

journal of PRAGMATICS

Journal of Pragmatics 32 (2000) 1419-1437

www.elsevier.nl/locate/pragma

Presuppositions as nonassertions[☆]

Barbara Abbott

Department of Linguistics and Germanic, Slavic, Asian and African Languages, Michigan State University, A-614 Wells Hall, East Lansing, MI 48824-1027

Received 18 March 1999; revised version 3 August 1999

Abstract

It is commonly assumed that the assertion/presupposition distinction maps fairly directly onto the distinction between new and old information. This assumption is made doubtful by presupposing constructions that regularly convey new information: uniquely identifying descriptions, 'informative presupposition' it-clefts, reverse wh-clefts, announcements embedded under factives, nonrestrictive relatives. The presupposed content conveyed by these constructions can be regarded as part of the common ground only with an unconstrained principle of accommodation. But this reduces the claim that grammatical presuppositions are part of the common ground to vacuity. Presuppositions are a consequence of two factors. One is a tendency to limit assertion to one atomic proposition per rooted sentence. The other is the fact that almost any thought to be expressed will involve many atomic propositions. Depending on medium, genre and other contextual variables, new information will be presupposed if it is not necessary to assert it. The view is confirmed by evidence that written language, which would be expected to contain more new information per utterance than spoken language, contains a higher proportion of text in definite descriptions. © 2000 Elsevier Science B.V. All rights reserved.

0378-2166/00/\$ - see front matter © 2000 Elsevier Science B.V. All rights reserved. PII: S0378-2166(99)00108-3

I would like to thank Doug Davidson for making me aware of the Poesio and Vieira article cited in section 3, and Doug and Fernanda Ferreira for making the Car Talk sample referred to in section 4 available to me. A draft of this paper was presented at the 73rd Annual Meeting of the Linguistic Society of America, Los Angeles, January 1999. I am grateful to Jeanette Gundel, Larry Hauser, Jerry Hobbs, Mark Liberman, Sally McConnell-Ginet, Craige Roberts, and two anonymous referees for comments on earlier drafts. Larry Horn deserves special thanks for particularly detailed comments on an earlier draft, as well as for reminding me of the relevance of embedded announcements to the point of this paper. His influence exceeds the explicit acknowledgements here and below. Finally I am grateful to Richard Larson for some early encouragement. Of course none of the above named is to be held responsible in any way for shortcomings of the finished product.

One of the referees objected to the title of this paper because of the vagueness in the word 'assertion', which infects the word "nonassertion" as well. I agree that these terms are quite vague. I hope the attempted clarification at the beginning of section 4 will help to mitigate the problem.

Keywords: Presupposition; Definite description; Old information; Common ground; Assertion; Semantic/pragmatic interface

1. Introduction

The standard diagnostic for distinguishing presupposition from assertion is survival in a variety of linguistic contexts: embedded under negation or a possibility modal such as *maybe*, *it is possible that*, in a question, or in the antecedent of a conditional. Chierchia and McConnell-Ginet (1990: 24) named these linguistic variations on a sentence S 'the S family'. Thus (1) consists of presupposition (2a) and assertion (2b). (2a), but not (2b), is maintained during typical utterance of other members of (1)'s family, given in (3).

- (1) The King of France is bald.
- (2) a. There is one and only one King of France.
 - b. That individual is bald.
- (3) a. The King of France is not bald.
 - b. Possibly the King of France is bald.
 - c. Is the King of France bald?
 - d. If the King of France is bald he may need to wear a wig.

I will sometimes use terms such as 'grammatical presupposition' and 'grammatically presupposed' when necessary to refer specifically to phenomena defined to be those showing this characteristic behavior.

According to a common view of the information structure of utterances, the assertion/presupposition distinction maps fairly directly onto the distinction between new information and old information, in the sense that what is asserted in an utterance is being treated as though it were new to the addressee, and what is presupposed is being treated as though it were familiar, or part of the common ground. The purpose of this paper is to urge consideration of a different view, on which this attribution of grammatical presupposition to the common ground is not made. I will argue that abandoning the common ground assumption has a number of advantages: it avoids some serious descriptive problems that arise on the common ground view, it yields a more accurate picture of information distribution, and this resulting picture suggests an explanation for the source of an important subcategory of presuppositions, including those associated with referring expressions and the cleft and pseudo-cleft constructions.

Here I must acknowledge a problem with (2b), given that the phrase 'that individual' is intended to be linked anaphorically to the individual asserted to exist in (2a). Technically, the phrase stands as a free variable in (2b). The standard solution to this problem is to rephrase (2b) as in (i):

⁽i) Whoever is king of France is bald.

However, this does not seem to express correctly the assertion of (1). Full, or even partial, consideration of this problem goes beyond the scope of this paper; see Ostertag (1998: 26ff.) and the works cited there for discussion.

First, we will review the move to assimilate presuppositions to the common ground, including the (slender) support that has been given for that position (section 2). Next, we will look at a number of problem cases for the common ground view (section 3). Many of these cases have been noted before in the literature, but as far as I know no prior attempt has been made to gather them all together. Following that, I will put forward the alternative picture of information distribution for which these cases do not present a problem (section 4). This alternative picture is very similar to that sketched by Grice (1981) for the presuppositions associated with definite descriptions, but is presented more fully here and provided with additional motivation as well as new argumentative and empirical support. The final section (5) contains concluding remarks.

