

*Assertion, context change and knowledge acquisition**

MARK JARY

Abstract

Assertion can be viewed both as a means of transferring information about the world and as a means of context change. This paper aims to bring the two views together by employing the relevance theoretic distinction between factual and non-factual assumptions.

1 Introduction

Assertion, a fundamental notion in pragmatics, can be approached in a number of ways. It is clearly of great epistemic significance, as much of what we know about the world has been acquired by listening to and interpreting assertions made by others.¹ Viewed from this perspective, assertion can be considered a form of perception by proxy: a means by which we gather information about states of affairs we have not ourselves perceived. This clearly raises issues regarding the relationship between assertion and truth, and between assertion and responsibility.

Not surprisingly, such issues have generally been addressed by philosophers, rather than by linguists, who have tended to concentrate on the view of assertion as a means of modifying a context – generally thought of as the common ground of a conversation – by adding the content of the utterance to that context. This view, of course, stems from work by Robert Stalnaker, who suggested that certain phenomena generally described as presuppositional could be explained by viewing assertion in these terms.

*This paper was presented at the 2005 IPrA conference in Riva del Garda and has been informed by useful discussions with fellow panellists Lenny Clapp, Mitchell Green and Zoltan Szabó. Thanks also to Robyn Carston for very useful comments on an earlier draft.

¹ On the importance of testimony as a source of knowledge and beliefs, see interesting work by Paul Harris and his colleagues (Clément, Koenig et al. 2004; Harris 2002, 2004).

One notable thing about this approach is that it has little to say, explicitly at least, about the epistemic role of assertion. As Stalnaker himself is keen to point out, what he sees as essential to assertion (i.e. its ability to modify the context by adding its content to that context) is also a feature of other speech-acts, such as supposition (1978: 323).

- (1) John is going to work
- (2) Let us suppose the following: John is going to work

In other words, the effect of ‘John is going to work’ on the context in both an assertion such as (1) and a supposition like (2) will be the same. As the epistemic role of supposition is clearly distinct from that of assertion, there seems, at first blush at least, no obvious way of applying the common-ground approach to assertion to the study of its epistemic effects.

The aim of this paper, though, is to argue that the Stalnakerian analysis of assertion, given a suitably psychological rendering, can indeed be employed to explain how assertion fulfils its epistemic function. That supposition has the same ‘essential effect’ as assertion is not denied. Rather, it is claimed that the key to understanding assertion lies as much in the nature of the context it aims to affect as in the nature of the effect itself.

This paper is divided into four further sections. Section 2 looks a little more closely at what has been said about the epistemic function of assertion; section 3 looks more closely at the common ground view; section 4 complements the Stalnakerian approach to assertion with some cognitive processing machinery from Relevance Theory, and shows how together, the two approaches can shed light on how assertion comes to fulfil its epistemic role as perception by proxy. The paper ends with a brief conclusion.

2 Assertion and perception

Parallels between perception and assertion have been suggested by a number of philosophers. Michael Dummett says that “we learn to react to the statements of others in the same way that we react to various observed features in the environment [...] It is thus essential to the activity of assertion that the making of an assertion will in general modify the behaviour of those to whom it is made” (1981: 355). Ruth Millikan is particularly forthright: “Forming a belief about where Johnny is on the basis of being told where he is, is just as direct a process (and just as indirect) as forming a belief about where Johnny is on the basis of seeing him there.” (2004: 125). In a similar vein,

John McDowell says that “When the communicative process functions properly, sensory confrontation with a piece of communicative behaviour has the same impact on the state of a perceiver as sensory confrontation with the states of affairs that the behaviour, as we may say, represents; elements of the communicative repertoire serve as epistemic surrogates for the represented states of affairs” (McDowell 1980/1998: 45). Manuel García-Carpintero, modifying a view put forward by Timothy Williamson (1996), argues that what is constitutive of assertion is the rule that one must assert that p only if one’s audience comes thereby to be in a position to know that p (2004: 156).

This view of assertion as perception by proxy clearly has a bearing on the relationship between assertion and speaker-commitment to the truth of what is asserted. Perceiving a state of affairs is generally the best grounds for forming a belief that that state of affairs exists in the world, i.e. of treating a mental representation of that state of affairs as true. Thus, in presenting a propositional form in a manner such that its content is to be treated on a par with directly perceived information, a speaker commits herself to the truth of that proposition.²

The notion of truth, however, has no role to play in the Stalnakerian conception of assertion, for the ability of the content of an assertion to modify the common ground is not dependent on its truth: as noted above, non-truth aiming speech acts, such as supposition, have the same essential effect on the context. Nevertheless, it will be shown below that the Stalnakerian view of assertion does have something interesting to say about how assertion fulfils its epistemic role.

