

Revisiting Common Ground

James R. Shaw

In this paper I'll explore some general issues in pragmatics by way of scrutinizing a pair of simple constructions of English. In §1, I'll present a series of three puzzles concerning those constructions' embedding behavior, their semantic values, and their presuppositional content. After overviewing Stalnaker's conception of common ground and its significance for presupposition failure in §2, I'll use his conception of communicative dynamics to motivate treating my problematic construction as a unique kind of presupposition trigger in §3. In §4, I show how this hypothesis resolves all three puzzles, thereby yielding a small result on the syntax-semantics-pragmatics interface. I also trace out some minor implications the new type of presupposition trigger has for theories of presupposition.

1 A Puzzling Construction

The focus of my investigation is into the subordinating constructions “given that” and “seeing as”, exemplary uses of which can be found in (1).

- (1) (a) You'll have to go to the store, given that we're out of milk.
- (b) I can't finish my work, seeing as you broke my computer.

These constructions have some peculiar features which can be brought out by contrasting them with other ‘explanatory’ subordinating constructions like “because” and “due to the fact that”. These latter constructions at first blush can appear to be both structurally similar and near synonymous, as brought out in the parallel sentences of (2).

- (2) (a) You'll have to go to the store, because we're out of milk.
- (b) I can't finish my work, due to the fact that you broke my computer.

These initial similarities, however, mask some striking differences.

A first divergence arises at the syntactic level. Sentences like those in (2) stably embed under negation, in the antecedent of conditionals, in questions, and under modal operators.

- (3) (a) It's not because we're out of milk that you'll have to go to the store.
(b) If it's because we're out of milk that you'll have to go to the store, then I'll go ask the neighbor for some and save you the trip.
(c) Is it because we're out of milk that you'll have to go to the store?
(d) It's possible that you'll have to go to the store [simply] because we're out of milk.

Note that in (3d) there is a reading where the modal operator takes 'wide scope' over the "because", perhaps easier to get with the added "simply".

"Seeing as" and "given that" constructions, however, don't seem to be able to embed in similar ways.

- (4) (a) * It's not seeing as we're out of milk that you'll have to go to the store.
(b) * If it's seeing as we're out of milk that you'll have to go to the store, then I'll go ask the neighbor for some and save you the trip.
(c) * Is it seeing as we're out of milk that you'll have to go to the store?
(d) ? It's possible that you'll have to go to the store [simply] seeing as we're out of milk.
- (5) (a) * It's not given that we're out of milk that you'll have to go to the store.
(b) * If it's given that we're out of milk that you'll have to go to the store, then I'll go ask the neighbor for some and save you the trip.
(c) * Is it given that we're out of milk that you'll have to go to the store?
(d) ? It's possible that you'll have to go to the store [simply] given that we're out of milk.

Embeddings of the sentences of (1) in the relevant environments generally results in ungrammatical sentences. Even when a grammatical sentence results, as might arguably occur with (4d) and (5d), it is difficult to obtain a reading on which the construction (in this case the modal operator) takes suitably wide scope.

This might lead one to conclude that sentences like those in (1) are simply not capable of embedding in general. This however isn't so, since relevantly

similar constructions can embed neatly in the consequents of counterfactual conditionals.

- (6) (a) If John were to have raided the kitchen then, seeing as we would be out of milk, you would have to go to the store.
- (b) If John were to have raided the kitchen then, given that we would be out of milk, you would have to go to the store.

Note that the readings of (6a) and (6b) are distinct from ones that would be obtained by scoping the “seeing as” or “given that” over the entire conditional. Not only can “seeing as” and “given that” constructions embed in some normal environments, but they can coherently be used to ‘preface’ questions, in a way that “because” and “due to the fact that” cannot.

- (7) (a) Seeing as we’re not out of milk, why are you going to the store?
- (b) Given that we’re not out of milk, why are you going to the store?
- (c) * Because we’re not out of milk, why are you going to the store?
- (d) * Due to the fact we’re not out of milk, why are you going to the store?

