding of modality’, Frajzyngier (2002: 165–184) focuses on epistemic and deontic modality but takes a more inclusive view of modality by showing how in Lele verbal inflection, word order, auxiliary verbs and modal particles all participate in coding modality. In essence, the findings show that epistemic modality is coded by the indicative form of the verb and deontic modality by the imperative, underpinning their conceptual associations with judgements on the one hand and directives on the other. They are semantically distinct domains, as carriers of both types of modality may combine within the same clause.

Papafragou (2002: 185–204) in ‘Modality and theory of mind’ takes a refreshingly pragmatic view in her opening assertion that “It has long been recognised that modal items
in natural language are context-dependent expressions” [my italics] (Papafragou, 2002: 185). This is one of the more thought-provoking contributions, raising as it does the hypothesis that “the acquisition of epistemic modality presupposes the ability to metarepresent mental representations (e.g. beliefs)” (Papafragou, 2002: 199). The hypothesis indicates a connection between early semantic/pragmatic abilities (preliminary stages in the development of pragmatic competence) and cognitive development. Papafragou uses acquisition data and the test case of autism to adduce evidence in support of her hypothesis. Of course, Papafragou is well known for her views on integrating formal approaches with real-world considerations. In her study ‘Modality: Issues in the Semantics–Pragmatics Interface’, the author concludes (Papafragou, 2000: 208): “My analysis was articulated with the purpose of providing a psychologically informed version of previous formal approaches to modal categories in natural language”. Formal approaches alone are deemed inadequate and incomplete.

With Postma’s article on ‘Negative polarity and modality in Middle Dutch ghe-particle constructions’ (Postma, 2002: 205–244), we revert to the theme of modality and negation in a diachronic perspective, through an examination of the Middle Dutch prefix ghe-. This tightly focussed paper uses detailed analysis of the prefix to shed light on the interactive relations between negative polarity and modality.

The penultimate paper, ‘(Negative) imperatives in Slovene’ by Sheppard and Golden (2002: 245–259), offers a formal syntactic account of Slovene imperatives sentences in the context of recent generative approaches to cross-linguistic variation in imperative systems.

The final paper, Tomić’s ‘Modality and mood in Macedonian’ (Tomic, 2002: 261–277) is an account of the relationship of modals to mood and modality phrases, emerging from the syntactic behaviour of Macedonian lexical and auxiliary modals.

The most obvious contribution this collection makes is to a broader understanding of the syntactic behaviour and distribution of modal expressions in terms of the systems of negation and polarity, and the insights it offers into the relation between syntactic properties and semantic ambiguity. The range of languages covered has important implications for the explanatory power of syntactic theory and its ultimate relevance for assessing and explaining the workings of modality across very different language families. From a pragmatic point of view, the accounts are mostly systemic evaluations locked into theoretical accounts of language behaviour where the language user, not to mention contexts of language use, have been disenfranchised and omitted from consideration. Generative syntactic approaches are certainly a part of the research agenda into modality in language, even if their perspective largely excludes the social and interactive features of language, which render it human, complex, and happily untidy.

4. Modal verbs in Danish (Brandt, 1999)

Other than Davidsen-Nielsen’s account of modality in English and Danish (1990), there is relatively little literature available in English on the Danish modal system. The present work is a useful addition to the modal literature, offering a detailed description of how modality works in a cognate but not widely known Germanic language.
In addition to the opening and very brief summary, there are six chapters. The first, an introduction (Brandt, 1999: 13–27), explains the corpus data (written language only and running to just over five million words), before outlining the notion of modality and listing the eight modal verbs selected for treatment: behave (‘need’/‘have to’), burde (‘ought to’/‘should’), gide (‘be inclined to’), kunne (‘can’/‘may’), måtte (‘may’/‘must’), skulle (‘shall’/‘must’/‘have to’), turde (‘dare’/‘can’/‘may’), ville (‘will’). The English glosses list cognates first followed by translation equivalents. The appended data on the relative frequency of these modal items shows that kunne (‘can’/‘may’) is twice as frequent as skulle (‘shall’/‘must’/‘have to’) or ville (‘will’), both of which enjoy similar distribution in the Danish corpus. By contrast, in their study of the behaviour of the English modals, Biber et al. (1999: 486) record that the three most frequent modals in English are will, would, can. Biber et al.’s (English language) corpus additionally makes reference to spoken texts, text types, and the particular modal meanings these typically embrace. The absence of spoken data in the Danish corpus, and the lack of textual categorization where the salience of different types of modal expression can be contextually understood, frustrate attempts to make any useful cross-linguistic comparison between the two languages, at least on the basis of the two sets of data that are presented. Biber et al. (1999) successfully demonstrate that the distributional properties of the English modals vary across text type; such information for Danish would have been very enlightening. The frequency data for the Danish modals would clearly benefit from the more detailed statistical approach adopted by Biber et al. (1999). As presented here, the data reveal little about the modals’ behaviour in different contexts and might, therefore, be better placed in an appendix, almost as a statistical ‘afterthought’.