3 Assertion and the common ground

Stalnaker’s view of assertion acting on the common ground is well-known. The basic idea is that the common ground of a conversation can be conceived of as a set of propositions, thought of as functions from possible worlds to truth-values. These propositions will pick out a set of possible worlds in which each proposition in the common ground is true in each world in that set. This is termed ‘the context set’. A speaker’s aim in making an assertion is to reduce the context set by adding to the stock of propositions in the common ground, thereby eliminating all those worlds for which the asserted proposition does not return a positive truth-value (Stalnaker 1978).

² Opposing the view that assertions are a perception-like source of information about the world is the view that acts of assertion are primarily a means of communicating information about the speaker’s beliefs. It seems that this is the view that Grice held (1989: 123). Against the belief-expression view of assertion, see Dummett (1989/1993: 171) and McDowell (1980/1998: 46-49).

If restricted to the analysis of assertion, the worlds in the context set can be thought of as candidates for the actual world. The idea is that, by reducing the context set, the participants become more certain as to the nature of the actual world, as there are fewer candidate worlds. However, if the activity in which the participants are engaged is not aimed at ascertaining the nature of the actual world, then the worlds in the context set need not be thought of as candidates for that world. For example, if they are engaged in supposition, or the creation of fiction, the aim would not be to reduce uncertainty about the nature of the actual world. However, the Stalnakerian view of assertion in terms of context-change offers no obvious way of distinguishing assertion from other activities which have the same essential effect (i.e. that of modifying the context through the addition of the proposition expressed) but do not share its aim of accurately representing the world.

In order to distinguish assertion from these other activities, it is necessary to consider more closely the difference between modifying a context when one is engaged in assertion and when one is engaged in a non-truth aiming activity, such as supposition or fiction. This will require addressing a number of issues, not least the nature of the forms expressing the propositions that pick out the context set, and the means by which these propositions affect that set.

3.1 Propositions and representation

A proposition, understood as a function from a possible world to a truth-value, does not have any special relationship with any particular world: given any possible world as input, it will return either a positive or negative truth-value. Thus the mere proffering of a proposition in communication need not itself be informative as to the nature of the world: the speaker need not be indicating that given the actual world as input, the proposition will return a positive truth-value. Rather, in order for a proposition to be informative as to the actual state of the world, it must be intended as a *representation* of that world. So how do propositions come to represent the world? Stalnaker says that “for any given set of possible worlds, to locate the actual world in that set is to represent the world as being a certain way” (1978: 316). What does it mean, though, ‘to locate the actual world in the context set’? In other words, how does one indicate that one intends, in proffering a propositional form, to represent the world as being a certain way? How is the hearer to identify the speaker’s intention to locate the actual world in the context set? This is essentially the question of how the hearer identifies the force of the utterance as assertoric.

In attempting to answer this question, it is important to note that returning a positive truth-value and being true are not the same thing, as has been pointed out by a number

of authors (Barker 2003: 21-22, 2004: 36-37; Dummett 1978, 1993: 219-220; García-Carpintero 2004: 152). When the proposition expressed by an assertion such as (1) returns a positive truth-value given the actual world as input, we say that the assertion is true. When the proposition expressed by a command made like (3) returns a positive truth-value, we say that the command has been obeyed. (In neither case is the positive truth-value enough, of course: in the case of the imperative, it must result from the utterance, whereas in the case of the assertion, it must hold independently of the utterance.)

- (1) John is going to work
- (3) Go to work, John

Similarly, we can describe beliefs as true but cannot apply this description to desires. What seems required for an object to be describable in terms of truth and falsity, then, is that it must (at least) both express a proposition and serve as a representation of how the world is.

If this is the case, then it is important to be clear about what is entailed by positing a representational relationship between a proposition and the world. A crucial point is that we can no longer speak of propositions *simpliciter*, but must also give consideration to the forms that express them. This is because propositions (thought of as functions) are abstract objects, but a representation must be a concrete object. Of course, an object employed as a representation may express a proposition, and it may fulfil its representational function in part by the fact that it does so, but we have just seen that propositionhood in its own right is insufficient for representing the world as being a particular way. Indeed, it is important not to confuse the proposition with the form that expresses it: it is the form that is the representation, not the proposition. Thus rather than say, as Stalnaker does, that “[a] proposition – the content of an assertion or a belief – is a representation of the world as being a certain way” (1978: 316), we should instead say that that an assertion or a belief is a representation of the world as being a certain way is *in part* due to the fact that it expresses a proposition. Propositionhood is thus a means by which representation can be achieved, rather than a means of representation in itself.