This raises an initial puzzle: what explains this peculiar embedding behavior? Why is it that sentences with subordinate “given that” or “seeing as” clauses cannot grammatically embed in almost any environments *except* for the consequents of certain conditionals? And why can they be used to preface questions while similar subordinating constructions cannot?

Some of the differences between, say, “seeing as” and “because” can lead one to think that *semantic* differences might give insight into their respective embedding behaviors. After all, when “seeing as” is embedded under negation, it is not merely that the resulting sentence sounds odd. It is also difficult to come up with a different *reading* to associate with this embedding that is the correlate to the new reading obtained by embedding a “because” construction. Perhaps embedding is problematized because just such a new reading is unavailable.

I suspect these reflections are on the right track, but note that it is not a simple matter to specify the truth-conditions for “seeing as *A*, *B*” or “given that *A*, *B*”. As I mentioned before, sometimes these constructions seem to say something identical to constructions with “because” or “due to the fact that”. This is particularly the case when the subordinated clause gives a *reason for action* discussed in the principal clause.

- (1) (a) You’ll have to go to the store, given that we’re out of milk.
- (b) I can’t finish my work, seeing as you broke my computer.

- (2) (a) You'll have to go to the store, because we're out of milk.
- (b) I can't finish my work, due to the fact that you broke my computer.

A subordinated “because” clause normally introduces some sort of causal or explanatory grounds for the state of affairs discussed in the principle clause. The semantics of such statements is difficult to capture in part because of philosophical concerns about the nature of causation and explanation, and in part because the type of explanation provided is highly sensitive to context. However it is uncontroversial that sentences of the form “*A* because of *B*” *assert* some relevant connection to hold between the state of affairs described by *B* and that described by *A*. Though at first it can seem that “seeing as” and “given that” constructions have a similar semantics, this view has a hard time explaining some divergences in interpretation when the relevant explanatory relation is different.

- (8) (a) Because he pushed the button, the missile launched.
- (b) Due to the fact that he pushed the button, the missile launched.
- (9) (a) Seeing as he pushed the button, the missile launched.
- (b) Given that he pushed the button, the missile launched.

Whereas the sentences of (8) assert a strong, causal connection between the button pushing and missile launching, the sentences of (9) can feel less committal and more open-ended. This divergence can be brought out most strongly by examining cases where there is *no* connection between the subordinate and principal clauses.

- (10) (a) Because salt dissolves in water, the Earth rotates around the sun.
- (b) Due to the fact that salt dissolves in water, the earth rotates around the sun.
- (11) (a) Seeing as salt dissolves in water, the Earth rotates around the sun.
- (b) Given that salt dissolves in water, the Earth rotates around the sun.

Intuitions that the sentences of (10) are false are extremely sharp. Speakers are much more reluctant to pronounce on the truth-values of the sentences in (11). Indeed, it is often felt that it is ambiguous or confusing what those sentences are claiming.

This raises a new question concerning the semantics of “given that” and “seeing as” constructions: if they are used to assert that some sort of explanatory

or causal relation holds, what accounts for the divergent intuitions concerning the truth-values of sentences in (10) and (11). And if the constructions *aren't* used assert that some such relation holds, then *what* is their semantics after all?

I want to provisionally table this question, along with our original question concerning embeddings, to look to a third interesting aspect of “seeing as” and “given that” constructions: their presuppositional character. The linguistic presuppositions of a sentence are facts that speakers intuitively ‘take for granted’ when making assertions of those sentences, and are often traceable to a particular linguistic item—a *presupposition trigger*—which systematically and predictably generates presuppositions of a particular sort.¹ Examples of presupposition triggers include definite descriptions, possessives, clefts, and factives. Examples of each are given in (12a)–(15a) which presuppose (12b)–(15b) respectively.

- (12) (a) The man holding a remote is dangerous.
(b) There is a man holding a remote.

- (13) (a) My wife is sick.
(b) I have a wife.

- (14) (a) It was Mira who ate the lasagna.
(b) Someone ate the lasagna.

- (15) (a) Somto knows that Isa stole her record.
(b) Isa stole Somto’s record.