The second chapter ‘Dimensions of Modality’ (Brandt, 1999: 28–42) explores semantic dimensions of the modal verbs. In common with Hoye (1997), the author takes issue with the fairly common practice of deploying the concepts of modal logic to describe natural language use. A terminological excursion is called for here. There is no denying the philosophical origin of many of the terms, such as ‘epistemic’, but this is not to suggest that they have logical or objective credentials on the playing fields of natural language and everyday discourse. Biber et al. (1999: 485) invoke the notion of ‘logic’ in their definition of extrinsic (epistemic) modality: “Extrinsic modality refers to the logical status of events or states”. Likewise, Crystal (2003:163) refers to ‘logic’ in his definition of epistemic modality, which involves “the logical structure of statements which assert or imply that propositions are known or believed”. The use of ‘logical’ might be taken to imply that epistemic modality aspires to objectivity, yet in natural language, objectivity in any absolute sense is unsustainable. In his detailed treatment of modality, which, as Perkins (1983: 3) points out, is mainly concerned with the logical characterization of necessity and possibility, Lyons (1977: 787–849) argues for the potential distinction between subjective and objective epistemic modality on theoretical grounds, although he acknowledges in conclusion (Lyons, 1977: 805) that “few linguists have ever considered the possibility that epistemic Modality could be anything other than a matter of the speaker’s attitude towards the propositional content of his utterance”. Palmer (1986: 16) considers subjectivity a fundamental characteristic: “Modality . . . is . . . concerned with subjective characteristics of an utterance, and it could even be further argued that subjectivity is an essential criterion for modality”. The expression in everyday discourse that something is in all likelihood
true is at some remove from the proposition that something is necessarily true in a logical sense. In:

(4) Any history of art written for the consumption of twentieth-century Europeans must necessarily regard the Giotto-Cézanne period as the most important section of art history. (Jacobson, 1964: 298)

the speaker is not making an objective assessment, tempting though it might be to think this, on account of the interpolation of necessarily and the speaker’s covert appeal to the art critic establishment as source of all ‘knowledge’. The force of the speaker’s opinion, no doubt a matter of professional judgement, merely reflects the strength of the speaker’s epistemic warrant. Thus, ‘knowledge’ in the sense in which it is used here is essentially subjective.

Once the logical concepts are banished from the discussion, Brandt posits three classificatory dimensions of modality: “modal source” (Brandt, 1999: 30–32), “modal intensity” (Brandt, 1999: 33–34) and “modal orientation” (Brandt, 1999: 34–36). Source, not surprisingly, refers to the source of modality, which may be implicit or explicit: Du skal gore det for dit helbreds skyld (‘You should do it for the sake of your health’). Modal intensity – which Huddleston and Pullum (2002: 175–177) discuss in terms of ‘strength’ of modality, namely the strength of the speaker’s commitment – is described in terms of a tripartite scale: possibility, predictability, and necessity. In fact, as the author acknowledges, the scale is in practice a continuous one. Several commentators have proposed scales of likelihood, especially with reference to epistemic modality, in which speaker assessments or inferences can be seen to range from the tentative through to the relatively certain (see Close, 1975; Coates, 1983; Halliday, 1970; Hermerén, 1978; Horn, 1972, 1989; Hoye, 1997; Lyons, 1977; Palmer, 1979, 1986, 1990, 2001; Perkins, 1983). In fact, scales of likelihood can be quite refined and used predictively to assess the relative strength of certain modal expressions. (For further discussion, see the section on Nuyts (2001) below.) Finally, modal orientation refers to the distinction drawn between active and passive modality. Other issues discussed include the semantic space of modality where the three dimensions described are represented as independent of each other; sense variants; and, lastly, variants of modal authority, approached in terms of the tripartite distinction that exists between the three ‘modes of modalization’: epistemic, ‘prospective’ (as a replacement for deontic), and dynamic modality.

Chapter 3 (Brandt, 1999: 43–67) provides an alphabetically arranged survey of the Danish modals and their sense variants. There is a separate entry for each modal verb, where the main sense variants are listed, with English glosses as appropriate, accompanied by dictionary definitions taken from the 27-volume Danish dictionary Ordbog over det Danske Sprog (1918–54). Methodologically speaking, this is arguably one of the weakest areas of the book since the data derive from now outmoded dictionary practices, with their principled use of quotations from literature rather than from the realm of everyday usage and contemporary discourse practices. The language examples used are often dated and rather bizarre: Ligeledes ville han vide, at tyske og danske tropper . . . (‘Likewise would he know that German and Danish troops . . .’) (Brandt, 1999: 61). The salience and spice of authenticated illustrations offered by corpus-driven linguistics is
conspicuously lacking from the present account. That said, given the succinct profiles of the Danish modals it provides, this chapter is probably the most informative in the book and certainly the most useful to scholars unfamiliar with the Danish modal system.

Chapter 4 (‘Basic Modal Grammar’) explores the interaction of the Danish modals with other grammatical items or categories: the inflection of modal verbs; modal complements; modality and negation (where there is a certain degree of similarity with English); modality and tense (where, unlike English, Danish modal verbs have non-finite forms, and distinguish present and past forms for all modals); and modality and the passive.

Chapter 5 (‘Syntactic Modal Constructions’) discusses certain types of syntactic constructions involving modal verbs including co-ordination; modal verb combinations; modal verbs as verb arguments; the co-occurrence of adverbs and adverbials with modals; functional dependency; modals in conditionals; modality and noun phrase specificity; and modality and expletive subjects. Treatment of the different topics here is uneven. For example, in the discussion of modal verb combinations, some of the illustrations are barely plausible: *Han skal ikke have ville gide skulle kunne læse latin* (‘He shall not have would bother should could read Latin’), as the author himself readily acknowledges (Brandt, 1999: 126): “In practice, of course, long verb chains are extremely rare because one rarely has such very complicated things to say”. In fact, given the cognitive processing necessary to produce, let alone understand such an utterance, it is highly improbable that such an elaborate concatenation would be invoked in the first place. The discussion of modal pairs (Brandt, 1999: 125–132), such as *burde kunne* (‘should/ought to can’) or *måtte kunne* (‘may/must can’) is more enlightening. It also brings to mind scholarship on double modal constructions found in dialects of northern England, northern Ireland, Scotland and the southern United States, such as Nagle’s discussion (Nagle, 2002: 349–371).

