

PRESUPPOSITION: AN ALTERNATIVE APPROACH

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It seems to have become of interest in recent philosophy to develop notions of presupposition which can be accommodated by straightforward statemental or context-free logics. The most elegant instance of this would seem to be the system of Van Fraassen [9]. The underlying assumption of such attempts is that presupposition is such that it can best be characterized in the indicative form.¹ Thus according to Van Fraassen:

(1) A presupposes B iff A is neither true nor false unless B is true.

This is equivalent to:

(2) A presupposes B iff

- (a) If A is true then B is true
- (b) If A is false then B is true

And settling on, "The negation of a sentence A is true (false) iff A is false (true)" as the meaning of negation, yields:

(3) A presupposes B iff

- (a) If A is true then B is true
- (b) If (not- A) is true then B is true

Contrary to this, the primary thesis to be developed in this paper will be that any such characterization of presupposition is inadequate because presupposition essentially requires the subjunctive conditional for adequate expression and such a characterization would require a context-dependent logic in order to be adequately represented.

While the main thrust of this thesis lies in the essentially subjunctive nature of presupposition, in order that this be sufficiently developed, an examination of the nature and significance of subjunctive conditionals in general is necessary.

A subjunctive conditional, in contrast to a regular material conditional couched in terms of indicatives, is one in which the component parts of the

conditional are generally presented in the subjunctive mood. "If such and such were to happen, then. . .", "If such and such would have happened, then. . .", and so forth. These subjunctives have much in common with counterfactuals and although neither term is completely adequate, some have come to use the terms 'subjunctive conditional' and 'contrary-to-fact conditional' interchangeably. Reasons for the interchangeable use of these terms are offered in Chisholm [3].

In this article Chisholm remarks that although a significant part of our knowledge comes to us in terms of these conditionals, "The type of statement in which this knowledge is usually formulated. . . appears to have been bypassed by contemporary logic; for the theories of generality, implication, and "Statement composition", as they have been developed in recent years, seem to concern only indicative statements and to make no adequate provision for what we usually express in the subjunctive." ([3], p. 289). Of course, this remark was made in 1946, and it should not be taken to imply that at present logics have not been developed which seriously take into consideration the complex nature of the subjunctive. Logics such as those of Bar-Hillel, S. Petersen, and perhaps David Lewis, among others are logics which do take into account knowledge which must be expressed outside the indicative form. These logics will hereafter be referred to as context-dependent logics. And they will be contrasted with logical systems such as Van Fraassen's which will be referred to as context-free logics. And, the basic difference which demarcates the two types of logics, for the purposes of this paper, is just the way in which each views the significance, implicitly or explicitly, of the subjunctive. More specifically, by context-free logic is meant a logic developed along the lines of an ordinary first order logic of a standard text book variety;² one which, as mentioned above, only concerns itself with knowledge which can easily be expressed by indicative statements, and one in which by 'implication' is meant either material or strict implication or something that can be defined solely in terms of them. Such logical systems are to be contrasted with systems (context-dependent logics) which allow for operators which express implication relations outside the scope of the material and strict implication operators. In the system Bar-Hilled [1] develops for instance, the relation of pragmatic implication is specified in order to accommodate a sense of 'imply' which is of utmost importance in any linguistic behavior situation but which is decidedly different from either material or strict implication. However, at the same time it remains a strictly logical relation, just as is 'entails' upon which it is based. Logics such as Bar-Hillel's thus are to be considered as context-dependent.

Van Fraassen [9] in saying, "I would resist any imperialism on behalf of classical logic; I would not accept the idea that it is applicable to all contexts or that it is sufficient for all (important) purposes, but on the other hand, I have no inclination to change it" seems to suggest that while he is aware of the availability of such alternatives, he finds them at least in relation to the generation of a presuppositional logic, unnecessary. But, as will be argued, because of the essentially subjunctive nature of presupposi-

tion, such alternative context-dependent logics are necessary to the generation of an adequate presuppositional logic.

