

前提の取り消しについて —否定，スコープ，視点との関連における分析— On the Cancellation of Presuppositions: Interactions with Negation, Scope, and Perspectives

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ABSTRACT

前提は、意味論的には命題が真か偽となるための予備条件として、また語用論的には発話が適切となるために話者と聴者が共有すべき情報として捉えられる。しかし実際の談話中では、前提はさまざまな形で取り消される。予備条件としての前提が、なぜ、またどのように取り消されるのか。本論文では、前提の取り消しとその不規則性を、否定、スコープ、視点との関連において分析し、以下を指摘する。1) 「前提は否定文においても保持される」は「命題が真のときの前提は、偽のときにも保持される」と修正される、2) 否定のスコープの解釈が切り替わった結果、狭いスコープの否定における前提が取り消される、3) 叙実述語が前提を投射しないのは、埋め込み文が仮定や時制などよりも狭いスコープを持つ場合である、4) 前提には話者以外の視点も関与する。スコープの曖昧性、可能世界、視点の関与を見ることで、一見不規則な前提のふるまいを系統的に説明できる。

The notion of presupposition plays an important role in explaining the meaning of utterances. It is commonly introduced as a precondition to be met in order for a sentence to be true or false, or in order for an utterance to be felicitous. However, in discourse, presuppositions are cancelled in various ways. Why and how are they cancelled if they are ‘preconditions’? This paper examines major examples that illustrate apparent irregularities in the cancellation of presuppositions and analyzes the various factors at work. To that end, semantic and pragmatic analyses are given in relation to negation, scope, and perspectives. It is argued that: 1) the alleged property that ‘presuppositions survive under negation’ should be modified to: ‘presuppositions survive under

the reversal of the truth value', 2) when the scope interpretation of the negation is switched from a narrow-scope to a wide-scope, the presupposition in the former interpretation may not survive in the latter, 3) apparent irregularities in the behavior of factive predicates (e.g. 'to know', 'to realize') are attributed to scope ambiguity between the embedded sentence and certain operators such as conditionals and tenses, 4) presupposition involves spaces other than the real world and perspectives other than that of the speaker. Presuppositions are in fact preconditions in one sense or another. However, these can be met not only in the real world and from the speaker's perspective, but in different spaces and from different perspectives triggered by the context. This accounts for the dynamism and apparent irregularities of presuppositions.

1. Introduction

The notion of presupposition plays an important role in explaining the meaning of utterances. The notion is traditionally introduced as a precondition to be met in order for a sentence to be true or false (from a logical/semantic perspective), or in order for an utterance to be felicitous (from a pragmatic perspective). In the classical examples below, the a-sentence presupposes the b-sentence:

- (1) a. The king of France is bald.
b. There is a unique king of France.
- (2) a. John stopped smoking.
b. John was smoking.

However, it is argued that in discourse presuppositions are apparently cancelled in various ways. To take just one example from Huang (2007):

- (3) There is no king of France. Therefore the king of France isn't bald.

According to Huang, the second sentence above does not presuppose that there is a king of France, 'because the putative presupposition is defeated by the contradictory proposition that there is no king of France, which has already been established in the immediate discourse context' (p.81). However, Huang, just as many others, introduces 'constancy under negation' as one of the basic properties of

presupposition, mentioning that presuppositions survive under negation. If we take this literally, we may think that the presupposition at issue should remain in the second sentence, just as in its affirmative version.

Atlas (2001) gives a similar example:

- (4) The king of France isn't bald. -- There is no king of France.

As he mentions, the presupposition of the first sentence (i.e. the existence of the king of France) is explicitly cancelled in the second sentence. But no further explanation is given.

Now the question is why the second sentence can be uttered felicitously at all. If the presupposition is in fact a semantic or pragmatic precondition in the sense of a requirement for the sentence or the utterance, then why can it be cancelled? Do the sentences remain truthful and utterances felicitous?

Our question concerns the basic property, or even the definition, of presupposition expressed in terms of 'precondition'. Thus, clarification is needed about the conditions on cancellation from both theoretical and educational perspectives.

