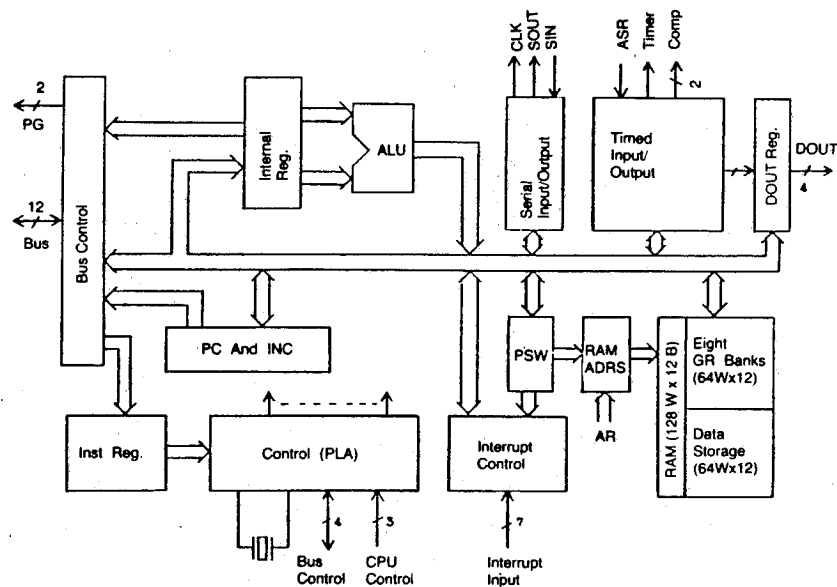


APENDICE II

La integración del término en el campo de la terminología es evidente.



PRESUPPOSITIONAL IMPLICATIONS IN COMPOUND AND COMPLEX SENTENCES.

John TYNAN

It is clear that an adequate theory of natural language communication must give an account of the implications that we derive from speakers' utterances in particular situations. In what follows, I will try to come to terms with one small set of these implications - what are often called presuppositional implications - when they occur in the context of the traditional logical connectives: 'and', 'or', and 'if...then'. For the most part, I shall concentrate on giving the outlines of a kind of algorithm for these implications in the contexts just described. While there are innumerable treatments of some of the material contained here, I shall concentrate especially on the types of formal analyses that can be found in Karttunen (1973) and Soames (1982). Towards the end of the article, I will try to give a general explanation for some of the observed facts by drawing on certain general principles of communicative behaviour.

By 'presuppositions' I will understand sets of assumptions which, though not explicitly asserted in an utterance would, unless

cancelled by the context, normally be attributed to the speaker of that utterance. It is important to note that these assumptions may or may not be shared by the addressee; all that matters is that the use of the utterance normally leads to the belief that the speaker at least assumes them. Neither is it necessary that the speaker actually holds these assumptions; there is a difference between actually holding an assumption and giving to understand that one holds it. Both these points will be elaborated on later.

It is usually assumed in semantic and pragmatic analysis that the implications that we derive from what people say must be subdivided into a number of different classes (Kempson 1975 and 1977; Wilson 1975; Sadock 1978; Nunberg 1981). Alternatively, we might consider certain types of implications as having a greater strength or probability than others (Sperber and Wilson 1986). I will assume here that implications are different not only in strength but also in character. For the purposes of this discussion it becomes necessary, then to distinguish three types of implication: entailments, presuppositions, and conversational implicatures. Since the notion of implicatures will only be appealed to at the end, I will concentrate here on the entailment-presupposition distinction.

Taking positive declarative sentences as a base, it is fairly easy to see that two kinds of implications can be derived from them: one type we will call presuppositions, the other entailments. Entailments follow only from the positive declarative; they no longer follow from the negative or interrogative that corresponds to this declarative; neither do they follow from a corresponding epistemic modal. In logical terms, entailments are necessary conditions on the sentences from which they are derived. Presuppositions, on the other hand, while they also follow from positive declaratives, differ from entailments in that they equally follow from the negative or interrogative which corresponds to that declarative and from a corresponding epistemic modal. The

presuppositions of negative sentences, however, are somewhat peculiar in that, in a particular context in which we are denying a previously-made assertion, and where the context makes it evident, they no longer follow, i.e. they can be cancelled or made defeasible in certain negative contexts. These differences can be seen in the following examples. Implication (1b), an entailment, follows only from the positive declarative (1a), but from none of the other (a) sentences. Implication (2b), on the other hand, a presupposition, follows from each and every one of the (a) sentences in (2). Finally, as we can see in the discourse in (3), implication (2b) can be cancelled in the negative contexts described above. I use the standard symbol (>>) to indicate presuppositional implications and ↘ to indicate that a presuppositional implication no longer follows.

