A relevance-theoretic account of metarepresentative uses in conditionals^{*}

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Abstract

The purpose of this paper is to give a relevance-theoretic account of certain 'non-basic' indicative conditionals. There has been a claim (e.g. Grice 1989) that natural language *if* is semantically identical with material implication in logic. This approach runs into some problems, one of which is that some natural-language conditionals do not appear to involve the required truth-functional relation between antecedent and consequent. I attempt to show that the relevance-theoretic notions of metarepresentation and pragmatic enrichment (Carston 1988, Wilson and Sperber 1992) allow us to preserve the view that *if* is equivalent to material implication.

1 Introduction

The purpose of this paper is to give a relevance-theoretic account of a certain range of indicative conditionals (as opposed to subjunctive conditionals). The semantics of indicative conditionals (henceforth, simply conditionals) has been much debated. Some people (eg. Grice 1989) claim that natural language *if* is semantically identical with material implication in logic. Others claim that natural language *if* encodes some non-truth-functional relation between antecedent and consequent; this is generally seen as 'causal' or 'consequential'.¹ Both accounts can deal with many 'basic' conditionals which convey a non-truth-functional relation, the only difference being whether this is regarded as pragmatically determined or as semantically encoded. Here I shall tentatively adopt the

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¹See Comrie (1982, 1986), van der Auwera (1986), Quirk et al. (1985), and Sweetser (1990).

material implication semantics, plus pragmatic enrichment under relevance-theoretic constraints.

However, there are further types of conditional which are seen as presenting problems for the material implication account. My main concern in this paper is with these types of 'non-basic' conditional. I will argue that some of these can be interestingly analysed in terms of the relevance-theoretic notion of metarepresentation, and that this analysis makes it possible to deal with these non-basic types on a material implication account.

The paper is organized as follows. In section 2, accounts of natural language conditionals in general are surveyed. In section 3, 'given' antecedents are reanalysed in metarepresentational terms. In section 4, 'speech-act conditionals' are reanalysed as having metarepresentational consequents. In section 5, it is suggested that some conditionals have both a metarepresentational antecedent and a metarepresentational consequent. Section 6 is a summary and conclusion.

2 An introductory survey of accounts of conditionals

Natural language conditionals appear to be so diverse that the material implication account cannot deal with all of them. Some conditionals certainly involve non-truth-functional relations between antecedent and consequent, and in the linguistics literature, the causal-consequential semantic approach (proposed eg. by van der Auwera (1986) and Sweetser (1990)) has been more popular. However, this approach also encounters the problem that not all conditionals involve such a semantic relation between antecedent and consequent. In this section, I will argue that the truth-table account can deal with conditionals better than the alternative semantic approach, as long as it is combined with proper pragmatic explanations. This section will also be an introduction to the problematic types of conditional which will be dealt with in detail in the following sections.

In the truth-table account, natural language *if* is analysed in terms of the truth-table in (1):

(1) Antecedent -> Consequent T T T T T F F F T T F T F (1) says that the whole conditional is true in all circumstances except where the antecedent is true and the consequent false. Consider (2):

(2) If he dies, his son will inherit the castle.

According to the truth-table for material implication, (2) rules out only one possibility: that he dies and his son does not inherit the castle. On this approach, additional meanings like 'his death causes his son's inheritance of the castle' are treated as pragmatically determined. Grice (1989, chap. 4) claims that they are conversationally implicated through his Cooperative Principle and maxims, and Smith & Smith (1988) claim that relevance theory can provide a better explanation of those meanings. A further problem, which is again often dealt with pragmatically, involves the so-called 'paradoxes of material implication', which predict that (2) will be true if the antecedent is false, or the consequent is true. I will not discuss these problems here in detail, but see Jackson (1987) for a detailed defence of a material-implication semantics for *if*.

In alternative semantic accounts, some stronger relation than material implication is claimed to be semantically encoded. Akatsuka (1986: 335) sees this as an abstract relation of 'correlation' or 'correspondence', which may be contextually narrowed to causation or consequence. Van der Auwera (1986) puts forward a Sufficiency Hypothesis, on which *if p, then q* means that *p* is a sufficient condition for *q*. On this account, (2) entails that his death is a sufficient condition for his son to inherit the castle. These alternative semantic accounts seem to explain why conditional (3) sounds odd, while (2) does not:

(3) If he dies, the butler has a son.

The difference is that in (3), the antecedent cannot normally be a sufficient condition for the truth of the consequent, while it is in (2). However, not all conditionals express sufficient conditions. Consider (4):

(4) If you are hungry, there's a sandwich in the fridge.

In (4), the hearer's hunger is not a sufficient condition for the presence of a sandwich in the fridge. Or consider (5), from Sweetser (1990: 116):

(5) If John went to that party, (then) he was trying to infuriate Miriam.

In (5), John's having gone to that party is not a sufficient condition for his having tried to infuriate Miriam. In neither of these examples is a cause-consequence analysis of conditionals easy to maintain.

Sweetser (1990) tries to cover these types of conditional, while retaining the Sufficiency Hypothesis. She claims that conditionality functions in three different domains: content, epistemic and speech-act domains, and that in each domain the Sufficiency Hypothesis can be maintained. Content conditionals relate events or states of affairs, and indicate that the truth of the antecedent is a sufficient condition for the truth of the consequent. The result is an ordinary, causal interpretation: for example, (2) means that his death causes his son's inheritance of the castle.

In the epistemic domain, the relation is between epistemic states, and the conditional may be paraphrased as 'If *I know* [antecedent], then *I conclude* [consequent]' (p. 121). For example, (5) is an epistemic conditional which means 'if I know that John went to the party, I conclude that he was trying to infuriate Miriam'. Here, knowledge of the antecedent is sufficient for knowledge of the consequent, and the causal link is at the epistemic level.

Sweetser's speech-act conditionals are analysed as indicating that truth of the antecedent is a sufficient condition for a speech-act involving the consequent. Consider her examples:

- (6) If I may say so, that's a crazy idea.
- (7) If I haven't already asked you to do so, please sign the guest book before you go.
- (8) If it's not rude to ask, what made you decide to leave IBM?

According to Sweetser, each conditional purports to perform the speech-act assigned to the consequent on condition that the antecedent is true. For example, in (6), the conditional is used to state an opinion only conditionally on the hearer's permission. The conditional in (4) belongs to this type. It means something like 'if you are hungry, I inform you that there is a sandwich in the fridge', which can be analysed as indicating that your being hungry is a sufficient condition for my informing you of the existence of the sandwich.