Brandt’s inclusion of certain adverbs which “characteristically occur together with certain (semantic variants of) modal verbs” represents an interesting departure from the usual focus in the literature on the modals as unmodified carriers of modal expression. However, there is no real discussion of the modal verb/adverb synergies that may arise through the more regular patterns of modal-adverb association. The lack of co-text or other context in the examples is a major drawback, the illustrations not being especially helpful for teasing out the refinements to meaning that adverb satellites can bring to their modal verb heads. The identification of semantic processes, such as those identified in Hoye (1997: 149–150) would give more substance to the discussion and possibly facilitate cross-linguistic comparison of adverbial function and the effects adverbial mobility has for the making of modal meanings. Hoye distinguishes between modal disjuncts and modal subjuncts (after Quirk et al., 1985), which he associates with the two main categories of modification identified: approximation and reinforcement. The former process involves thematization, interpolation or tagging of modal values at the level of the clause, according to whether the disjunct is positioned initially, parenthetically or finally. Reinforcement involves the emphasis, intensification or focussing of modal adverbs intrasententially, when the subjunct is contiguous with its modal verb head and occurs in medial position. Modal-adverb combinations herald refinements in the way modality is expressed in English and may well play a similarly important role, semantically, in the Danish modal system. This would make for worthwhile research.
The last chapter, ‘Concepts of Modality’ (161–193), reviews the semantic space of modality in Danish where a distinction is made between those dimensions which primarily involve the choice of lexical items and those which primarily involve variant meanings within lexical items. It continues with a summary of Danish modal grammar rules and then raises questions about modal ‘trouble spots’ involving, mostly, the modals måtte, ville, and skulle. The chapter ends with an overview of the structure of the Danish modal system. Finally, there is a brief survey of literature on Danish modals, including two comparatively short bibliographies: the first is a reference list of significant Danish modal literature, whilst the second is a general selection of linguistic references. The latter contains serious omissions, especially in relation to more recent scholarship and standard reference works, such as those featuring in this review. The lamentable absence of an index compromises the user-friendliness of the book, although the comprehensive table of contents and the well-designed layout compensate to a degree.

In sum, uneven though Brandt’s work is, his study nevertheless opens windows on a modal system, which may not be that linguistically remote but which will be unfamiliar to many. As the author notes (Brandt, 1999: 194), given that much of the literature on Danish modals is unpublished or “semi-published”, the present survey purposefully fills an evident information gap.

5. Epistemic modality, language, and conceptualization: a cognitive–pragmatic perspective (Nuyts, 2001)

Nuyts’ monograph (Nuyts, 2001), a cognitive–pragmatic investigation of epistemic modality in Dutch and German with reference to English, has two primary aims: firstly, to explore four major epistemic modal expression types (modal adverbs; modal adjectives; mental state predicates; and modal auxiliaries) and, secondly, on this basis, to illuminate the relationship between linguistic and cognitive structures and processing. The book includes an introduction, six chapters, the conclusion, and a serviceable if not very refined index (there are too many blocks of page numbers due to insufficient use of sub-entries). There is a wealth of information and corpus analysis; to avoid otiose detail, we focus on a few salient points, which mostly highlight the cognitive aspect of Nuyts’s work. For an in-depth review of Nuyts (2001), see Jaszczolt (2003).

The first chapter, ‘Preliminaries’ (Nuyts, 2001: 1–54), elaborates Nuyts’ earlier proposals for a cognitive–pragmatic theory of language (Nuyts, 1992). This establishes the framework of investigation for the rest of the book and is further developed in Chapter 6. Language, as a dimension of human mental activity and as an instance of complex human behaviour, involves a sophisticated cognitive infrastructure, firmly anchored in the human mind. The function of language is to symbolize what the mind conceptualizes; pragmatically speaking, the instantiation of language is observable, and the analysis of contextualized human behaviour is a necessary first step towards an understanding of the cognitive infrastructure for language. As Gibbs (2003: 3) remarks, in terms of what researchers today call ‘embodiment’, “language and thought are inextricably shaped by embodied action”. The thrust of this side of Nuyts’ research seeks to explain the connections between mind and body and language and body, a connection which is
articulated in a pragmatic perspective by Haberland and Mey (2002: 1680): “The basic material orientation of all our cognitive and volitional processes [is] due to the fact that we ‘inhabit’ a body, and therefore, cognition is specifically geared to, and informed by, the body ‘perspective’. The theory of pragmatic acts [can be] defined as the total activity that a human unfolds in an embodied situation”. ‘Depth’ (concerned with the wider cognitive embedding of language as an integral subpart of the language user’s mental world) and ‘dynamism’ (concerned with the dynamics of linguistic behaviour and its context-sensitive nature) are identified as the two key principles of a cognitive–pragmatic approach. Pursuing a similar theme in his paper on ‘Embodied experience and linguistic meaning’, Gibbs (2003) offers an illuminating account of the role people’s embodied experiences have in their use and understanding of meaning—that is, how people’s subjective, felt experiences of their bodies in action provides part of the fundamental grounding for language and thought.