- (1) a. Cain killed Abel
 a'. Cain didn't kill Abel
 a''. Did Cain kill Abel?
 a'''. Cain may have killed Abel
 b. Abel died
- (2) a. Cain regrets that he killed Abel
 a'. Cain doesn't regret that he killed Abel
 a''. Does Cain regret that he killed Abel?
 a'''. Cain may regret that he killed Abel
 b.>> Cain killed Abel
- (3) Mary: Cain regrets that he killed Abel
 Peter: You're assuming far too much, you know. Cain doesn't regret that he killed Abel, because he never killed him in the first place.

↗ Cain killed Abel

Having made these distinctions, we will now go on to see how these presuppositional implications behave in the contexts that we have described. When composing the meaning of whole sentences from their parts, there are cases, as we shall now see, in which entailments no longer follow while presuppositions do, and vice versa. This analysis of the compositionality of meaning has become known as the projection problem, and has proved extremely controversial, as indeed has the whole analysis of presuppositions (see the references already cited). But here, as elsewhere in linguistic analysis, we expect there to be order and not chaos, and it is to the search for this order that we will now address ourselves.

Langendoen and Savin (1971) proposed that the presuppositions of embedded clauses were inherited by the complex sentence in which they were embedded. This does not mean that they amalgamate in any way with either the entailments or presuppositions of higher clauses. Rather they remain as presuppositions of the whole complex sentence. They based their observations on data such as the following:

- (4) a. John accused Mary of beating her husband
 b. John claimed that Mary beat her husband
 c. John judged that it was bad for Mary to beat her husband

In (4), we can say that (a) entails (b), while it presupposes (c). The same relations seem to hold between (a), (b), and (c) in the following:

- (5) a. John stopped doing it
 b. After time t1, John didn't do it
 c. Before time t1, John did it

If we now embed (4a) within (5a), we get (6a), with the basic meaning entailment (6b) and the presuppositional implications (6c) and (6d).

- (6) a. John stopped accusing Mary of beating her husband
 b. After time t1, John didn't claim that Mary beat her husband
 c. Before time t1, John claimed that Mary beat her husband
 d. John judged that it was bad for Mary to beat her husband

Presuppositions (6c) and (6d) are simply the presuppositions of (4a) and (5a), out of which (6a) is formed, i.e. they correspond to (5c) and (4c) respectively.

As we will see, this generalization does not hold. Karttunen (1973) claimed that there were three distinct cases to be analysed: "holes", "plugs" and "filters". He defined them in the following way:

- (i) *Holes* : Contexts in which presuppositions survive, while entailments, generally, do not.
 (ii) *Plugs* : Contexts in which presuppositions do not survive.
 (iii) *Filters* : Contexts in which presuppositions sometimes survive and sometimes not.

Holes. Negative and modal contexts are, as we have already seen, typical holes. In them presuppositions continue to follow. We have also already noted that in certain negative contexts (contexts of denial) the presuppositions can, however, be cancelled. We note in addition, here, that it is not necessary for the presupposition to be explicitly cancelled in order for it to drop out of the sentence. For example, the following, out of context, seems to imply that John did a Ph.D.

- (7) a. John won't have to regret that he did a Ph.D.
 b. >> John did a Ph.D.

In a context, in which, for example, it is known that John has just been offered a very good job, thanks to the fact that he has a Ph.D., then the implication in (7b) clearly follows. If, on the other hand, it is known in the context that John has just completed his graduate studies and has decided not to enrol for post-graduate research, then (7a) would be a perfectly acceptable comment, but it no longer carries the implication in (7b); indeed the implication is quite the opposite. We might notice here, too, that contextual factors can also eliminate a certain type of presuppositional implication even in affirmative sentences.

