DOCUMENT RESUME

ED 252 056 FL 014 708

AUTHOR Prince, Ellen F.
TITLE Language and the Law: A Case for Linguistic Pragmatics. Sociolinguistic Working Paper Number 94.
INSTITUTION Southwest Educational Development Lab., Austin, Tex.
SPONS AGENCY National Inst. of Education (ED), Washington, DC.
PUB DATE Jul 82
NOTE 24p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Court Litigation; *Discourse Analysis; *Language Skills; *Legal Problems; *Listening Comprehension; *Reading Comprehension; Sociolinguistics
IDENTIFIERS *Linguistic Pragmatics

ABSTRACT

The emergence of a subfield of linguistics, linguistic pragmatics, whose goal is to discover the principles by which a hearer or reader understands a text or can construct a model based on the text, given the sentence-level competence to parse the text's sentences and assign logical forms to them, is discussed in the context of a court case in which a man sued a company for rescinding an insurance policy because it claimed he had answered several application questions falsely. The theories of linguistic pragmatics were used to analyze the application questions in an effort to determine whether or not the applicant, as a cooperative reader, could answer the questions in good faith without giving the information the application sought. The analysis of the four application questions is outlined in some detail, and problems facing the linguist serving as an expert witness in such a situation are examined. These include the fact that the domain of linguists, language, is explicitly taken to be the domain of the court; the appropriateness of the testimony, varying according to who hears it (whether lawyers alone or with a jury present); and lexical and conceptual differences between lawyers and linguists, as in the use of key terms such as "meaning" and "ambiguous." (MSE)

LANGUAGE AND THE LAW:
A CASE FOR LINGUISTIC PRAGMATICS

by

Ellen F. Prince
University of Pennsylvania

Sociolinguistic Working Paper
NUMBER 94

July, 1982

Southwest Educational Development Laboratory
211 East SEventh Street
Austin, Texas

Language and the Law a Case for Linguistic Pragmatics*

Ellen F. Prince
University of Pennsylvania

1.Introduction.

In the past few years, theoretical linguists have become increasingly involved in various socially relevant activities, in particular in serving as expert witnesses in legal proceedings. Most often, the subfield of linguistics involved is the one that is most obviously 'socially relevant', sociolinguistics. Roger Shuy's topic-analysis presented at a Texas murder trial and William Labov's testimony on Black English during the landmark Ann Arbor case are just two of the better known examples. The case I am about to describe, however, involves a subfield of linguistics that is less often thought of--at least by linguists--as having practical application or social relevance, the subfield of linguistic pragmatics. By linguistic pragmatics I mean that field of linguistics whose goal it is to discover the principles by which hearers or readers 'understand' a text, or, somewhat more precisely, construct a model on the basis of that text, given that they have the sentence-level competence to parse the sentences of the text and to assign logical forms to those sentences.

In what follows, I shall first provide some background information concerning a case in which I served as an expert witness; then I shall describe the analysis that I presented

in court; and, finally, I shall discuss some potential problem areas that face linguists serving as expert witnesses.

2.Background: the case.

In 1976, the plaintiff, then a 55 year old cement-worker with an eighth grade education, applied for and received a disability insurance policy from a certain insurance company, the defendant. In 1977, the insured suffered a heart attack, was declared disabled, and began collecting disability payments from the company. However, in 1978, the company rescinded the policy on the grounds that the insured had not answered truthfully four of the sixteen questions on the original application questionnaire. The latter brought suit against the company to collect his disability insurance, and his lawyer hired me to analyze the questionnaire 'from a linguistic point of view'. I was the sole witness for the plaintiff. The analysis that follows constitutes the testimony presented. It should be noted that there was no jury, the case being decided by the judge.

3.Analysis.