The centrality of epistemic modality to a human’s perception of the world and capacity to function, read survive, in it would suggest that epistemic evaluations are a fundamental category of human conceptualization. On conceptual and procedural grounds, and in order to avoid conflation of two closely related yet distinct aspects of speaker ‘knowledge’, Nuyts (2001: 24–27) espouses a more restricted definition of epistemic modality, distinguishing it from evidential modality, on the grounds that the latter is concerned with the status of evidence rather than with the speaker’s evaluation. However, it is argued that polarity, involving the scalarization of speaker evaluations, is an integral feature of the epistemic system. Evaluations can be made independently and without overt recourse to sources of evidence.

The behaviour of different epistemic modal expression types (covered in detail in Chapters 2–4) is examined in terms of four functional factors: evidentiality; performativity versus descriptivity; information structure; and discourse strategy. The Dutch and German parts of the study rely on a mix of spoken and written data (some of it elicited), supplemented by “intuitively constructed examples”, whilst for English only invented examples are used, as it primarily serves as the language of presentation (Nuyts, 2001: 45–54). Evidentiality concerns the status of the evidence the speaker invokes: it is subjective where the speaker alone ‘knows’ the evidence and draws a conclusion from it (I think personally . . .), and intersubjective when the evidence is accessible to a (presumed) wider audience (It may be that . . .). Nuyts’ distinction is based on a re-analysis of Lyons’ (1977: 797–801) subjective and objective epistemic evaluations. In practice, Nuyts’ intersubjectivity amounts to an ‘objectification’ of the modal expression, where the adjacent proposition seems invested with greater authority:

\[(5) \quad \text{It may be that} \quad \text{vs. I think that}] \text{ by the end of the century, when we are carrying all before us, some fair-minded matron will survey her predominantly female team and announce that the time has come for a Ministry for Men. (BNCW/AJM 1163)}\]

In either case, subjectivity is pervasive, precisely because the modal expression is a function of the speaker’s own conceptualization of the world. The performative/descriptive dichotomy is used to distinguish expressions which involve the speaker’s current attitude
towards a particular state of affairs (a performative mental act of evaluation as in *I guess they may be lost*) and another, where the speaker’s commitment is not an issue at the moment of speaking (a descriptive act of evaluation, as in *Henry thinks they’re away*; *I believed they were wrong*). Information structure concerns the informational status of the epistemic expression in the context of the utterance, where it may or may not be focussed. Thus, Nuyts distinguishes focal and non-focal epistemic expressions. Although Nuyts’ data do not permit such observations, there is a strong correlation between fall–rise and fall-plus-rise intonation patterns and epistemic expressions, especially in relation to the modal auxiliaries and modal-adverb combinations (*Coates, 1983: 243–244; Hoye, 1997: 217–227*). Finally, Nuyts refers to discourse strategy to cover uses of epistemic expressions to do with the speaker’s ‘strategic’ adjustments to an utterance, for pragmatic reasons of politeness, modesty or the need to save face:

(6) Forgive me. *I think I must* be missing something. Why don’t you want to go back inside, where all the fun is? (*BNCW/AOF 2442–2444*)

These four factors are not exclusive to linguistic expressions of epistemic modality, nor can they in themselves account for the speaker’s preference for one type of expression over another.

The comparative analysis of modal adverbs and modal adjectives (*Nuyts, 2001: 55–106*) begins with a discussion of their syntactic behaviour in questions and in terms of negation in English, where the broad conclusion is that adjectives can be questioned (*Is it possible that . . . *) and negativized (*improbable*), whereas adverbs cannot (*Possibly could they . . . *improbably*). These findings partly recall *Perkins’ (1983: 90–93)* observations on the same topic. The corpus material shows that in the case of the Dutch and German equivalents of *probably/probable, waarschijnlijk* and *wahrscheinlich*, respectively, the adverbial form is by far the more frequent, albeit with variations across text types and between languages. (Supporting Nuyts’ analysis, my examination of the frames *Possibly they* and *It is possible they* in the British National Corpus, shows the adverbial form to be twice as frequent as its adjectival counterpart.) This frequency difference cannot be pinned down to a single underlying cause, although Nuyts concludes (*Nuyts, 2001: 79*) that information structure and focus seem to be the key factors: when the epistemic qualification is focal information in the clause, adjectival constructions are preferred. Plausible though this observation is, there is clearly scope for more research here: Nuyts’ (*2001: 56–57*) principled exclusion of evaluative adverbs from the discussion (*seemingly, apparently, clearly* and their Dutch and German counterparts) makes for too restrictive a selection; the issue of adjectival preference and focus would need to take on a broader range of languages to gain in typological validity, and the language data generally would need to be more extensive.

