

On speech-act modality[☆]

Anna Papafragou*

*Department of Phonetics and Linguistics, University College London,
Gower Street, London WC1E 6BT, UK*

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Abstract

In this paper I reconsider Sweetser's (1990) proposal to include 'speech-act modality' in the categories of modality expressed by natural language alongside the traditional cases of root and epistemic modality. I propose a reanalysis of her examples using the relevance-theoretic notion of metarepresentation. Rather than assuming that there is a separate speech-act domain for modal operators in natural language to range over, I suggest that the material embedded under modal operators is sometimes used metarepresentationally, a possibility which is independently motivated and well manifested in other logical operators. © 2000 Elsevier Science B.V. All rights reserved.

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1. Introduction

It is standardly assumed that modal expressions in natural language express two main types of meanings: root and epistemic meanings. (1a–d) and (2a–d) are examples of root and epistemic modality respectively:

- (1) a. I must go on a diet.
b. You ought to feel ashamed.
c. You may go home only if you have finished your work.
d. One should acknowledge the authorities' effort to fight crime.

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* E-mail: anna@ling.ucl.ac.uk

- (2) a. You must be John's wife.
 b. That problem ought to be easy for a genius like you.
 c. You may find that your love of opera is not widely shared here.
 d. Since you are interested in industrial design, this course should be useful.

Broadly speaking, the utterances in (1) convey that a given state of affairs is considered possible or necessary in view of some (physical, moral, legal, social, or other) circumstances in the real world; the utterances in (2) convey that a given proposition presents itself as a possible or necessary conclusion in view of a body of evidence which is available to the speaker.

As is obvious from the above examples, a number of the English modal verbs can be used to communicate both root and epistemic meanings. The same seems to hold for a variety of modal expressions cross-linguistically (Perkins, 1983). There has been a growing body of research on the interrelationships of the two categories of modal meanings, their historical development, as well as possible reasons for the use of a single expression to convey both kinds of modality (see Palmer, 1986, 1990; Sweetser, 1990; Bybee et al., 1994; Bybee and Fleischman, 1995; Traugott, 1989, 1995; Groefsema, 1995; Papafragou, 1998a,b,c). In this paper I will not go into the details of this discussion, but I will focus instead on a different issue: in a recent influential study, Eve Sweetser has proposed yet a third modal category, which she calls 'speech-act modality' (Sweetser, 1990). I am going to argue that the phenomena classified as speech-act modality, although interesting, do not belong to a separate category and do not yield independent generalisations concerning modality. In the end, we are left again with the two basic kinds of modality exemplified in (1) and (2).

My paper is structured as follows: section 2 presents the basic tenets of Sweetser's analysis and discusses some problems. Section 3 offers a relevance-theoretic rethink of the original examples of speech-act modality using the notion of metarepresentation. Section 4 draws some conclusions for the metarepresentational use of logical operators in general.

2. The proposal

Sweetser (1990) places her discussion of modality within a more general approach to polysemy in natural language. She uses as a starting point the claim that polysemy is often motivated by a metaphorical mapping from the concrete, external world of socio-physical experience to the abstract, internal world of reasoning and of mental processes in general. She argues that modal verbs display a similar, motivated polysemy, thus offering a principled explanation for the intuitive connection between the utterances in (1) and (2).

Sweetser uses as a basis for the semantics of the modals Talmy's (1988) notion of 'force dynamics'. Root modals are taken to encode force-dynamic notions in the external world: *may* encodes the existence of a potential but absent barrier, *must* a positive compulsion, and *can* either a positive ability on the part of the doer, or some

potential force/energy. These notions metaphorically extended at some point into the internal, ‘mental’ domain and gave rise to epistemic meanings: *may* and *must* have thus come to denote barriers or forces operating in the domain of reasoning. The metaphorical mapping between root and epistemic senses has become conventionalised, i.e. it is now part of the semantics of English. The structured polysemy it creates is resolved pragmatically during the process of utterance comprehension.

Sweetser believes that an account based on ‘modality in two worlds’ explains the acquisitional and historical priority of the root over the epistemic meanings of the modals. The category of speech-act modality is then introduced as a further mapping of force dynamics, this time into the domain of speech acts, as the following examples (Sweetser, 1990: 70) are meant to illustrate:

- (3) He may be a university professor, but he sure is dumb.
- (4) There may be a six-pack in the fridge, but we have work to do.

Sweetser observes that what the speaker wants to convey by (3) is something like ‘I admit that he is a university professor, and I nonetheless insist that he is dumb’; similarly in (4) the speaker is responding to an offer previously made by her interlocutor by communicating something like ‘I acknowledge your offer, and I nonetheless refuse it’. These readings are contrasted with the interpretations of (5) and (6), where *may* carries normal epistemic meaning (Sweetser, 1990: 70):

- (5) He may be a university professor, but I doubt it because he is so dumb.
- (6) There may be a six-pack in the fridge, but I’m not sure because Joe had friends over last night.

Sweetser concludes that modality in (3) and (4) is applied not to the content world or the epistemic world but to the conversational world: “the interlocutor is being *allowed* by the speaker to treat a certain statement as appropriate or reasonable, or to present an offer” (1990: 71); therefore the two utterances can be paraphrased as follows:

- (3′) I do not bar from our (joint) conversational world the statement that he is a university professor, but ...
- (4′) I do not bar from our conversational world your offer of beer, but ...