2. Historical background

The view that the grammatical concept of presupposition can be assimilated to the pragmatic concept of background information, shared knowledge, or the common ground is widespread, thanks in part to Stalnaker's (1974) paper 'Pragmatic presuppositions' (Karttunen, 1974, should also be acknowledged in this respect). In that paper, Stalnaker contrasted two possible analyses of the familiar phenomenon exemplified by definite descriptions, factive verbs, and words like *only*. On the semantic analysis, presuppositions are requirements for possession of a truth value (so both the truth and the falsity of 1 necessitate 2a). On the pragmatic analysis:

"A proposition P is a pragmatic presupposition of a speaker in a given context just in case the speaker assumes or believes that P, assumes or believes that his addressee assumes or believes that P, and assumes or believes that his addressee recognizes that he is making these assumptions, or has these beliefs." (Stalnaker, 1974: 473)

The set of propositions assumed by the speaker to be shared by the speaker and addressee form the common ground of the discourse. Despite the wording in the quote above, Stalnaker was not distinguishing two kinds of presuppositions, as he had in earlier work (Stalnaker, 1972), but rather, offering two analyses of a single phenomenon. This is made clear in a more succinct statement from a later paper, which is also widely cited: "Presuppositions are what is taken by the speaker to be the COMMON GROUND of the participants in the conversation, what is treated as their COMMON KNOWLEDGE or MUTUAL KNOWLEDGE" (Stalnaker, 1978: 321, emphasis in origina; for further general discussion of the notion of common ground in Stalnaker's sense of mutual knowledge, including some problems in a strict definition, see Clark and Marshall, 1981).

The common ground conception of presuppositions is spelled out in the later paper in wording slightly but significantly different from that quoted above: "A proposition is presupposed if the speaker is disposed to act as if he assumes or believes that the proposition is true, and as if he assumes or believes that his audience assumes or believes that it is true as well" (Stalnaker, 1978: 321, emphasis added). The revised wording reflects Stalnaker's acknowledgement, which was

present even in the 1974 paper, that presuppositions need not actually be either believed by the speaker or believed by the speaker to be believed by the addressee. The hedge allows for cases in which a speaker may *exploit* a presupposition as a way to smuggle information into the context without having to actually assert it. Horn (1996: 306) gives the following example:

(4) A: John is very attractive.

B: Yes, and his wife is lovely too.

Here, B discreetly lets A know that John is not unattached, without having to make an assertion which would possibly be embarrassing to A. However, this kind of pretense has a marked flavor which is not present in the problem examples we will see below.

The common ground view of presuppositions arises naturally from the recognition that utterances typically contain parts that are familiar or old information, and parts that are new. This recognition, for instance, is a centerpiece of the 'Given-New Contract' of Clark and Haviland (1977). And of course the division of information into old and new is exhaustive. The further step of assuming that *all* new information must be asserted, so that anything that is not asserted is old or familiar, or at least being treated as such, appears to be so natural as to be almost unavoidable. Apparently, Stalnaker assumed that there was only one possible pragmatic view of presuppositions – the one defined above.

The assimilation of presupposition to old information has again been given explicit statement recently by, among others, Knud Lambrecht:

"Let us refer to the 'old information' contained in, or evoked by, a sentence as the PRAGMATIC PRESUP-POSITION (or simply the PRESUPPOSITION ...), and let us refer to the 'new information' expressed or conveyed by the sentence as the PRAGMATIC ASSERTION (or simply the ASSERTION)." (Lambrecht, 1994: 52, emphasis in original)

Also compare the following:

"'Old information,' then, is the sum of 'knowledge' ... evoked in a sentence which a speaker assumes to be already available in the hearer's mind at the time of utterance – 'the old,' 'the given,' or 'the presupposed' ... – while 'new information' is the information added to that knowledge by the utterance itself." (Lambrecht, 1994: 50.)

Lambrecht's actual definition of 'pragmatic presupposition' contains an important escape clause: "The set of propositions lexicogrammatically evoked in a sentence which the speaker assumes the hearer already knows or is ready to take for granted at the time the sentence is uttered" (Lambrecht, 1994: 52, emphasis added). However, as the quotes reproduced above suggest, this clause is lost amidst the overwhelming tendency to simply identify grammatical presupposition with old information. And note that if this escape clause were taken seriously, it would obviate that problematic identification. That is, since what an addressee can be assumed to be ready to take for granted would include any knowledge assumed to be shared

between speaker and addressee, focusing on the former property would allow one to bypass problems with the latter. This is similar to what I will suggest below.

The main point I want to stress here is that the assumption that all of the new information contained in an utterance must be asserted, and hence cannot be grammatically presupposed, is not necessitated by the exhaustive division of information into new and old and the natural assumption that all asserted information is new. Thus it requires defense.

Stalnaker gave four arguments in favor of 'the' pragmatic analysis of presuppositions, but I will argue below than none of them actually requires his particular pragmatic analysis. One argument was that the pragmatic view leaves the presupposition relation independent of entailment. Since semantic presupposition would be a parallel relation inconsistent with entailment, we could not hold that a given statement both entailed and presupposed another (as we might want to say e.g. in the case of 1 and 2a above). However, this argument does not seem to be a strong one. We would in any case need to distinguish the relation of semantic presupposition from ordinary entailment, as holds e.g. between (5) and (1):

(5) The King of France is bald, and the Queen of England is wise.

and the necessitation relation nicely describes what they have in common. Compare the analysis in Burton-Roberts (1989), which distinguishes a weak entailment relation, consistent with presupposition, from a strong entailment relation, which is not. I will not have anything more to say about this argument in what follows.

The next of Stalnaker's arguments cites the variability in strength of presuppositions, and he contrasted examples similar to those in (6) and (7). (6a) does seem to presuppose (6b) more strongly than (7) does.

- (6) a. Judy was surprised that Bill went to the movies.
 - b. Bill went to the movies.
- (7) If it hadn't rained, Bill wouldn't have gone to the movies.

A related property is the ability of presuppositions to shift, depending on context, which Stalnaker illustrated with an example of Terry Langendoen's. (8) would normally be taken to presuppose that the speaker's cousin is male and to assert that he had grown up, but where it is known that the cousin had been contemplating a sexchange operation, this presupposition would be lost.

(8) My cousin is not a boy anymore.

Undoubtedly these properties are related, and we can expect that the weaker the presupposition, the more likely it is to be able to disappear in some contexts.