“Because” is generally construed as a factive presupposition trigger: its uses presuppose the truth of its compliment. Insofar as this judgment is based on basic intuitions about presupposed as opposed to asserted content, it seems reasonable to extend the same treatment to “seeing as” and “given that”. Just as (2a) is felt to presuppose (2a’), (1b) is felt to presuppose (1b’).

- (2) (a) You’ll have to go to the store, because we’re out of milk.
(a’) We’re out of milk.

- (1) (b) I can’t finish my work, seeing as you broke my computer.
(b’) You broke my computer.

¹This characterization of linguistic presuppositions is controversial, but the grounds for the controversy are irrelevant to the points I’m making here. I discuss some related issues in §2.

Intuitions concerning presupposed content, however, are not in general reliable. Thus, the existence and content of a linguistic presupposition is often bolstered by examining the embedding behavior of sentences to test whether any entailments are preserved—particularly under negation. Thus, for example, (16) entails (2a') just as (2a) does.

- (16) It's not the case that you'll have to go to the store [simply] because we're out of milk.

The problem is, as we have already seen, that such tests are *unavailable* for “seeing as” and “given that” since they *can't embed* in the relevant ways.

Since some of the primary tests for the existence of presuppositions is barred for these constructions, this raises yet another question: are “seeing as” and “given that” presupposition triggers? And if so, what is the content of the presuppositions they trigger, and how do we test for it?

Having raised these three puzzles concerning “seeing as” and “given that” constructions, I'd like to propose a way of understanding these expressions which addresses all three questions at once. The answer involves construing these constructions as a special type of presupposition trigger with a peculiar semantics. I'll try to motivate the proposal indirectly, by considering some abstract features of communicative dynamics within which to frame a *role* for the construction, on the proposed semantics, to play. To this end, in the next section I'll overview some relevant background on Stalnaker's notion of *common ground*. Then I'll make a minor extension to that picture in §3 which will help situate my proposal. Finally, I'll show how the proposal resolves the puzzles I've raised and chart out some further implications it has for theories of presupposition in general.

2 Presuppositions and Common Ground

I initially glossed the presuppositions of a sentence as the set of things normally taken for granted by speakers in uttering the sentence in question. This heuristic way of framing the notion of a sentence's presuppositions is connected with a more theoretically committal characterization of the *facts to be explained* by a theory of presupposition. A theory of presupposition can operate on the assumption that the most theoretically fruitful construal of the relation being tracked (namely between utterances and their presuppositions) is either semantic or pragmatic in character. On the traditional semantic approach, one is

characterizing a relationship between utterances of sentences and the facts that need to obtain for those utterances to be *truth-valued*. These facts are sometimes called the *semantic presuppositions* of an utterance. The alternative, pragmatic, approach is to construe the relation as one between utterances of sentences and what *speakers* tend to presuppose in using them. The pragmatic view grew out of dissatisfaction with overwrought semantic accounts of when and how presuppositions are preserved under various embeddings. In this section I'd like to elaborate some basic machinery developed on the pragmatic approach, *not* because I wish to endorse it as the best method developing a theory of presupposition, but because its emphasis on the relationship between presupposition and communication will be of use in setting up my discussion in §3.

A well-received version of the pragmatic strategy is elaborated by Stalnaker.² A key element of his account is the notion of a shared body of information upon which participants in a conversational exchange attempt to build. This information, dubbed the *common ground*, is construed as a set of propositions that participants recognize as being taken for granted in their conversation. In the simplest cases it can be identified with the set of *common beliefs* of conversational participants, which is the set of propositions all participants believe, and believe all participants to believe, and believe all participants to believe all participants to believe, and so on. A given proposition may be a common belief, and hence in the common ground, because the fact was already brought to light in the conversation, or because it was manifested to the participants in a manner such that it was clear to each that it was likewise manifest to the others. It might also be in the common ground because, for other reasons, it is safe to assume that the information in question is shared by all participants with all participants aware of that fact.

The information in the common ground demarcates a set of possible worlds, namely that set of worlds such that each member of it is compatible with the entire set of propositions contained in the common ground. This set of worlds is called the *context set*. The basic idea is that the participants, considered collectively, are in the process of narrowing the class of worlds in which the actual world is contained, and the context set is a measure of how far the narrowing process has progressed for the group up to a given point in time.