It may be claimed that a system such as Van Fraassen's is neutral in respect to subjunctives, but the way in which his system is generated shows that it is not. He distinguishes implication from presupposition and necessitation in the following way:

- (i) Modus Ponens holds for both implication and presupposition.
- (ii) Modus Tollens holds for implication but not for presupposition.
- (iii) The Argument Form:
 - A presupposes B
 - (not- A)
 - $\therefore B$
 - Holds for presupposition but not implication
- (iv) What implication and presupposition have in common is that, if A presupposes or implies B , the argument from A to B is valid. This semantic relation will be called necessitation. That is, A necessitates B iff whenever A is true B is true also.

This taken together with his characterization of presupposition shows that by implication he means material implication³ and by presupposition he means something that can unproblematically be defined in terms of implication, and which can unproblematically be distinguished from implication by exhibiting different types of inference rules that would hold for each.

But if reasons, later to be provided, for showing that presupposition represents an essential occurrence of a subjunctive mode are successful, then both Van Fraassen's model of presupposition and the system itself will not be adequate unless subjunctives (at least the type of subjunctive occurring in the presupposition relation) are just the type of things that can easily be transformed into indicatives. But since this is the question at issue, the adequacy of such systems revolves around just this. Such context-free systems can not be simply proffered forth as adequate unless they have priorly provided grounds for assuming subjunctives are either insignificant, unproblematic, or at least easily capable of being transformed into indicatives. But an examination of subjunctives shows that they are not any of these three things.

We assert subjunctive or contrary-to-fact conditionals in at least two types of situations. In situations where we know the antecedent to be false and in situations where we assert the conditionals not knowing whether the antecedents are true or false. Again following Chisholm on this, historical statements which the past has made false, statements that we know are physically impossible, and statements that we know will never become actual are examples of subjunctive conditionals asserted in the first type of situation. Subjunctive conditionals which are precautionary or dilibrative are examples of the second type which are asserted in situations where we do not know whether the antecedents are true or false. For a detailed account of the use of these precautionary and deliberative conditionals

Chisholm [3] or R. Firth [4] can be consulted, but it is significant to note at this point that the subjunctive conditional is considered essential to the expression of such deliberations.

Taking Chisholm's partial symbolization of a typical subjunctive conditional:

$$(x)(y)(\text{if } a \text{ were } \phi \text{ and } y \text{ were } \psi, y \text{ would be } \chi)$$

the question arises, "What if anything do we have to assume about the universe if we are to claim validity for such counterfactual knowledge?" ([3], p. 294). The problem of transforming subjunctives into indicatives is not a straightforward problem of simple logical manipulation. It involves epistemological and metaphysical considerations as well as logical and linguistic ones.

Since there are obviously no problems with logically true or analytic subjunctives it is only the transformation of other types of subjunctives that is in question and is of concern. There have been many attempts at translating these subjunctives, the simplest of which are clearly inadequate. Replacing 'will' and 'would' by 'is' and 'will' and interpreting the resulting statement as a truth functional material conditional, for instance, will not do because the original subjunctive conditional may be true when the material conditional is not and vice versa.

The more complicated attempts at handling subjunctives and contrary-to-fact conditionals such as those of Carnap, Broad, Stevenson, Ramsey and Quine are too lengthy to cover in a paper of this scope, but Chisholm's analyses of these attempts shows that of the attempts among these that even begin to look adequate, the endless refinements necessary to keep such programs in tact invariably point toward the fact that perhaps there is something inherently wrong with any such types of approach.⁴ What this points to is that it may very well be futile to try to consider contrary-to-fact or subjunctive conditionals outside the context of their utterance. But if this is so, then it is clear that only those logics which are capable of taking contextual considerations into account would be adequate for handling such knowledge as we do express with our contrary-to-fact and subjunctive conditionals.

As mentioned in the beginning, the main thesis to be argued here is that the subjunctive conditional is essential to the representation of presupposition. This goes directly against Van Fraassen, as his characterization shows that he would either deny this or be forced into the position of holding that this particular type of subjunctive conditional can be successfully transformed into an indicative form. The thesis here is that either of these alternatives is unacceptable. It must be noted however, that the Strawsonian account of presupposition, while it lends itself to Van Fraassen type interpretations is, upon close scrutiny, not in direct opposition to the account to be developed here. Because, while the Strawsonian account does allow for statemental interpretations of presupposition,⁵ its appeals to notions of prior satisfiability and responsibility of utterance make it possible to view the model of presupposition to be developed here as roughly patterned after these later aspects of a Strawsonian account.