Frege (1892), who was the first in modern times to draw attention to presuppositions, noted that temporal clauses seem to have presuppositional implications attached to them. For example, (8a) seems to carry the presuppositional implication (8b):

- (8) a. Mary had to work very hard before she finished her thesis
b. Mary finished her thesis

By changing the matrix predication, however, we can eliminate the implication of the temporal clause. Neither (9a) nor (9b), for example, seem to imply that Mary finished her thesis.

- (9) a. Mary emigrated before she finished her thesis
b. Mary left University before she finished her thesis

The presupposition that Mary finished her thesis is cancelled in these cases because we normally assume that a person's emigrating usually means the total disruption of all their activities in the country in which they have been residing, while, in the second case, leaving University would also usually imply the disruption of the activities that one has been carrying on there.

It is perhaps necessary here to return to our point of departure. What we are claiming is that we can, by examining the

characteristics of the implications can be regarded as speakers' assumptions or are implications of another type. We are further claiming that implication (8b) above is ultimately an assumption that the speaker of (8a) is taking for granted. This implication contrasts with other implications that we can derive, for example, with entailments, which we can regard as being explicitly asserted. Paradoxically perhaps, in asserting, we lay our claims open to question, while we seem to be so sure of our background assumptions that it is much more difficult for our interlocutors to question them (Katz 1972: 127ff).

Plugs : As we indicated above, these are contexts in which presuppositions do not survive. The analysis of these contexts is, however, extremely controversial and we shall only give a very broad indication of the type of argument that has been brought forward in support of the claim that certain linguistic contexts are, from the point of view of the inheritance of presuppositions, blocks or plugs which inhibit a presupposition from surviving into a complex sentence. The possible candidates for this class are verbs of saying, such as "say", "mention", "tell", "ask", "promise", "warn", "request", "order", "accuse", "criticise", etc., verbs of propositional attitude, such as "think", "believe", "doubt", "suspect", "fear", etc., and so-called world-creating predicates, such as "dream", "imagine", etc. The way in which these predicates seem to block presuppositions from ascending into the complex sentence can be seen from the following:

- (10) a. Fred wasn't aware that he had failed the exam
b. >> Fred had failed the exam
- (11) a. Fred said that he wasn't aware that he had failed the exam
b. >>> Fred had failed the exam

- (12) a. Fred kissed Cecilia again
b. >> Fred had kissed Cecilia before
- (13) a. Fred asked Cecilia to kiss him again
b. >> Fred had kissed Cecilia before

Filters. As the name indicates, these are contexts in which presuppositions sometimes survive and sometimes do not. The class of filters seems to consist basically of the logical connectives, "if...then", "and", and "either...or". It is clear that presuppositions survive generally in these contexts, just as it is equally clear that entailments do not. The following sentences show up this contrast:

- (14) a. The exhibition lasted four days
b. ⊢ The exhibition lasted three days
c. If the exhibition lasted four days, it should be over by now.
d. ⊢ The exhibition lasted three days
- (15) a. Fred has stopped beating Zelda
b. >> Fred has been beating Zelda
c. Fred resents Zelda's infidelity
d. >> Zelda has been unfaithful
e. If Fred has stopped beating Zelda, then Fred no longer resents Zelda's infidelity
f. >> Fred has been beating Zelda
g. >> Zelda has been unfaithful

This survival property in the case of presuppositions does not, however, always hold true. There seem to be definite contexts, nevertheless, in which the presuppositions are not inherited by the whole sentence. Let us look at the following sentences:

- (16) a. All of Jack's children are bald.
b. >> Jack has children.
- (17) a. If baldness is hereditary, then all of Jack's children are bald.
b. >> Jack has children.
- (18) a. If all of Jack's children are bald, then baldness is hereditary.
b. >> Jack has children.
- (19) a. If Jack has children, then all of Jack's children are bald.
b. >> Jack has children.