In order to explain the relationship between an asserted proposition and the actual world, we must consider how the propositional form communicated by the assertion fulfils its representational function. In other words, by virtue of what does this propositional form come to have a representational role? While it is true that there is no restriction on the representational functions that objects can fulfil (any object can be used to represent another: all that is needed is for someone to say, for example, “Let

this brick/apple/pin/mountain/planet stand for John/the Amazon rainforest/the struggle of the workers against oppression/etc.”), certain types of objects serve as useful representations by virtue of their formal features: maps are good representations because their lines correspond to some degree to the features of the landscapes they represent; a statue can be said to be a good representation of an individual in part because it shares formal features with the person it represents. But, in these cases, there is an iconic relationship between the representation and the thing it is representing which does not hold in linguistic representation. What, then, makes a certain type of speech-act – *viz.* assertions – good for representing the world? While it is clearly true that this question cannot be answered without reference to the fact that the forms employed in performing assertions express propositions, it is also true that propositionhood alone is not enough.

The lesson from Stalnaker is that the means by which an assertion can be informative as to the nature of the world – and hence represent it – is by eliminating all those worlds for which the proposition it expresses returns a negative truth-value from the set of candidates for the actual world. Thus an assertion of (1) invites us to remove from the set of possible worlds that could be the actual world all those worlds in which John is not going to work. But while this gives us an idea of how assertions might fulfil their representational function, it also raises further questions:

- What is special about assertoric forms such that they can have this effect on a context?
- What capacities are needed by interpreters to achieve representation by these means?
- How does assertion differ from non-truth-aiming activities, such as supposition and fiction?

In answering these questions, it is important to note that, on the Stalnakerian analysis, the set of propositions which picks out the context set is a consistent set. That is to say, all the propositions in the common ground are true in all the worlds in the context set (Stalnaker 2002: 706). In evaluating an assertion for acceptance or rejection, then, a hearer needs to be able to assess whether it is consistent with other propositions in the context. If it is, then it can be accepted; if it is not, then either it, or those propositions with which it is inconsistent, must be rejected.

Attributing to a hearer the ability to assess the consistency of a set of propositions assumes that he has the means to carry out inferences which take propositional forms as inputs and return others as outputs. With this capacity, the hearer can perform deductions which take as premises both the asserted proposition and those already in

the common ground in order to determine whether any inconsistencies between the new proposition and the common ground occur. Besides presupposing certain deductive abilities on the part of the hearer, this also requires that the propositions employed in this process are expressed by forms which are able to act as input to that deductive process. This point can be illustrated by considering why (1) can serve as a premise in a modus ponens argument while (3) cannot, even though both express the same proposition as the antecedent of the conditional. i.e. (4):

- (4) <go to work, John>
- (5) If John goes to work, we'll be able to eat this week.
John is going to work
We'll be able to eat this week
- (6) If John goes to work, we'll be able to eat this week.
Go to work, John
We'll be able to eat this week

The invalidity of (6) results not because the second premise does not express the same proposition as that expressed by the antecedent of the conditional premise, but from the fact that it is not expressed by the same type of form (cf. Hare 1970/1971; 1989 on 'phrastics', 'neustics' and 'tropics'). The lesson here is that expressing the appropriate proposition is not sufficient for a form to be employed in successful inference: the form itself must also be of the requisite type.

In order that a propositional form be used in the Stalnakerian manner to represent a particular world, then, the person for whom that form is to serve as representation must have the capacity to assess its consistency with other propositions in the context, and this entails that the propositional form must be of the requisite type to allow it to be processed by that person's deductive system. So, the answer to the question of what it is, in addition to propositionhood, that permits a propositional form to serve as a representation of a particular world is that it must be of the requisite type to allow its consistency with other propositions with the same function to be evaluated by the cognitive system for which it serves as a representation.