In arguing that presupposition represents a fundamental occurrence of the subjunctive form, it is not enough simply to notice or to claim that presupposition can be represented in this form or that its "natural form" is subjunctive. Firstly, because the idea of "natural form" is itself rather vague. Various philosophers have had all kinds of presumptions of what the "natural form" of certain terms is, but for the purposes at hand, it won't be sufficient simply to point up contexts in which the subjunctive form seems natural for presupposition. It must be argued that the subjunctive is essential, not just natural, to the representation of presupposition. Secondly, that presuppositional relationships have been described by subjunctive conditionals is also insufficient, because, if tense changes are sufficiently attended to, almost any statement is capable of being trivially transformed into the subjunctive form. That is to say, given for example, Aristotle's "All men are mortal", which is clearly categorical, it can, following Russell's prescription, be transformed into the hypothetical "(x) (If x is a man, then x is mortal)" and from there the option is open for a transformation into "(x) (If x were to be a man, then x would be mortal)". That is, there is no bar from going from a categorical to a hypothetical and then to a subjunctive, and there is no bar from saying that this, in certain situations, is just what the categorical means. And the availability of such trivial transforms from indicatives to subjunctives is what makes it tempting to assume that since subjunctives resulting from such transforms can easily be transformed back into indicatives, all subjunctives can. However, this is not the case. As was pointed out earlier, there are deliberative uses of subjunctive conditionals and the subjunctive conditional is essential to the expression of such deliberations. These deliberative uses refer to analyses of what Carnap and Broad have called 'dispositional adjectives' and 'dispositional terms' and the subjunctive conditional is necessary to the expression of such dispositional adjectives and terms. Thus Broad [2] has said:

Whenever we conjoin a dispositional adjective to a substantive we are expressing . . . a hypothetical proposition of the following kind, 'If this were in a certain state, and were in certain relations to certain other things of certain specified kinds, then certain events of a specific kind would happen either in it or in one of these other things'.

What this implies is that a clearly subjunctive conditional, as above, is not only natural to the expression of dispositional adjectives and terms, but that they can't be adequately described by any other means. And this is what makes them essential and marks them off from other subjunctives which arise out of and can easily be transformed back into indicatives. Nelson Goodman also has produced a somewhat similar account of the relation between dispositionals and contrary-to-fact conditionals [5]. According to his treatment, indicatives with dispositionals yield subjunctives with non-dispositionals. And from this we can infer a similarity of role. That is to say for example, 'Sugar is soluble' has an equivalent function to 'If sugar were to be put in water, etc., etc., then it would dissolve' and this shows the interrelationship between the two.

Since the occurrence of the subjunctive is essential to the description

of these adjectives and terms, the problem of their translation or reduction into a handleable form represents an instance of just the type of problem for which context-dependent logics provided the most promising solution.

The reason then, why presupposition represents an essential occurrence of the subjunctive is because presupposition is dispositional. And any adequate characterization of it as of any other dispositional adjective or terms can't adequately be expressed by any other means than the subjunctive. Thus, if presupposition is dispositional, it represents a fundamental occurrence of the subjunctive.

Even prior to the Strawsonian conception of presupposition there was much evidence available to support the claim that presupposition is such a dispositional term.⁶ Limiting the discussion however, to a consideration of a Strawsonian type model, seeds of such a dispositional nature can even be seen there. According to Strawson: If *S* is a presupposing statement and *S'* is the statement presupposed, the truth of *S'* is a necessary condition of the truth or falsity of *S*. This is, for all practical purposes, the beginning and the end (with the exception of a few examples) of his characterization of presupposition. It can easily be seen that this characterization could be open to many interpretations.

Since his characterization is couched in terms of statements and the presence and/or implied absence of truth value ascriptions to such statements, one can easily get the mistaken impression, for instance that statements rather than people are capable of presupposing, or that presupposition is capable of being defined solely in terms of statements.

But on the other hand, the requirement of the prior satisfaction of certain conditions explicit in his characterization, and his idea of the role "responsible utterance" plays in presupposition⁷, provide much to build on towards a dispositional account of presupposition.