Speaker presupposition is defined in terms of the common ground, and sentential presupposition in terms of speaker presupposition. A *speaker presupposes*

²The view is developed, among other places, in Stalnaker (1970, 1974, 1998, 2002).

that p if she believes *p* is in the common ground. A *sentence presupposes that p* if its use is appropriate only if the speaker is presupposing that *p*. A sentence's use in context might only be appropriate if the speaker presupposes that *p* for a number of reasons. Perhaps otherwise the utterance would not have a determinate truth-value (i.e. the sentence semantically presupposes *p*) or perhaps otherwise the utterance could not easily or properly be interpreted. As I've already noted, in many cases sentence presuppositions are the systematic product of presupposition triggers—linguistic items that create such presuppositions as a consequence of their linguistically encoded meaning.

One virtue of the machinery just elaborated, according to Stalnaker, is its ability to seamlessly integrate the phenomenon of *informative presuppositions*: cases where a sentence that intuitively presupposes *p* is uttered when *p* is not taken for granted and the utterance is used, directly or indirectly, to communicate that *p* obtains. A straightforward example is a sentence like (17), which could be uttered by someone to explain their tardy appearance at a meeting.

(17) I'm sorry I'm late, I had to pick up my son from ballet.

(17) seems to presuppose that the speaker has a son, yet this need not be recognized as shared information in order for the utterance to be appropriately made. Typically interlocutors can understand and accept this utterance, thereby learning that the speaker has a son, without any special difficulty. This raises a question as to how the pragmatic view just adumbrated can consistently accept that (17) has the intuitive presupposition and yet is *successfully* uttered in a conversation where the relevant information is not taken for granted prior to the utterance.

To cope with this problem, pragmatic theorists outline a process known as *presupposition accommodation*. Roughly, the story told makes a slight clarification of the notion of sentence presupposition: it is generally only unacceptable to assert a sentence with a presupposition *p* unless the speaker believes that *p* will be in the common ground *at the time of utterance interpretation*. Now, if a speaker utters (17) to a single linguistically competent interlocutor, it will immediately be 'manifest', and hence enter into the common ground, that the speaker has made an utterance which would have been inappropriate unless she believed that the relevant *p* would be in the common ground at the time of utterance interpretation. That process of interpretation, subsequent to the utterance, has yet to occur. On occasions like this, the speaker and interlocutor both realize the interlocutor is be more than willing to take up the information

that p in deferral to the speaker, without derailing conversation, when faced with an otherwise uninterpretable utterance. But the interlocutor is now faced with just such an utterance. So the interlocutor *will* come to believe p . Since both speaker and interlocutor are competent speakers, this uptake and the process whereby it occurs will be transparent to both. So p ends up in the common ground in time for interpretation after all.³

What this admittedly brief discussion of common ground brings out is the importance of a certain truism in accounting for pragmatic phenomena. The truism is that discourse habitually proceeds not in a vacuum, but within an environment marked by shared information that we inveterately exploit to facilitate communicative acts. The Stalnakerian picture takes this idea seriously by systematizing ways in which that pool of information affect the dynamics of discourse in order to explain various presuppositional phenomena as a natural consequence of the involvement of shared information in regulating communication. However, while attention is typically given within this framework to those features of discourse which exploit the common ground to speed up communication, such as presupposition accommodation, discussions have often neglected what impact this picture has for circumstances when we want to *slow down* discourse and regain access to parts of the common ground. A brief examination of this topic will help to illuminate the role of the constructions I examined in §1.

3 Revisiting Common Ground

Sometimes an assertion can be unnatural or inappropriate precisely because it would be reasonable for all participants in a conversation to take what is asserted for granted. Consider the following dialog.

A: Was that your cousin you were just talking with?

B: Yup.

A: You seem like the type who stays in touch with your relatives.

B: Definitely. Just now I was talking with my cousin, and in fact two days ago I met with his whole side of the family.