Before examining the application questions separately, I must stress that a determination of what this or any other text 'really means' is not at issue here, a task that this approach does not take to be even possible. Rather, we are describing the various principles and strategies that a Cooperative Reader has at his/her disposal in order to construct an understanding. Which principles and strategies

the plaintiff actually used, and, therefore, which understandings he in fact constructed, are beyond the ken of theoretical linguistics. If, however, it can be shown that a Cooperative Reader in the same state of health and knowledge as the plaintiff can answer the questions in the same way and be in good faith, then we will have invalidated the conclusion that the plaintiff necessarily lied.

3.1.The first question.

The first question, #13 on the application, involves the problem of assigning an appropriate denotation to an expression.

> Question #13: Have you any impairments?...Loss of sight or hearing?...Loss of arm or leg?...Are you crippled or deformed?...If so, explain...

On the original application, the plaintiff had answered no to this question. The company claimed that this was an untruth because he in fact was overweight, had a high cholesterol level, and had occasional backaches. (No work time had ever been lost on account of these conditions.)

The analysis focuses on a Cooperative Reader's assignment of a denotation to the word impairment. If we think of the denotation of some word W as its extension, that is, as the set of all the objects/states/events in all possible worlds that can appropriately and truly be called a W, we see that different classes of words work differently.

For certain words, the denotation is clear-cut:

vertebrate, for example, denotes every object in every possible world that has a spinal column, and only those. For a word of this class, we can find a necessary and sufficient condition (or set of conditions) that must be met for the word to be true of some object, e.g. 'having a spinal column' for vertebrate.

For another class of words, the situation is more complex: there are some objects which they 'prototypically' denote and others which they denote 'fuzzily'. For example, a tuna is a prototypical fish, while, for the layman, an eel is 'sort of' a fish. (See Lakoff 1972, Rosch 1977 for discussion.) For such words, we can find an associated set of properties such that, the more properties in the set that hold for some object, the closer to the prototype that object is.

For a third class of words, the situation is even more complex: their extension ranges over a very broad set of objects but, in any given usage, includes only a (proper) subset of that set. For example, if I discover that I am out of cigarettes, I may think of my state as a problem. If, however, the very next day, my psychoanalyst asks me if I've had any problems, I can truthfully and appropriately say no (assuming I could have truthfully and appropriately said no had the cigarette incident not taken place). Problem, then, is a word whose potential denotation differs from its actual denotation, the actual denotation being a subset of the potential and being selected on the grounds of contextual relevance. That is, a hearer/reader assigns the actual denotation of a word like problem on the basis of the context

(both linguistic and extralinguistic). In addition, it should be noted that the range of objects in the potential denotation is often ordered and is seen as involving a scale of magnitude: thus we may distinguish between 'big problems' and 'small problems', and the distinction is different from that between 'big vertebrates' and 'small vertebrates'.

Impairment is in the third class. That is, we cannot say truthfully and appropriately of something that it is or is not an impairment as we can say of something that it is or is not a vertebrate--there is no necessary and sufficient condition for something to be an impairment, out of context. Likewise, there is no 'prototypical' impairment, no set of properties that together make some object perfectly impairment-like. On the contrary, impairment is like problem in that its potential denotation ranges over a set, its actual denotation in a given utterance being a (proper) subset of that set, determinable only on the basis of contextual relevance. Thus, for example, a hangnail might count as an impairment in one context (e.g. if one is auditioning to be a nail polish model) but not in another (e.g. if one is applying for a driver's license).

Turning now to the first part of the first question, Have you any impairments?, we must consider the task of the Cooperative Reader (Grice 1975, Kaplan 1979). To answer the question, he must infer the actual denotation of impairment, unless of course he is totally impairment-free, i.e. has no hangnail, dandruff, ingrown toenail, pimple, cavity, etc. Assuming the Reader is not in such a godlike state, he must search the context for clues. The immediate context is the

rest of the first question: Loss of sight or hearing? Loss of arm or leg? Are you crippled or deformed? Now this context presents six situations that all come under the potential denotation of impairment. The Cooperative Reader, then, has his clue: he can try to infer what the actual denotation of impairment is by inductively inferring the immediate set of which these six states are members. The states include loss of the two major perceptual faculties, loss or severe lessening of manual ability, and loss or severe lessening of locomotion, in effect all (and perhaps only) those states that lead to an individual's being called physically disabled/handicapped, unable to function normally in society. Thus the Cooperative Reader can inductively infer that impairment here actually denotes 'disabling/handicapping condition', in which case he will, in his response, appropriately and in good conscience ignore all the nondisabling afflictions he may have, e.g. a missing tooth.