This paper examines major examples which illustrate apparent irregularities of the cancellation phenomena and analyzes the factors at work. To that end, semantic and pragmatic analyses are given in relation to negation, scope, and perspectives.

2. Preliminaries

As a basis for the discussions to follow, a brief summary of major approaches to presupposition is given below.

2.1 Semantic and pragmatic presuppositions

- (5) a. The king of France is bald.
b. There is a unique king of France.
c. The individual in question is bald.

Russell (1905) argued in the framework of logic that sentence (5a) asserts both (5b) and (5c). For Russell, therefore, if either (5b) or (5c) is false, then (5a) is false.

Strawson (1950), in contrast, distinguished between two levels: in order for sentence (5a) to be true or false, (5b) should be true. Under this condition, (5a) asserts (5c). For Strawson, therefore, when the precondition (5b) is not met, sentence (5a) has no truth value, instead of being false. Thus, the evaluation of (5a) has three cases; true, false, or no truth value ('truth value gap'). This kind of precondition for the proposition having a truth value is called a semantic presupposition.

The notion of pragmatic presupposition was then employed, first as a background assumption shared by discourse participants and then in a more sophisticated manner (references herein). It was observed that the hearer often 'accommodates' the presuppositions after the utterance is made. Cancellation and accommodation illustrate the dynamism of presuppositions in the discourse.

2.2 Projection problem

A central concern in the theory of presupposition since 1970's has been so called projection problem. It addresses the question: In what conditions are presuppositions of smaller components inherited onto a larger unit in the sentence or the discourse?

Earlier work (Karttunen 1973, Stalnaker 1973) argued that the answer to the question above is determined by the linguistic devices used (conjunctions, constructions, words and phrases). They are classified into three types: holes (which let the presuppositions at a lower level go through to a higher level), plugs (which block off the presuppositions), and filters (which behave differently, depending on the context). The main focus of this framework is the systematic behavior of presuppositions. However, irregularities are observed with holes and plugs too, as mentioned in the literature (Levinson 1983, Huang 2007, among others).

Gazder (1979) argued that presuppositions will be cancelled when they are inconsistent with other discourse elements which are given a higher priority. He proposes a hierarchy of discourse elements, as in (6) below. In his theory, a presupposition is cancelled when it is incompatible with the participants' background assumption, for example.

- (6) Gazder's (1979) hierarchy of discourse elements

Background assumptions > Contextual factors > Semantic entailments > Conversational implicatures > Presuppositions

2.3 Dynamic semantic theory

Recent works analyzed various phenomena concerning presupposition in the framework of dynamic semantic theory of context change (Lewis 1979, Heim 1983, 1992, Chierchia and McConnell-Ginet 2000, Kadmon 2001, among others).

It is also often observed that necessary presuppositions are added into the knowledge of discourse participants after the utterance is made, in order to make the utterance felicitous. This kind of phenomena is called accommodation.

Both cancellation and accommodation are explained in terms of the updates made on the

common ground of discourse participants.

3. Presupposition, negation, and truth value

Let us first examine how negation is related to presuppositions.

3.1 The status of semantic presupposition

Semantic presupposition as a condition for the presence of the truth value (either true or false) is considered to be part of lexical semantics of the linguistic element (e.g. words, phrases, constructions), because it is triggered on a conventional, rather than conversational, basis. I argue that it is a semantic counterpart of well-formedness of a proposition. It is not whether the proposition has a truth value but whether it is in fact licensed as a proposition.

Huang (2007) mentions that ‘when a presupposition is queried, the relevant lexical presupposition trigger is frequently queried in an explicit way’, providing examples including the following (p.67, fn. 2. Italics are by Huang.)

- (7) a. *The king of France* is bald.
b. *The king of France*? But is France not a republic?
- (8) a. The boy cried wolf *again*.
b. What do you mean by ‘*again*’? The boy didn’t cry wolf before.