The first part of *B*'s last utterance sounds redundant. *A* already knew that *B*

³That was a little quick. For some more detailed accounts see Stalnaker (2002) and von Stechow (2000).

met with her cousin from an earlier part of the conversation. In this way, *B* violated a familiar Gricean maxim of manner: *be brief*. In general, it is assumed that an assertion will contribute some *new information* to the conversation. It is important to note, however, *the respect* in which the information ought to be new for the relevant utterance to be stably interpretable. It is of course not necessary that it be new information to the speaker—otherwise assertions would likely never be appropriately made. It is also, however, not necessary that the information be new for the interlocutor for the utterance to be successful: if the speaker through no fault of their own asserted something which the interlocutor already happened to believe, *interpretation* needn't halt or otherwise be problematized. Rather, for a defect of that severity to occur the speaker must assert not only what the interlocutor believes, but what the speaker believes that the interlocutor believes. In fact, even *that* won't necessarily have detrimental results for interpretation—for the interlocutor may not believe the speaker has the aforementioned belief. It is easy to see where this leads. An assertion's smooth interpretation is threatened if its content is *already contained in the common ground*. It could be said: every assertion carries with it the pragmatic presupposition that what is said is not in the common ground.

Making an assertion with content implied by the context set can have a number of detrimental results. On the one hand, it can pressure the interlocutor to think that her beliefs and the speaker's beliefs about what is in the context set do not line up. Perhaps the speaker has a faulty memory, or perhaps something somewhere in the conversation was misunderstood. On the other hand it can lead the speaker to look for an implicature when there is none. Since the speaker is violating reasonable conversational principles, there is the possibility that they are doing so in the hope of leading her to a special, unspoken conclusion.

Assertions whose content is already in the common ground needn't always be problematic in these ways. For speakers may avoid both of the above consequences by *signaling* that they believe the relevant information is in the common ground. Consider how the small addendum to the last sentence of *A* and *B*'s dialog enables it to be more easily received.

A: Was that your cousin you were just talking with?

B: Yup.

A: You seem like the type who stays in touch with your relatives.

B: Definitely. I mean, as you saw, just now I was talking with my cousin, and in fact two days ago I met with his whole side of the family.

In asserting that she had just met with her cousin, *B* was careful to highlight that she was asserting this *despite* its being in the common ground. This precludes both of the possible worrisome results above: there is no reason to think that *B* and *A* have poorly coordinated assumptions about the course of the conversation so far, nor to think that *B* is violating any principles for cooperative communication—she seems to be reiterating something because it is pertinent to a new point in the discourse.

Reconciling recapitulation of old information with a default conversational purpose of sharing news in this instance was facilitated by the possibility of using assertion to *emphasize* an old fact for a new purpose. There are other reasons to delicately draw up information from the common ground for renewed expression—for example, to safely stabilize the common ground. This is especially important when speaking to a multiple addressee, most of whom one takes to be aware of the relevant information. Consider the use of (18) in a military debriefing.

(18) As well all know, the enemy has mobilized its artillery for the purpose of defending the northern front.

Without the prefacing “as we all know”, the speaker of (18) may misleadingly convey that she is ignorant of the fact that the information she is offering is already well known, perhaps thereby insulting her interlocutors. Moreover, if the speaker has fairly good reason to think that the enemy’s recent tactics are in the common ground, but is not entirely sure, she can utter (18) as a way of ensuring that she is right. If the relevant facts are not yet in the common ground, they will be after the utterance. And if they already were in the common ground, no one will misconstrue her utterance as having been made on the presumption that they weren’t.

There is a final reason for bringing up facts already taken for granted which I take to be integral to understanding the behavior of “seeing as” and “given that”—namely, for the purposes of asserting new facts *in light* of old ones. Sometimes there are strong relations between pairs of facts, for example causal or explanatory ones, which can be asserted on their own. Other times, however, either the connection is weaker or more ambiguous, or a speaker wishes to *leave it so*. To see this, consider an assertion of (19) out of the blue.

(19) You should probably go to the store.

If too little has been said by way of contextualizing the purpose of (19), it may fall flat. The context provided in (20) already helps out tremendously.