In (19), in which the presupposition does not survive, we notice that the antecedent clause "Jack has children" in actual fact is equivalent to the presupposition of the consequent, as is indicated in (16a) and (17a). We can say then that presuppositions survive in conditionals unless the antecedent entails the presupposition of the consequent. That this seems to be the correct prediction seems to be corroborated by the following:

- (20) a. Harry's wife is no longer living with him.
b. >> Harry is married.
- (21) a. If Harry is married, then his wife is no longer living with him.
b. >> Harry is married.

We can now formulate an initial rule for the projection of presuppositions in conditional sentences as follows:

(22) Where $S = A \supset B$ (A being the antecedent and B the consequent)

then (a) If $A \supset\supset C$, then $S \supset\supset C$

(b) If $B \supset\supset C$, then $S \supset\supset C$, unless $A \vdash C$

Unfortunately, this rule will not always work either. As we noted above, presuppositions can also be cancelled where there are purely contextual assumptions which contradict the normal implications of the utterance. We can see this by looking back at (18) above. The implications for presupposition inheritance in this case, we gave as follows:

- (23) a. If all of Jack's children are bald, then baldness is hereditary.
 b. $\supset\supset$ Jack has children.

Let us suppose, however, that (a) is uttered in a context in which Jack has just got married and somebody is wondering what his future children are going to be like. In such a context, there is clearly no implication to (b). A similar case can be seen in the following:

- (24) a. If the Vice-Chancellor invites Felipe González to dinner, then he'll regret having invited a socialist to his table.
 b. If the Vice-Chancellor invites Margaret Thatcher to dinner, then he'll regret having invited a socialist to his table.
 c. The Vice-Chancellor has invited a socialist to his table.

We notice here that, in a context in which it is known that Felipe González is a socialist and Margaret Thatcher is conservative, only (b) carries the implication (c). The reason for this is that we tend to interpret "socialist" in (a) as being anaphoric

to Felipe González. In rule (22) we said that the conditional will inherit the presuppositions of the consequent, unless the antecedent entails the presupposition. We see now that this entailment can be derived from the antecedent plus some set of assumptions made in the context. We will have to change rule (22) accordingly. We will also have to change it to take into account what happens in (23). What has happened in (23) is that the presupposition attached to the antecedent is contradicted in the context. We can bring the two cases together as follows:

(25) Where $S = A \supset B \supset$

then (a) If $A \supset\supset C$, then $S \supset\supset C$

(b) If $B \supset\supset C$, then $S \supset\supset C$

unless there is some possibly null set X of assumed facts such that $\{X\} \vdash C$ in (a) or $\{X\} \cup A \vdash C$ in (b).

We know from logic that the logical connectives are inter-definable. Thus, "if P then Q" is logically equivalent to "It is not the case that P and not-Q are true together". More formally we say:

(26) $P \supset Q = \sim (P \wedge \sim Q)$

We would expect, then, that there would be a similarity in the behaviour of presuppositions in these cases and this does, in fact, seem to be the case. Look at the following sentences:

- (27) a. Baldness is hereditary and all of Jack's children are bald.
 b. $\supset\supset$ Jack has children.
- (28) a. All of Jack's children are bald and baldness is hereditary.
 b. $\supset\supset$ Jack has children.

- (29) a. Jack has children and all of Jack's children are bald.
 b. \gg Jack has children.

We say that (29a) does not presuppose that Jack has children, but rather that this sentence, or an utterance of it, asserts that Jack has children. This assertion in the first conjunct seems to cancel the presupposition of the second conjunct. As with the rule for indicative conditionals, it seems to be the case that presuppositions of the individual conjuncts are inherited by the entire sentence, unless a presupposition of the second conjunct is entailed by the first conjunct. As with indicative conditionals also, this rule can be over-ridden where there are contradictory assumptions in the context. Look at the following sentences:

- (30) a. The Vice-Chancellor has invited Felipe González to dinner, so he's going to regret having invited a socialist to his table.
 b. The Vice-Chancellor has invited Margaret Thatcher to dinner, so he's going to regret having invited a socialist to his table.
 c. The Vice-Chancellor has invited a socialist to his table.