I will not examine the adequacy of Sweetser's three domains for conditionals in detail, but her account of 'speech-act conditionals' is discussed in section 4. I should note here, though, that if we maintain the truth-table account, we do not need to postulate the class of 'epistemic conditionals' at all. Compare the content conditional (2) and the epistemic conditional (5). Though the implied relations between antecedent and consequent are different, both share the truth conditions of material implication in logic.² That is, (2) rules out the case where he dies and his son does not inherit. Similarly, (5) rules out the case where John went to the party and was not trying to infuriate Miriam. Thus the distinction between content and epistemic conditionals is not needed in the truth-table account.

The Sufficiency Hypothesis is faced with many counterexamples in which the antecedent is not a sufficient condition for the consequent in any of the three domains. One involves conditionals chosen only for the truth-values of antecedent and consequent, as in (9):

(9) If the sun rises in the East, I am innocent.

(9) is used to emphasize the truth of the consequent, by using an antecedent which is obviously true. This does not seem to fit into any of Sweetser's categories. The sun's rising in the east cannot be a sufficient condition for the speaker's innocence, for the speaker's conclusion that she is innocent, nor for the assertion that she is innocent. It simply rules out the case where 'the sun rises in the east' is true, and 'I am innocent' is false, as the material implication analysis predicts.³ Hence, the Sufficiency Hypothesis seems too strong.

However, if we want to maintain the material implication account, we need to provide some analyses of those conditionals which do not seem to involve the predicted truthfunctional relations. One type is the so-called speech-act conditionals in (6)-(8) above. These do not seem to fit the truth-table account. For example, in (6) ('If I may say so, that's a crazy idea'), whether the speaker may say so or not, the speaker thinks that it's a crazy idea. I will attempt to deal with this type of conditional in section 4, using the relevance-theoretic notions of metarepresentation and pragmatic enrichment.

²See Smith (1983: 4), where conditionals similar to 'epistemic' conditionals are claimed to have *if* identifiable with material implication.

³Grice (1987: chap. 4) says one might invent a bid of, say 'Two Hearts', which means 'If I have a red king, I have a black 10'. And here, it's quite clear that there is no causal connection between cards randomly dealt at bridge. The bid, interpreted as communicating this conditional, would simply rule out the case where I have a red king and do not have a black 10. In other words, it functions exactly as predicted by the truth-table account.

These notions shed light on another type of conditional, where the antecedent is often analysed as 'contextually given'. Consider (10):

- (10) A: Two and eleven makes thirty.
 - B: If two and eleven makes thirty, you need more work on maths.

In (10 B), the conditional is not equivalent to 'either two and eleven does not make thirty or you need more work on maths', as the truth-table account predicts. (10 B) is also a counterexample to the Sufficiency Hypothesis, because it does not mean that the truth of 'two and eleven makes thirty' is a sufficient condition for your needing more work on maths, nor for concluding or asserting that you need more work on maths. I will analyse it as having a metarepresentational antecedent. This will be dealt with in the next section.

We have seen that the truth-table account needs to be supplemented with a proper pragmatic analysis, which will allow the hearer to infer a more specific connection between antecedent and consequent when appropriate in the context, and give an explanation for non-basic conditionals. The first part has been attempted by Smith (1983) and Smith & Smith (1988) within the framework of relevance theory, and could be extended using the framework for pragmatic enrichment developed by Carston (1988). In this chapter, I will concentrate on the second part. Using the notions of metarepresentation and pragmatic enrichment, I hope to show that some of the problematic non-basic conditionals can be analysed as having a metarepresentational antecedent, or consequent, or both, and that the result will allow us to maintain the truth-table analysis of *if*.

3 Metarepresentative use of antecedents

3.1 Introduction

A conditional with a 'given' antecedent is generally known as a 'given' conditional. The notion of a 'given' antecedent has been analysed in two different ways: in the stronger sense, a 'given' antecedent must be known (or accepted) by both speaker and hearer; in the weaker sense, it must merely be 'contextually given', i.e., recoverable from the prior discourse but not necessarily accepted by both speaker and hearer. In the literature on conditionals, various conditions to do with 'givenness' of antecedents have been proposed

and defended. In this section, I will try to evaluate and reanalyse some of these conditionals using the relevance-theoretic notion of metarepresentation.

3.2 'Given' antecedents in the literature

3.2.1 'Givenness' in general. The general notion of given - new information has figured prominently in the linguistic literature. Prince (1981) distinguishes three notions of givenness, of which two will concern me here.

In the first sense, an item is 'given' when it is salient in the hearer's consciousness as a result of having been present in the discourse or environment. According to Chafe (1976: 32), an NP is 'given' if its referent has been explicitly introduced in the discourse, or is present in the physical context, or can be categorized in the same way as a referent previously introduced or physically present. I shall talk of such items as 'contextually given'.

The second sense of 'givenness' is one that Prince talks of as involving 'shared knowledge', but not necessarily salience in consciousness. Prince defines it as follows:

(11) **Givenness**_k: the speaker assumes that the hearer 'knows', assumes, or can infer a particular thing (but is not necessarily thinking about it). (p. 230)

An NP is 'given' in this sense if its referent has been mentioned in the previous discourse or is 'in the permanent registry (Kuno 1972: 270)', where 'the permanent registry' corresponds to what the speaker assumes about the hearer's assumptions. (Prince 1981: 231) The difference between contextual 'givenness' and 'givenness' as in (11) lies in this 'permanent registry'.

Prince claims that the two senses of givenness are related: 'an understanding of givenness in the sense of 'shared knowledge' is germane (and perhaps, prerequisite) to an understanding of givenness in the other two senses' (p. 232). In other words, on her view, both senses of 'givenness' involve 'shared knowledge'. It seems to be assumed that when the speaker uses an NP, she already knows the referent of the NP, so as long as the hearer knows it, it is regarded as shared knowledge. However, this is not strictly speaking true. For example, when an NP is used echoically, the speaker can use the NP without knowing its referent. Consider (12):

(12) Mary: I loved the painter.

Peter: You loved the painter?

In (12), Peter may use the echo question because he does not know who 'the painter' refers to. Or consider (13):

(13) Mary: I would like to meet **your parents.** Peter: They have been dead for ten years.

In (13), *your parents* should be 'given' in the sense defined in (11), but that does not mean that Mary knows who Peter's parents are. Accordingly, not every speaker knows what/who the NP which she uses refers to, whether it is given in the discourse or in the permanent registry of the hearer. Hence, it is misleading to talk of 'givenness' in either of the senses defined above as involving shared knowledge. I will argue that the same point applies to 'given' antecedents, which are not, in fact, typically treated as involving shared knowledge, but more as 'contextually given'.

3.2.2 Accounts of 'given' antecedents. Prince's claim that all the senses of 'givenness' involve 'shared knowledge' runs into the same problem with 'given' propositions in general as it does with 'given NPs'. Consider (14):

(14) Housemaid: Madam wrote a letter to the gentleman every day. She was in love with him.Detective: She loved him.