I analyze that these questions are meta linguistic ones concerning the use of the expressions at issue. They reflect the speaker’s attempt either to indicate the inappropriateness (i.e. ‘semantic ill-formedness’) of the expressions in focus or to modify the statement to a semantically complete (i.e. ‘well-formed’) proposition. Therefore, the reply may also be, for example, ‘*The prime minister of France*, you mean? Yes, he is bald’. These examples support the view that presupposition concerns the well-

formedness of a proposition, rather than the presence or absence of its truth value.

3.2 Alleged ‘constancy under negation’

It is a common understanding that presupposition survives under negation (Chierchia and McConnell-Ginet 2000, Kadmon 2001, Huang 2007, and other references herein). In (9), for example, both (9a) and its negation (9b) presumably presupposes (9c):

- (9) a. John stopped smoking.
b. John didn’t stop smoking.
c. John was smoking.

Now let us consider the following.

- (10) A: Fred stopped smoking after the health checkup. Did John stop smoking too?
B: No, he didn’t. Actually, he never smoked. He went on a diet, though.
A: Oh, that’s good.

B’s utterance does not raise a problem. The first sentence negates (9a) being true, and it is ambiguous:

- (11) a. The presupposition (9c) is met and John continued to smoke.
b. The presupposition (9c) is not met.

Note that (11a) indicates (9a) is false, whereas (11b) indicates it has no truth value. Here, we find that negation in natural language in the form of ‘{It is not the case / It does not hold} that S’ (S is a sentence), ‘not Pred’ (Pred is a predicate), and so forth, does not just reverse the truth value between true and false, like logical negation, but involves truth value gap.

So called narrow scope negation assumes that the presupposition is met and negates the predicate. Wide scope negation, on the other hand, denies that the proposition is true, leaving the status of the presupposition open. Thus wide scope negation

allows for two cases: 1) the presupposition is met and the proposition is false, or 2) the presupposition is not met and the proposition has no truth value.

To deal with wide scope negation formally, we could introduce non-bivalent semantics with a truth value gap introduced. An alternative approach is to attribute the truth value gap case to the unique property of natural language negation. We could consider that presupposition concerns the semantic well-formedness of the proposition (i.e. whether the sentence in fact expresses a proposition) and that natural language negation concerns both well-formedness and truth value. In the latter approach, therefore, logical negation in propositional semantics is not affected, because propositional semantics applies only to (well-formed) propositions. I propose to take the latter approach, because it does not require any change in propositional semantics and also does justice to the notion of presupposition.

Now, let us examine the claim that presuppositions survive under negation ('constancy under negation' in Huang's term). We just found in the above that presuppositions survive under *narrow scope* negation, which in turn assumes that the presuppositions in question hold. It is now clear that the idea of 'constancy under negation' makes a circulatory argument.

The correct statement is the following:

- (12) 'Constancy under the reversal of the truth value': If a presupposition **q** holds for a true proposition **p**, then it also holds when **p** is false.

3.3 Focus and presupposition

Now let us examine how focus may affect the presupposition, in the case of 'stop smoking'.

At the semantic level, 'stop smoking' conventionally triggers the presupposition that the subject individual was smoking. It is interesting to see the situation at the pragmatic level. When a focus is on 'stop', as in (13a), the presupposition 'John was smoking'

does not remain. When a focus is on 'smoking', the presupposition is 'John was doing something (to stop)', instead. When the whole VP 'stop smoking' is in focus, the presupposition in question may or may not hold, context-dependently. (See Atlas 2001 for a relevant example and discussion.)

- (13) a. John did not STOP smoking. He STARTED smoking.
 b. I thought John STARTED smoking. Did he STOP smoking?

The observation is summarized as follows:

- (14) Focused element in 'stop smoking' and the presumable presupposition

Focused element	Presupposition
STOP smoking	N. A.
stop SMOKING	John was doing something
STOP SMOKING	(John was smoking)

Thus, the idea of 'constancy under negation' is defeated from a pragmatic perspective too.