Stalnaker's final argument, which was actually quite an extended one, pointed out several instances in which presuppositions or their projection properties might be *explained* on the pragmatic view, where they would have to be simply stipulated on the semantic view. We will consider his examples below in section 4, where I will

show that the pragmatic view I'm supporting in this paper shares all of the advantages cited by Stalnaker for the pragmatic view he put forward. But it should be clear already that at least these first three arguments do not support the common ground view specifically, but could hold for a variety of pragmatic analyses.²

Before turning to the problems for the common ground view of presuppositions I want to briefly mention one additional factor, which is the term 'presupposition' itself. Recall that Strawson, in his classic paper "On referring", did not use this term at all. He said instead that (1) 'implies' (2a), although "this is a very special and odd sense of 'imply'" (Strawson, 1950: 345). The term 'presupposition' was introduced into the English literature on the subject by Strawson (1952: 175) two years later (in doing so Strawson echoed, apparently unknowingly, Peter of Spain, who seven or eight centuries earlier had distinguished between what "an expression *praesupponit* and what it *denotat*", Horn, 1996: 300). The ordinary everyday sense of the word 'presupposition' strongly encourages the common ground view of presuppositions, but this factor should be completely set aside from influence. In this respect 'conventional implicature' would be a better term.³

3. Problems for the common ground view

In this section we will review five constructions which trigger presuppositions which are commonly *not* part of the common ground. These cases are well known, but their collective impact may have been overlooked, so I want to put them all together here to make a more impressive display.

3.1. Definite descriptions

Roughly speaking, the common ground view of presuppositions, when applied to definite descriptions as in (1) above, gives us the familiarity analysis of definiteness (one fact that makes this only roughly true is that the uniqueness part of the presupposition given above in 2a is generally not included at all in familiarity views). Probably the most well-known version of a familiarity type of approach is in the discourse representation theory of Heim (1982, 1983a; other supporters of this kind of view include Hawkins, 1978; Millikan, 1984; Zeevat, 1989; Chafe, 1996; and Walker and

A parenthetical note: the discourse representation treatment of presuppositions (cf. e.g. Heim, 1982, 1983b) actually embodies both the analyses which Stalnaker was contrasting, and in so doing loses some of these advantages claimed by Stalnaker for a non-truth-conditional pragmatic account.

³ Karttunen and Peters (1979) preferred the term 'conventional implicature' to 'presupposition' but for a different reason. In their view, 'presupposition' had been used for a disparate group of phenomena, whereas 'conventional implicature' referred to a well-defined subset which was the subject of their analysis. Karttunen and Peters echoed Stalnaker's common ground conception of presuppositions/conventional implicatures – "... ideally every conventional implicature ought to belong to the common set of presumptions that the utterance of the sentence is intended to increment" (Karttunen and Peters, 1979: 14) – again suggesting that it was not because of unwanted connotations that they rejected the term 'presupposition' but rather because of contamination from promiscuous usage.

Prince, 1996). In Heim's approach, a discourse is seen as a file of information organized around file cards representing discourse entities. An indefinite description instructs the addressee to add a new file card whereas a definite description must represent an existing discourse entity. Thus, on Heim's approach definite descriptions were initially taken to denote discourse-old entities, in Prince's (1992) sense, whereas we might expect to find hearer-old but discourse-new entities in the common ground.

Heim was aware that there were many types of definite descriptions that would naturally be used in ways which did not meet the condition of referring to an entity which was already part of the discourse. In fact, as she noted, only two of the eight types of definite descriptions described by Hawkins (1978) would straightforwardly fit her model (Heim, 1982: 370). (9) gives the problematic examples that were considered by Heim (1982: 371, italics added).

- (9) a. Watch out, the dog will bite you.
 - b. The sun is shining.
 - c. John read a book about Schubert and wrote to the author.

Of course, Heim was not the first to notice such problems. Indeed, in an oftencited footnote, Stalnaker discussed an example which he attributed to a personal communication from Jerry Sadock, which presented a problem for his common ground conception of presuppositions:

"I am asked by someone who I have just met, 'Are you going to lunch?' I reply, 'No, I've got to pick up my sister.' Here I seem to *presuppose* that I have a sister even though I do not assume that the speaker knows this. Yet the statement is clearly acceptable, and it does not seem right to explain this in terms of pretense, or exploitation." (Stalnaker, 1974: 480, fn. 3, emphasis in original).

Stalnaker's discussion of this example was inconclusive and confined to a footnote; in particular, it did not cause him to change his common ground view. However, Gazdar (1979: 106) used a similar example to argue *against* the common ground view of presuppositions. On Gazdar's analysis, presuppositions needed only to be consistent with the context (see also Givón, 1979: vh. 2).

Grice (1981) also cites a similar example:

"For instance, it is quite natural to say to somebody, when we are discussing some concert, My aunt's cousin went to that concert, when one knows perfectly well that the person one is talking to is very likely not even to know that one had an aunt, let alone know that one's aunt had a cousin." (Grice, 1981: 190)

Interestingly, he continues:

"So the supposition must be not that it is common knowledge but rather that [it] is noncontroversial, in the sense that it is something that you would expect the hearer to take from you (if he does not already know)." (Grice, 1981: 190)

Unfortunately Grice continued to use the term 'common ground' for this concept of noncontroversiality. Nevertheless, the concept he seems to have had in mind is quite congruent with what I will put forward below.

Heim's response to the examples in (10) was to call on a principle of accommodation proposed by David Lewis. This principle says: "If at time t something is said that requires presupposition P to be acceptable, and if P is not presupposed just before t, then - ceteris paribus and within certain limits - presupposition P comes into existence at t" (Lewis, 1979: 340). That is, grammatical presuppositions which are not part of the common ground prior to the utterance, become so automatically at the time the utterance occurs.

The rule just quoted mentions certain limits to accommodation, but none were specified by Lewis. Without any limits the rule would allow accommodation of any kind of example that appears to violate the familiarity theory. In that case the theory would become almost vacuous, since no counterexamples could be raised against it (a similar point was made by Gazdar, 1979: 107). However, Heim did propose a constraint to accommodation, one which would bring it closer to being a 'bridging' principle, in the sense of Clark (1977): "When a new file card is introduced under accommodation, it has to be linked by crossreferences to some already-present file card(s)" (Heim, 1982: 373). Heim suggested that in addition to the usual file cards for entities that have been introduced into the discourse, there should be a special card "describing the utterance situation" (Heim, 1982: 374). Incorporating that suggestion, it would appear that the examples in (9) can be dealt with.⁵

However there are other examples which cannot be accommodated with Heim's bridging constraint. Some of these are given in (10).