3.2 Summary of section 3

The aim in this section has been to determine what it is that makes an assertion a useful representation of the world, such that we can treat its content as we would information we derive through perception. We have seen that the fact that assertions express propositions is not enough, for imperatives also express propositions but

cannot be used in perception by proxy. Taking our cue from Stalnaker, we have decided that what makes an assertion a useful means of representing the world is that it has the potential to reduce uncertainty about the nature of the world by removing, by virtue of its propositional nature, possible worlds that are candidates for the actual world from the set of candidate worlds. Assertions have this capacity because they present the proposition expressed as consistent with other propositions in the context. However, positing that representation is achieved in this way implicitly attributes to hearers the ability to test incoming propositions for consistency. This in turn implies that these propositions must be expressed by forms which enable them to serve as input to deductive processes aimed at ascertaining consistency. In sum, then, it appears that what makes an assertion a useful means of representing how the world is is that it expresses a proposition in such a form that it can be evaluated for consistency by a hearer.

However, we have not yet solved the problem of what distinguishes assertion from supposition. The process of establishing consistency will be just as important in evaluating a supposition or fiction as in deriving and qualifying the implications of an assertion. In order to distinguish assertion, we need to give some thought to the nature of the context affected by an assertion and how it differs from the context affected by a supposition or a sentence uttered as fiction. This will be done in the next section.

4 Context types

We saw above that the Stalnakerian conception of context is not, on its own, up to the job of explaining how assertion fulfils its epistemic function because it is neutral concerning the nature of the activity in which the participants are engaged. (Of course, this might well be considered an advantage when dealing with the sort of phenomena with which Stalnaker is primarily concerned, such as the projection of presuppositions, because these do not appear to depend on the nature of the conversational activity for their analysis. Presuppositions behave the same way whether one is engaged in telling a story or giving testimony.)

Another issue is that assertion, in Stalnaker's terms, is not seen as modifying the common ground itself, but the hearer's representation of the common ground. This is made especially clear in more recent papers (Stalnaker 1988/1999, 2002). The problem is that viewing assertion in terms of a modification of the participant's representation of the common ground does not necessarily say anything about how the content of an assertion might modify the participants' beliefs about the nature of the world (beyond what they believe about what their fellow participants take to be

common ground). As Stalnaker himself puts it, “[t]hat something is common belief may be a pretense – even a mutually recognized pretense” (2002: 704).

This leaves us in a quandary. On the one hand, Stalnaker’s conception of assertions modifying the context by virtue of their propositional content gives us an elegant answer to the question of how a propositional form can have the function of representing a particular world (most importantly, the actual world). On the other hand, his conception of the context as what is assumed to be common ground does not make it clear how assertions can fulfil their epistemic role, for what this view of context does is describe how hearers, on interpreting an assertion, come to modify their beliefs about what others assume to be common ground.

In order to apply Stalnaker’s insights to the task of explaining how assertion fulfils its epistemic function, then, another conception of context is required, one which recognises that assertion aims not only at modifying beliefs about common ground, but also at providing knowledge about how the world is (beyond the attitudes of the participants towards the conversation). This conception of context needs also to be able to explain what assertion has in common with supposition and fiction, and also how it differs from them.

Sperber & Wilson (1986/1995) characterise context in terms of the assumptions that a hearer brings to bear on interpreting an utterance. ‘Assumptions’ here are propositional mental representations. Assumptions can be of two main types. First, there are basic unembedded assumptions. These are treated as true by the person for whom they serve as representations of the world by virtue of their unembedded format. In this respect, they are ‘assertoric in character’, to use Geach’s term: “possibly a thought is assertoric in character unless it loses this character by occurring only as an element in a more complicated thought” (1965: 457). In Relevance Theory, such thoughts are termed ‘factual assumptions’ (1986/1995: 74).

Second, there are assumptions embedded in factual assumptions. These assumptions are not necessarily entertained as true by the individual: they may be entertained as descriptions of fictional worlds or employed as supposition, for example. Thus when you suppose that *p* or process a sentence that is manifestly intended as fiction, the mental representation that expresses that proposition is a constituent of a more basic mental representation. These propositional constituents of factual assumptions can be called ‘embedded assumptions’. Thus on hearing (2), the hearer will form a mental representation expressing the proposition (7), with (4) as a constituent:

- (2) Let us suppose the following: John is going to work
- (4) <go to work, John>

(7) <suppose, we, <go to work, John>>

Crucially, only the complex proposition (7) will be factual, i.e. have assertoric character and thereby be treated as true by virtue of its format.