We can also find contexts in which, if the presuppositions of the first conjunct are contradicted in context, the presuppositions of the first conjunct are also cancelled. Suppose the following sentence is uttered in a context in which Philip has just decided that he won't go on to do any post-graduate research after graduating:

- (31) a. Philip won't have to regret that he did a Ph.D. and he can look for a job straight away.

Clearly, there would be no implication in this context that Philip has done a Ph.D. The normal assumption from the factive

predicate is cancelled. We can now combine all these observations into a rule for the projection of presuppositions in conjunction:

- (32) Where $S = A \wedge B$
 then (a) If $A \gg C$, then $S \gg C$
 (b) If $B \gg C$, then $S \gg C$
 unless there is some possibly null set of assumed facts X such that $\{X\} \models \sim C$ in (a), or $\{X\} \cup A \models C$ in (b)

We know by the law of material implication that any proposition of the form "If P , then Q " is equivalent to a proposition of the form "Either not- P or Q ". Formally we can express this as:

- (33) $P \supset Q = (\sim P \vee Q)$

As before, we would expect that presuppositional behaviour under disjunction would show parallels with the behaviour of the other connectives, and this is indeed the case. Consider the implicational relations between the following sentences:

- (34) a. Either baldness is not hereditary or all of Jack's children are bald.
 b. \gg Jack has children.
- (35) a. Either all of Jack's children are bald or baldness is not hereditary.
 b. \gg Jack has children.
- (36) a. Either Jack has no children at all or all of Jack's children are bald.
 b. \gg Jack has children.

In (36), where the presuppositional implication no longer holds, we find that the first disjunct negates the presupposition of the second. That this generalization seems to be correct can be seen from the following sentences, where the same result also holds:

- (37) a. Either Harry isn't married at all or his wife is no longer living with him.
b. \Rightarrow Harry is married.
- (38) a. Either Bill has always refrained from beating his wife or he has stopped beating her.
b. \Rightarrow Bill has been beating his wife.

In the same way we find that where assumptions made in the context contradict the presuppositions of the first disjunct, then these presuppositions are cancelled from the whole assertion. We can now give a rule for the projection of presuppositions in disjunctive sentences:

- (39) Where $S = A \vee B$
then (a) If $A \gg C$, then $S \gg C$
(b) If $B \gg C$, then $S \gg C$
unless there is some possibly null set of assumptions X
such that $\{X\} \vdash \sim C$ in (a), or $\{X\} \cup A \vdash \sim C$ in (b).

An example of a context in which assumptions particular to the context cancel the presuppositions of the first disjunct can be seen in the following. Let us suppose that it is being debated whether Bill should go on to do post-graduate study or should leave University and look for a job. If I am not in favour of Bill's going on to do any more study, and in general have a poor opinion of Bill as a student, then I might very well comment:

- (40) Either he will regret the fact that he did a Ph.D. or he will make a complete mess of it.

Clearly, in this context, there is no presupposition that Bill has done a Ph.D.

We can in actual fact make out a kind of formalism for the three cases that we have now been looking at. The formalism would be as follows:

- (41) Let $S = A \times B$, where x can be any one of the logical connectives symbolizing implication, conjunction or disjunction:
 $\supset \wedge \vee$

- (a) If $A \gg C$, then $S \gg C$
(b) If $B \gg C$, then $S \gg C$

Unless there is some possibly null set of assumptions $\{X\}$ such that

- (i) $\{X\} \vdash \sim C$ in (a), or
(ii) $\{X\} \cup A \vdash C$ in (b), where $x = \supset$ or \wedge , or
(iii) $\{X\} \cup A \vdash \sim C$ in (b), where $x = \vee$

We have now found a descriptive rule or formalism which seems to work fairly well, and allows us to assume that presuppositions will always be inherited in sentences involving the logical connectives, unless some of the conditions stipulated above eliminates them.

Let us look now at some of the implications of the analysis that we have been pursuing up to now. First of all we have seen that the presuppositional implications we have been looking at are not either by assumptions which exist in the context of utterance or they

can disappear under certain implications which can be derived from what is explicitly said or stated somewhere in the surrounding context of utterance. It follows from this that if we take a certain sentence which normally carries a certain presupposition, e.g.