(10) a. In her talk, Baldwin introduced the notion that syntactic structure is derivable from pragmatic principles. (Birner and Ward, 1994: ex. 1a)

⁴ The theory would not be totally vacuous, since other kinds of problems can be raised for it. See Abbott (1999) for discussion. Incidentally, I want to make clear that my criticism of (this use of) Lewis's rule of presupposition accommodation does not extend to the other accommodation rules he suggested (Lewis, 1979). In some cases, e.g. 'permissibility', Lewis is describing basic generalizations about word/world direction of fit. Others constitute seemingly accurate and intrinsically interesting observations about linguistic phenomena (e.g. the rules for salience and vagueness). And taken together the rules do exhibit a 'common pattern' which is worthy of exploration. Here I am only arguing that the rule of presuppositional accommodation should not be included, because it rests on a faulty view of presuppositions.

⁵ Criticisms of Heim's approach sometimes fail to take note of her proposed use of accommodation. Thus Bezuidenhout ascribes to Heim's theory "the consequence that definite descriptions cannot (or cannot without infelicity) be used to introduce *new* discourse referents" (Bezuidenhout, 1997: 395, emphasis in original), and puts forward the examples in (i) as problematic for Heim:

⁽i) a. The gas company ... is sending a man to fix the leak. (= Bezuidenhout, 1997, ex. 10).

b. Enter the Coca Cola Sweepstakes now! *The grand prize winner...*will win an all-expenses-paid trip for two to the Bahamas. (= Bezuidenhout, 1997, ex. 11).

⁽ia) is to be understood as spoken to a spouse, who has just noticed the smell of gas and sniffed ostentatiously. In both (ia) and (ib) there are obvious bridging inferences to get from existing file cards (including the utterance situation card) to the referent in question.

On the general subject of problems for the familiarity theory of definiteness, an anonymous referee recommends the thorough discussion in chapter 3 of Birner and Ward (1998), which I have not seen. I will also take the liberty of suggesting Abbott (1999).

- b. The first person to sail to America was an Icelander. (= Hawkins, 1978: ex. 3.131)
- c. The founder of the new state historical society is slated to speak at this year's commencement.

These are all examples of what Millikan (1984: 188) describes as 'necessarily identifying descriptions', where the descriptive material in the NP necessarily picks out a single individual. Thus the definite article is not only licensed but required. There is no necessary link to anything in the context of utterance; any of the examples in (10) could be used in a discourse where they introduce completely novel referents which are related neither to any discourse entities, nor to the text-external world of the nonlinguistic discourse context. Note that this remains true if we broaden the notion of context to include shared knowledge between speaker and addressee. The only way for the familiarity theory to accommodate examples such as those in (10) would seem to be to broaden the notion of utterance situation to include everything in the world, so that any definite description which contained any reference to anything related to something in the world would be accommodatable. But I cannot think of any NP that would not meet that condition. If there are none, then we are back to Lewis's original unconstrained principle of accommodation which would cause the familiarity theory to approach vacuity.

The bottom line is that the definite descriptions in (10) would typically *not* be used to denote a referent presumed to be familiar to the addressee, or one that is part of the common ground of the discourse. Furthermore, and more importantly, there is no pretense to that effect. To describe these examples as being accommodated by Lewis's principle of accommodation is to mistakenly assimilate them to a category to which they do not belong.

Such examples raise a further issue. Independent of the observational adequacy of the 'bridging' constraint on accommodation, one can question its theoretical motivation. Presumably the idea is that people will accept more readily referents which are related in some way to the discourse context than ones which are not, but one might wonder whether the expectedness or non-newsworthiness of such referents might not be a better predictor of their ability to enter a discourse without formal introduction (recall Grice's notion of noncontroversiality, cited above). Thus, as has been frequently pointed out, intuitively a sentence like (11b) is more natural than (11a), despite the bridging relation to a discourse participant.

- (11) a. My neighbor's boa constrictor got loose yesterday.
 - b. My neighbor has a boa constrictor and it got loose yesterday.

This is because it is extremely rare, and therefore unexpected, that one's neighbor will have a boa constrictor. My point is that the link to entities in the discourse context does not seem to be as important in making a novel definite terme acceptable as is the lack of newsworthiness of the existence of the referent. The picture which I will put forward below will suggest other considerations, like expectedness and nonnewsworthiness, in order to better explain this phenomenon.

It may be thought that definite descriptions which introduce novel referents into a discourse are a relatively marginal or atypical phenomenon, but recent research shows that that is not the case. Fraurud (1990) found that approximately 60% of definite NPs in a large corpus of Swedish texts introduced new referents into the discourse - only about a third being used anaphorically. These findings were confirmed for English by Poesio and Vieira (1998), who also found that a relatively small proportion (≈15-20%) could be classified as accommodated via a bridging relation. Fraurud's results lumped together hearer-new/discourse-new definites with hearerold/discourse-new definites (in Prince's, 1992, sense), where only the former would fail to be part of the common ground in Stalnaker's sense. For obvious reasons it is easier to identify discourse newness than it is to identify hearer-newness in texts. However, Poesio and Vieira separated out these two categories, and found that more than half of the discourse-new definites also seemed to be hearer-new (although there was substantial coder disagreement here, as with the other categories they used). Thus even with the most generous version of the familiarity theory, on which definite descriptions need only to be linked to something assumed to be familiar to the addressee, there are still abundant counterexamples.

3.2. It-clefts

Definite descriptions are not the only example of the failure of grammatical presuppositions to be part of shared knowledge. Prince (1978), in her comparison of wh-clefts and it -clefts in discourse, distinguished a separate category which she called 'informative-presupposition it-clefts', concerning which she remarked: "not only is the hearer not expected to be thinking about the information in the that-clause, but s/he is not expected even to KNOW it. In fact the whole point of these sentences is to INFORM the hearer of that very information" (Prince, 1978: 898). One of Prince's examples is given in (12).