Nuyts’ (*2001: 104–106*) concluding discussion on the (un)acceptability of certain adverb and adjective combinations calls to mind *Lyons’ (1977: 807–808)* treatment of modal verb and modal adverb collocations in terms of “modally harmonic” or “modally non-harmonic” combinations. Thus, ‘He might possibly be at home’ is harmonic but ‘*He must possibly be at home*’ is not, as there is a lack of concord in the degree and nature of the epistemicity expressed by the verb and adverb, respectively. Likewise in ‘It is certainly
possible that they have run out of fuel’ the adverb and adjective are harmonic but not in ‘*It is certainly probable that they have run out of fuel’. Nuyts (2001: 105) argues that in ‘It is certainly possible that they have run out of fuel’, the adverb–adjective collocation is acceptable only because it involves different semantic categories of modality: the adverb certainly carries an epistemic evaluation ‘of a dynamically modalized state of affairs’ expressed by the adjective possible—an observation which upholds ‘the principle that one cannot combine two different epistemic qualifications in one utterance’ (Nuyts, 2001: 105). This interpretation, where the speaker apparently meshes epistemic with dynamic meaning, is slightly undermined by Nuyts’ acknowledgement that: ‘there are not many circumstances in which a speaker would want to do something of this kind’ (Nuyts, 2001: 105). The issue perhaps is not so much that the epistemic values of the two forms are incompatible, but that their discourse functions differ. It can be argued that the adverb functions intensively and focally, thereby drawing attention to the speaker’s epistemic assertion (carried by the adjective) of a strong belief in the possibility that a certain state of affairs may exist. This is an issue we have dealt with elsewhere in terms of the process of ‘objectification’ (see further Hoye, 1997: 48–53). The adverb’s dual discourse function of intensification and focus (‘objectification’) can be seen in the corpus examples below, where the second utterance operates concessively: the speaker acknowledges that, on the basis of the evidence, the envisaged state of affairs is untenable at the moment of utterance (7), or restricted in its validity (8):

(7)  It is certainly possible that we do indeed have an innate sense of ‘place’. For the moment, however, we have to regard the matter as unproven.
(BNCW/CET 1203–1204)

(8)  It is certainly possible that Mercury once had a molten core which has since partly or wholly solidified. However, solidification of an appreciable fraction of any such core cannot have happened [. . .]. (BCNW/GW6 1362–1363)

In the spirit of Barbiers (2002a: 12–14; 2002b: 51–73), there is additional evidence from syntax, which may help determine the possible semantic interpretation of the modal expression. The availability of the adjective’s epistemic interpretation is further indicated by the complement that-clause (‘It is possible that such and such is the case’). By contrast, a root interpretation is indicated when the adjectival expression takes a complement containing an infinitival verb (‘It is [in theory/principle] possible for such and such to be the case’):

(9)  Admittedly, we have no time to learn every instrument, but it is certainly possible to get to know the workings of one each of the string, woodwind, and brass groups. (BCNW/GVJ 954)

In Chapter 3, (Nuyts, 2001: 107–169) the focus is on lexical modal verbs, specifically mental state predicates (or ‘propositional attitude predicates’) which would include: believe, doubt, guess, know, suppose, think, and their Dutch/German equivalents. In contrast to adverbs and adjectives, this category of expression is vague, lacking the scalar precision of adverbs and adjectives (*150% think that . . .). The vagueness can be mitigated
by interpolating adverbials of degree (to an extent, up to a point, in some measure), although it could be argued that such expressions merely reinforce such vagueness!

The key issue in Nuyts’ view is the ‘omnipresence of the evidential component’, which clearly distinguishes this expression type from adverbs and adjectives (Nuyts, 2001: 167). The observation that mental state predicates chiefly occur in contexts where speakers voice personal views rooted in their own individual experience, be this in agreement with or in opposition to their interlocutors, is pragmatically significant and apparently borne out by examples in the (British National Corpus) data. There is an intuitive difference between (what we label) the subjective-integrational use of suppose in (10), where the source of information or knowledge is the speaker (the speaker is doing the ‘supposing’) and the subjective-deferral use of the passive locution it might be supposed that in (11), where the source is withheld (apparently, the speaker appeals to an outside authority who has already done the ‘supposing’):

(10) I’m hitting my head repeatedly against something and I suppose that that could be a definition of insanity. (BNCW/CA3 2080)

(11) With the growth in pre-marital sexual experience which has taken place, it might be supposed that selection of a long-term partner on these lines would be easier [. . .]. (BNCW/EW8 1518)

The contrast between the two expression types and their complementary function is poignant in cases where the two co-occur: ‘deferral use’ situates source of ‘knowledge’ and responsibility for opinion outside the speaker, thereby investing the speaker’s utterance with apparent authority, whereas ‘integrational use’ identifies the speaker as explicit source, thus committing the speaker on the basis of that ‘authority’. The latter expression type necessarily falls within the scope of the former:

(12) It may be the case – and I suspect that it is – that some of the very early retail pairs . . . were excellent. (LFHW/HFN110471)

The notions of ‘subjective-integration’ and ‘subjective-deferral’ are related to the theme of ‘authoritativeness’ in discourse which, as Hill and Irvine (1993: 11) claim, shows “how speech can come to be seen as reported—deriving in some respect at least from a source other than the actual speaker”. The concept of ‘entitlement’ is also relevant here, embracing as it does the matter of “ownership of experience and information”. (For further discussion, see Hill and Irvine (1993: 1–23).)

A further point of interest is Nuyts’ observation that the use of a mental state predicate requires more utterance planning than does the interpolation or tagging of parenthetical forms, such as adverbs, “which can be ‘thrown in’ at any time, even when the execution of the utterance has already started, or even after it has been completed” (Nuyts, 2001: 169). The implication is that speaker choice of epistemic expression reflects the cognitive effort involved in its integration within discourse: writing, which normally requires more planning, features few parenthetical forms. Again, this preliminary finding would need further investigation and refinement.
Chapter 4 (Nuyts, 2001: 171–233) explores the status of the epistemic modal auxiliaries, initially dealing with their syntax and semantics and non-epistemic as well as epistemic uses. Their defective syntactic behaviour has been covered in depth elsewhere (Coates, 1983; Huddleston, 1984; Palmer, 1990), especially in relation to features of grammaticalization and the integration of the modals into the grammar of the language. The polysemous nature of the modals raises the familiar issue of epistemic/deontic ambiguity where, as Nuyts (2001: 180) acknowledges: “[i]n very many cases the wider context is the only clue for their disambiguation”. It is also true that ‘merger’ often comes into play – as seen in our discussion of should and ought to above (example 2) – when disambiguation or indeterminacy are no longer an issue: the modal comes double-flavoured!