3.4 What's going on behind the cancellation of presupposition?

A question arises: why does it lead to the cancellation of presupposition, instead of resulting in infelicity? Relevant remarks can be seen on the constraints on accommodation, which is the addition of presuppositions to the common ground as required in the discourse. Chierchier and McConnell-Ginet (1990) argues: 'if the presupposition required is inconsistent with what is already in the common ground, the utterance is infelicitous, because its presupposition cannot be accommodated by simple addition to the existing common ground.' (p.294) Soames (1979) mentions the same point: 'what is accommodated must be uncontroversial'.

In this light, we could consider that if a new statement is incompatible with earlier statements including their presuppositions, then a natural

option would be give up making the new statement. However, our observations indicate that a higher priority can be given to the new statement than the incompatible presuppositions in the current discourse without causing a problem. The literature provides examples to illustrate this point but does not explain why this works.

Let us see what is going on in the example below:

- (15) The king of Bhutan isn't bald: he is young. The king of France isn't bald: there is no king of France.

The last part of this utterance sounds tricky, but it still works. The first half of the utterance concerning the king of Bhutan presupposes and entails the existence of the king. In the second half, the hearer is invited to presuppose the existence of the king. But the sentence itself allows for another, marked case, in which the presupposition is not met. The last sentence reveals the fact that there is no such king.

By uttering the last sentence, the speaker switches from the default interpretation with a narrow scope negation to the marked interpretation with a wide scope negation. Note that precisely speaking the presupposition in the narrow-scope negation interpretation is not cancelled but remains unchanged. What is cancelled is the narrow-scope negation interpretation. As a result, the presupposition there disappears. The term 'cancellation of presupposition' covers a wide range of phenomena including those like the current example.

4. Apparent irregularities with factive predicates

Factive predicates are so called because they require, and thus presuppose, that the embedded proposition be true. However, they exhibit irregularities as to whether the presupposition should

be preserved or not.

Here is an example taken from Chierchier and McConnell-Ginet (1990):

- (16) a. If Bill discovers that syntax is easy, he will be delighted.
b. Syntax is easy.
c. If I discover that syntax is easy, I will be delighted.

They observe that: 'Sentence (16a) seems generally to need (16b) for felicity. Hence (16a) presupposes (16b). But in special circumstances this presupposition can be cancelled (for instance, if the context makes it clear that the speaker doesn't know whether syntax is easy).' (p.286) In contrast, (16c) does not presuppose (16b), given that the discovery of (16b) is hypothetical. Chierchier and McConnell-Gine consider that this illustrates the irregularity of the status of the 'factive' predicate: in the case of the first person subject, the verb 'discover' is not factive.

Kadmon (2001), in contrast, argues that there is nothing special about the behavior of factive predicates.

Supporting Kadmon's view, I propose below an account on the basis of scope ambiguity. My point is that the requirement for the embedded proposition remains unchanged, that is, it should be true, but that it needs not be in the real world. My account is based on scope ambiguity between embedding and some operator such as conditional, modal, and tense.

Let us first see a traditional example in which the reference of the NP 'a linguist' is ambiguous between the specific and unspecific reading:

- (17) Mary wants to marry a linguist.

In the example above, Mary may have a specific linguist in mind (i.e. a specific reference) or she has no idea about who it will be (i.e. an unspecific reference).

This ambiguity of the sentence is attributed to the scope ambiguity of the NP 'a linguist'. When the NP has a narrow scope under the modal operator 'want', the NP refers to an unspecific linguist in the hypothetical world introduced by the modal. When the NP has a wide scope beyond the modal operator, the NP refers to a specific linguist in the real world.

My analysis of (16c) goes along the same lines. Now the scope ambiguity is seen between the if-conditional and the embedded sentence, (16b). Chierchier and McConnell-Ginet's (1990) observation that 'sentence (16a) seems generally to need (16b) for felicity' indicates that (16a) is more likely to have a wider scope than the if-clause, licensing it as a presupposition of the whole sentence. This interpretation is only more typical, not required. The other interpretation is also possible where (16a) is under the scope of the conditional and (16b) is not presupposed. The following version illustrates the point:

(18) If Bill discovers that syntax is easy, he will be delighted. If Bill discovers that syntax is difficult, he will be in a trouble.