3.2. The second question.

The second question, #14 on the application, involves lexical competence and the notion of default reasoning.

> Question #14: Have you ever had or do you now have (a)diabetes, heart disease, rheumatism, arthritis, varicose veins, sacro-iliac trouble?...(b)cancer, tuberculosis, goiter, rectal disease, syphilis or any other venereal disease?...

On the original application, the plaintiff had answered

no to this question. The company claimed that the answer should have been affirmative, since the plaintiff had had backaches, or 'sacro-iliac trouble'. The plaintiff then claimed that he did not know the meaning of the word sacroiliac. To this, the company responded that he should then not have answered the question until learning what the word meant. My testimony is as follows.

The term sacroiliac is a technical Latinate term, defined in Webster's Third International Dictionary as 'the region of juncture of the sacrum and ilium; also, the firm fibrocartilage joint between these bones'. It is extremely plausible that a manual laborer with an eighth grade education would not be familiar with this term, especially since English has a short, highly frequent, and nonstigmatized correlate of Anglo-Saxon origin, back, which though far less precise, meets the everyday needs of most laypersons. When more precision is desired, a common term used, e.g. in commercials and advertisements, is lower back.

If we assume then that the respondant to the second question was not familiar with sacroiliac, we must address the issue of the basis for his negative response. In fact, a person in such a position might in principle invoke one or two strategies. One, he may ask someone present what sacroiliac means, or, two, he may work by inference. The inferencing required here is a very common and important type, known in the artificial intelligence literature as default reasoning, or reasoning from incomplete knowledge. (See Collins et al. 1975, Collins 1978, Reiter 1978.) Consider the following two

situations:

(1)A: Has any relative of yours ever won a Nobel Prize?

B: No.

If we imagine that we are in B's position and that we would answer as B has, we must consider the basis for our answer. It is a very rare person indeed that can know for a fact that he cannot trace any family link to any Nobel Prize recipient. Still and all, most people would answer without hesitation. The explanation lies in default reasoning: one assumes that being in the state of having a relative who won a Nobel Prize is a property of such a magnitude that, if one had that property, one would know it. Therefore, since he does not know that he has the property, he concludes that he must not have it. Likewise, consider (2):

(2)A: Did you hear? Someone jumped in front of a bus in front of Williams Hall and got killed!

B: He didn't jump--he was pushed.

What we are concerned with here is the basis for B's remark. Since A asserted only that there existed some individual such that he jumped...and got killed, how can B know that the individual that was pushed is the same individual? Again the explanation is default reasoning: B reasons that he knows that someone was pushed in front of a bus in front of Williams Hall this morning and got killed, that he does not know about an individual jumping in front of a bus there and getting killed, in the same time period, and that the two events are analogous in importance, such that, if one knows about one,

one should know about the other, but, since he does not know about the other, it must not be true, i.e. it must be the event he knows about. (See Webber 1978 for a full discussion.)

Default reasoning is of great interest to computer scientists attempting to produce machines which act intelligently, since it turns out to figure very prominently in the reasoning which underlies intelligent human behavior, especially linguistic behavior. Default reasoning figures as well in the field of linguistic pragmatics, where it is needed, for example, to account for the successful reference--he--in B's response in (2).

To return to Question #14, we can see that a Cooperative Reader, unfamiliar with the word sacroiliac, may reason as follows: 'I know what all these other words mean: they are all names of serious and/or obvious ailments. I do not know what sacroiliac trouble means, but I infer that it, too, is a serious and/or obvious ailment. Since I've had medical checkups, I assume that, if I had sacroiliac trouble, I would know about it. I do not know about it; therefore, I must not have sacroiliac trouble.'