In (14), the proposition expressed by the detective's utterance is 'given' in both senses defined above, but it need not be shared knowledge if he has just repeated the housemaid's utterance in order to express doubts about whether it is true. We should not be surprised, then, to find that the same point applies to 'given' antecedents.

Akatsuka (1986) considers the following example of a 'contextually given' antecedent:

(15) (Pope to the telephone operator in a small Swiss village)
Pope: I'm the Pope.
Operator: If you're the Pope, I'm the Empress of China.

She argues that a contextually given proposition can be presented as the antecedent of a conditional only if it is newly learned *information*, as opposed to speaker's *knowledge*. (This will be dealt with in section 3.2.3. again). Hence, for her, a 'contextually given' antecedent must not involve shared knowledge.

Sweetser (1990) claims that 'given' antecedents are not always accepted by the speaker. Consider her example (16):

(16) Well, if (as you say) he had lasagne for lunch, he won't want spaghetti for dinner.

Sweetser points out that the conditional in (16) can be followed by 'but I don't believe he had lasagne for lunch'. The parenthetical expression in (17), which she uses in order to indicate a 'given' reading, confirms this view:

(17) If you're so smart (as you seem to think), what was the date of Charlemagne's coronation?

Obviously, 'as you seem to think' shows that 'given' means 'accepted or proposed by the hearer'. The speaker may not admit that the hearer is 'so' smart. Here, 'given' antecedent again seems to mean 'contextually given' (though it is used to refer to shared knowledge in her argument about 'given' conditionals. (See 3.1.3.)).

Akatsuka and Sweetser use 'given' antecedents in the sense of 'contextually given' as defined above. By contrast, Haiman (1978) uses 'givenness' in the sense of shared knowledge. He comments (square brackets mine):

A conditional clause [antecedent] is (perhaps only hypothetically) a part of the knowledge shared by the speaker and his listener. As such, it constitutes the framework which has been selected for the following discourse (Haiman 1978 (51)).

As far as I can understand from the parenthesis 'perhaps only hypothetically', he is not claiming that every antecedent is shared knowledge between speaker and hearer, but that it functions **as if** it is shared between them.⁴ So, this claim does not prevent us from concluding that 'contextually given' antecedents are not necessarily speaker's knowledge.

⁴This claim is contrasted with the claim that conditionals convey the speaker's uncertainty of (Akatsuka 1986) or epistemic distance (Dancygier 1993) from the antecedent. See 3.1.3.

3.2.3 'Given' antecedents and speaker's knowledge. The claim that 'given' antecedents are not necessarily speaker's knowledge implies that they may still possibly be shared knowledge. However, Akatsuka (1986) claims that speaker's knowledge cannot be presented in antecedents, and *only* newly learned information can be used. I want to argue against this, not because Akatsuka's distinction between information and knowledge is useless, but because it is less material than the distinction between descriptive and metarepresentative use.

Let us start with Akatsuka's claim about example (18):

(18) (A mother and her son are waiting for the bus on a wintry day. The son is trembling in the cold wind.)
Son: Mommy, I'm so cold.
Mother: Poor thing! If you're so cold, put on my shawl.

Akatsuka claims that in (18), as the fact that her son is cold is 'information' which is only indirectly accessible to her, and hence not knowledge, the mother expresses it as an antecedent. By contrast, the son cannot express his inner state in the form of *if* p; instead he must use *because* or *since*, as in (19):

(19) Son: *If/Because/Since I'm so cold, please let me use your shawl.

Not only knowledge of the speaker's inner state but other knowledge acquired from direct perception is ruled out in antecedents, as in (20):

(20) (Son looking out of the window and noticing the rain) Son: *If it's raining, let's not go to the park!

In (20), *if* is ruled out because the speaker is a direct experiencer of the proposition. Using these examples, Akatsuka claims that antecedents can only involve newly presented information, not the speaker's own knowledge.

In fact, this claim is too strong. Compare (21a), from Akatsuka (1986), and (21b):

- (21) (Son looking out of the window)
 - Son: It's raining, Mommy.
 - a. (Mother going to the window and noticing the rain herself) Mother: You're right. *If it's raining, let's not go to the park.

b. (Mother following him to the door)Mother: If it's raining, why don't you take an umbrella with you?

According to Akatsuka, the conditional in (21a) is not felicitous because the antecedent involves the speaker's knowledge. Notice, though, that in (21b) the antecedent is acceptable; it does not matter whether the mother has noticed the rain or not. She is asking her son why he does not take an umbrella when he says/knows it is raining. Her antecedent is really equivalent to 'If you know it's raining, ...'

In a similar vein, the conditional in (19) can be used in the following context:

Mother: Oh, you're cold. Your lips look blue with cold.Son: If I'm cold, please let me use you shawl.

The antecedent in (22) is acceptable, and equivalent to 'if you think/know I am cold'. Hence, not only speaker's knowledge but also speaker's inner state can be presented in antecedents. I want to argue that the antecedents in (21b) and (22) are used to represent not the speaker's knowledge, but preceding utterances. For example, in (22), the antecedent represents the hearer's utterance that the speaker is cold. In such cases of echoic or interpretive use, an assumption that is in fact known by the speaker can be felicitously used, contrary to Akatsuka's analysis. This will be taken up in section 3.3.

Here are some more examples of the same general type:

(23) (Mother and daughter are insisting on their own preferences in a clothes shop.) Daughter: Mum, I'm a girl.
Mother: If you're a girl, why don't you choose this flower-printed dress?
Daughter: That is really out-of-date. You don't want your daughter to look like a girl fresh from the country, do you?

We can all imagine what is happening. Now, does the fact that the daughter is a girl belong to newly learned information, as Akatsuka would claim? Both the mother and daughter know that she is a girl. The mother is representing her daughter's utterance in the antecedent of the conditional, meaning 'if you are a girl, as you say/know'. Or consider (24):

(24) (In a classroom, a teacher sees a student writing down '2 + 12 = 13') Teacher: What is 2 + 2? Student: Four. Teacher: If 2 + 2 = 4, 12 + 2 should be 14.

It is obvious that the teacher in (24) knows that 2 + 2 = 4, and that he is representing the student's utterance in the antecedent, meaning 'if 2 + 2 = 4, as you maintain.' In these cases, as in the previous ones, the fact that the antecedent is not newly learned information does not rule it out.

In fact, even without a previous utterance, speaker's knowledge can be used in an antecedent. Akatsuka considers one such conditional, in (25):

(25) If 2 + 2 = 4, my client is innocent.

She argues (p. 346) that this is a 'rhetorical device' enabling the speaker to show her certainty that the consequent is true. For this analysis to work, the speaker must be certain that 2 + 2 = 4. This goes against Akatsuka's general claim that *if* is a marker of uncertainty, and cannot be used to introduce speaker's knowledge.