A range of epistemic forms in Dutch and German are reviewed, especially kunnen and können in relation to the cline between their dynamic and epistemic readings. There appear to be closer parallels between English and Dutch than between English and German. Nuyts (2001: 175) records how English and Dutch allow the scalar marking of ‘probability’ by highly idiomatized modal-adverb combinations such as may well and kan goed. Interestingly, Nuyts does not select this feature as a diagnostic for disambiguating epistemic from non-epistemic readings. For instance, referring to must in the sentence He must understand that we mean business, Nuyts (2001: 180) argues that, all other things being equal, the most natural interpretation, which first comes to mind is deontic rather than epistemic. Context apart, it can be observed that adverb collocates of must are often determinate of its modal orientation (see Hoye, 1997: passim). Nuyts (2001: 228) concludes that, with reference to the epistemic scale (‘possibility’, ‘probability’, ‘certainty’), adverbs can be more finely tuned than the auxiliaries, the latter being more vague “possibly because of their higher grammaticalization”. I suggest that this may account for why modals and adverbs combine in the first place, indicated by the fact that in idiomaticized expressions such as may well or can’t possibly, where the intensifier has become integrated with its modal verb head, grammaticalization of both elements is complete. Nuyts also comments that in practice speakers avoid an accumulation of functionally similar adverbs and auxiliaries “in order to distribute the load evenly over both linguistic categories” (Nuyts, 2001: 228). Yet it must also be recognized that the epistemic system is amenable to fine-tuning and irony:

(13) If your idea is contrary to my idea your idea must be eliminated, especially if it starts getting a territorial foothold, and might just possibly catch on. (BNCW/HGJ 2519)

(14) Yes Mr Mitterand we absolutely, categorically, possibly, maybe, could be going into Europe. (Hoye, 1977: 236)

In Chapter 5 (Nuyts, 2001: 235–260), Nuyts seeks to corroborate his findings in the Dutch corpus data on epistemic expression types and information structure, through recourse to an elicitation experiment, involving native speaker informants. The controlled experiment uses cartoon strips where there are several possible outcomes in the stories they narrate. Informants were asked to express their opinions on different aspects of the stories
although, of course, they were not invited explicitly to make epistemic evaluations. The experiment is a useful and necessary adjunct to the corpus investigation but is rather contrived so the results obtained need to be treated with considerable caution. (See my comments in Part II on the two reference grammars and the use of elicitation tests to supplement their use of corpus data.) As Nuyts (2001: 236) notes: “In normal circumstances, speakers make epistemic evaluations in situations in which they have to reflect on the reality status of a state of affairs, usually because their reality status is unclear” [my italics]. The “reality status” depicted in the cartoon strips is too manicured; the use of visuals is an excellent ploy but perhaps these could be images whose actual content is genuinely unclear or clearly open to interpretation, there being no ‘correct’ answer obviously available. However, broadly speaking, the results of the test confirm that, with reference to Dutch, adverbs never occur with focus and hence are not foregrounded for their informational value; adjectives are regularly used focally; mental states predicates are rarely so used; and, lastly, the modal auxiliaries (contrary to the corpus investigation) are also used focally. In line with the corpus investigation, Nuyts (2001: 259) concludes that speakers tend to avoid using epistemic expressions “under conditions of focality”. In other words, in terms of information structure, epistemic qualification is essentially non-focal. Why this should be so is tackled in the final chapter. There seems to be a contrast here with (spoken) English where Coates (1983), Hoye (1997), and Quirk et al. (1985) have noted that epistemic modals and modal-adverb combinations can be associated with nuclear stress (fall–rise) and thereby have focal value. In fact, Hoye (1997: 220) suggests that, for spoken English, intonation can be a useful diagnostic for identifying the epistemic status of modals and modal-adverb idioms. That said, it is worth bearing in mind Cruttenden’s observation that: “It is not difficult to find examples, at least in English, of almost any nuclear tone combined with any syntactic type” (Cruttenden, 1986: 96)!

In ‘The cognitive structure of epistemic modality’, the final chapter (261–366), Nuyts moves away from discussion of the empirical findings to focus on a theoretical discussion which might account for them; we outline only very briefly the main discussion here. Nuyts remarks that in principle, the epistemic element is an adjunct to the expression of the state of affairs it qualifies because it is dependent on the information that that state of affairs contains; it exhibits different degrees of integration – strong in the modals, weak in parentheticals – and is non-focal in linguistic expression. Nuyts uses epistemic modality as a case study for his preliminary investigation into the cognitive structure of language use or how we move from mental conceptualization to linguistic utterance. Accessing the epistemic system and its linguistic expression casts light on the nature of conceptualization, since language generally encodes and transmits conceptual information. Processing in language production, for which Nuyts adopts a Functional Procedural Grammar (FPG) model, is firstly non-linguistic, or pre-linguistic, although at some juncture it must obviously enter the linguistic realm. There is no one-to-one relationship between conceptualization and its expression through verbal communication; this involves a host of mediating factors, not least the very pragmatic one of context. Like other semiotic systems, language itself is a conceptualization procedure (Nuyts, 2001: 322–328). As a conceptual category, epistemic modality is amenable to the abstract notion of hierarchical or layered representation in terms of which conceptualization can be modelled; being classified second to evidentiality in terms of this scale (Nuyts, 2001: 347), indicates its
centrality to conceptual structure. Nuyts’ concluding remark is pragmatically significant, for it explicitly endorses the language user and context of utterance as crucial to the instantiation of meaning: “Even though what can be conceptualized must be innately determined, what is actually conceptualized depends on the needs and interactions of the organism [sic] in/with its physical environment” (Nuyts, 2001: 366).