3.3.The third question.

The third question, #15 on the application, is a linguist's delight in that it manifests syntactic ambiguity, possible pragmatic infelicity, and possible false presupposition.

Question #15: Have you within the past 5 years had any

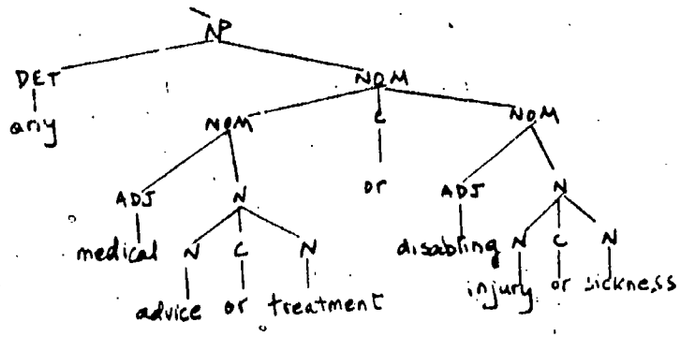
medical advice, treatment, or disabling injury or sickness?...If so, give date, cause and length of disability...

On the original application, the plaintiff had answered no to the first part and left the second part blank. The company claimed that this was an untruth because he had in fact had annual checkups. The analysis is as follows.

The first part of Question #15 is a disjunctive question involving, ultimately, four disjuncts, two of which are two-ways ambiguous. Both instances of ambiguity arise from the fact that the two adjectives, medical and disabling, have two possible 'scope' assignments, corresponding to two possible syntactic structures. Thus there are four possible readings of this sentence:

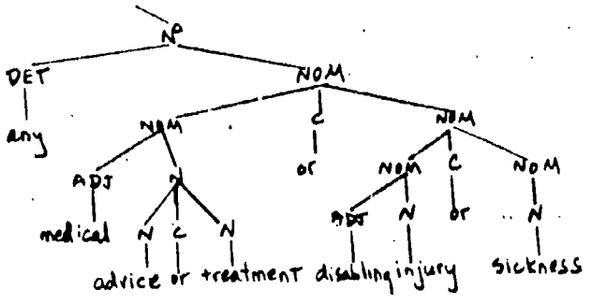
(3)a.Wide scope, wide scope:

...any medical advice or medical treatment or disabling injury or disabling sickness...



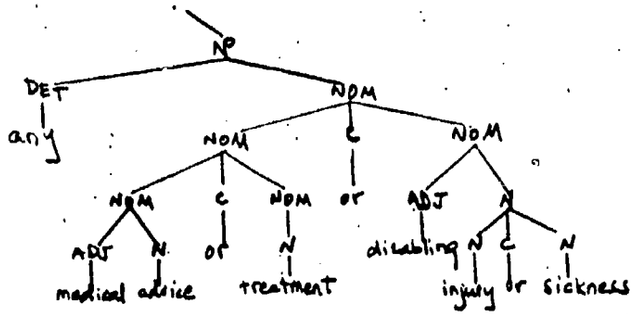
b.Wide scope, narrow scope:

...any medical advice or medical treatment or disabling injury or (not necessarily disabling) sickness...



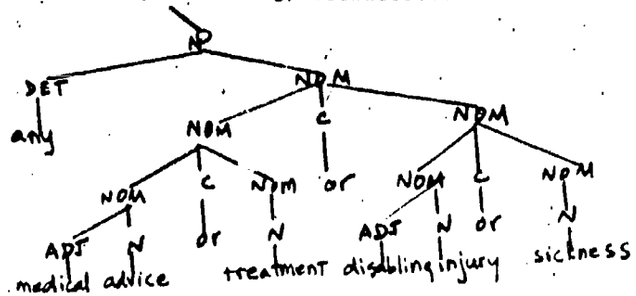
c.Narrow scope, wide scope:

...any medical advice or (not necessarily medical) treatment or disabling injury or disabling sickness...



d.Narrow scope, narrow scope:

...any medical advice or (not necessarily medical) treatment or disabling injury or (not necessarily disabling) sickness...