Sweetser (1990) claims that 'given' antecedents cannot be used in content-conditionals, which link two events or states of affairs. In her view, if an antecedent is 'given' (in the sense of already known to the speaker and the hearer), the speaker should simply utter *Y*, rather than saying *If X, then Y*, in accordance with the maxim of informativeness. For example, in (16), if the speaker and hearer know that 'he' had lasagne for lunch, according to Sweetser, the speaker should simply say, 'He won't want spaghetti for dinner'.

On Sweetser's view, conditional (16) without the parentheses is ambiguous between content and epistemic readings. However, once we regard the antecedent as 'given', the only available reading is epistemic. She contrasts 'given' with 'hypothetical', and claims that antecedents of content-conditionals are always hypothetical. However, we need to clarify her notion of 'given' antecedents, since she seems to waver between 'contextually given' and 'shared knowledge' readings.

Consider her claim that there are no content-conditionals with 'given' antecedents. If she is using 'given' in the sense of shared knowledge, the following is a counterexample:

- (26) Son: Dad, what is my surname?
 - Dad: If you are my son, your surname is Smith. If you're Mr Baker's son, your surname is Baker. Is that clear?

The conditional in (26) 'If you are my son, your surname is Smith' is neither an epistemic nor a speech-act conditional. It states a relation between the contents of the two clauses, and is a content conditional. Hence, Sweetser's claim that a 'given' antecedent cannot be used as an antecedent of content-conditionals is too simple.

There are also content-conditionals where the antecedent is 'contextually given'. Consider (27):

(27) (Peter is watching a baseball game on TV. It is raining at the stadium, as can be seen on the TV screen. The commentator says that it is raining.)Peter (to himself): If it is raining, the game will be suspended.

In (27), Peter knows or accepts that it is raining. (27) is a content-conditional, which states a relation between two states of affairs. It is interesting that in the same situation Peter cannot use the conditional to Mary, who does not know that it is raining at the stadium: If he did, it would be interpreted as merely hypothetical. By contrast, in (27), the conditional sounds like a 'given' antecedent. Compare this with (21a), where the conditional with a 'given' antecedent is not acceptable. I think that the difference lies in the fact that the raining in (21a) is directly perceptible, while that in (27) is only indirectly perceptible, i.e., by way of a TV screen. Hence there is some room for doubt.

We have seen from (26) and (27) that content-conditionals can have a 'given' antecedent in either of the two senses of 'given'. So Sweetser's claim that content-conditionals cannot have a 'given' antecedent seems to be false. I would now like to look at her reasons for making this claim, to see where the problem lies.

Sweetser claims that it is useful for speakers to present a 'given' antecedent in the epistemic or speech-act domains because these conditionals serve some purposes which content-domain conditionals do not. She calls these purposes 'social', and comments (pp. 131-132) that presenting a speech act as subject to a condition makes it politer. Moreover, the epistemic and speech-act worlds are intangible; hence, the display of a reasoning sequence marks the conditional as expressing an epistemic domain event and the use of a speech-act condition may help to show that the conditional is in the speech-act domain. However, 'given' antecedents in epistemic or speech-act conditionals can be used in the absence of any audience. Consider (28):

- (28) (Reading a newspaper on the bomb explosion at Aldwych, A says)
 - a. If a bomb exploded at Aldwych, Waterloo Station (which is near Aldwych) must be closed.

b. If a bomb exploded at Aldwych, I will not go to school (which is near Aldwych) today.

Without any hearer, the speaker can use 'given' antecedents. So I doubt that it is only for social reasons that a 'given' antecedent is deleted in content-conditionals and used in non-content conditionals.

If antecedents known by both the speaker and hearer can be used to guide the hearer to recognise that the conditionals are epistemic or speech-act, as Sweetser claims, there is no reason why in content-conditionals the speaker cannot use a 'given' antecedent to guide the hearer to see the consequential link. Dancygier (1993) sheds light on this point. She claims that *if* is a marker, used to signal the speaker's epistemic distance from an antecedent that she does not know or believe to be true. And in other conditionals, the speaker can use her knowledge in an antecedent to show the hearer how to arrive at a conclusion, as in (29)-(30):

- (29) If two and two make four, four is an even number.
- (30) If you're having a steak, you're not a vegetarian.

According to Dancygier, in (29), the speaker, putting aside her knowledge of the fact that two and two make four, presents it as background leading to the conclusion that 4 is an even number. Similarly, in (30), even when the speaker sees the hearer having a steak, she can say (30). Whether the proposition is shared knowledge or not, the *if*-clause signals that the speaker wants to keep her distance from the content. This is contrasted with (25), where the speaker's knowledge is presented as knowledge.

To sum up: Akatsuka claims that only newly learned information (as opposed to knowledge) can be expressed in an antecedent, but admits that knowledge can be used rhetorically. Sweetser claims that 'given' antecedents cannot appear in content conditionals, but they can be used in non-content conditionals for social or expository reasons. Similarly, Dancygier claims that speaker's knowledge can be used as background for argument, when it is presented not as knowledge, but as an assumption. Eventually, all of them agree that in some cases knowledge can be used in antecedents, and in other cases where they claim speaker's knowledge cannot be used, we have seen that they are wrong. Accordingly, the distinction between information and knowledge is not sufficient to account for appropriate use of antecedents of conditionals. I will now try to provide a more explanatory account, based on the notion of metarepresentative use.

3.3 Metarepresentational antecedents

3.3.1 Introduction. In 3.1, we have seen that 'given' antecedents are neither necessarily shared knowledge nor necessarily information. I propose to analyse them in terms of metarepresentational use within the framework of relevance theory; 'given' antecedents are used to represent another representation in context.

3.3.2 Metarepresentation in Relevance Theory. Metarepresentation involves use of one representation to represent another representation which it resembles. If the resemblance is in content, it is a case of 'interpretive use', which is contrasted with 'descriptive use', i.e., the use of a representation to describe a state of affairs. Consider (31):

- (31) (Mary is talking to Peter about her meeting with her supervisor) Peter: Then what did she say?
 - a. Mary: She said the argument is invalid.
 - b. Mary: The argument is invalid.

In (31a), Mary metarepresents the content of her supervisor's utterance, and indicates this explicitly with the phrase 'she said'. In (31b), she leaves Peter to infer that her utterance represents not her own opinion but what the supervisor said⁵. In both cases, the clause 'the argument is invalid' is interpretively rather than descriptively used and will be understood as embedded within a metarepresentation of the type 'she said'. We can metarepresent the content not only of utterances, but of attributed thoughts. Consider (32):

(32) (Mary is drinking her fourth glass of whisky.) Peter: You have a meeting tomorrow morning. Mary: Stop drinking?

In (32), Mary is interpreting a thought which she attributes to Peter, and simultaneously expressing a questioning attitude to it. Metarepresentations involving the expression of attitude are called 'echoic' in relevance theory, and (32) is analysed as an echo question in Noh (1995). The notion of 'interpretive use' also allows for a reformulation of the original proposition, because it involves representation by resemblance. For example, in

⁵See Sperber &Wilson (1986: section 7, chap 4).