So speech-act modality is the result of applying the modal concepts to the conversational interaction itself: “the speaker (or people in general) is forced to, or (not) barred from, *saying* what the sentence says” (1990: 73). Although it is more difficult to find examples parallel to (3) and (4) using other modals, Sweetser (1990: 71) mentions some more cases which seem to involve all of the modals quite regularly:

- (7) Editor to journalist:
OK, Peking can be Beijing: but you can’t use ‘Praha’ for Prague.

- (8) Mondale advisor giving directions to speech writer:
 Reagan must be a nice guy (as far as the content of the speech is concerned), even if we criticise his policies.
- (9) To smoker of long cigarette, from speaker who recognises that ‘cigar’ dialectally signifies ‘long cigarette’:
 In New Orleans, you would be smoking a cigar right now.

The main reason for introducing speech-act modality into a model that so far includes root and epistemic meanings lies with Sweetser’s conviction that “an utterance is content, epistemic object and speech act all at once” (1990: 75). Therefore, linguistic meaning may be grounded in any of the three conceptual domains of real-world (content), epistemic and speech-act objects. Very often, a single meaning starts out from the more basic, real-world domain and ends up having counterparts in the other two domains. The same sort of polysemous structure is detected by Sweetser in conjunctions, conditionals, and other areas of natural language.

Sweetser recognises that a fuller account of speech-act modality is yet to be formulated, and points out certain problematic – or, at least, puzzling – facts. First, (3) and (4) do seem different from the other examples of speech-act modality. What is more, *may* cannot be used freely in utterances like (8)–(9): for instance, it gives strange results if substituted for *can* in (7). The explanation Sweetser puts forward is that *may* has been specialised for the sort of use exemplified in (3)–(4) – a proposal very similar to that found in Fillmore et al. (1988), who view utterances such as (3) and (4) as cases of *constructions*: “clusters of information including, simultaneously, morphosyntactic patterns, semantic interpretation principles to which these are dedicated, and, in many cases, specific pragmatic functions in whose service they exist” (Fillmore et al., 1988: 534). In a more recent discussion of examples like (3) within the framework of Construction Grammar, Paul Kay (1997) has maintained that the construction view can explain why in (3) it is not *affirmed* that he *may* be a university professor (as it would if the utterance were used to make an epistemic statement), but rather it is *conceded* that he *is* a university professor; we could know everything else we know about the grammar and meaning of the words in (3), Kay argues, without knowing that the utterance conveys something different from, say, an epistemic statement (1997: 51).

Both Sweetser’s and Kay’s approaches, then, have to attribute to the *may*-structures in (3) and (4) some degree of idiomaticity, in the sense that their interpretation cannot be solely predicted from the semantics of their separate parts.¹ An account which could show that the interpretation of the two examples follows quite naturally from their compositional semantics plus general pragmatic considerations would avoid the appeal to idiomaticity. If usual considerations of cognitive economy hold, such an account (if it could be made plausible) might be preferable on methodological grounds. One of my claims later on will be precisely that no construction-specific knowledge is necessary in order to derive the concessive overtones of these utterances.

¹ This is not to say that there are no differences between Kay’s and Sweetser’s accounts (see Kay 1997: 51, footnote 3).

Another point made by Sweetser casts further doubt on the hypothesis that there is a separate, homogeneous category of speech-act modality: cases like (8) and (9) seem to involve a use/mention distinction, “in that the speaker is applying the relevant modality to the choice of linguistic *form*, not to the content” (1990: 72).² However, Sweetser says, in utterances like (8) it is the *purport* of the speech which is in question, and so speech-act modality applies to the choice of a given content. One cannot help wondering whether there could be a single, more explanatory category which would encompass the uses in (3)–(9) and naturally allow for either content or form to fall under the scope of modality.

The previous point raises a more general question as to the exact status of the ‘speech-act domain’ with respect to the semantics/pragmatics distinction. Sweetser clearly intends the content and epistemic domains to have a bearing on linguistic semantics; indeed, she says that some of the English modals actually encode both root and epistemic concepts. It is less clear that she should wish to extend this line to the speech-act domain. It certainly does not make much sense to claim that, say, *may* encodes speech-act modality, and Sweetser herself carefully avoids any such formulation. At best, thus, one can speak of speech-act *uses* (rather than senses) of modal expressions. A pragmatic extension of modality into the speech-act domain seems also to fit the parallel drawn by Sweetser between speech-act modality and metalinguistic negation (Horn, 1985) – the latter, exemplified in (10), is widely recognised as a case of pragmatics-related phenomenon:

(10) I’m not his daughter; he’s my father.

I will have more to say on the parallel in section 3. For the moment, I merely intend to point out that, even on Sweetser’s analysis, speech-act modality has to be set apart from the root and epistemic cases in that it cannot be viewed as systematically generating polysemy in natural language.