Thus, the Cooperative Reader has to select one from these four equally valid but truth-conditionally different readings before beginning to provide an answer, which amounts to a fairly high level of syntactic and semantic processing complexity.

Secondly, and equally importantly, on all four readings,

this sentence seems pragmatically deviant. That is, following the Maxim of Quantity (Grice 1975), natural-language users assume that their interlocuters do not ask for information which they already have or can plausibly infer. Following Grice 1975, Searle 1969, and others, a Cooperative Reader, upon reading a redundant question and assuming that the writer is also cooperative, decides that the writer is intending to convey something other than what the literal meaning indicates, and the reader then tries to figure out what this other, nonliteral, implicated interpretation might be. As a trivial example, if my dinner companion says, Can you pass the salt?, I assume that the literal meaning, 'Do you have the ability to pass the salt?', is not intended, since he knows or can plausibly infer the answer, and I, therefore, decide that he intends something else, generally, 'Please pass the salt.'

Now it is a fact of life that normal people get colds and other minor ailments, and it is a fact of contemporary American life that people get medical care fairly regularly--if not to treat those minor ailments, then simply for checkups. Since advice and treatment are very broad terms, covering such commonplaces as You shouldn't smoke and Take two aspirins, it is plausibly inferrable of an American that he has had medical advice and/or treatment in the past five years. A Cooperative Reader, then, might well infer that this is not the information requested and would try to find clues as to what is intended. There are several possible strategies generally available, but, in this case, there is an obvious and virtually unignorable clue provided by the

context. If so, give date, cause, and length of disability.

Thus, whatever the first sentence is intended to convey, if the answer is yes, then the respondant must give the date, cause, and length of disability, which in turn presupposes that there is a disability. By a standard logical rule of inference, Modus Tollens, if there is no disability, then the answer to the first question, whatever it may mean, is no. Put differently, the two parts of Question #15 entail the following:

(4)IF p: it is true that you have within the past five years had medical advice, treatment, or disabling injury or sickness,

THEN q: there exists a date, cause, and a length of disability.

Let us now apply Modus Tollens:

(5)p --> q 'If p, then q'

~q 'Not q'

∴ ~p 'Therefore, not p'

Of course, different readers may follow different strategies when faced with texts which are apparently deviant in some way. In the case of #15, at least three other strategies come to mind. First, one might ignore the second part (If so,...) and also the violation of the Maxim of Quantity in the first part (asking for information which is known or inferrable), and answer yes to the first part, leaving the second part blank.

A second alternative, which would elicit the same answer as the Modus Tollens strategy described above, is for the reader to decide, consciously or preconsciously, that the deviance is due to a performance error, here a typographical error, that the writer of the question intended to ask the question in (6), and to correct that error:

(6)Have you in the past 5 years had any medical advice, treatment, for disabling injury, sickness?[1]

Recent research in reading (e.g. Just and Carpenter 1980) shows that readers fixate their foveal vision on the character to the left of the center of content words (nouns, verbs, adjectives, adverbs) and do not fixate on function words (prepositions, articles, conjunctions). Since both or and for are function words, it is plausible that the latter would be substituted for the former, especially in view of their graphemic similarity and the fact that such a substitution would resolve the deviance. (See Marslen-Wilson 1973, 1975 on hearers' preconscious correction of phonologically, syntactically, and semantically deviant sentences.)

A third alternative, less likely perhaps in this situation, is for the reader to decide that the writer is simply not following the Cooperative Principle and is being deviant, i.e. is what Grice calls opting out, in which case the reader may simply not respond.

3.4.The fourth question.

The fourth question, #16 on the application, involves the

role of prior context in the underatanding of some utterance.