(31b), the supervisor may have said something like 'I am not convinced by the argument'. Interpretive use allows for such reformulations.

The notion of metarepresentation covers not only representation involving resemblance of content but also resemblance of form. It is thus broader than the notion of interpretive use. Consider (33):

- (33) A: It's getting dark day by day [day bay day]
 - B: It's not getting dark day by day [day bay day], it's getting dark day by day [dey bay dey]

In (33), B metarepresents and corrects A's pronunciation [day bay day]. This type of corrective utterance is generally referred to as 'metalinguistic negation'. Metalinguistic negation is treated as a variety of echoic use in Carston (1994), with the speaker's dissociative attitude made explicit by the presence of 'not'. Mentions of words are another variety of metarepresentation involving linguistic form. Thus, the term 'metarepresentation' covers a variety of sub-types of representation by resemblance, with or without the expression of speaker's attitude.

3.3.3 Various types of metarepresentational antecedents. Metarepresentational antecedents are those used to represent another representation. In metarepresentation, what is important is faithfulness to the original being represented, rather than truth, or truthfulness (See Wilson & Sperber (1992) and Wilson (1995)). So the distinction between 'information' and 'knowledge' is unlikely to play much role in accounting for metarepresentational antecedents. I shall now attempt a categorisation of the various types of metarepresentational antecedent.

First, there are metarepresentational antecedents which are used to interpret (a part of) the proposition expressed by a previous utterance, as in (34)-(35):

- (34) A: I have two daughters. The older one is clever and the younger one is beautiful.
 - B: If the younger daughter is beautiful, I will choose her.
- (35) A: She produced a series of sounds closely resembling the notes of 'Home Sweet Home'.
 - B: If she produced a series of sounds closely resembling the notes of 'Home Sweet Home', the audience must have been disappointed and complained.

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In (34)-(35), the antecedent of B's conditional can be understood as representing (part of) A's utterance, with the implicit parenthetical 'as you say'. The utterances represented may be spoken or written, as in (36) and (37):

- (36) (Seeing a road sign 'ROADWORKS AHEAD, DELAYS POSSIBLE') Driver: If delays are possible, delays are necessary.
- (37) A: (writing in his notes '2 + 1 = 4') B: If 2 + 1 = 4, you need more homework.

As we have seen, unspoken thoughts may also be interpreted, as in (38):

- (38) A: (raises a finger to her lips, indicating a baby's cot)
 - B: If we have to be quiet, we will play outside.

A second type of metarepresentational antecedent exploits resemblances of linguistic form, as in the case of metalinguistic negation above. I will call these metalinguistic uses. Consider (39)-(41):

- (39) A: I eat TOMEIDOUZ (American pronunciation of 'tomatoes').
 - B: If you eat TOMEIDOUZ, you must be from America.
- (40) A: I trapped two mongeese.
 - B: If you trapped two mongeese, what I trapped are three 'mongeese'.
- (41) A: I called the POlice.
 - B: If you called the POlice, the poLICE will not come. (jokingly) (Capital letters indicate the syllable on which word stress falls.)

In (39)-(41), what is represented in the antecedent is not the content of the previous utterance, but its pronunciation, morphology, and word stress, respectively.

The form of an utterance can also be metarepresented for other reasons. Consider (42)-(43):

- (42) A: His father kicked the bucket.
 - B: If his father kicked the bucket, you don't seem to have respected him.

- (43) A: The wine bottle is half-empty.
 - B: If it is half-empty, you are a pessimist.

In (42), the phrase 'kick the bucket' is singled out because of its register, and in (43), 'halfempty' because of its emphasis on the dark side of things (as contrasted with 'half-full'). These too are cases of metalinguistic use.

Metarepresentational antecedents allow the speaker to single out not only the proposition expressed by a previous utterance, but also pronunciation, morphology, word stress, register, foci, etc. They thus allow the speaker to represent something 'given' in the context — namely a prior utterance or thought. Reanalysing 'given' antecedents in terms of metarepresentation should enable us to provide a more explanatory and general account of their semantic and pragmatic properties.

3.3.4 Possible interpretations of metarepresentational antecedents. Though 'given' antecedents have been discussed in the literature, their meanings have not been dealt with in detail. In this subsection, I will examine two different interpretations of 'contextually given' metarepresentational antecedents. Consider (44):

(44) Travel agent: Mexico City is really beautiful.Customer: If Mexico City is beautiful, I will stay there one more week.

The antecedent of the conditional in (44) can be metarepresentationally used in different ways. First, it may be used to metarepresent not only what was said, but also the higher-level explicatures (i.e. the speech-act and propositional attitude communicated), meaning 'if you say/think Mexico City is beautiful'. Secondly, it may have a 'given' antecedent reading, sometimes marked by parenthetical expressions like 'as you say'. The two readings are given in (45a) and (45b):

- (45) a. If you say/think Mexico City is really beautiful, I will stay there one more week.
 - b. If Mexico City is beautiful, as you say, I will stay there one more week.

The reading of (45a) is illustrated in the following conversation:

(46) Travel agent: Mexico City is really beautiful.Customer: If Mexico City is beautiful, I will stay there one more week.

Travel agent:Then I will book the hotel from 6th to 20th, July.Customer:Yes, please.

The conditional in (46) means 'if you think Mexico City is beautiful, I will stay there one more week'. The acceptability of this type of antecedent is determined by the degree of faithfulness of the metarepresentation, not the truth of the antecedent.

(45b) is a typical case of 'given' antecedent. It involves a mixture of descriptive and metarepresentational use. The antecedent is both representing the agent's utterance and describing a state of affairs. 'Given' antecedents discussed in the literature in general belong to this type: they describe a hypothetical state of affairs, while simultaneously metarepresenting a prior utterance.

By contrast, even when the proposition it expresses is given in context, the antecedent of a conditional can be descriptive, i.e., it can be used to describe a state of affairs, but not to interpret the preceding utterance. Consider (47):

(47) A: You look so cold. Shall I lend you my shawl?

B: No, thank you. I'm O.K. *If I am cold, I don't hesitate to ask for warm clothes.* You know my character.

In (47), A assumes that B is cold, but the proposition expressed by the antecedent in (B) does not attribute this thought to A. It means 'whenever I am cold', not 'if I am cold (now), as you think'.

Now let us return to Akatsuka's examples. Consider (20), in which the antecedent is not interpretively used, since there is no representation to be interpreted. As a descriptive use, the antecedent in (20) is not natural, because the boy knows that it is raining. So in this respect, Akatsuka's claim that speaker's knowledge cannot be used in antecedents makes a good point. However, the same antecedent, used metarepresentationally, could be acceptable, as in (21b). The antecedent is used to represent the son's utterance, and means 'if you know it is raining, why don't you take an umbrella with you?'. The antecedent is acceptable as metarepresentational.