(12) The leaders of the militant homophile movement in America generally have been young people. It was they who fought back during a violent police raid on a Greenwich Village bar in 1969, an incident from which many gays date the birth of the modern crusade for homosexual rights. (PG, p. 16, Prince, 1978: ex. 41b, PG = Pennsylvania Gazette]

Prince concluded that "what is presupposed logico-semantically in the informative-presupposition *it*-cleft is NEW information on the discourse level ... Such sentences provide strong evidence for distinguishing between these two levels ..." (Prince, 1978: 898; see also Delin and Oberlander, 1995, and the works cited there).

Lambrecht (1994) notes the problem that the cleft construction presents for his view and leans heavily on Lewis's accommodation principle. Since, as Prince pointed out, the cleft construction is *regularly* used to introduce new information it requires something stronger than the ordinary accommodation rule: "... it seems psychologically unmotivated to assume that in such cases the relative-clause proposition has to be accommodated via Lewis' rule" (Lambrecht, 1994: 71). Instead,

Lambrecht invokes a new concept of 'conventionalized pragmatic accommodation' to explain this type of case. In effect, instead of constraining Lewis's principle, Lambrecht instills it with even greater power.

There are two problems with this approach. One is that there is the same kind of danger of vacuity which was noted previously for the familiarity theory when supplemented with an unconstrained accommodation principle.⁶ The second problem is related to the first. By using the principle of accommodation to force the presuppositional structure of clefts into the mold of his analysis, Lambrecht ignores another remarkable fact about clefts. This is the fact that the text which carries the grammatically presupposed information is placed last in the sentence, which is ordinarily the place where *new* information is located. If the grammatically presupposed content of informative presupposition *it*-clefts were really masquerading as discourse-old information, its sentence-final location would be an unexplained anomaly. This raises the question of the other type of *it*-cleft, called by Prince 'stressed focus *it*-clefts'. An example is given in (13).

(13) ... So I learned to sew books. They're really good books. It's JUST THE COVERS THAT ARE ROTTEN. (= Prince, 1978: ex. 38a)

In this case the content of the *that*-clause is typically known or inferable, and so may appear to be anomalously placed in sentence-final position. However, Prince points out that the content of these *that*-clauses is not the theme of the discourse and not marked as being assumed to be in the forefront of the addressee's consciousness (Prince, 1978: 896f.).

3.3. Reverse wh-clefts

Reverse wh-clefts, as the name suggests, have a syntactically postposed wh-clause, which is nevertheless grammatically presupposed, and in this respect they are similar to it-clefts. Oberlander and Delin (1996) examined 302 examples of reverse wh-clefts in spoken discourse, and found that over half of them contained discourse-new content in the presupposed portion. An example is given in (14).

(14) ... and this is where they said right let it all go for fellowships studentships and research posts. (= Oberlander and Delin: 1996, ex. 31a)

⁶ In a rather startling comment, Lambrecht appears to embrace this near vacuity as a strength of his approach: "I would like to emphasize the importance of the phenomenon of pragmatic accommodation for the theory of information structure. By recognizing the theoretical status of this principle of interpretation, we are in a position to simplify the description of presuppositional structures and at the same time to counter in a principled way certain arguments raised against presuppositional analyses. The analysis of the presuppositional structure of a given expression or construction cannot be falsified simply by pointing to examples in which an actual presuppositional situation does not correspond to the presuppositional structure postulated by the analysis" (Lambrecht, 1994: 72–73).

Oberlander and Delin noted the difficulty of separating discourse-new/hearer-old from discourse-new/hearer-new information, and suggested that the content of the relative clause constituent might actually be "reminding the hearer of a link with a hearer-old fact". In this respect, reverse *wh*-clefts are different from the informative presupposition *it*-clefts discussed by Prince. However, "in each case the proposition has no antecedent in the current discourse and bears the prosodic trappings of new information" (Oberlander and Delin, 1996: 208).

3.4. Embedded announcements

The next category of grammatically presupposed new information is the one exemplified in (15).

- (15) a. We regret that children cannot accompany their parents to commencement exercises. (= Karttunen, 1974: ex. 26a)
 - b. We regret that H.P. Grice is ill and will be unable to attend the conference. (= Horn, 1986: ex. 54)

An announcement embedded under a verb of regretting or delight is grammatically presupposed in virtue of being the complement of a factive verb, but is patently not taken by the speaker to be part of the common ground prior to their utterance. In these cases, there is no problem distinguishing discourse-new/hearer-old from discourse-new/hearer-new information. Announcements always purport to be presenting new information to the addressee (compare the formula *I regret/am happy to inform you that...*), yet this information is presented as grammatically presupposed.

An anonymous referee has pointed out that the text of an embedded announcement may contain the word *hereby*, which is characteristic of explicit performative utterances, and provides the example in (16):

(16) We regret to inform you that your insurance policy is hereby cancelled.

This might be thought to present a problem for my view in that it may seem that the final clause in this example is actually the main point of the utterance and is hence being asserted, despite being grammatically presupposed. Here, I think we need to distinguish the real world from the linguistic world. In practice, of course, the fact that an insurance policy is cancelled is much more important than the fact, or pretense, that the insurers are unhappy about the cancellation. However, I claim that the form of utterance in (16) presents the regret as what is being asserted, and not the cancellation. Politeness is the most probable motive for this form of utterance. Compare other socially motivated speech acts such as stereotypical greetings, invitations, expressions of sympathy or interest, and the like, where literal content is dictated by custom and the desire to appear polite, rather than by the real-world exigencies of the moment.

3.5. Non-restrictive relative clauses

The final construction I want to mention here is the nonrestrictive relative clause. As is well known, these clauses frequently can convey new information which is, however, backgrounded or parenthetical relative to the main assertion of the sentence. Chierchia and McConnell-Ginet assume that nonrestrictive relatives should not be considered to be presuppositions, exactly because of this characteristic (Chierchia and McConnell-Ginet, 1990: 282-283). However, if we withhold the common ground analysis of presuppositions, which we have already seen good reason for doing, then there seems to be no motivation to exclude nonrestrictive relatives from this category. And note that nonrestrictive relatives need not introduce new information, as illustrated in the preceding sentence of this paper. In such cases, nonrestrictive relatives do repeat information which is part of the common ground, and would be presupposed in the ordinary sense of the word. Indeed, in sometimes expressing given information and sometimes new, nonrestrictive relatives, like all of the other constructions mentioned above except for the embedded announcements, are a good example of the failure of the presupposition/assertion distinction to map directly onto the old/new information distinction.