There is one more argument to this effect. Sweetser suggests that her tripartite modal structure may be semantically analysed in terms of Fauconnier’s theory of mental spaces (Fauconnier, 1985): the content, epistemic and speech-act domains correspond to mental spaces, and a single root modal expression can have a counterpart in one of the other two spaces. Fauconnier’s original conception of spaces was meant to capture referential ‘ambiguities’, which essentially stemmed from various ways of conceptualising a real-world referent: for instance, separate spaces were set up to deal with various mental representations of real-world referents (e.g. referents in pictures, or referents enmeshed in counterfactual situations). It is, therefore, quite easy to fit content and epistemic modality in this model: content modality would operate in the basic mental space which is used to represent ‘real world’ entities and states of affairs, while epistemic modality would operate in a derived space which

² In a footnote Sweetser leaves room for the existence of a separate subtype of speech-act modality to cover applications of modality to the form of the utterance (1990: 155). This would presumably cover examples (8) and (9), which she calls ‘metalinguistic’. If my reanalysis of the speech-act examples below is right, these uses are explicable in a natural way.

includes our mental representations of those entities or states of affairs (indeed, Fauconnier discusses a number of epistemic expressions such as *in X's view*, *X believes that*, *according to X*, etc., which he considers 'space-builders').

However, mental space terminology does not apply as straightforwardly to speech-act modality. The question is: what would a mental space look like in this case? Most probably it would have to be a domain including descriptions of speech acts: the claim would then be that we conceptualise utterances as speech acts using a discrete speech-act mental space, so that modality operates on it. However, it is not clear how the basic modal concepts of possibility and necessity would coherently apply to such a space. Consider example (3): what the speaker conveys is not that a *speech act* is possible or admissible, but rather that the *content* of a statement is possible or admissible with respect to certain background assumptions. The same holds for the rest of the utterances in (4)–(9). Note that Sweetser (1990: 74) considers certainty as the counterpart in the epistemic domain of compulsion in the real-world domain, and epistemic possibility as the counterpart of root possibility or permission: however, she does not give any example of counterparts in the speech-act domain.

Finally, as Sweetser points out (1990: 73), speech-act uses of the modals have a relatively restricted range of interpretations. For instance, they generally do not refer to the speech act being performed by the speaker. Consequently, one could not use (11) to communicate (12):

(11) Your father must want you home.

(12) I must tell you that your father wants you home.

Moreover, only certain types of modality can be felicitously expressed towards the speech act being performed; although it is not rare to request permission, it is rare to assert it:

(13) May I ask you where you are going?

(14) ?I may ask you where you are going.

In the next section I will propose an alternative approach to Sweetser's original examples; my main argument will be that speech-act modality is not a separate and natural class of phenomena but can be given a more plausible analysis in terms of concepts already independently motivated within relevance theory.

3. A relevance-theoretic rethink

3.1. A reanalysis in terms of metarepresentation

Let me go back to the utterances in (3) and (4). A closer look reveals that they share a number of features:

a) They occur most naturally as rejoinders to a previous utterance, some aspect of which was disputed by the speaker but is now grudgingly conceded. For instance, (3) can be a follow-up to the clause in (15c) in an argument about Jones' abilities:

- (15) a. X: I admire Jones immensely. I think he has contributed a lot to the intellectual life of this country.
 b. Y: I don't agree at all. In fact, I think the guy is completely incompetent.
 c. X: Look, he is a university professor.
 d. Y: He may be a university professor, but he sure is dumb.

(b) The special effects that such utterances are felt to achieve are lost if *but* (or some item signalling disagreement) is replaced by *and* in their second half; they are maintained, though, if the two clauses are merely juxtaposed:

- (16) a. ?He may be a university professor, and he sure is dumb.
 b. He may be a university professor; he sure is dumb.

(c) The modal bears contrastive stress, which seems to be crucial for the 'concessive' overtones of the utterance. Interestingly, if *may* is omitted, the utterance can still achieve more or less the same range of effects in case the main verb is assigned contrastive stress:

- (17) He IS a university professor, but he sure is dumb.

(d) The proposition in the second clause is a contradiction of a contextual implication of the proposition embedded under *may* in the first clause. In (15), the proposition that Jones is dumb obviously contradicts the implication of the embedded proposition 'Jones is a university professor', namely that Jones is intelligent.

The above observations are meant to suggest that the special effects that utterances like (3) are felt to cause (concession being maybe the most prominent among them) are not due to any special semantic features of the modal verb employed but rather to the specific nature of the material embedded under the modal, together with independent contextual considerations. It is useful to point out in this connection that such uses are not specific to English but are also exhibited by modal verbs expressing possibility in other languages. In Modern Greek, for instance, the impersonal verb *bori* denoting possibility has uses exactly parallel to those of *may*:

- (18) Bori na ine kathigitis panepistimiu, ala ine
 POSS be-3sing.pres.subj. professor-of university, but be-3sing.pres.indic.
 anoitos.
 dumb-masc.

Here is how a pragmatic account of these uses would go. As far as I can see, there is an important generalisation to be made about the above uses: the material in the scope of the modal is (wholly or partly) metarepresentational. In a nutshell, speech-act uses involve metarepresentations of either linguistic material (utterances or parts thereof), or conceptual material (thoughts or parts thereof) which is typically attributed to a source other than the speaker at the time of utterance. In the following paragraphs, I will first explicate the notion of metarepresentation and introduce some terminology, before turning to the data.

Metarepresentation involves use of one representation to represent another representation which it resembles. According to Sperber and Wilson (1995 [1986]: 227), “in appropriate conditions, any natural or artificial phenomenon in the world can be used as a representation of some other phenomenon which it resembles in some respects”. In ostensive-inferential communication, in particular, such representations by resemblance are regularly exploited both on the level of content and on the level of form. As far as content is concerned, a proposition expressed by a natural-language string can be used to represent another proposition with which it shares a sufficient number of analytic or contextual implications due to the resemblance between the two propositional forms. Within relevance theory, this kind of metarepresentational use of language which involves resemblance in content is called *interpretive use*. Interpretive use is contrasted with *descriptive use*, where a certain proposition is used as a truth-conditional description of a state of affairs in the world. Consider (19):

- (19) a. Mary: So what did John say?
 b. Peter: It is a lovely day for a walk.