- (42) a. How narrow is the street at that point?
b. >> The street is narrow at that point,

there is no guarantee that the presupposition implied is necessarily true. The most, it seems, that we are entitled to say is that the *speaker* implies that the presupposition is true. In other words, we are entitled to infer, in certain cases, that a speaker is taking a certain implication for granted. Sentences, as such, either because of their structural form, or because of certain lexical items within them, or because they contain certain semantic predicates, *potentially* carry certain presuppositions. Whether that potential presupposition will actually follow in a particular case in which that sentence is uttered depends ultimately on the context in which it is uttered, and on the assumptions that obtain in that context. Sentence (43a) for example, because of its particular structural form, has the potential presupposition (43b).

- (43) a. Harry's wife is no longer living with him.
b. >> Harry is married.

It should be clear, however, that in a particular context, the speaker of an utterance corresponding to (43a) is simply making a mistake about the relation that exists, or existed, between Harry and a certain woman who was once living with him. The utterance, then, indicates to us that the speaker is taking it for granted, or appears to be taking it for granted, that Harry is married, but clearly, this in no way necessitates that such, in fact, be the case. Of course, if it is, objectively-speaking, true that Harry's wife is no longer

living with him, then it must, objectively-speaking, be true that Harry is married.

The point of view that we seem to be coming round to is that presuppositions are types of background assumptions which it is reasonable to infer that a speaker is taking for granted, unless something in the context indicates that this simply cannot be the case. Language itself, then, in the way it is structured seems to reflect the fact, or else leads us to assume the fact that, whatever speech act we are performing, whether we are describing, questioning, requesting, ordering, or whatever, there is certain information that we can background in certain ways, and each language places at our disposal various means, whether syntactic, semantic or intonational, whereby this backgrounding can be effected. It is probably as well to note that speakers may have various reasons for backgrounding information, the most usual ones being that we take it for granted that the other participants in the exchange either already take the information involved for granted also, or will not find it in any way surprising or controversial. There can, however, be other much more subtle reasons. Suppose that I don't know whether the woman who was living with Harry was his wife or not, and suppose that I'm the kind of person to whom that kind of information is important, then I may very well start trying to satisfy my curiosity by making a statement such as (43a) above, in the hope that my interlocutor has more information on the subject than I have and may inadvertently give me the information that I want without my actually asking for it.

We can now try to come to grips once more with the projection problem outlined and see if we can account for it in some more general way than we have done heretofore. Following Soames (1982), we can get a more general perspective on the phenomena we have been describing by building an account on the following definitions of utterance presupposition and presupposition inheritance:

Utterance Presupposition: An utterance U presupposes P at t1 if and only if one can reasonably infer from U that the speaker S seems to accept P and regards it as uncontroversial.

Presupposition Inheritance: If P is entailed by some potential presupposition Q of U, then an utterance of U in a conversational context C presupposes P unless:

- (i) Q is incompatible with C, or
- (ii) uttering U in C conversationally implicates that the speaker is not taking U for granted

We use the notion of entailment in this final definition because we not only want to include the immediate presuppositions of a particular utterance in the list of presuppositions that are attached to it, but also the presuppositions that follow from that presupposition itself. The definition would work in the following way in a context where there are no incompatible presuppositions or assumptions in the context:

- (44) a. The King of France is in hiding (U)
- b. There is a King of France (Q)
- c. There are such things as Kings (entailed by Q)
- d. There is a place called France (entailed by Q)

Since every proposition trivially entails itself, the definition that we have given guarantees that, where conditions (i) and (ii) are not fulfilled, the potential presuppositions will always be actual presuppositions of an utterance, together with all the presuppositions that are entailed by that utterance. Where the context is incompatible, however, then neither the potential presuppositions nor the presuppositions that are entailed by them

become actual presuppositions of the utterance. One case in which this happens is the following:

- (45) a. There is no King of France, so the King of France isn't in hiding (U)
- b. There is a King of France (Q)
- c. From C (the conversational context), we know that there is no King of France. Since (b) is incompatible with this assumption, neither Q nor any of its entailments follow.