Example (18) above does not require, and even allow for, a presupposition that syntax is easy/difficult is true. Still, as a semantic presupposition, syntax being easy/difficult should be true in the hypothetical world introduced by the conditional.

Now let us consider (16c). Here, for the sake of the consistency about the speaker's knowledge, the only plausible interpretation would be that (16b) is not presupposed.

5. Perspectives

Among other contextual elements, the following have a crucial effect on the status of presupposition: 1) the bearer of the presupposition (e.g. the speaker, the hearer), 2) the space into which the

presupposition is introduced, and 3) the point in discourse.

Chierchier and McConnell-Ginet's (2000) gives a good example which illustrates the point:

(19) A, noticing the open door:

Was it you who opened the door to the porch? I closed it at lunch time.

B: Well, it wasn't me who opened it, because I've been gone all afternoon, and it wasn't Joan who opened it, because....., and it wasn't any of the kids who opened it, because....., and I strongly suspect that nobody opened it – there was a lot of wind this afternoon, you know.

The it-cleft sentence 'it wasn't me who opened it' triggers a presupposition that somebody opened the door, and yet speaker B ends up with saying that he doubts it. One way of explaining this example is, as Chierchier and McConnell-Gine argue, that B tentatively takes the presupposition required by the it-cleft sentences, and then defeats it after examining all the possibilities.

An alternative account is that the presupposition in question is speaker A's. B tentatively takes over the presupposition from A's perspective, while providing counterevidence to it. B eventually defeats the presupposition. There is no contradiction if B doubted the presupposition from the beginning.

Chierchier and McConnell-Ginet (2000) discuss a constraint on the presupposition cancellation in the following.

(20) Jim does not know that Ann is unfaithful, because she isn't.

'To assert (20) in a context that contains nothing about Ann's fidelity before the utterance occurs in very odd indeed, since it makes the hearer accommodate by adding the proposition that is explicitly denied in the *because* clause.' (p.387)

This kind of example is often given as a simple illustration of presupposition cancellation, but their observation makes a step forward.

To have a closer look at the situation, let us now suppose the following dialogue:

(21) A: Does Jim know that Ann is unfaithful?

B: No, he doesn't (know that Ann is unfaithful), because she isn't.

In this sequence, B's utterance sounds fine. What is the difference from (20)? We can explain it by considering the perspective from which the presupposition is introduced. In (21), the presupposition 'Ann is unfaithful' is introduced by speaker A by means of the factive verb 'to know'. In his reply, B first takes A's perspective and employs the presupposition in question. He then explicitly denies it from his perspective. There is no contradiction or complication within B's utterance. It is not that B introduces his presupposition ('Ann is unfaithful') and cancels it in a moment. What B does is to switch the perspective from A's to his own. The essential difference between (20) and (21) is the involvement of two perspectives corresponding to different statuses (i. e. presence or absence) of the presupposition at issue.

6. Conclusion

Semantic presupposition as a condition for the presence of the truth value (either true or false) is considered to be part of lexical semantics of the linguistic element (e.g. words, phrases, constructions), because it is triggered conventionally, rather than conversationally. I argue that it is a semantic counterpart of well-formedness of a proposition. The point is not whether the proposition has a truth value but whether it is in fact licensed as a proposition.

Assuming that semantic presupposition is part

of lexical semantics, it cannot be cancelled. How then can we explain a variety of presupposition cancellation phenomena? I analyzed that semantic presuppositions can be met not only in the real world from the speaker's perspective but in various kinds of space and time and from different perspectives. This holds for pragmatic presuppositions as well. The literature reduces such phenomena to the cancellation of presuppositions. However, they are better understood as shifting from the default space (i.e. the real world) and the default perspective (of the speaker) to some other ones. The dynamism of presupposition concerning cancellation and accommodation is attributed to the contribution of the pragmatic factors in the discourse as mentioned above.

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