In (19b) Peter might be taken to utter a description of a state of affairs in the external world; more plausibly, though, he is interpretively representing the content of John’s utterance. The proposition expressed by (19b) is thus used to represent what John said, and can be assumed to bear some resemblance to his original statement. Since the utterance is used interpretively, what is important is not the truthfulness of the representation conveyed but its faithfulness to the original one (see Wilson and Sperber, 1988). Within relevance theory, faithfulness is taken to be a matter of degree, so that representations can be *more or less literal interpretations* of the original propositional objects they are meant to represent.

The sort of interpretive use one may detect in (19b) is not linguistically marked, and therefore rests wholly on the inferential side of communication. In other cases, interpretive use is lexically or grammatically indicated. (20) is an example of overtly marked reported speech, where the metarepresentation is signalled by the adverbial *allegedly*:

- (20) Allegedly, the Prime Minister will resign.

This is a subtype of interpretive use of language which may be termed *attributive*, since it involves the attribution of a thought or utterance to some more or less specific source. This source may be indicated in very general terms, as in (20); it may be quite specifically indicated, as in (21a), or it may be linguistically unmarked, as in (21b):

- (21) John: Flying will become more expensive.
 a. According to John, flying will become more expensive.
 b. Flying will become more expensive, indeed!

Finally, on certain occasions, a metarepresentation is accompanied by an indication of the communicator’s attitude towards the original representation: in (20), for

instance, the speaker may be seen as maintaining her distance from what the content of the metarepresented assumption conveys, whereas in (21b) the communicator may be seen as adopting an attitude of endorsement towards the metarepresented assumption. The subtype of attributive interpretive use of a proposition which includes expression of attitude is called *echoic use* by Sperber and Wilson (1995 [1986]).

Apart from metarepresentations of propositional or conceptual content – utterances or thoughts – speakers may metarepresent aspects of linguistic form:

(22) On page 10, ‘book’ should be underlined.

Here, the speaker uses a linguistic stimulus to represent the form, rather than the content, of another linguistic stimulus. Linguistic metarepresentations which involve form instead of content are called *metalinguistic*. On this view, cases of mention fall squarely within metalinguistic uses of language. When mention is accompanied by the expression of the speaker’s attitude, metalinguistic uses are echoic in a way parallel to the interpretive echoic uses:

(23) Johnny saw two ‘mongeese’; somebody ought to tell him that the correct plural is ‘mongooses’.

In the first clause of (23) the communicator metarepresents the specific linguistic form used by a previous speaker (a fact that can remain linguistically unexpressed in spoken interaction) and (implicitly) adopts an attitude of rejection towards it; the second part of the utterance includes an explicit metalinguistic representation of form together with its explicit endorsement by the speaker, and thus functions as a sort of corrective statement with respect to the first clause.

We can now return to the examples of speech-act modality. It is fairly easy to see that the material embedded under *may* in (3) is used metarepresentationally: as I showed, the utterance is felicitously used as a rejoinder to a previous utterance, which made the point that Jones is a university professor. Since the metarepresentational use here involves the content and not the form of the utterance, it is a case of interpretive use; this one is not overtly signalled by any linguistic device, but is quite directly retrievable by virtue of the immediate juxtaposition of the two utterances in interaction.³ The same holds for the example in (4). What about the speaker’s attitude toward the metarepresented content? I would suggest that (3) and (4) are not clear cases of echoic use, since there is no single communicated attitude towards the interpretively used material. On a first pass, it might seem that the speaker adopts an attitude of endorsement. However, she hastens to add that she disagrees with an easily accessible implication of the interpretively used content, which the initial utterance aimed at communicating: in (3) this is the implication that Jones, being a university professor, is intelligent; in (4) it is the implication that the interlocutors should have some beer.

³ Of course, the interpretive use may be explicitly indicated, as in:

(i) He may be a university professor, as you say, but he sure is dumb.

The implication-denying aim of the second clause is bolstered by the existence of *but*. As Diane Blakemore (1989) has shown, this conjunct functions as a constraint on the implicatures of the utterance containing it: more concretely, it indicates that the proposition it introduces is meant to achieve relevance as a denial. In both (3) and (4), the second clause indeed contradicts and eliminates a highly accessible implication of the (interpretively used) content of the first clause. This is the reason for the awkwardness of (16a): *and*, even after pragmatic enrichment, cannot achieve the same effects as *but*. However, a non-conjoined juxtaposition of the two clauses may convey effects quite similar to those achieved by the presence of *but*, as the example in (16b) demonstrates: the reason is that the hearer can inferentially work out the contrast between what is communicated by the material embedded under *may* in the first clause and the proposition expressed by the second clause – in other words, he can pragmatically supply the instruction which *but* encoded as to the direction in which the relevance of the second clause is to be sought.

On the present analysis, then, *may* in (3) and (4) has its normal epistemic interpretation. Its complement is an assumption which is derived by deliberate inferencing and as such has come to belong to the speaker's 'belief-box' with a degree of strength attached to it. What is typical of so-called speech-act examples such as (3) and (4) is simply that the assumption in the complement of the modal has been picked up from the interlocutor's previous contribution to the exchange, evaluated and formed the output of the usual inferential computation of epistemic possibility.