Now, consider (25) repeated below as (48):

(48) If 2 + 2 = 4, my client is innocent.

(48) is acceptable as a metarepresentational interpretation, with the tacit parenthetical 'as you know', or 'as we know'. The speaker uses what she is certain of as an antecedent in order to force the hearer to accept the consequent as true.

Depending on the definition of 'givenness', the antecedent in (48) may or may not be called a 'given' antecedent. As it belongs to a 'permanent registry', it is given in the sense of shared knowledge, but not in the sense of 'contextually salient'. However, it is certainly metarepresentational.

3.3.5 Truth conditions of metarepresentational antecedents. If we treat *if* in English as semantically equivalent to material implication, the conditional as a whole will be true unless p is true and q is false. This truth-table approach (like the Sufficiency Hypothesis) appears to run into problems with some metarepresentational antecedents. Consider (10), repeated below as (49):

- (49) A: Two and eleven makes thirty.
 - B: If two and eleven makes thirty, you need more work on maths.

In (49), as the proposition literally expressed by the antecedent is false, the whole conditional is predicted as true on the material implication account. But this is the wrong interpretation, as we have seen.

Before examining the truth conditions of metarepresentational antecedents, let us consider (31b), which is metarepresentatively, specifically interpretively, used. In (31b), Mary may be interpreting her supervisor's utterance. In this case, what is important is not whether the argument is really invalid or not, but whether the supervisor said something resembling that or not. In interpretive use, faithfulness, not truthfulness, is important. Consider (49) again. In (B), the antecedent is used to represent A's utterance including the higher-level explicature. In other words, the proposition expressed by the antecedent is enriched into 'if you say/believe that two and eleven makes thirty'. The truth conditions of (49) will be correctly assigned as long as this enrichment takes place. My claim is, then, that the relevance-theoretic notions of pragmatic enrichment and metarepresentation make it possible to assign truth conditions to metarepresented via enrichment. I will start with some cases of metalinguistic use, and then return to interpretive uses.

Consider (50) and (51), repeated from (39) and (43):

- (50) A: I eat TOMEIDOUZ. (American pronunciation of 'tomatoes')B: If you eat TOMEIDOUZ, you must be from America.
- (51) A: The wine bottle is half-empty.
 - B: If it is half-empty, you are a pessimist.

In (50), the proposition expressed by the antecedent is something like 'If you eat things you call 'TOMEIDOUZ', you are from America'. Once the attribution of pronunciation is included in the proposition expressed, the truth-table account of *if* remains available. The proposition expressed by (51) will be 'if you say it is 'half-empty', you are a pessimist', rather than 'if it is half-empty, you are a pessimist'.

Antecedents with mixed metarepresentative and descriptive uses have the truth conditions of descriptive ones, but with an extra parenthetical comment outside the scope of the if, as in (16), repeated below as (52):

(52) If he had lasagne for lunch (as you say), he won't want spaghetti for dinner.

Again the truth-table account of *if* applies.

Finally, (53), repeated from (36), is a case similar to (49), which involves interpretive use plus representation of speech-act information:

(53) (Seeing a road sign 'ROADWORKS AHEAD, DELAYS POSSIBLE') Driver: If delays are possible, delays are necessary.

Here, the proposition expressed is 'if *they say* delays possible, delays are necessary.' Again, the truth-table account applies unproblematically.

To sum up: we have seen that metarepresentational antecedents can express propositions different from those expressed by descriptive (i.e., ordinary) antecedents. This is possible as long as pragmatic enrichment processes can flesh out the linguistically encoded material in such a way as to distinguish between descriptive and metarepresentational use. As a result, the truth-table for material implication applies to these 'non-basic' conditionals just as it does to more basic ones, and a standard argument against the truth-table account dissolves.

4 Metarepresentative use of consequents

4.1 Introduction

As we have seen in section 2, natural language *if* has been analysed in two ways: as equivalent to material implication in logic, or as encoding a causal-consequential link between antecedent and consequent, so that the truth of the antecedent is a sufficient condition for the truth of the consequent. In fact, some conditionals seem to present problems for both analyses. Consider (54):

(54) If you're thirsty, there's beer in the fridge.

In (54), there is no causal or consequential link between antecedent and consequent. It does not mean that the speaker's thirst is sufficient for the presence of beer in the fridge. Nor are its truth conditions identical with the truth-table for material implication. The truth-table says that if p is false, (54) will be true regardless of whether q is true or false. But (54) does not suggest that if the hearer is not thirsty, there may be no beer in the fridge. On the contrary, it suggests that even if the hearer is not thirsty, the beer is still in the fridge. That is, regardless of the truth conditions of the antecedent, the consequent is presented as true. Despite this, (54) is not a concessive conditional which means 'even if you're not thirsty, there's beer in the fridge'.

In this section, I attempt to give an account of conditionals like (54), using the relevance-theoretic notion of metarepresentation. My account will be consistent with the view that natural language conditionals are semantically equivalent to material implication and that any differences are due to pragmatics. I will argue against the speech-act analysis based on the Sufficiency Hypothesis.

4.2 Speech-act accounts

4.2.1 Speech-act conditionals. The Sufficiency Hypothesis treats p in 'if p, q' as a sufficient condition for q. However, van der Auwera (1986) and Sweetser (1990), who propose such an analysis, note that the required sufficiency relation does not exist in (54) ('If you are thirsty, there's beer in the fridge'). They both try to reanalyse this type of conditional as a speech-act conditional, where the truth of the antecedent is a sufficient condition for the performance of a speech-act involving the consequent. Thus, (54) would

be analysed as conditionally asserting that there's beer in the fridge, the condition being that the hearer is thirsty.

Let us examine their analyses in turn. Van der Auwera starts by claiming that the conditionals in (55)-(57) do not present p as a sufficient condition for the truth of q (which in (56) and (57) is a non-declarative clause):

- (55) If I can speak frankly, he doesn't have a chance
- (56) Where were you last night, if you wouldn't mind telling me?
- (57) Open the window, if I may ask you to

Instead, the antecedent is presented as a sufficient condition for the performance of a speech-act involving the consequent — in (55) an assertion, in (56) a question, and in (57) a request. These are then conditional speech-acts. Van der Auwera represents (57) along the lines of (57)', where |-> = speech-act operator of assertion, ! = speech-act operator of assertion, ! = speech-act operator of imperative, and -> = a sufficient condition:

(57)' |-> ((I may ask you to open the window) -> (!(you open the window)))

In (57)', the wide scope speech-act is an assertion '|->', and the antecedent is outside the scope of the imperative '!'. He comments that this is 'both an imperative and an assertion about that imperative' (p.202).