There is more reason to think that the notion of prior satisfiability, that is that *S'* must be satisfied before an ascription of truth value can be assigned to *S*, can be more fully captured by a subjunctive than by a truth functional material conditional, because the subjunctive is implicitly tensed, while the material conditional in the indicative is not and the notion of prior satisfiability as it occurs in presupposition requires tensing

Expressed in ordinary English, the presupposition relation Strawson is trying to describe is the following: When a person utters or expresses a sentence in English, it is not always the case that we should ascribe a truth value to what he says. That which he says merits truth value ascription only if the sentence makes a statement and the statement that it makes is the type of statement which is capable of meriting truth value ascription. Presupposition enters in at exactly this point, and it enters in precisely because the capability of statements to have truth values is dispositional. That is, suppose someone says "All John's children are asleep" and suppose this makes a statement.⁸ Now the question arises, "Does this statement have a truth value?" Suppose that we don't know John and we don't know whether he has children. Strawson's account of presupposition can't handle this supposition because it assumes that we are always in a position

to know. Thus he says that if "John has Children" is true, then "All John's children are asleep" has a truth value, and if "John has children" is false, then "All John's children are asleep" does not have a truth value. But as facts stand, we do not always know whether "John has children" is true or false. And perhaps this situation is even more common than the situation Strawson describes where we do actually have such knowledge. Now in this situation where we do not know, are we not in an exactly analogous situation to the one Chisholm described in which we are faced with a subjunctive conditional which has to be asserted not knowing whether the antecedent is true or false?

Taking *A* to be "All John's children are asleep" and *B* to be "John has children", according to Strawson's account:

If *B* is true then *A* is either true or false

and

If *B* is false then *A* is neither true nor false.

But supposing we do not know whether *B* is true or false (or even perhaps whether *B* itself is neither true nor false). Then what do we do? How would we express the situation we are in? There is only one way that is adequate to the description of the situation in which we do not know whether *B* is true or false, namely to hypothesize in terms of a subjunctive by saying:

Even though we do not know whether *B* is true or false,

If *B* were to be true then *A* would be either true or false.

and

If *B* were to be false then *A* would be neither true nor false.

Now what makes this situation arise; what makes us aware that the subjunctive is essential here is that in giving a full account of presupposition it is not sufficient to consider only semantic relations between statements. We must also consider knowledge states of particular utterers, tensing and the role of responsible utterance.

When we are in the explicit non-subjunctive there are resources for being tenseless which don't exist in the subjunctive. The subjunctive is tensed. Every subjunctive utterance implies a commitment on the part of the speaker to a belief that, in fact, the corresponding counterfactual is true. For example, if someone says "If this piece of butter were to be heated, then..." they are contextually implying that it is not now heated. And the reason they are contextually implying this is because if they weren't, then this is not the form of words they would have responsibly used. And if this is so, then the utterance is extensionally equivalent to "Had the butter been heated in the past" or "Were it to be heated in the future". One cannot have a tenseless statement combined with the responsible utterance of "If it were to be heated...". At time *T'* someone can

say "If this butter were to be heated..." but they cannot say "If this butter were to be heated at time T' ..." because time T' is occurring. What they can say about time T' is that there is no reason why this would have not been true at time T' . But their saying it at time T' as a responsible utterance precludes that they believe that it is now happening at time T' . But they can always say "If it were to have happened at time T' and it was time T' , then it would have been the case that..." and this would be exclusively counterfactual.

When representing presupposition one can always talk as if the ascription of truth value to statements were all that is involved but this is not so. Because of the situation where even the truth value ascription of the presupposed statement is in question, the notion of responsible utterance must be brought in if a *full* account of presupposition is to be given.

If someone asks, "Is 'All John's children are asleep' true or false?", we can say, varying slightly from Strawson, that we cannot play that game of ascribing truth value, because of those factors which make a response to "John has children" something which has to be settled previously. There is no way one is required to give a yes or no answer to the question and there is no way one is prohibited from giving a yes or no answer except as a function of their prior commitment to a response to the question "Is 'John has children' true or false?". If a truth value ascription to this statement has not been settled, then there can be no truth value ascription settlement to "All John's children are asleep". That is to say, one would not be acting responsibly in a linguistic implicature context if one were to accept or settle a true or false allocation to "All John's children are asleep" without priorly having arrived at a true or false allocation to "John has children". If we have not arrived at a true or false allocation to "John has children", then we are saying, it is not the case that true or false is allocated to "All John's children are asleep", but if true or false were to be so allocated, then a true or false allocation to "John has children" would have to be settled. This is clearly subjunctive and this recipe for treating non-overtly explicitly dispositional terms like 'allocate' shows the subjunctive element lying behind such terms.