The move of reducing speech-act modality in (3) and (4) to a subcase of ordinary epistemic modality has a number of advantages. First, it allows for the fact that very often the speaker chooses to modify her utterance with *may*, although she manifestly possesses enough evidence for the truth of the embedded proposition. In (3), the fact that Jones is a university professor is undisputed, so that (17) would actually be more appropriate given the speaker's current beliefs. By using epistemic *may* – i.e. by indicating that further evidence could conceivably bear on the truth of the embedded proposition, but that such evidence is unavailable to her at present – the speaker communicates less than what she manifestly knows. Therefore, she conveys that she does not want to commit herself to the whole array of cognitive effects the stronger proposition in (17) would produce. This strengthens the conclusion that the speaker does not subscribe to the contextual implication that Jones is intelligent. Moreover, the understatement gives rise to the implication that the speaker grants a point to the addressee now but reserves the right to dispute it later.

It may be objected here that, on my account, the speaker does not actually communicate in any strong sense that Jones *is* a university professor in (3). This goes against the intuitions of many speakers, and is explicitly argued against in Kay (1997). I have two lines of response to such an objection. To begin with, I do not think these intuitions are particularly decisive. For instance, they seem to rely heavily on the presence of *but*; compare (24a) to (24b):

- (24) a. The minister may want to support research, but the funding is scarce.
 b. The minister may want to support research; still, the funding is scarce.

More generally, it seems that the degree of speaker commitment to the complement of the modal depends on contextual assumptions, and cannot be derived in a purely structure-driven way. This is supported by the fact that there is a range of related uses of *may* which, although carrying concessive overtones, lack (at least on one of their readings) a speaker commitment to the complement of the modal:

- (25) a. Harry may be a genius; I don't care. I never liked him.
 b. The story of her life may be very sad – but I'm not interested in that. It's her work as an artist that I'm interested in.
 c. He may be a university professor – but then again he may not; in any case, he's dumb.
 d. This allegation may well be true, but it does not affect the rights of the defendant.

Roughly, the examples in (25) involve an *even if* type of concession rather than an *even though* type; in different terms, the speaker raises one possibility only to convey that it does not affect the main point she wants to communicate. In some of the utterances in (25) (e.g. 25d), it is difficult to distinguish between the 'speech act' and a pure epistemic reading for the modal. This emerges more clearly in (26c), where the speaker is in no way committed to the sculpture being a masterpiece:

- (26) a. X: I hate modern art. Look at this: what is it supposed to mean?
 b. Y: Well, this sculpture is famous. It was the winner in the Royal Academy contest last summer.
 c. X: It may be the masterpiece of the century, but I still don't understand it.

How then are we to explain the various types of concession ranging from the strong variety in (3) to the weak version of (26)? Assuming that *may* has its usual epistemic interpretation throughout, it appears that the degree of speaker commitment to the complement of the modal (and hence, the degree of concession) will be pragmatically inferred. Generally, as I have suggested above, the presence of *but* encourages 'strong commitment' interpretations. In (3), by introducing the denial of an implicature of the complement of *may*, the presence of *but* supports the conclusion that the speaker actually subscribes to the truth of the complement ('Jones is a university professor') in the first place – and, therefore, grants a point to the addressee, who previously put forth a version of the complement. Another factor affecting the type of concession communicated is the resemblance between the original utterance or thought and its interpretive representation in the complement of *may*. In (26c), for instance, the complement of *may* is a less-than-literal interpretation of the original utterance of Y, and in fact an exaggeration;⁴ rather than genuinely granting that the sculpture is a masterpiece, X communicates that, even if it is, he still denies that it is understood and recognised as such (which is a strong

⁴ On exaggeration as a variety of representation by resemblance, see Sperber and Wilson (1989).

implication of the assumption that it is the masterpiece of the century). In fact, what (26c) communicates can be paraphrased as in (27):

- (27) It is possible that it is the masterpiece of the century (although I doubt it), but I still don't understand it.

Yet a further advantage of considering speech-act modality as a subcategory of epistemic modality is that one can explain why *may* seems to have a privileged distribution in 'speech-act' examples over other modals – most notably, *can*. According to an analysis of the English modals which I have motivated elsewhere (Papafragou, 1998a, 1998b), *can* encodes the information that the assumption in its complement (let us call it *p*) is compatible with the set of all factual assumptions that bear on its truth; this analysis predicts that *can* lacks epistemic interpretations – a prediction which seems to be borne out.⁵ However, all concessive examples such as (3) and (4) appear to involve the speaker's admission that a certain assumption is not ruled out by her current knowledge – rather than by the state of affairs in the world. Furthermore, *may* is naturally suited to 'concessive' examples, where the speaker temporarily grants a point while at the same time reserving the right to reject it later (as is especially the case in utterances such as (26)). This is so because changes in epistemic states are to be expected, so that what may now seem epistemically possible can in the future be disproved by further evidence (and vice versa). *Can* differs from epistemic *may* in that no further assumptions entailing the negation of *p* (i.e. assumptions incompatible with *p*) are expected to be uncovered in the future – hence the infelicity of *can* in the concessive examples of this section.