(20) We're out of milk. You should probably go to the store.

The suggestion in a typical utterance of (20) is presumably that the addressee should go to the store because of a lack of milk, probably to get milk. But it is *merely* that—a suggestion. There is no asserted connection between facts about milk and the grounds for the given exhortation. That is left up to the addressee. There are innumerable reasons to allow others to draw connections rather than to draw some for them. Sometimes we don't know the exact connection or don't want to commit ourselves to any given one. Sometimes there is no way to assert a connection because a fact isn't being stated, but a question asked, where answers to the question are obviously shaped by the preceding statement.

(21) The phone lines are down. How do you think we should get the word out?

This illustrates the simple sense in which sometimes we wish to assert or question *in light* of other facts. And it gives a new reason to dip back into the common ground: sometimes a fact which is suitable to do the work of framing a new statement or question is already being taken for granted. Thus the normal mode of asserting the relevant fact prior to the new fact or question is rendered problematic. As with the other cases I have been examining, a default strategy for avoiding the problems of asserting something already contained in the common ground is to do so *while* indicating that one is aware that the asserted content is shared background. This, however, is sometimes awkward, especially if the background information was recently entered into the common ground but not recently enough. Consider the dialog below.

C: Those hooligans drank all the milk!

D: And they ruined my rug!

E: That's a shame. Well, as we know, those hooligans drank all the milk. So why doesn't one of you go to the store?

Even with the prefaced “as we know”, *E*'s comment feels redundant. It would thus be nice to have another method of using old news to highlight real news aside from guarded assertion. And there seems a prime candidate: presupposition. In theory any content can be presupposed, with suitable embeddings,

and since presupposed content is by nature supposed to be background information, it will not raise any of the problems arising for assertions of old news. The problem is that most presuppositional constructions carry *their own type of content*, which may or may not be desired. Thus, for example, one can make a new assertion while using a subordinate “because” clause to embed the desired presupposed old news, but in doing so one would assert a potentially undesired causal connection of some sort to hold. Thus normal presupposition triggers don’t have the expressive flexibility afforded by simple succession of assertions.

It should now be clear where the discussion has led and how it ties back to the constructions I examined in §1. What one would ideally want is a construction which could be used to *render content presuppositional* with no assertoric force of its own. My suggestion is that this is precisely the function of “seeing as” or “given that”: *their sole linguistic function is to render their complements presuppositional*. They would thus have no semantic contribution of their own to the sentences in which they figure. The suggestion that a construction of this kind could make a null semantic contribution to, say, the truth-conditions of the sentence in which it figures can initially appear a strange one. Hopefully the foregoing discussion has made clear why it is tremendously useful to have just such a construction about. And indeed, this seems to be roughly how “seeing as” and “given that” are used: they are used to introduce information seemingly taken for granted, which is then used to frame a subsequent assertion.⁴ Moreover, it suits this purpose much better than guarded assertion as is witnessed in the repaired dialog below.

C: Those hooligans drank all the milk!

D: And they ruined my rug!

E: That’s a shame. Well, seeing as those hooligans drank all the milk, why doesn’t one of you go to the store?

Hopefully the discussion so far has made my claim about the function of “seeing as” and “given that” plausible. In the next section, I’d like to bolster this claim by showing how it resolves the puzzles of §1 and then draw some small consequences for a theory of presupposition.

⁴Note, of course, that this doesn’t mean that “given that” and “seeing as” constructions are only employed when their complements are already taken for granted. Just as with other forms of presupposition, a process of accommodation may be exploited depending on the potential for the embedded information to derail conversation.

4 Puzzles Revisited

My proposed semantics for “seeing as ϕ , ψ ” involves taking the subordinate clause as semantically inert. The only function of the clause is to generate an arbitrary presupposition. So the asserted content of “seeing as ϕ , ψ ” is equivalent to that of “ ψ ”, except with ϕ presupposed. Let’s see how this helps explain the embedding behavior of the construction.

I showed in §1 that “seeing as” and “given that” constructions generally cannot embed in almost any environments. Take negation first.