Recalling Broad's formulation [2] of the subjunctive conditional necessary to the treatment of dispositionals,

If this were in a certain state, and were in certain relations to certain other things of certain specified kinds, then certain events of a specific kind would happen either in it or in one of these other things.

we can now see that a sufficient characterization of presupposition can be adequately given only by it. And again taking A to be "All John's children are asleep" and B to be "John has children", we can say

If B were in a certain state (Namely if B were to be capable of being true or were to be capable of being false) and B were in a certain relation to A (Namely if B were in the presupposition relation Strawson described to A) then certain events would happen either in it or in one of these other things (Namely A would be capable of being either true or false).

As argued earlier, successful treatment of such subjunctives can only be achieved by logics which are capable of contextual considerations. And since this is so the direction we should be looking in for adequate containment of presupposition is away from classical context-free logics such as Van Fraassen's and toward context dependent logics such as those of Peterson and Bar-Hillel and so forth.

But even if all the above argued was set aside, there are still other inadequacies in the Van Fraassen model of presupposition and in his approach in general. Among these reasons why the notion of a presuppositional logic does not even begin to look like a statemental context-free logic are the non-homologicallity of presupposed and presupposing statements, certain semantic parallels which exist between entailment and presupposition which bring to light the role that epistemic consideration must play in developing sufficient characterization of entailment and presupposition, and the participial structure present in the antecedents of entailments and presuppositions.

Given the Van Fraassen characterization of A presupposes B , A and B are logically homologous. That is, they are of the same logical type. In fact however, this should not be the case. In order to achieve any degree of coherency in the deliniation of presupposition, we have to realize that in any particular presupposition relation B will be of a different logical type than A . The Strawsonian conception of presupposition which Van Fraassen claims to be following asserts that if A presupposes B then the truth of B is a necessary condition of the truth or falsity of A . But what this is to mean, if it is to have any meaning at all, is that truth value ascription to B is not only a necessary condition but also a prior condition for any truth value ascription to A . What this implies is not only that the truth value of B must be determined prior to the truth value of A , but also it must be determined independently of A . What this independence means is that the truth value of A may not be considered or appealed to in determining the truth value of B . But Van Fraassen's characterization of presupposition entitles us to do just this and this is where it goes wrong. Not only Van Fraassen's characterization, but any characterization which defines presupposition in terms of truth functional material conditionals will also lead to such illegitimate entitlement.

If truth value ascription to B must be determined independently of truth value ascription to A , then this provides reasons for treating B statements as different types of statements or as different level statements than A statements. They are different level statements because the justification for truth value ascription to B statements, unlike A statements, must be based not only on syntactic considerations but also on epistemic considerations. This twofold requirement brings to light certain semantic parallels between presupposition and other logical operators such as entailment.

Entailment and presupposition are semantically parallel in respect to the fact that neither can be represented by the material conditional or strict implication alone. This was noticed in respect to entailment long ago when it was noticed that the definition of material implication (the standard truth

table definition), gave rise to certain paradoxes (the paradoxes of material implication):

- (A) Any false statement materially implies every statement.
- (B) Any true statement is materially implied by every statement.

Since these counter intuitive results occurred from the definition of material implication and yet the notion of material implication was indispensable in logical systems, the notion of strict implication was developed to more fully encompass our intuitive knowledge in regard to the requirements of implication. Strict implication was represented by \rightarrow , and defined as $p \rightarrow q$ iff $(p \cdot \neg q)$ is logically impossible. While this more fully represented implication paradoxes still arose. Given this definition it followed that

- (C) If p is self-contradictory, then p strictly implies any statement.
- (D) If q is necessary, then every statement strictly implies q .

and these results were also counter intuitive. For example, when a reductio proof is being performed and we derive a contradiction, we are then entitled to assert, not just any statement, but only the denial of our original assumption. But (C) would have entitled us to have implied any statement whatsoever. So the notion of entailment was designed to represent an even stronger implication relation which would overcome such counter-intuitive results.