Van der Auwera refers to Lauerbach (1979: 215-53), who gives the antecedents of these 'commentative' conditionals a Gricean analysis; the antecedent is a comment on a conversational or politeness maxim and functions as an indicator of politeness or opting out of a maxim. Van der Auwera restricts his conditional speech-acts to 'commentative conditionals' where the antecedents are explicitly commenting on the consequents, as in (55)-(57). He does not regard non-commentative conditionals as performing conditional speech-acts, since it is not obvious how the antecedent in such cases can be seen as commenting on a maxim or representing a sufficient condition for a speech-act involving the consequent. (p.203) Such non-commentative conditionals are analysed as a sub-type of ordinary conditionals. Consider (58):

(58) If you saw John, did you talk to him?

Van der Auwera claims that (58), which is treated as performing a conditional speech-act by Holdcroft (1978: 92), is in fact a speech-act about a conditional, and that what makes it different from ordinary conditionals is that the antecedent is expected to have a positive answer. He treats this antecedent as a 'given' proposition, and proposes that in these cases the following rule applies:

(59) $(?(p \rightarrow q) \land GIVEN(p)) \rightarrow ?(q)$

In other words, a speech-act about a conditional implies a conditional speech-act, and the result is similar to the formulation given in (57)', but for different reasons.

The problem is that not all non-commentative conditionals which behave differently from ordinary conditionals have a 'given' antecedent, in either sense of 'taken to be true' or 'contextually given'. (54) is a case in point. If we formulate (54) in accordance with van der Auwera's analysis, the result will be as in (54)'. (|->: assertion, ->: a sufficiency condition, ^: conjunction).

(54)' (|-> (you are thirsty -> there's beer in the fridge) ^ GIVEN (you are thirsty)) -> (|-> (there's beer in the fridge))

But (54) does not mean something like (54)'; the antecedent is not given in the context in the relevant sense. Moreover, the fact that someone is thirsty is not generally a sufficient condition for the presence of beer in the fridge, so (you are thirsty -> there's beer in the fridge) in (54)' presents a problem for his analysis. I will provide further arguments against this analysis, in 4.1.3 below.

Sweetser (1990) also argues for speech-act conditionals, which she paraphrases as *if p*, *then let us consider that I perform this speech-act*. (p.121) Consider her examples (6)-(8), repeated below as (60)-(62):

(60) If I may say so, that's a crazy idea.

(61) If I haven't already asked you to do so, please sign the guest book before you go.

(62) If it's not rude to ask, what made you decide to leave IBM?

According to Sweetser, these conditionals purport to perform the speech-act assigned to the consequent only on the condition stated in the antecedent. For example, in (60), the

conditional is used to state an opinion only if the hearer permits it. Sweetser again sees the conditions expressed in the antecedents as referring to general Gricean or Searlian conditions on discourse. She comments;

It thus becomes clear that there are a great variety of conditional speechacts, some more overtly referring to the general felicity conditions on the relevant class of speech-acts, while others refer implicitly to these general conditions by referring overtly to some more specific felicity condition on the particular utterance (a sub-case of the general condition) (p.121)

According to her, the felicity conditions picked out by antecedents are those proposed by Searle (1969), Lakoff (1973) or Grice (1975). This is the same idea that van der Auwera proposes in his analysis of 'conditional speech-acts'. The difference is that Sweetser includes cases where the antecedent **implicitly** refers to the conditions, whereas van der Auwera does not. Consider her example (63):

(63) If you went to the party, was John there?

Sweetser claims that (63) can be interpreted as meaning '*If* you went to the party, *then* consider that *I ask you* whether John was there'. The hearer's going to the party would enable him to have the relevant knowledge to answer the question. The higher-level paraphrase might be, 'If you *do* know the answer, then take me as asking this question seriously'. Sweetser includes this kind of conditionals in her speech-act conditionals, whereas as we have seen with the equivalent in (58), van der Auwera does not.

4.2.2 Metalinguistic conditionals. Horn (1989) claims that the conditional operator *if* can be used either descriptively or metalinguistically; when *if* is used descriptively, it is equivalent to material implication, but when it is used metalinguistically, it is not. Consider his examples of metalinguistic conditionals:

- (64) If you're thirsty, there's some beer in the fridge.
- (65) If you haven't already heard, Punxsutawny Phil saw his shadow this morning.
- (66) If I may say so, you're looking particularly lovely tonight.

According to Horn, the antecedents in (64)-(66) specify 'a sufficient condition for the appropriateness or legitimacy of asserting the consequent' (p. 380). This definition is nearly identical with Sweetser's account of speech act conditionals, except that it relates only to declarative consequents. If we extend it to non-declarative consequents, the result will be very similar to Sweetser's.

Another type of 'metalinguistic conditional' discussed in Horn (1989: 380-381) includes the following examples from Ducrot (1972: 175-178):

- (67) If the Cité is the heart of Paris, the Latin Quarter is its soul.
- (68) If the Bois de Boulogne is the lungs of Paris, the neighbourhood square is its pores.

Horn says that these conditionals mean, 'if you're willing to grant p, you must equally grant q'. These conditionals are not speech-act conditionals, in that the antecedents are not felicity conditions for the speech-acts performed by the consequents. They will be dealt with in section 5.

Horn's position might be described as middle of the road. For descriptive conditionals, he uses the truth-table account, while for metalinguistic conditionals, which do not seem to be truth-functional, he uses a Sufficiency Condition account and its notion of speechact conditionals. Though he regards these different uses as resulting in a pragmatic ambiguity, they also seem to imply a semantic ambiguity: *if* is either logical or metalinguistic, and the two meanings are irreducible. This account encounters not only all the problems of speech-act accounts, but all the problems of ambiguity accounts.

Finally, a look at Dancygier's metatextual conditionals is in order. Dancygier (1992) holds the same idea about speech-act conditionals as Sweetser, but she also discusses a class of metatextual conditionals, which she sees as different from speech-act conditionals. These include the following:

- (69) a. He trapped two mongeese, if that's how you make a plural of 'mongoose'.b. He trapped two mongeese, if 'mongeese' is the right form.
- (70) a. Grandma is feeling lousy, if I may put it that way.
 - b. Grandma is feeling lousy, if that's an appropriate expression.

- (71) a. Chris managed to solve the problem, if solving it was in any way difficult for him.
 - b. Chris managed to solve the problem, if 'manage' is the right word.
- (72) The Queen of England is happy, if not ecstatic.⁶

Regarding these conditionals, she comments that the antecedent may highlight a certain fragment of the consequent by echoing it, as in (69b) and (71b), or referring to it anaphorically, as in (70b). It may also offer a repair, as in (72), or explain the reasons why the speaker is not sure about the appropriateness of some expression, as in (69a), (70a), and (71a). To generalise, 'The speaker ... is not sure if she chose the right expression to render an aspect of the utterance — whether pertaining to form or interpretation. To mark the lack of certainty, she appends to the utterance an *if*-clause expressing her doubt about a part of the text' (1992: 70).