4. The alternative view

4.1. The proposal

If grammatical presuppositions are not simply reflections of the common ground, it is pertinent to ask where they come from. I propose that grammatical presuppositions are a consequence of a natural limit on how much can be asserted in any given utterance, where what is asserted is what is presented as the main point of the utterance – what the speaker is going on record as contributing to the discourse. There are many problems in quantifying information from a grammatical perspective, and I am not going to try to do that here. I will suggest as a starting place that an ideal assertion is one atomic proposition, consisting of one predicate with its unanalyzed arguments. Typically, the asserted proposition in an utterance will correspond to the main clause of the uttered sentence, though of course this is not necessarily the case – marked focal stress being one notable way of altering the asserted proposition. I am

⁷ Conjoined and disjoined sentences present special problems. It may be that there are two possibilities for conjoined sentence structures. One would be interpretation as a sequence of utterances, with the minimal assertion constraint operative in each. As an anonymous referee has pointed out, in this kind of case different illocutionary forces can be associated with the utterances, as shown in (i), making clear that different speech acts are involved.

⁽i) I promise to love you forever, but I warn you that I may not always show it. In other cases, the conjunction itself could be taken as the main predicate, with the propositions it conjoins as arguments, as in the old advertising slogan in (ii):

⁽ii) It's a candy mint and a breath mint!

not sure that this strong claim can be maintained, especially when written language is taken into account, but that does not matter for present purposes. What does matter is that there is some kind of a limit on how much can be asserted in an utterance. Anything else will have to be expressed in another way, typically by being presupposed.

Support for the idea that there is a limit on assertion in an utterance is the notion of a sentence accent (or main sentence stress) which is associated with a single constituent (cf. Chomsky, 1970: 199; Bolinger, 1975: 47–48; compare also the discussion of 'dominance' in the analysis of English sentence stress in Erteschik-Shir and Lappin, 1983). Apparently, Stalnaker (1974) assumed that an utterance should have a single 'point'; this assumption forms a crucial part of his explanation for the factivity of *know*, to be discussed below. And Grice (1981) suggests along similar lines that utterances should anticipate appropriate replies, one of which might be denial.

"If your assertions are complex and conjunctive, and you are asserting a number of things at the same time, then it would be natural, on the assumption that any one of them might be challengeable, to set them out separately and so make it easy for anyone who wanted to challenge them to do so." (Grice, 1981: 189)

Finally, I will cite Lambrecht's (1994) discussion of example (17), understood as uttered after a brief pleasant meeting.

(17) I hope we will meet again for more than five minutes.

Lambrecht notes that utterance of (17) with a single focal stress on either *minutes* or *again* conveys the wrong understanding, and stress on both constituents is odd. The result is that the speaker would be required to break (17) up into two utterances to convey her desire that she and her addressee meet again, and for more than five minutes (compare Lambrecht, 1994: 237–238, and the works cited there).

The picture of information packaging supported here suggests an explanation for the fact that grammatical presuppositions *are* so often part of the common ground. Part of the explanation lies in the fact that a proposition which is known to be already familiar to the addressee should typically not be chosen as the assertion for an utterance on pain of violation of Grice's first rule of Quantity, which enjoins speakers to give sufficient information (Grice, 1975: 45). This means that typically, it will be presupposed. Of course 'typically' does not mean always, in this case because there may be reasons to assert what is known to be common knowledge. And as everybody, knows the speaker may even acknowledge explicitly that what they are saying is well known. However, this is the exception rather than the rule.

On the other hand, to say that old information should be presupposed does not rule out also presupposing new information, and as we have seen exemplified above,

Two similar options may be available for disjunctions – as a series of qualified assertions, or with the disjunction as the main predicate, as illustrated in (iiia) and (iiib) respectively.

⁽iii) a. We could go to the movies, or would you rather see a play?

b. We could go either to a movie or to a play, but not both.

new information can in fact be grammatically presupposed. However, there are limits, and another advantage of the alternative picture supported here is that it suggests a naturally motivated pragmatic limit for grammatical presuppositions: propositions that are believed by the speaker to be new information to the addressee should not be presupposed if they should be asserted instead. As noted above, Grice (1981) suggested a condition of noncontroversiality for presupposition; in addition, in particular cases the determining factors may be many and disparate, including the speaker, the addressee(s), their manifest relationship, genre, stylistic preferences, topic of conversation, channel clarity, and other contextual variables.

All of the cases discussed above of grammatically presupposed new information have characteristics which suggest that they need not be asserted. Nonrestrictive relatives, informative presupposition *it*-clefts and reverse *wh*-clefts all contain grammatically presupposed propositions which are parenthetical in one sense or another. In nonrestrictive relatives, the presupposed information is presented as ancillary to the main point of the utterance. This is true even in cases where the grammatically presupposed information may in fact contain speech acts which are more important than what is asserted, as in (18):

(18) Kim Sneadworthy, whom I hereby appoint as my successor, is known to you all as a valued colleague.

In *it*-clefts, the presupposed content provides background, sometimes prefacing a new topic. And in the reverse *wh*-clefts, as noted, the presupposed portion often serves a metalinguistic summarizing function.

Embedded announcements, as in (15) and (16) above, form an interesting category. In a sense the speaker in these cases is in a position of total authority, being the possessor of information which the addressee lacks. Thus there is no need to negotiate the addition of this information to the discourse. But at the same time, by embedding the announcement under a factive verb of emotion, the speaker removes herself from responsibility for the content of the announcement, and goes on record instead as expressing an appropriate emotion. Presumably this is intended to have the psychological effect of aligning the speaker with the emotional state of the addressee, and, as noted above, is thus seen as polite. Finally the grammatically presupposed existence and uniqueness claims associated with definite descriptions are possible when they are unexciting and non-newsworthy – in short, not the kind of thing that needs explicit assertion.