The proposal to be made here is that the epistemic function of assertion can be explained, in broadly Stalnakerian terms, by distinguishing between speech-acts where the proposition expressed is intended to have its essential effect on a context formed of factual assumptions, and those where it is intended to have this effect on a context formed of embedded assumptions. In order to develop this proposal, it will be necessary to say a little about the nature of the relevance-theoretic view of linguistic communication.

4.1 Relevance and communication

The relevance-theoretic view is that hearers attend to utterances for the same reason that they attend to other apparently attention-worthy features of the environment: in order to improve their representation of the world. They attempt to do this by processing the input from a communicative act in a context of assumptions drawn from other perceptual sources and memory in order to derive further assumptions as output. The greater the number of assumptions that result, the greater the relevance of the utterance (for any given level of effort). The results of this processing are termed ‘cognitive effects’. Cognitive effects that lead to an improvement in the individual’s representation of the world are ‘positive cognitive effects’. An utterance which results in positive cognitive effects is said to be relevant to that individual.

Which context a new proposition is processed in will be determined by accessibility considerations. On the relevance-theoretic view, the context of an utterance is not given but constructed by the hearer, on the basis of the linguistic form of the utterance, as he tries to arrive at an interpretation consistent with the presumption of optimal relevance that is communicated by every utterance. This presumption entitles the hearer to follow a path of least effort when interpreting the utterance and to stop when he has an interpretation worthy of the effort he has expended, given his estimation of the speaker’s competences and preferences. Following a path of least effort entails constructing the most accessible context, which might be formed of either factual or embedded assumptions. Crucially for present concerns, processing an assumption for relevance entails assessing its consistency with contextual assumptions. The deductive

system posited by Sperber & Wilson checks for contradictions and removes the weaker of any assumptions which result in a contradiction (1986/1995: 114-115).³

Given this view of context, it is possible to distinguish assertion both from supposition and fiction, on the one hand, and from the speech-acts associated with non-assertoric forms such as the imperative, on the other. To do this, two factors must be taken into consideration: how the utterance affects the context and the type of context it affects.

Consider again (1). A hearer processing this utterance could attempt to arrive at an interpretation by deriving effects from (4), the proposition (1) expresses, or from (8), a description of what the speaker has done in uttering (1), or from (9), a description of the attitude he has towards the proposition (1) expresses. (Of course, none of these is exclusive, and nor is the list exhaustive.)

- (1) John is going to work
- (4) <go to work, John>
- (8) <say, speaker, <go to work, John>>
- (9) <believe, speaker, <go to work, John>>

In the first case, the hearer would be attempting to derive effects from the utterance's base-level 'explicature', in the second and third from one of its higher-order explicatures. In Stalnaker's terms, the changes to the context set derived from an assertion of (1) would be essential if they resulted from adding (4) to the context, non-essential if they resulted from adding (8) or (9). Notice, though, that when interpreting (3), attempting to derive effects from the proposition expressed (i.e. (4)) is not an option: all effects must be derived from higher-order explicatures such as (10) and (11) (Carston 2002: 120).

- (3) Go to work, John
- (10) <tell, speaker, John <go to work, John>>
- (11) <want, speaker, <go to work, John>>

So, when an assertoric form such as (1) is used, there are two ways the utterance can affect the context, either by virtue of the proposition it expresses or by virtue of a higher-order description of the act. When a non-assertoric form is used, by contrast, the effect can be derived only from higher-order representations of the proposition

³ It also deletes those assumptions that analytically imply that assumption and the weaker of any pair of assumptions that synthetically implies it (1986/1995: 114-115).

expressed. This difference can be captured by saying that the proposition expressed by an assertoric form is potentially relevant in its own right, whereas the proposition expressed by a non-assertoric form does not have this potential.

However, processing the proposition expressed by an assertoric form for relevance in its own right does not entail that the utterance is being interpreted as an assertion: interpreting an utterance of (1) as an act of supposition or as fiction would still require the effects to be derived from the proposition expressed. What distinguishes assertion from supposition is not the type of effect that is intended to be derived, but the type of context that the effect is to be derived in.

Recall that above we distinguished between two types of assumptions: factual and embedded. The former are assumptions which are treated by the individual as true by virtue of the fact that they are not embedded in any other, while unembedded assumptions are not necessarily treated as true. A context can be formed either of factual assumptions, thus forming a factual context, or of embedded assumptions, forming an embedded context. An embedded context will be formed of assumption embedded under the same factual assumption schema. An example of a factual assumption schema is (12), and (13) illustrates a context formed of assumptions embedded in that schema:

(12) In the Superman stories it is the case that....