- (4) (a) * It’s not seeing as we’re out of milk that you’ll have to go to the store.

Negation operates on the semantic content of the negated construction. So one might think my semantics would predict the content of a sentence like (4a) would be something like that of “you won’t have to go to the store” with the presupposition that we’re out of milk preserved. Note, however, that there is already a perfectly good construction devoted to expressing that content, with that presupposition, namely (22).

- (22) Seeing as we’re out of milk, you won’t have to go to the store.

In some senses, (22) is a more *natural* way of expressing the relevant content, since it keeps assertoric and presupposed content more clearly demarcated. This is part of the reason, I want to claim, that (4a) is no good: it scopes a negation over a construction in an environment where this correlated with *no possible change in content, semantic or presuppositional*. Given the function of “seeing that”, scoping out the negation is a syntactic maneuver with no pragmatic or semantic consequences. Moreover allowing the wide scope would *mislead* into thinking new content were obtained. Consider, by contrast, using an embedded “because” clause. The difference between (23a) and (23b) is that the widely scoped negation “captures” new content to be negated.

- (23) (a) Because we’re out of milk, you won’t have to go to the store.
(b) It’s not because we’re out of milk, that you’ll have to go to the store.

Because “because” *asserts* a certain relation to hold, scoping out the negation is capable of expressing new content. On the other hand, since “seeing as” does not, attempting to scope the negation is totally inert. It is for this reason, I propose, that the construction in (4a) is registered as malformed.

The explanation extends to the other cases in which “seeing as” and “given that” do not embed. Just as one cannot negate a presupposition, one cannot suppose it for the sake of another assertion, question it, or assert its possibility.

- (4) (b) * If it’s seeing as we’re out of milk that you’ll have to go to the store, then I’ll go ask the neighbor for some and save you the trip.
- (c) * Is it seeing as we’re out of milk that you’ll have to go to the store?
- (d) ? It’s possible that you’ll have to go to the store [simply] seeing as we’re out of milk.

Scoping the conditional, question, or modal operator over the relevant construction is thus analogously inert, and speakers register the constructions as malformed.

My hypothesized semantics for sentences containing “seeing as” and “given that” not only explains when they do not embed, but also when they *do* stably embed, much as sentences with subordinate “because” clauses. Consider the case where the construction is put in the consequent of a counterfactual conditional.

- (6) (a) If John were to have raided the kitchen then, seeing as we would be out of milk, you would have to go to the store.

Giving the semantics of counterfactual conditionals is no simple matter, but for present purposes it is enough to note that the consequent is doing something like making an assertion on the *supposition* of the antecedent. Note, however, that if a particular supposition has been introduced, there is the possibility of *new* presupposed information being introduced only *relative* to the supposition in question. Indeed, this seems to be precisely what “seeing as” does in (6a): it reminds interlocutors of something they should take for granted *given* the truth of the antecedent, and then asserts the main clause of the consequent.

So far I’ve explained why “seeing as” and “given that” cannot always embed where constructions like “because” can, and also why they sometimes can. But my account can also account for a final piece of syntactic data: that “seeing as” and “given that” clauses may preface questions while those containing “because” cannot. In §3, I suggested the purpose of the former constructions to be a way of replicating the effects of successive assertion as a framing device. That is instead of saying “ ϕ . ψ ” one could say “given that ϕ , ψ ” to the same ends, except instead of asserting ϕ one would presuppose it. Just as one can frame

an assertion using an assertion, however, one can frame a *question* using an assertion, as we saw with (21).

(21) The phone lines are down. How do you think we should get the word out?

Since “seeing as” and “given that” are by nature framing devices, and since there is nothing problematic with adding a presupposition to a question, there is no bar to them prefacing questions with the desired effect.

(24) Seeing as the phone lines are down, how do you think we should get the word out?

Since “because” clauses are used to *assert* a relationship between two states of affairs, they are precluded from playing a similar role.

My view also explains speakers’ dispositions to particular truth-value ascriptions regarding constructions using “seeing as” or “given that”. In cases where reasons for action or inaction are being presented, we would expect “seeing as” clauses and “because” clauses to play roughly the same role.