We need the second part of the defining conditions on presuppositional inheritance in order to account for those cases in which presuppositions disappear in sentences involving logical connectives. Let's look at a few examples:

- (46) a. Harry's wife is no longer living with him.
- b. >> Harry is married.
- (47) a. If Harry is married, then his wife is no longer living with him.
- b. >> Harry is married.

Though the consequent of the conditional sentence in (47a) does, when it occurs in isolation in (46a), carry the presuppositional implication that Harry is married, this presupposition no longer follows in (47a). Clearly, in (47a), the antecedent of the conditional entails the presupposition of the consequent. When we first examined this sentence in (21a) above, and noted that the presupposition of the consequent disappeared, we merely stipulated a rule to this effect and gave a first formulation in (22). Rule (22), however, and the other rules, all of which we collapsed into one formulation in (41), constitute a mere formalization of the

observed facts. The basic idea that seems to follow from our analysis is that presuppositional implications are generally inherited in the contexts we have been examining, except when certain contextual factors cancel them. The question is, of course, whether we cannot find some kind of unifying explanation for all these contexts.

Semantic analysis has, traditionally, been concerned with accounting for the literal meaning of words and sentences. What has increasingly come to light, however, in the past thirty years or so, is that this is not sufficient if we are to account, as it seems we ought to, for what it is we actually communicate to one another. There is, in our everyday communication through language, a tremendous amount of indirection, with the result that the simple (it is not so simple) interpretation of our literal utterances very often falls far short of accounting for what it is we actually communicate. To take one extreme but, nevertheless, typical example, in ironic utterances we often communicate a meaning which is the exact opposite of what we literally say. Pragmatic analysis has tried to bridge the gap that arises between literal meaning and what is actually communicated.

Accounts of how information is communicated have especially highlighted two factors that seem to play a fundamental role in the processes involved: the recognition of speakers' intentions, and the utilization of certain general principles of interactive behaviour, what is generally known as the cooperative principle (Grice 1975, 1978; Gazdar 1979; Levison 1983). The maxims contained in this principle enable us to cooperate with one another in our linguistic exchanges in such a way that we do not have to spell out in literal terms what we actually mean on each occasion, but can rely on those maxims, and general cognitive capacities, to imply or infer, as the case may be, what it is we wish to say or that our interlocutor wishes to say to us.

Why is it that we infer from the consequent of (47a) that the speaker assumes that Harry is married, while we do not infer it from the whole sentence? Clearly, in this case, the explanation has to do with the fact that Harry's being married is conditionalized in (47a). A speaker who takes it for granted that Harry is married would be in a position to assert simply: "Harry's wife is no longer living with him". The sub-maxim of quality of the cooperative principle says: "Do not say that for which you lack adequate evidence". Since anyone uttering (47a) does not make such a statement, we conclude that he or she is not in a position to make it. In accordance with the other sub-maxim of quantity which says: "Make your contribution as informative as is required for the current purposes of the exchange", we can then conclude that the strongest statement that the speaker can make in the circumstances is precisely (47a). Contextual and conversational implications are, we must assume, stronger than presuppositional implications. A virtually identical inferential process would lead to the cancellation of the presupposition in sentences such as (36a). In sentences such as (29a), the presupposition would be cancelled if we assume that assertions are stronger than presuppositional implications. So, the type of explanation that we have arrived at draws upon the two notions regarding meaning implications that we spoke of as being widespread in pragmatic analysis: one, that meaning implications must be subdivided into different sub-classes, and the other that meaning implications differ from one another in terms of saliency or strength.

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AN INTEGRATIVE APPROACH TO SOME "Ø" MORPHEMES IN ENGLISH (DEICTICS AND NUMERATIVES)

José M. ORO

INTRODUCTION

In analysing syntactically sentences of the type,

1.a. It's always the one Ø carries the radio that gets it.

1.b. The one Ø carries the radio always gets it.

linguists are likely to say that *zero* relatives function as the subject of their relative clause and control it, even though the relative nexus is not present in surface structure. It has been reduced, perhaps for economy of speech, to Ø even in such unclear patterns of language where the antecedent and its relative clause should not be linked in order to avoid confusion of fluent meaning in normal speech.

But linguists, on the other hand, also give a possibility behaving syntactically different from other morphemes which do