Halliday (2004: 616) remarks that: “speakers have indefinitely many ways of expressing their opinions—or rather, perhaps, of dissimulating the fact that they are expressing their opinions”. The wide range of choices available to speakers within linguistic modal systems, including synergistic combinations of different carriers of modal meanings (such as the modal-adverb collocations identified in Dutch and English), need to be investigated further if epistemic modality and its cognitive–pragmatic implications for conceptual structure are to be properly understood. Nuyts’ unique, groundbreaking study points the way for continued research in this area.

6. Mood and modality (Palmer, 2001)

Palmer (2001), like its predecessor (Palmer, 1986), offers a comprehensive typological treatment of modality, using data from over 120 of the world’s languages. A glance at the language index reveals that, whilst Classical Greek, English, French, German, Italian, Latin, and Spanish are the most oft cited, other, more exotic (and extinct or near-extinct) languages also feature in this survey, including: indigenous languages from America (Caddo, Central Pomo, Kashaya, Maricopa, Serrano); Australia (Dyirbal, Ngiyambaa, Yidiny), and the Amazon region/Brazil (Tuyuaca). This is a unique catalogue of modal data on a wide range of languages. As with other works here, such as Nuyts (2001), English is used as language of presentation and for the numerous glosses. In contrast to the first edition, the Language Index no longer contains parenthetical information on the geographical location of the languages covered. Perhaps this is felt to be unnecessary, it being assumed that the specialized readership, which the volume targets has the requisite knowledge. Certainly, typological studies have gained in popularity in recent years and readers could be expected to have broad familiarity with the world’s more exotic languages, given the more frequent reference to them in the literature. In fact, details of all the languages cited are readily available on the Internet (try, for example, http://www.ethnologue.com/). That said, the editorial decision to omit such information lessens the user-friendliness of this indexical line of access.

The book has been substantially revised for its second edition and now consists of eight chapters (previously there were six) organized into two main parts. Following the ‘Introduction’ (1), the first part is concerned with modal systems: ‘Modal systems and propositional modality’ (2); ‘Modal systems and event modality’ (3); and ‘Modal systems and modal verbs’ (4). The second part deals with mood: ‘Indicative and subjunctive’ (5); ‘Realis and irrealis’ (6); ‘Subjunctive and irrealis’ (7). The last chapter, ‘Past tense as modal’ (8), focuses on the modal function of tense.

With a view to modality as a cross-linguistic grammatical category, Palmer’s main aim in Chapter 1 (Palmer, 2001: 1–23) is to clarify a number of terminological issues and basic concepts. He thus establishes sets of fundamental oppositions, such as ‘Realis’ and
‘Irrealis’ (in preference to the more familiar and less technical terms) ‘non-modal’ and ‘modal’ or ‘declarative’ and ‘non-declarative’ (Palmer, 2001: 1–3); ‘Mood’ (inflection) and ‘Modal Systems’ (for instance, the epistemic uses of the modal auxiliaries in English or the evidential markers of Central Pomo); ‘Propositional’ (epistemic) and ‘Event’ (deontic/dynamic) modality; ‘Epistemic’ and ‘Evidential’ modal systems; and ‘Deontic’ and ‘Dynamic’ Event modality. He proceeds to examine sub-types of modality, including: presupposed propositions; non-assertive negative and interrogative use; ‘wishes’, ‘fears’ (Rescher’s (1968) ‘boulomaic’ modalities), and the modal use of past tense forms. Modal systems are highly complex and there is no one-to-one correspondence between the formal systems of languages used in the study. This fact motivates the need to establish notional definitions (such as those Palmer proposes), which may be external to the linguistic system of a particular language, yet make it possible to accommodate formally different exponents of similar modality types.

Chapter 2 (Palmer, 2001: 24–69) explores propositional modality across several languages, a basic distinction being drawn between epistemic modality, the modality of judgements, and evidential modality, the modality of evidential source. Epistemic modality is distinguished in terms of the familiar three-point scale of possibility, probability, and necessity; English, apparently, is one of few languages that have a system with all three markers (Palmer, 2001: 25), which makes for an elaborate and complex system. In a novel approach, Palmer establishes the categories of ‘Speculative’ (may), ‘Deductive’ (must), and ‘Assumptive’ (will). Other, less common propositional types of modality are also discussed. Palmer identifies two basic types of Evidential modality: ‘Reported’ and ‘Sensory’, that is, “evidence of the senses” (Palmer, 2001: 35). Other evidential types are discussed (direct and indirect; auditory; visual, and so on); then, discourse and participant systems (where some languages exploit modals and discourse relations); and, finally, declaratives (Realis); here, in some languages, a distinction is made between ‘strong’ and ‘weak’ assertion, reflecting the speaker’s ‘knowledge’ or ‘belief’. In the case of languages such as English, with their own epistemic system, the declarative is unmarked for modality and thus independent of the modal system.