Question #16: Are you now in good health and sound bodily condition?

On the original application, the plaintiff had answered yes to this question. The company's position was that #16 is a general catch-all question, aaking for information about any health problem at all, including anything not mentioned in previous answers. While such an understanding ia possible, it is not the only one that a Cooperative Reader may construct. Another one goes as follows. By the Gricean Maxim of Relation, one assumes that an utterance is relevant to the linguistic and extralinguistic context. In particular, the immediately preceding linguistic context is a prime candidate for what an utterance is taken to be potentially relevant to.

If we reconsider the immediately preceding context, we see that Questions #15 and #16 may form a subtext on the grounds of syntactic and semantic parallelism. That is, each begins with an auxiliary verb, continues with an inverted subject you and a time adverbial, and ends with verb phrase material pertaining to health. Parallelism has long been known to be a salient linguistic feature; see, for example, Kuno 1974. Following the Parallelism Principle, hearers interpret a sentence on the basis of the preceding sentence, where the two sentences exhibit parallel structure. (See also Prince 1981.) If, on the basis of the Maxim of Relation and the Parallelism Principle, the Cooperative Reader construes Questions #15 and #16 as forming a subtext, s/he will presumably attend to the two points of contrast in the two

questions. One, represented in the time adverbials, contrasts 'the preceding five years' (which includes the present time) with 'the present time'. The second contrasts 'sickness' with 'health'.

Let us now see what a Cooperative Reader may make of this subtext if s/he takes these points of contrast to be salient. If the answer to #15 was no, the answer to #16 must necessarily be yes, now being included in the past 5 years. This is at first blush a strange situation: the asking of a redundant question, i.e. a question whose answer the writer already knows, constitutes a violation of the Maxim of Quantity, as noted above. The Cooperative Reader, however, may well note that, if the answer to #15 were yes, no violation would occur; that is, the writer may wish to know whether the reader has recovered from whatever sicknesses were reported in #15, a most plausible intention. Thus, following several well-established pragmatic principles, a Cooperative Reader may well infer that #16 is designed to elicit new information if and only if the answer to #15 is affirmative, an affirmative answer to #16 following necessarily from a negative answer to #15.

4.Caveat linguist.

Finally, I should like to turn now to certain problems that a linguist serving as expert witness may encounter. First, linguists differ crucially from all other experts in that their domain, language, is explicitly taken to be the domain of the court. That is, the law holds that any English

speaker is an expert on English and that the ultimate decision regarding the language of some English text resides with the court. In the case discussed here, the defendant's lawyer spent a good deal of time making that point in an attempt to prevent me from being admitted as a witness. Fortunately for me, the judge admitted me, with the stipulation that she of course would make the decision as to what the text 'meant' but that she would hear what I had to say. This is, of course, quite different from other fields of expertise, e.g. medicine, where the court has no legally assigned competence.

A second potential problem resides in who the expert witness' hearers are. In this instance, I was addressing the judge. Had there been a jury, such a technical exposition would not have been appropriate. The lawyer for whom I was working in fact wanted a highly technical testimony, since he foresaw the issue of who has linguistic expertise and he wanted me to sound 'like an expert'. Obviously, it is much easier for a linguist to present a technical exposition than a nontechnical one, and a jury trial would have been far more difficult.[2]

Third, linguists and lawyers speak somewhat different languages, a fact linguists must keep in mind. The law sees a text as 'meaning something', in contrast to at least the position taken by Radical Pragmatics, whereby a hearer/reader constructs an understanding on the basis of some text in accordance with a variety of principles, strategies, and hypotheses. Thus it was impossible for me to answer the frequently posed question, What does this really mean?, except