3.2. Further examples

If the reanalysis of speech-act modality in terms of metarepresentations is essentially correct, then it should allow us to provide a unified account of a quite wide range of examples. On Sperber and Wilson's (1995 [1986]) approach, what can be metarepresented may vary from actual tokens of previous discourse to implied propositions or unuttered thoughts, hopes, etc., and from fully propositional forms to individual concepts; furthermore, as I have already remarked with respect to example (26) above, the degree of faithfulness to the original proposition may range from total identity to weak resemblance. Let me explore some of these possibilities. Imagine that Peter and Mary are getting ready to go home after a party and the following dialogue takes place:

- (28) a. Mary (to Peter): Give me the car keys. You are drunk.
 b. Mary (to Peter): Give me the car keys. You are in no position to drive.
 c. Mary (to Peter): Give me the car keys. You'll have an accident.
 d. Mary gives Peter a worried look as he approaches the driver's door.

⁵ In certain cases (e.g. negative or interrogative environments), *can* appears to admit epistemic interpretations. In Papafragou (1998a) I argue that these are not, in fact, genuine epistemic uses of the verb.

(29) Peter: I may be drunk, but I know what I am doing.

Peter's reply in (29) places within the scope of *may* conceptual material which has become available in the previous stage of his exchange with Mary. Offered as a response to (28a), Peter's utterance clearly interpretively represents a stretch of speech produced by Mary, and does so verbatim: in relevance-theoretic terms, it is a fully literal metarepresentation of the original utterance. If (29) is a reply to (28b), the material embedded under *may* bears a lower degree of faithfulness to the metarepresented utterance: in other words, it offers a less-than-literal interpretation of the proposition expressed by the second utterance of (28b), although it shares with the latter a number of logical and contextual implications (for instance, that Peter is in a bad condition, that he has no full control of himself, etc.). If taken together with (28c), (29) will be taken to interpretively represent a highly accessible contextual implication of Mary's second utterance ('You'll have an accident') – in particular, an implicated conclusion which Peter has derived in order to establish the relevance of Mary's comment. Finally, Peter may choose to interpretively represent an unuttered thought of Mary's, which he has reconstructed from the stimulus in (28d) – independently of whether the stimulus itself was ostensive or not; by interpretively representing Mary's thought Peter communicates that he has somehow retrieved it and wants to convey his attitude to it (as well as to one of its manifest implications).

Let me extend the analysis to some of Sweetser's earlier examples, repeated below for convenience:

(30) Editor to journalist:

OK, Peking can be Beijing: but you can't use 'Praha' for Prague.

(31) Mondale advisor giving directions to speech writer:

Reagan must be a nice guy (as far as the content of the speech is concerned), even if we criticise his policies.

(32) To smoker of long cigarette, from speaker who recognises that 'cigar' dialectally signifies 'long cigarette':

In New Orleans, you would be smoking a cigar right now.

Recall that metarepresentation may focus on aspects of linguistic form as well as aspects of content. I want to claim that, rather than warranting the postulation of a separate kind of modality, these examples simply contain metarepresentations of form. In (30), for instance, given certain pragmatic considerations such as the authority relationship of the editor to the journalist, *can* is ascribed its usual permission-granting interpretation. *Beijing* is here used metalinguistically: the speaker is 'holding up' a term which (in all probability) was previously proposed by her interlocutor, and concedes its appropriateness for the identification of Peking. The proposition expressed by the initial utterance of (30) assumes roughly this form:

(30') Peking can be (appropriately) called 'Beijing'.

The existence of metalinguistic use is further supported by the overtly quotational use of '*Praha*' which follows. An identical analysis can be proposed for (32): the indefinite description *a cigar* is being used metalinguistically. The speaker refers back to a linguistic form which would have been considered suitable for picking out a specific object in a different dialect (that of New Orleans). In these examples one might further assume that the descriptions are used not only metalinguistically, but also echoically, since the speaker expresses an attitude towards the appropriateness of the descriptions to pick out specific referents. This line of analysis justifies Sweetser's feeling that there is something 'metalinguistic' about these examples, and that they are possibly connected to the use/mention distinction; moreover, it successfully accommodates cases like (30) and (32) to the metarepresentation of content I have examined above.

The case of (31) is slightly more complicated. On a first pass, it has to be set apart from (30) and (32) in that it involves no mention of linguistic form. What is distinctive about this example is the use of the proper name *Reagan* to refer not to the individual who used to be President of the United States but to a representation of that individual as it emerges from a text (here, a speech). Such uses of names and descriptions have attracted some attention in the linguistic literature; it is standardly assumed that 'real-world' referents are linked to their representations in images, pictures, photographs, etc. via 'pragmatic connectors', so that the natural way of talking about representations of a referent is by using the term for the referent itself (Nunberg, 1978, 1979; Fauconnier, 1985, 1997). In Fauconnier's theory of mental spaces, once a relation of the form 'x is a picture of y' is established through psychological perception, social convention, mode of production or some other means, then a local pragmatic connector is created to the effect that the term for y can be used to pick out the representation in x (Fauconnier, 1985: 12). In a much earlier study, Jackendoff (1975) has noted that this phenomenon is a pervasive characteristic of natural language, and its explanation should be sought not in 'imprecision' or 'loose metaphor' but rather in 'the means the language has to refer to images in pictures'.