4.2. Support for the alternative view

We need to check first that the view supported here has the same advantages that Stalnaker claimed for the common ground view of presuppositions. The first three advantages, which were outlined above in section 2, hold quite straightforwardly for the nonassertion view of presuppositions, so I will not say more about them. Stalnaker's fourth argument was the claim that presuppositional behavior could be *explained* on the pragmatic view, rather than needing to be stipulated. One of

Stalnaker's examples was the factivity of *know*: he suggested that, given that *know* entails the truth of its complement clause, were that clause not presupposed, the point of an utterance of the form 'x knows that P' would be unclear. Much the same argument can be given on the view supported here, with the additional advantage that we explain why the main point concerns x's mental state rather than the truth of the embedded clause – namely, because that is what is expressed in the main clause. Another of Stalnaker's examples was the 'semifactivity' of *discover* and *realize* – the fact that they lose factivity in certain contexts, with a first person subject, as shown in (19), where they contrast with *regret*.

(19) If I regret/realize/discover later that I have not told the truth, I'll confess it to everyone.

As Stalnaker pointed out, there is no conflict between a speaker presently being aware of a fact but only coming to regret it in the future, but being aware of a fact presently does conflict with one discovering or realizing it at a later time, and so the factivity of *realize* and *discover* is lost in this case. This explanation predicts that *realize* and *discover* will not lose factivity with third person subjects, and that seems to be the case (although judgements may vary). Compare (20).

(20) If Sue regrets/realizes/discovers later that she hasn't told the truth, she'll probably confess it to everyone.

Again, the same kind of explanation will work as well on the present account.

It should be noted that Stalnaker has not explained all cases of semifactivity.

Compare (21).

- (21) a. I don't know that that's a good suggestion.
 - b. ?I don't realize that that's a good suggestion.

In (21a), the potential conflict between asserting you do not know a fact which your utterance grammatically presupposes, is resolved with the loss of factivity of *know*, but that does not explain why this happens with *know*, but not with the verb *realize*. In (21b) the conflict is retained, resulting in an anomalous type of utterance.

By looking at grammatical presuppositions as nonassertions, we may gain even greater explanatory power than on the common ground view. In particular, this view may explain why so many presuppositions are associated with noun phrases. As has been noted before (cf. Du Bois, 1986: 817), typically new information in a discourse concerns new events and relations holding among a more stable collection of participants. Thus the locus of assertion is the verb. Unmarked negation and modality associate with the verb and by and large do not affect the content of NPs (though of course indefinite NPs may occur within the scope of negation). Hence the unaffected content is grammatically presupposed. The cleft and pseudo-cleft constructions use NP structures to repackage content so it will be grammatically presupposed.

As noted above, we expect differences in how much new information can be grammatically presupposed depending on many factors. One notable factor is medium. Given that written texts can be processed at the receiver's pace and can be reviewed, we expect a more condensed presentation, with more new information per utterance than with spoken language. In accordance with the suggested constraint on assertion, this should mean more presupposed content per utterance, and in fact I have found that to be the case. My research assistant Mingyu Sun and I compared newspaper texts (front page and sports page stories from the Los Angeles Times, the St. Louis Post-Dispatch, and the Washington Post) with a sample of spoken dialog (excerpts from the radio call-in show Car Talk). We found that the written texts contained on average longer definite descriptions, and had a greater proportion of their words in definite descriptions, than the spoken samples. The details are given in Table 1.

Table 1 Comparison of definite descriptions in selected written and spoken texts

	Written texts	Spoken texts
Average length (in words)	4.2	2.8
Proportion of text	22.8%	8.6%

5. Concluding remarks

The purpose of this paper has been to urge consideration of an alternative view of grammatical presuppositions. A number of problems of observational adequacy facing the popular common ground view (as well as related theories such as van der Sandt's, 1988, 1992, 'anaphoric' theory) were pointed out. These would not be addressed by a view that considers presuppositions to be simply nonassertions. It seems that this alternative view might also be better able to explain presuppositional phenomena of the type pointed out by Stalnaker and others. There remain a number of problems of course, such as determining empirically what kinds of factors affect which information is asserted and which is not, and what makes the effective factors function in the way that they do. If the view supported here is more correct than its alternatives, it should be of benefit in the future resolution of these issues.

References

Abbott, Barbara, 1999. Support for a unique theory of definite descriptions. To appear in: Proceedings from Semantics and Linguistic Theory (SALT) IX.

Bezuidenhout, Anne, 1997. Pragmatics, semantic underdetermination and the referential/attributive distinction. Mind 106: 375–409.

Birner, Betty and Gregory Ward, 1994. Uniqueness, familiarity, and the definite article in English. Proceedings of the twentieth annual meeting of the Berkeley Linguistics Society, 93–102. Berkeley, CA: Berkeley Linguistics Society.