by restating my position. A second crosscultural difference is lexical rather than conceptual: the term ambiguous is a technical term for both the law and linguistics, but the two fields define it differently. Basically, for the law, a text that does not clearly 'mean something' is deemed ambiguous, close to what a linguist would call ill-formed.[3] This became relevant during the discussion of Question #15, when I was asked if the second part of it was ambiguous. Although it may be so from the point of view of the law, it of course is not from my point of view. Thus, I explained what ambiguous means to a linguist, pointing out that the term applies to a wellformed sentence which, for lexical or structural reasons, has more than one logical form, e.g. Flying planes can be dangerous. By this definition, the second part of #15 is not ambiguous. It is, however, what I would call pragmatically illformed, or infelicitous. In a similar vein, it had to be made clear that Question #13 is not technically ambiguous, although it might be considered vague, such vagueness not, however, considered to constitute any illformedness.

In conclusion, it is hoped that theoretical linguists of different subfields will increasingly be called upon to serve as expert witnesses in legal proceedings and that our special training will aid us in bridging the crosscultural and crosslinguistic differences that we will encounter when we get to court.[4]

Notes

*This paper was presented at NWAVE-X, Univ. of Pennsylvania, Philadelphia, Pa; October 23, 1981. I should like to thank Anne Walker for her good advice.

[1]This strategy was suggested by M. Hepps, Esq.

[2]Of course, a jury trial may not have required a linguist's services in this case, the plaintiff being a far more sympathetic party than the defendant, which is presumably why the defendant chose not to have one.

[3]Black's Law Dictionary, for example, defines ambiguity as 'doubtfulness; doubleness of meaning. Duplicity, indistinctness, or uncertainty of meaning of an expression used in a written instrument. Want of clearness or definiteness; difficult to comprehend or distinguish; of doubtful import.' (p.105).

[4]One final optimistic note, with a potentially discouraging addendum: The plaintiff won. However, the insurance company is currently appealing the decision, the main argument being that the judge should not have heard my testimony.

References

Collins, A. 1978. Fragments of a theory of human plausible reasoning. In D. Waltz, ed. Proceedings of TINLAP-2. Urbana, IL: Univ. of Illinois.

Collins, A. et al. Reasoning from incomplete knowledge. In Bobrow, D. and A. Collins, eds. Representation and understanding. NY: Academic Press.

Grice, H.P. 1975. Logic and conversation. In Cole, P. and J.L. Morgan, eds. Syntax and semantics. III. Speech acts. NY: AP. Pp. 41-58.

Just, M. and P. Carpenter. 1980. A theory of reading: from eye fixations to comprehension. Psychological Review 87.4.329-54.

Kaplan, S.J. 1979. Cooperative responses: an application of discourse inference to data-base query syctems. Moore School, Univ. of Penn. Ph.D. diss.

Kuno, S. 1974. Lexical and contextual meaning. Linguistic Inquiry 5.469-77.

Lakoff, G. 1972. Hedges: a study in meaning criteria and the logic of fuzzy concepts. CLS 8.

Marslen-Wilson, W.D. 1973. Speech shadowing and speech perception. MIT Ph.D. diss.

Marslen-Wilson, W.D. 1975. The limited compatibility of linguistic and perceptual explanations. In Grossman, R. et al., eds. Papers from the Parasession on Functionalism. CLS. Pp. 409-20.

Prince, E.F. 1981. Toward a taxonomy of given/new information. In Cole, P., ed. Radical pragmatics. NY:

AP. Pp. 223-55.

Reiter, R. 1978. On reasoning by default. In Waltz, D. ed. Proceedings of TINLAP-2. Urbana, IL: Univ. of Ill.

Rosch, E. 1977. Classification of real-world objects: origins and representations in cognition. In Johnson-Laird, P.N. and P.C. Wason, eds. Thinking: readings in cognitive science. Cambridge: Cambridge Univ. Press.

Searle, J. 1969. Speech acts: an essay in the philosophy of language. Cambridge: Cambridge Univ. Press.

Webber, B.L. 1978. Jumping ahead of the speaker: on recognition from indefinite reference. Paper presented at the Sloan Workshop on Indefinite Reference. University of Massachusetts, Amherst. Dec. 3.