Elsewhere I have raised some questions for the theoretical motivation and the descriptive adequacy of the concept of pragmatic connectors (Papafragou, 1995: 143ff.). For the moment, and without taking up the whole issue raised by pictorial representations and their linguistic expression, I would like to propose that (31) can be more profitably analysed using again the relevance-theoretic notion of representation by resemblance. Apart from whole propositional representations, isolated concepts can be held to enter into relations of representation by resemblance when they share logical or encyclopedic properties. Thus the concept REAGAN in (31) is used interpretively to refer to a representation of the concept's referent which is constructed out of assumptions included in a political speech. REAGAN, once used interpretively, no longer picks out an individual directly, but rather a description of an individual; even more accurately, an individual-as-object-of-description. Let's call this interpretively used concept REAGAN'. Of course, the new, ad hoc concept and the original concept for the individual resemble each other: after all, the derived concept has to maintain a reasonable degree of faithfulness to the parent concept if it is to be recognised as a representation of it in the first place. In addition to a com-

mon logical entry, the two concepts share a considerable part of their encyclopedic entry: for instance, a number (if not all) of the perceptual attributes for Reagan, as well as attributes concerning Reagan's personal history.⁶ Where REAGAN and REAGAN' presumably come apart is in those attributes which have to do with Reagan's political career and abilities. (31) explicitly conveys that REAGAN' must be a nice guy, even though Mondale's group criticises REAGAN's policies.⁷

This line of thought can be generalised to a broad range of cases where language is used to pick out pictorial or other representations. It seems that the possibility of using the term for a given referent to pick out a representation of that referent arises universally and spontaneously (Nunberg, 1978, 1979). This fact provides further support for a pragmatic account based on a general human cognitive ability, such as the ability to form representations by resemblance. A full-blown pragmatic explanation should also be able to accommodate the variations in the sorts of representation or in degrees of faithfulness to the original concept, the possible attribution of the representation to a specific source (i.e. the creator of a work of art) etc.

This may well be so, one might think, but what does it have to do with the sort of modality employed in (31)? Absolutely nothing – which is what I set out to show. *Must* in (31) may receive either of two interpretations: on a regular root interpretation of the modal, the utterance expresses a necessity in view of the circumstances; bolstered by further contextual considerations (e.g. the relationship of authority of the Mondale advisor over the speech writer), the root interpretation may yield a stronger, deontic one, whereby the speaker will be taken to impose an obligation on the hearer. In either case, there appears to be no room for speech-act modality. (31) thus serves to strengthen the conclusion which emerges from examining all of the examples in this section: the class of speech-act modality is unified by the fact that modal operators may range over material which may be metarepresentationally (i.e. interpretively or metalinguistically) used. This possibility, being a general pragmatic phenomenon, is not particularly linked to modality examples.

The proposed analysis can handle a number of formerly puzzling facts. Take first the observation that in utterances of the sort in (30)–(32) various modals seem to occur freely. An unrestricted distribution of modal verbs is exactly what one would expect if the occurrence of the interpreted/metalinguistic material is completely independent of the sort of modality involved, and is in fact a general pragmatic possibility. True, examples (30)–(32) are different from the other examples examined in this section. The reason, however, is simply that they do not involve metarepresentation of the whole of the proposition embedded under the modal, but rather include metarepresentations of individual concepts (either as metalinguistic uses of form or as interpretations of content). This should not stand in the way of viewing all of the 'speech-act modality' examples as belonging to a unitary group marked by the presence of metarepresentations. Natural connections between the two groups in (3)–(4)

⁶ I use 'attributes' for conceptual properties in the technical sense introduced by Barsalou (1992).

⁷ Pronominal co-reference is not blocked by interpretive use (cf. *his policies* in 31, where *his* refers to real-world Reagan), although its acceptability may be influenced by a variety of pragmatic factors (see Fauconnier, 1985; Papafragou, 1995).

and (30)–(32) are not difficult to find. For instance, whenever the metarepresented concept is attributed to a previous speaker and endorsed by the communicator, the utterance in (30) acquires concessive implications parallel to those communicated by (3) and (4).

It is equally unsurprising that we cannot use a modal verb to modify an unexpressed description of the speech act performed by an utterance (e.g. an act of telling). What falls under the scope of the modal verb is the propositional content of the utterance embedded under the modal; although this content may be descriptively or non-descriptively used, there is no room for a development of its truth-conditional content that would include a speech-act description which would then be picked up by the modal operator. As for linguistically expressed speech-act descriptions, again they do not warrant the existence of a special sort of modality. In a case like (12) – repeated below as (33) – *must* has its normal root interpretation, in other words it expresses a necessity in view of the circumstances:

(33) I must tell you that your father wants you home.

Sweetser is right to point out the existence of restrictions on the co-occurrence of performatives and modals. But such restrictions can very often be predicted and explained on the basis of the contextual effects the speaker might have intended to achieve by her utterance. It is true, for instance, that it is strange to assert – rather than demand – permission as in (14), repeated in (34):

(34) ?I may ask you where you are going.

Imagine now the following situation. Peter, Mary's husband, is getting ready to go out after having had a big quarrel with his wife:

(35) Mary: Where are you going?

Peter: You don't expect me to answer that, do you?

Mary: I may ask you where you are going. After all, I'm still your wife.