(13) In the Superman stories it is the case that

Clark Kent is Superman Lois Lane loves Superman Jimmy Olsen admires Superman

There are, then, two dimensions that need to be taken into account when considering the sort of effect an utterance can have on a context: the nature of the context and whether the proposition expressed has an effect in its own right, as illustrated by Table 1.

Table 1: Types of contextual effect

	Factual context	Embedded context
Relevant in own right	Assertion	Supposition Fiction Representation of common ground
Not relevant in own right	Imperative utterances	Imperative utterances in fiction

What Table 1 shows is that assertoric effects will result when the proposition expressed is presented as relevant in its own right in a factual context. If it is presented as relevant in its own right in an embedded context, then the effects will be distinct. (Supposition and fiction are given here as examples, but are not intended to be exhaustive.) The proposition expressed by an imperative utterance such as (3) will not have an effect in its own right, but will affect the context only by virtue of its higher-order explicature (and other non-indicative forms are also limited in this way). Depending on the nature of the utterance, it may affect either an unembedded context or an embedded context, such as when an imperative is used in fiction or a play.

Having a positive effect on a context formed of factual assumptions will increase the hearer's stock of true assumptions and thereby improve his representation of the world. In Stalnakerian terms, this stock of assumptions picks out a set of possible worlds in which each proposition obtains a positive truth-value. Enlarging the set of factual assumptions reduces the size of this set of possible worlds, and thereby reduces uncertainty about the nature of the world. The same effect is achieved by assumptions obtained through perceptual systems. Modifying an embedded context will also reduce a set of possible worlds, but this set can be considered a set within (and accessible from, in the terms of modal semantics) the set picked out by a factual context. Thus, a propositional form which is relevant in its own right in an embedded context will also have an *indirect* effect on a factual context.

So the ability of assertions to have what Stalnaker calls the essential effect of reducing a context set by adding the proposition expressed to the context can explain their capacity to result in positive epistemic effects. For this explanation to work, though, the context must be thought of not as a representation of the common ground, but as a set of assumptions drawn from the hearer's stock of basic assumptions about the nature of the world. Given this conception of context, the Stalnakerian view of assertion in terms of context-set reduction can shed light on how it fulfils its epistemic function, i.e. on its role in perception by proxy.

We can still grant Stalnaker the view that assertions modify the hearer's representation of the common ground. In our terms, however, this is a case of the proposition expressed being relevant in its own right in an embedded context. As pointed out earlier, there is no reason that the hearer must take what he believes is common ground to be true. This is why the hearer's representation of the common ground must be thought of as being made up of embedded assumptions. However, there is nothing preventing an assumption having an effect on both an embedded and a factual context, as would be the case if the hearer both accepted an assertion as true and assumed it to be common ground.⁴

5 Conclusion

Recall that Stalnaker says that to locate the actual world in the context set is to represent the world as being a certain way. The question that has been considered here is just how speakers go about locating the actual world in the context set. The answer that has been suggested is that they do so by proffering a proposition expressed by a form which enables it to be assessed for consistency with a set of contextual assumptions. This set of assumptions will be one of two types: factual or embedded. Which type of context the hearer brings to bear on interpreting an utterance of an assertoric form will determine whether or not the utterance is interpreted as having assertoric force: if it is a factual context, then an assertoric interpretation will be the result.

The hearer's selection of context is determined by considerations of relevance. Given the presumption of optimal relevance conveyed by an utterance, the hearer will process the incoming proposition in the type of context that is most accessible. If this is a factual context, then the speaker has indicated that the proposition she proffers is on an epistemic par with those assumptions that the hearer has acquired via his own perceptual mechanisms. In other words, she indicates that adding this assumption to the stock of basic, unreflective assumptions that the hearer has about the actual world will reduce his uncertainty about that world by eliminating those possible worlds which are no longer candidates for the actual world. Thus the Stalnakerian model of

⁴ There is clearly a lot more that needs to be said about the relationship between factual and embedded contexts, in particular concerning the conditions for entry to and exit from embedded contexts so that, for example, factual assumptions can be employed in the processing of fictions and, say, the results of a supposition made to perform a *reductio ad absurdum* can be released from the embedded context as a factual assumption.

assertion is employed to show how assertion fulfils its epistemic role, and Relevance Theory is employed to show just how the speaker manages to locate the actual world in the Stalnakerian context set.

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