(1) (a) You’ll have to go to the store, given that we’re out of milk.

(2) (a) You’ll have to go to the store, because we’re out of milk.

“Because” in these cases introduces a *reason*, which is not a cause of the ensuing normative claim, but something in light of which it makes sense or is appropriate. Given the connection made, which is looser than a stronger, causal relation, “seeing as” and “given that” in the place of “because” yield about the same effect. In cases where a stronger causal claim is made, these latter constructions seem less committal, and to a certain extent awkward.

(8) (a) Because he pushed the button, the missile launched.

(9) (a) Seeing as he pushed the button, the missile launched

Why assert (9a) instead of (9b)? What relation is being intimated in (8a) if it is not a causal one? And if it *is* causal, why not simply state it? These questions help make sense of the felt difference between these two claims.

Finally, when there is *no* relevant connection between two facts, “because” will be used to *assert* a false connection whereas “given that” or “seeing as” will only be used to *intimate* a connection, without any definite commitment.

(10) (a) Because salt dissolves in water, the Earth rotates around the sun.

(11) (a) Seeing as salt dissolves in water, the Earth rotates around the sun.

This is why (11a) is more perplexing to speakers than (10a). (10a) is straightforwardly false. On my account, however, (11a) is *true*. It asserts the plain truth that the Earth rotates around the sun. However, it is highly *pragmatically* defective. The whole point of the construction is to frame facts about the Earth in terms of salt’s properties. Since there is no obvious connection to be made, speakers are confused at what possible use (11a) could be put to.

Thus the hypothesis that “seeing as” and “given that” serve *solely to render their complements presuppositional* explains their peculiar embedding behavior as well their otherwise perplexing semantic status. For these reasons, I suggest we should accept the hypothesis, thereby addressing the third question with which I ended §1, concerning the presuppositional content of these constructions. The presuppositional content is that intuitively ‘felt’ to be presupposed, but we cannot tell this by the normal methods of investigating the embedding behavior of the construction. Rather, it is only via consideration of syntactic and semantic features of the construction that we can arrive at the relevant result. Before concluding, I’d like to trace some implications this result has generally, and for theories of presupposition in particular.

First, this is an instance of a result on what could be called the ‘syntax-semantics-pragmatics interface(s)’: the semantics of a particular construction is revealed to consist entirely in its ability to manipulate pragmatic information in a way that ultimately constrains its syntactic realizability. This also shows, perhaps surprisingly, that the most abstract, pragmatic, features of communication generally can ‘reach down’ and have slight but noticeable effects in the structure of the conventional symbolism we use for communication. Though the result is small, it ties together otherwise incommensurable ways of looking at language and communication.

Second, the result has implications for how theorists identify the presence and content of presuppositions. As I mentioned before, a popular test for whether a sentence ϕ presupposes p is to check whether certain standard embeddings of ϕ presuppose p —embeddings under negation being foremost candidates. Such a process, as has been pointed out by Kadmon (2001), might not be sufficient to show a presupposition is in place, since the projected entailments may arise from ‘background’ information carried by a sentence, such as given in a relative clause. Nonetheless, it is sometimes asserted, as Kadmon does, that

preservation under embedding is a *necessary* feature for a presupposition to be in place. This turns out not to be true. Some presuppositions don't project under the embeddings since the embeddings are not even grammatical. So the test does not even produce a necessary condition for the presence of presuppositions.

Finally, it should be noted that the cases of "given that" and "seeing as" can be seen as test cases for other constructions with similar embedding behavior. These include other 'prefacing' constructions like "supposing that", "granting that", "leaving aside that", and many others. Though the exact account here can't be given for these constructions (if only because the uses to which the constructions are put is so highly different), it can open the door for a *very* pragmatically informed treatment of the constructions which would illuminate their communicative role while likewise indirectly accounting for their embedding behavior.

This final point is connected with a general idea to which I hope this paper has made a small contribution: that highly abstract features of the pragmatics of cooperative communication may have small, but systematic and tangible effects on *both* the semantic and syntactic features of language.

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