What Mary conveys by her reply is that it is not excluded by a certain set of assumptions that she asks where Peter is going; in other words, that she is allowed to ask him where he is going. The reason (34) is more acceptable within the context in (35) has to do with the fact that it creates a range of cognitive effects, i.e. it is relevant in that context. Assume, for example, that Peter manifestly wants his independence and therefore it is against his desires and preferences that Mary knows whatever he does at any given moment. It is easily inferred from the second assumption that it is also against his desires and preferences that Mary asks him where he is going. Given these manifest assumptions, Mary's response in (35) communicates that she does not take into account Peter's desires and preferences in assuming that she is allowed to ask him about his whereabouts. There are two conclusions to be drawn from this example. Firstly, no special kind of modality is needed for the comprehension of (34); if the utterance is placed in the context of (35), *may* receives a normal root

interpretation, i.e. it is understood to convey possibility in view of external circumstances. Secondly, and more generally, there are no straightforward generalisations to be made with respect to the interaction between modals and performatives, since the acceptability of their combination within an utterance crucially depends on the way the utterance is intended to achieve relevance.

4. Extensions: Metarepresentational uses of logical operators

Let me add a couple of final considerations which extend (and indirectly support) the proposed reanalysis of speech-act modality. Firstly, the notion of interpretive/metalinguistic use should provide us with a means of capturing similarities between modal and other logical operators in natural language which operate on metarepresented conceptual material. Recent work within relevance theory has furnished two candidates: metalinguistic negation and some non-basic uses of indicative conditionals. Consider the following examples:

- (36) a. He isn't neurotic OR paranoid; he's both.
 b. I haven't DEPRIVED you of my lecture on negation; I've SPARED you it.
 c. She's not my mother; she's my female progenitor.
 d. The President of New Zealand ISn't foolish; there IS no President of New Zealand.
- (37) a. If you eat TOMEIDOUZ, you must be from America.
 b. If the wine bottle is half-empty, you are a pessimist.
 c. If two and eleven makes thirty, you need more work on maths.
- (38) a. If you're thirsty, there's beer in the fridge.
 b. If I can speak frankly, he doesn't have a chance.
 c. If I may say so, you're looking particularly lovely tonight.
 d. Grandma is feeling lousy, if I may put it that way.

(36) presents some typical cases of what Horn (1985) has called 'metalinguistic negation' (see also example 10 above). This sort of negation is taken as communicating an objection to some property other than the truth-conditional semantic content: the insufficient strength of the lexical item used in (36a), a non-truth-conditional aspect of the semantics of a word in (36b), the stereotypic assumptions or connotations that come with a particular word in (36c), or an existential 'presupposition' carried by a sentence/utterance in (36d). Robyn Carston (to whom the examples and comments belong – see Carston, 1994: 322) has suggested that the correct generalisation about the uses in (36) is that the normal truth-functional negation operator takes scope over implicitly echoic material. Similarly Eun-Ju Noh (1996), after having examined some allegedly non-truth-functional uses of conditionals, has concluded that the truth-table account of indicative conditionals can be maintained if the antecedents in (37) and the consequents in (38) are construed metarepresenta-

tionally (i.e. interpretively or echoically). Although there are various kinds of metarepresented material and various degrees of faithfulness to the original source, what unifies the examples in (36)–(38) is the presence of metarepresented form or content of actual or possible utterances/thoughts (or subparts thereof).

An account which allows for the existence of interpreted/metalinguistic material in the scope of logical operators has the advantage of keeping constant the operators' semantic contribution to the proposition expressed by the utterance, while offering a purely pragmatic explanation for the behaviour of the operators in metarepresentational environments. The opposite solution would be to adopt what Horn (1985) has termed 'pragmatic ambiguity', or 'built-in duality of use' for the logical operators. This move has been explicitly or implicitly adopted by a number of writers; as we saw, it could be considered to underlie Sweetser's discussion at least with respect to 'speech-act' aspects of modality (since she takes the root-epistemic distinction to be semantically significant). However, as Carston (1994: 323) has remarked, what the 'pragmatic ambiguity' view entails is effectively a two-fold *semantic* ambiguity (see also Carston and Noh, 1995). On the one hand, there is a linguistically encoded ambiguity in the logical operators themselves, which is often manifest in the discrepancy between truth-functional and non-truth-functional behaviour. On the other hand, there is ambiguity in the nature of the material which falls under the scope of the operators, whether it is a proposition or an utterance. This two-fold ambiguity thesis is unsatisfactory on two counts: first, it is counterintuitive to postulate ambiguities for the logical operators, and second, the thesis is based on an odd redundancy, an unnecessary multiplication of ambiguities. The conclusion, offered by Carston and Noh (1995: 7), is that "this representational ambiguity is not a linguistic ambiguity nor even a pragmatic ambiguity, though it is a pervasive feature of language use. It is one manifestation of a perfectly general cognitive capacity of humans: the ability to metarepresent".⁸

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⁸ Actually the same argument can be extended to all declaratives which can be construed either descriptively or interpretively: on the ambiguity view, even an example like (19b) would come out as (semantically/pragmatically) ambiguous.

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Anna Papafragou received her Ph.D. from the University of London in 1998. Her dissertation, *Modality and the semantics-pragmatics interface* (to appear from Elsevier Science, Oxford), deals with issues in the lexical semantics of the English modal verbs and the interaction between lexical information and pragmatic principles in utterance comprehension. She has taught Pragmatics in the Department of Linguistics at University College London; 1 from August 1999 she will be at the Institute for Research in Cognitive Science at UConn as a postdoctoral fellow. Some of her recent papers are: 'The acquisition of modality: Implications for theories of semantic interpretation' (*Mind and Language* 13, 1998), 'Infer-

ence and word meaning: The case of modal auxiliaries' (*Lingua* 105, 1998) and 'On metonymy' (*Lingua* 99, 1996).