The presentation of Event modality in Chapter 3 (Palmer, 2001: 71–85) relies heavily on English material because its deontic system is so extensive. The analysis throughout upholds the contrast between dynamic modality, where the conditioning factors are external to the subject, and deontic, where these are internal.

Chapter 4 (Palmer, 2001: 86–106) looks at modal systems in terms of epistemic and deontic/dynamic modality. In many languages, the same modal verbs are used for both modality types. This, it might be added, informs discussion of modal ambiguity in a number of works considered in this article: Barbiers et al. (2002) and Nuyts (2001) in Part I, and Facchinetti et al. (2003) in Part II. However, as Palmer (2001: 103) points out, the distinction is generally quite clear and there are formal distinctions, which correlate with the two uses. Recalling much of his earlier work, Palmer (2001: 89) refers to Lyons’ (1977: 787–793) treatment of the central modal notions of possibility and necessity to explicate what is epistemically possible/necessary and what is deontically possible/necessary. Possibility and necessity are then discussed in relation to English and other languages. In a brief but illuminating discussion of the notional connection between the epistemic and deontic uses of the modals, Palmer (2001: 98–99, after Sweetser, 1982, 1990) argues the
case of parallelism between a “sociophysical” world (which can be construed as the actual world), where deontic may represents “an absent potential barrier” and a “world of reasoning” (a non-actual possible world), where with epistemic may “there is no barrier to the speaker’s process of reasoning from the available premises to the conclusion expressed”. As Palmer demonstrates (again with reference to Sweetser), similar epistemic/deontic ambiguities exist with other forms of English, such as the modal lexical verbs insist, suggest, expect. These effects are readily identifiable in the British National Corpus data; take the case of deontic/epistemic insist:

(15) I insist that the autopsy shall be completed by tomorrow night. (BNCW/ANL 713)

(16) The skill is in some danger of being lost, but I insist that there is so much fun and pleasure in it and the methods are so effective that it should never be allowed to die out. (BNCW/BNY 1529)

Palmer ends the chapter with a brief consideration of modal systems in relation to other grammatical categories: mood, future, and negation. He notes that most languages can be characterized as having either a modal system (English) or mood (Romance languages). The two may co-exist in languages where the modal verbs have not been fully grammaticalized and/or where the subjunctive is losing ground, as with French and Italian.

The next three chapters (5–7) deal with mood across a variety of languages. The data for Chapter 5 (Palmer, 2001: 107–144), dealing with indicative and subjunctive mood, are taken from classical and Romance languages and explore the different types of modality (propositional, event); the imperative and Jussive (third person ‘imperatives’ used in Latin and Classical Greek), and the association between the subjunctive and subordination. Chapter 6 (Palmer, 2001: 145–184) investigates the grammatical markers of realis and irrealis (similar to the indicative and subjunctive) by which mood can be described in some languages, especially Native American languages and those of Papua New Guinea. Chapter 7 (Palmer, 2001: 185–202) brings the second part to a close with a discussion of several issues relating to both subjunctive and irrealis not addressed elsewhere. Here Palmer (2001: 185–187) explains the terminological differences between indicative/subjunctive, used in the description of the classical and modern languages of Europe (where differences can be associated with a range of morphosyntactic features), and realis/irrealis preferred by scholars working with Native American languages, and the languages of the Pacific, in particular those of Papua New Guinea (where differences are often marked by single words, affixes and clitics). Despite objections raised in Bybee et al. (1994), Bybee and Fleischman (1995), and Bybee (1998), Palmer concludes that, on the evidence of the data examined in the previous two chapters, the typological status of realis/irrealis remains a valid one. The final chapter (Palmer, 2001: 203–221) explores the modal function of past tense in the expression of ‘unreality’.

This is the most important typological work to date on mood and modality. It draws together the findings of considerable (and often disparate) scholarship in the field, in an accessible and terminologically consistent, data-driven account. Mood and modality in some form or another may feature in all human languages; this would make sense
pragmatically, given the centrality of modal systems to human thought and enterprise and to the verbal processes we use to express our opinions or to get things done, within the different societal and cultural contexts in which we act. Whilst there may still be a lack of consensus as to how the different modalities should be typologically categorized, Palmer’s study will set the agenda for future research in this field for some time to come: the mood and modality frameworks he has established should give greater coherence to the enterprise and facilitate future cross-linguistic investigation.

7. Intermission

The range of scholarship discussed here attests the significance of modality studies for different theoretical paradigms. Increasingly, these involve more detailed analysis and description of carriers of modal meaning other than the purely verbal, even if the verbal complex remains the primary focus for typological studies and is generally favoured in generative approaches, with their central concern for modal verb constructions. The picture of modality, which emerges is more complete as the findings of these diverse approaches refine or radically modify the results of much previous research. These accounts point to the existence of a more or less elaborate system, depending on how its scope is defined, but one, which nonetheless affords speakers wide latitude and considerable choice in their exploitation of the modal system. Speakers can express their stance through recourse to a formidable repertory of modal expressions, which may additionally involve gesture and prosody. Enhanced by the growing interest in typological studies generally, the cross-language data on mood and modality now available makes it possible to compare and contrast complex modal systems across a wide range of often unrelated languages and, indeed, cultures. Situating the modal enterprise firmly within the realm of human thought and communication in context, a cognitive–pragmatic perspective affords unique insights into not just how the modal system works at the surface level but how it is modelled at the deeper level of conceptualization.

In Part II, mood and modality are explored in relation to works dealing (primarily) with English, as a preliminary to a pragmatic treatment of modal synergy or the harnessing of different modal expressions across text.

References


Further reading

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