One well-known development of entailment was by Lewy [6]. In this development he suggested that for P entails Q it is not enough, though it is necessary that P should strictly imply Q . It is also necessary (1) that the propositional function " R counts in favour of P " should strictly imply the propositional function " R counts in favour of Q " and (2) that the propositional function " R counts against Q " should strictly imply the propositional function " R counts against P ". But while (1) and (2) are necessary also, still their conjunction is not a sufficient condition. The sufficient conditions according to Lewy are:

In order that P should entail Q it is necessary and sufficient (1) that the function " R counts in favour of P " should strictly imply the function " R counts in favour of Q " and (1') that the function " X knows that the function ' R counts in favour of P ' strictly implies the function ' R counts in favour of Q '" should not strictly imply the function of " X knows that the function ' R counts in favour of P ' is self-contradictory."

So even with entailment, which has certainly been considered more easily accommodated by simply statemental context-free logics than presupposition, appeals have been made to the consideration of evidence and the epistemic conditions under which assertions can be made. And if entailment is a candidate for such consideration, it seems clear that presupposition is an even better candidate. To straightforwardly assume that presupposition can be represented by material or strict implication alone

when it is questionable even whether entailment can, seems unjustified at best.

Participial structures which occur in both entailments and presuppositions also show this. Antecedents of entailments for example, have been said to be simply participial phrases or nominalizations of the form "so and so being such and such" (for instance "Socrates' being wise"), for which there are no transforms.

Quine [7], after distinguishing between use and mention, makes a parallel distinction between statements and names of statements. He says

(1) Jones is ill

is quite different from

(2) 'Jones is ill' is true

(1) is about Jones while (2) is about the statement 'Jones is ill'. And while there are clearly contexts in which both (1) and (2) can be legitimately used, it is always illegitimate, when ascribing truth or falsity to statements to assert

(3) Jones is ill is true.

because the words 'Jones is ill' represent a phrase or nominalization, i.e., they name a statement and as such do not function in the way a statement functions. It is improper to ascribe truth value as in (3). However, if we look at Van Fraassen's characterization:

A presupposes *B* iff

(a) If *A* is true then *B* is true

(b) If not-*A* is true then *B* is true

we see that he is treating *A* mistakenly as a statement rather than treating it as a nominalization or a name of a statement. And according to Quine [7], any relation which has a serious claim to the name implication⁹ is a relation which is a binary predicate by means of which *we talk*¹⁰ about statements.

Thus, we can see that it is illegitimate in the case of entailment for example, to mistakenly render these participial structures or nominalizations as statements. They are not statements, they are just participial structures. As such they are fundamentally tied not to statement talk, but to people talk.

Likewise, there is even more reason to view the antecedents of presuppositions in this way as not only does presupposition also qualify as warranting the name implication,¹¹ but presupposition is even more fundamentally tied to people talk. Just as Quine said, it is *we* who talk about statements by means of binary predicates, in the case of presupposition it is even clearer that it is *we* who presuppose. But if it is people and not statements who presuppose, then any account of presupposition that does not take such things as behavioral considerations, epistemic considerations, or conditions of assertion into account, will at best, be lacking. Since it is

people who presuppose, only a dispositional account of presupposition could begin to be complete.

But there is still one last reason to question the adequacy of the Van Fraassen model of presupposition and the system developed as a result of it. The motivating kernel behind the Strawson-Van Fraassen development of presupposition is that empty subject classes call for truth value gaps. But this may be only partially correct. It, in fact, only has intuitive appeal with certain kinds of examples. Namely, with examples in which we are intuitively neutral as far as the necessity for ascribing truth value to the presupposing sentences. For example "The present King of France is bald" and "All John's children are asleep". With certain other examples however, we are not intuitively neutral. An instance of such an example is "All brakeless trains are dangerous". This may be said to presuppose that there are brakeless trains. But, in fact there are none. The subject class is empty. On the Strawsonian account, since "There are brakeless trains" is false, "All brakeless trains are dangerous" must be truth valueless. But this has no intuitive appeal. In fact it is counter intuitive. We all want to say that "All brakeless trains are dangerous" has a truth value. Namely, it is simply true. Another example of this type is the well known case "All trespassers will be prosecuted", in which the truth of the presupposing sentence is meant to insure an empty subject class. This also causes trouble for the Strawsonian model because here too we are interested in preserving the truth of the presupposing sentence regardless of whether an empty subject class occurs.