- Birner, Betty and Gregory Ward, 1998. Information status and non-canonical word order. Amsterdam: Benjamins.
- Bolinger, Dwight, 1975. Aspects of language. Second edition. New York: Harcourt Brace Jovanovich. Burton-Roberts, Noel, 1989. The limits to debate: A revised theory of semantic presupposition. Cambridge: Cambridge University Press.
- Chafe, Wallace, 1996. Inferring identifiability and accessibility. In: Thorstein Fretheim and Jeanette K. Gundel, eds., 37–46.
- Chierchia, Gennaro and Sally McConnell-Ginet, 1990. Meaning and grammar: An introduction to semantics. Cambridge, MA: MIT Press.
- Chomsky, Noam, 1970. Deep structure, surface structure, and semantic interpretation. In: R. Jakobson and S. Kawamoto, eds., Studies in general and oriental linguistics. Tokyo: TEC Corporation for Language Research. Reprinted in: Danny D. Steinberg and Leon A. Jakobovits, eds., Semantics: An interdisciplinary reader in philosophy, linguistics and psychology, 183–216. Cambridge: Cambridge University Press.
- Clark, Herbert H., 1977. Bridging. In: P.N. Johnson-Laird and P.C. Wason, eds., Thinking: Readings in Cognitive Science, 411–420. Cambridge: Cambridge University Press.
- Clark, Herbert H. and Susan E. Haviland, 1977. Comprehension and the given-new contract. In: Roy A. Freedle, ed., Discourse production and comprehension, 1–40. Norwood, NJ: Ablex.
- Clark, Herbert H. and Catherine R. Marshall, 1981. Definite reference and mutual knowledge. In: Aravind K. Joshi, Bonnie L. Webber and Ivan A. Sag, eds., Elements of discourse understanding, 10–63. Cambridge: Cambridge University Press.
- Delin, Judy and Jon Oberlander, 1995. Syntactic constraints on discourse structure: The case of *it*-clefts. Linguistics 33: 465–500.
- Du Bois, John W., 1987. The discourse basis of ergativity. Language 63: 805-855.
- Erteschik-Shir, Nomi and Shalom Lappin, 1983. Under stress: A functional explanation of English sentence stress. Journal of Linguistics 19: 419–453.
- Fraurud, Kari, 1990. Definiteness and the processing of noun phrases in natural discourse. Journal of Semantics 7: 395–433.
- Fretheim, Thorstein and Jeanette K. Gundel, eds., 1996. Reference and referent accessibility. Amsterdam: Benjamins.
- Gazdar, Gerald, 1979. Pragmatics: Implicature, presupposition, and logical form. New York: Academic Press.
- Givón, Talmy, 1979. On understanding grammar. New York: Academic Press.
- Grice, H. Paul, 1975. Logic and conversation. In: Peter Cole and Jerry L. Morgan, eds., Speech acts (Syntax and semantics 3), 41–58. New York: Academic Press.
- Grice, H. Paul, 1981. Presupposition and conversational implicature. In: Peter Cole, ed., Radical pragmatics, 183–198. New York: Academic Press.
- Hawkins, John A., 1978. Definiteness and indefiniteness. Atlantic Highlands, NJ: Humanities Press. Heim, Irene, 1982. The semantics of definite and indefinite noun phrases. Ph.D. dissertation, University of Massachusetts. Amherst.
- Heim, Irene, 1983a. File change semantics and the familiarity theory of definiteness. In: Rainer Bäuerle, Christoph Schwarze and Arnim von Stechow, eds., Meaning, use and interpretation of language, 164–189. Berlin: de Gruyter.
- Heim, Irene, 1983b. On the projection problem for presuppositions. Proceedings of the West Coast Conference on Formal Linguistics 2: 114–126.
- Horn, Laurence R., 1986. Presupposition, theme and variations. Papers from the parasession on pragmatics and grammatical theory (CLS 22, part 2), 168-192. Chicago, IL: Chicago Linguistic Society.
- Horn, Laurence R., 1996. Presupposition and implicature. In: Shalom Lappin, ed., The handbook of contemporary semantic theory, 299–319. Oxford: Blackwell.
- Karttunen, Lauri, 1974. Presupposition and linguistic context. Theoretical Linguistics 1: 181-194.
- Karttunen, Lauri and Stanley Peters, 1979. Conventional implicature. In: Choon-Kyu Oh and David A. Dinneen, eds., Presupposition (Syntax and semantics 11) 1-56. New York: Academic Press.
- Lambrecht, Knud, 1994. Information structure and sentence form. Cambridge: Cambridge University Press.

Lewis, David, 1979. Scorekeeping in a language game. Journal of Philosophical Logic 8: 339-359.

Millikan, Ruth Garrett, 1984. Language, thought, and other biological categories: New foundations for realism. Cambridge, MA: MIT Press.

Oberlander, Jon and Judy Delin, 1996. The function and interpretation of reverse wh-clefts in spoken discourse. Language and Speech 39: 185–227.

Ostertag, Gary, 1998. Introduction. In: Gary Ostertag, ed., Definite descriptions: A reader, 1–34. Cambridge, MA: MIT Press.

Poesio, Massimo and Renata Vieira, 1998. A corpus-based investigation of definite description use. Computational Linguistics 24: 183–216.

Prince, Ellen F., 1978. A comparison of wh-clefts and it-clefts in discourse. Language 54: 883–906. Prince, Ellen F., 1992. The ZPG letter: Subjects, definiteness, and information-status. In: William C. Mann and Sandra A. Thompson, eds., Discourse description: Diverse linguistic analyses of a fundraising text, 295–326. Amsterdam: Benjamins.

Sandt, Rob A. van der, 1988. Context and presupposition. London: Routledge.

Sandt, Rob A. van der, 1992. Presupposition projection as anaphora resolution. Journal of Semantics 9: 333-377.

Stalnaker, Robert C., 1972. Pragmatics. In: Donald Davidson and Gilbert Harman, eds., Semantics of natural language, 380–397. Dordrecht: Reidel.

Stalnaker, Robert C., 1974. Pragmatic presuppositions. In: Milton K. Munitz and Peter K. Unger, eds., Semantics and philosophy, 197–214. New York: New York University Press. Reprinted in: Steven Davis, ed., 1994. Pragmatics: A reader, 471–482. Oxford: Oxford University Press.

Stalnaker, Robert C., 1978. Assertion. In: Peter Cole, ed., Pragmatics (Syntax and semantics 9), 315–332. New York: Academic Press.

Strawson, P.F., 1950. On referring, Mind 59: 320–344. Reprinted in: Peter Ludlow, ed., 1997, Readings in the philosophy of language, 335–359. Cambridge, MA: MIT Press.

Strawson, P.F., 1952. Introduction to logical theory. London: Methuen.

Walker, Marilyn A. and Ellen F. Prince, 1996. A bilateral approach to givenness: A hearer-status algorithm and a centering algorithm. In: Thorstein Fretheim and Jeanette K. Gundel, eds., 291–306.

Zeevat, Henk, 1989. Realism and definiteness. In: Gennaro Chierchia, Barbara H. Partee and Raymond Turner, eds., Properties, types and meaning, vol. II: Semantic issues, 269–297. Dordrecht: Kluwer Academic Publishers.

Barbara Abbott has taught linguistics and philosophy at Michigan State University since receiving her degree from the University of California at Berkeley in 1976. She works on issues in semantics and pragmatics including noun phrase interpretation, existential sentences, word meaning, and semantic indeterminacy.