What these types of examples show, however, is not a complete breakdown of a Strawsonian model of presupposition but what they point to is that if notions of presupposition are to be developed, it is possible that no one development may be inclusive enough to handle all actual cases of presupposition. So these examples again point toward a nature for presupposition which may be dispositional, in a rather Wittgensteinian sense, such that, while all particular cases of presupposition may share a strong enough family resemblance to each other to warrant the title of presupposition, there may be no Strawsonian-Van Fraassen, stipulative-legislative type of definition capable of handling all of what we do want to describe as presuppositional situations.

The significance of differing presuppositional situations mainly lies in the way these differing presuppositional situations limit the initial attractiveness of the development of notions of presupposition in context-free logics. Even if presupposition could be adequately characterized in the indicative (which has been shown not to be the case), its containment in a context-free logic would render such a logic inadequate if the logic purported to handle all presuppositional situations. This is not to say that all such logics do so purport, but the air of triumph present in the development of such systems often seems misleading in just this way.

Context-dependent logics, on the other hand, because of their capacity to deal with subjunctives and dispositionals, are more capable of codifying even the Strawsonian model. The Strawsonian model represented an essential occurrence of the subjunctive because the description of ascriptions

of truth value necessitated a dispositional analysis. If such dispositionals can only be captured by the subjunctive conditional and it is also the case that differing presuppositional situations indicate a dispositional account of presupposition itself, then it follows that a context-dependent logic, since it is more sufficient for characterizing subjunctives, may be the only way to logically capture the various different developments of presupposition.

NOTES

1. That is, that it can adequately be represented by material conditionals the component parts of which are indicative sentences or statements.
2. Such as Copi, Kalish and Montague, Resnik, Thomason, etc.
3. That is, material implication defined by standard truth table means.
4. This does not only apply to the philosophers noted above but also to any more contemporary attempts which try to deal with subjunctives without considering the contextual situations different types of subjunctives arise in.
5. A statemental interpretation of presupposition being any interpretation that views presupposition as a relation between statements where one particular statement presupposes another. That is, any interpretation where statements are the presupposing entities rather than people.
6. "Presuppositional circles" in contemporary philosophy, while concentrating on Strawsonian type models and examples seem totally to ignore the evidence that the history of philosophy from Aristotle up through Vahlinger and Collingwood has provided us with which point toward this dispositional nature of presupposition.
7. As developed in his article "On Referring".
8. Although the things Strawson says in "On Referring" might make this entitlement to statementhood questionable, his actual definition of presupposition makes it necessary to ascribe statementhood to it.
9. Here Quine intends any logical relation over and above material implication which has a claim to the name implication.
10. Italics added.
11. Where, going along with Quine, 'implication' is over and above material and strict implication.

REFERENCES

- [1] Bar-Hillel, Y., "Analysis of 'Correct' language," *Mind* (1946), pp. 328-340.
- [2] Broad, C. D., *Examination of McTaggart's Philosophy*, vol. 1, p. 149.
- [3] Chisholm, R., "The contrary-to-fact-conditional," *Mind*, vol. LV, No. 220 (Oct. 1946), pp. 289-307.
- [4] Firth, R., *Sense-Data and the Principle of Reduction*, Ph.D. Thesis, Harvard University, Ch. VII (1943).
- [5] Goodman, N., *Fact, Fiction, and Forecast*, Third Ed., The Bobbs-Merrill Company, Inc., Indianapolis, Indiana (1973).

- [6] Lewy, C., "Entailment and necessary propositions," in *Philosophical Analysis: A Collection of Essays*, Max Black (ed.), Prentice-Hall, Englewood Cliffs, New Jersey (1963), pp. 183-184.
- [7] Quine, W. V. O., *Mathematical Logic*, Harvard University Press, Cambridge, Massachusetts (1965).
- [8] Strawson, P. F., "On referring," *Mind*, vol. LIX, No. 235 (July 1950), pp. 320-344.
- [9] Van Fraassen, B., "Presupposition, implication, and self-reference," *Journal of Philosophy*, vol. LXV (1968), pp. 136-151.

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