Horn's metalinguistic conditionals and Dancygier's metatextual conditionals differ as to what the antecedent is commenting on: the antecedents of metatextual conditionals are commenting on the linguistic properties of the consequents, while the antecedents of metalinguistic conditionals are commenting on the assertability of the consequents. I think that these two types do belong to a single class of conditionals⁷, which are contrasted with ordinary conditionals. Dancygier also says (p.71);

The similarities are not incidental. Both speech-act and metatextual clauses are comments on utterances presented in their 'consequents', and are thus markedly different from standard conditionals, which express a content relation between clauses (in the sense introduced by Sweetser 1990).

In both cases the standard semantic analyses of *if* as material implication, or a sufficiency condition relating contents are violated. Postulating metatextual conditionals is not a new

⁶This elliptical conditional is claimed to be ambiguous between ordinary and concessive readings. The one used for an example of metatextual conditionals is the ordinary case. As a concessive reading, it means, 'the Queen of England is happy, though she is not ecstatic.' Wilson (1970) also points out this ambiguity.

⁷Quirk et al. (1985: 15.38) define both types as involving an 'indirect condition', which is contrasted with the 'direct condition' of the truth-functional relation.

approach, but an extension of speech-act accounts. If we can generalise them into one category, the analysis would be more explanatory.

To sum up: there are some conditionals which do not appear to express a truthfunctional relation or a sufficiency relation between literally expressed propositions. Van der Auwera and Sweetser argue for an analysis in terms of speech-act conditionals, to preserve the Sufficiency-condition account. Horn tries to analyse them as metalinguistic conditionals. Dancygier admits the existence of speech-act conditionals, and postulates another related type of conditional (which she calls metatextual conditionals) in which the antecedents comment on the linguistic properties of their consequents, rather than on the speech-acts performed by their consequents. All these are seen as based on the same type of Sufficiency Condition analysis as speech-act conditionals. Thus accounts of both metalinguistic and metatextual conditionals should encounter the same problems as accounts of speech-act conditionals.

4.2.3 Some problems with speech-act accounts. Here I will argue only against Sweetser (1990), but since van der Auwera (1986) and Horn (1989) offer similar analyses, my arguments should also raise problems for their accounts.

One problem is that though speech-act accounts appear able to deal with so-called speech-act conditionals, there are some conditionals which are neither content nor epistemic, but which cannot be dealt with by those accounts. Consider (73)-(74):

- (73) (Son to Mother who is going out).Mum, don't worry. If I'm hungry, there's a sandwich in the fridge.
- (74) If he dies without a will, I am his son, though not from his first marriage.

(73) is neither a content nor an epistemic conditional. It does not mean that the speaker's hunger is sufficient for the presence of the sandwich, nor that knowing he is hungry will lead him to conclude that the sandwich exists. Rather, it is very similar to speech-act conditionals, in Sweetser's terms. But it does not mean that if the speaker is hungry, he will be performing a speech-act of informing someone/asserting that there is a sandwich in the fridge. The speaker's hunger cannot be a felicity condition for informing his mother that there is a sandwich in the fridge. Indeed, the truth of the antecedent will be established in the future, whereas the consequent is being asserted now. Similar arguments hold for (74). The father's death will happen some day in the future but the consequent is being asserted now (as Sweetser acknowledges (1990: 118), noting that the

'actual pragmatic status' of these conditionals is 'somewhat nebulous'). And, as in (73), the father's death is not a felicity condition on asserting that he is his son.

Another problem is that some consequents involve an utterance by the hearer, which could not possibly be performed by the current speaker. Consider (75)-(76):

- (75) (The door bell is ringing) Mary to Jane: If that's John, I'm not here.
- (76) If anyone talks to you about the treasure map, you don't know anything about it, you have never heard of it.

In (75), the conditional is neither a content nor an epistemic conditional. Is it then a speech-act conditional? What kind of speech-act could the speaker be performing with the consequent 'I'm not here'? I am not sure if we can define 'speech-act' to include this case. Even if we could, the truth of the antecedent is not a felicity condition on the speech-act. The same holds of (76). In both cases, intuitively, the speaker is telling the hearer what he/she should say if the antecedent turns out to be true. Such cases are not normally considered in the literature.

There are many conditionals in which the antecedents do not state a felicity condition for the speech-act performed by the consequents. Consider (77)-(78):

- (77) The war was started by the other side, if you remember your history lessons.(Quirk et al. 1985: 15.38)
- (78) I am very interested in foreign stamps, if you get any letters from abroad. (Davies 1979: 1042)

(77) is treated by Quirk et al. (1985) as imposing an indirect condition between antecedent and consequent, which speech-act conditionals are also claimed to do. Indeed, (77) is very similar to the genuine speech-act conditional 'The war was started by the other side, if you don't remember your history lessons'. In the latter, the antecedent is likely to be a felicity condition for informing the hearer of the consequent, but in the former, it is not obvious what kind of felicity condition the hearer's remembering the lessons could be. (78) is claimed not to be a speech-act conditional, (nor is it a content nor an epistemic conditional). Davies (1979: 1042) argues that in some conditionals 'the function of the *if*-clause seems to be to justify the utterance of the main clause by

indicating the conditions under which it is relevant'. According to her, (78) differs from speech-act conditionals because it has no related conditional imperatives like '?Get any letters from abroad, and I'm very interested in foreign stamps', as speech-act conditionals do.

To conclude: speech-act accounts cannot accommodate all these cases. So we need another approach which can cover a wider range of conditionals, that is, not only speechact conditionals but also the further examples given above.

4.3 A metarepresentational account

4.3.1 Metarepresentational consequents. In section 4.2.3, we have seen that there are some conditionals which speech-act accounts cannot deal with. I will look at these first, and then extend the account to 'speech-act conditionals' proper. Conditional (75) is different from standard speech-act conditionals in that the antecedent is not commenting on the consequent, either on its linguistic properties or on the speech-act performed. I propose to treat this consequent as metarepresenting an utterance which the speaker wants the hearer to make in the situation described by the antecedent.

As we saw in section 3.3.2, metarepresentative use is different from descriptive use in that it does not describe a state of affairs, but represents another representation by resemblance in content or form; resemblance in content results in what we are calling interpretive use, and resemblance in form results in metalinguistic use. Conditional (75) is a case of interpretive use: it communicates that in the situation where the visitor is John, the speaker wants the hearer to tell him that Mary is not there. Or consider (76). This conveys to the hearer that if someone talks about the treasure map, he must say that he does not know anything about it. It is a case of interpretive use, where a prospective utterance by the hearer is being represented.

Metarepresentation can also involve metalinguistic use. For example, an utterance may be represented as direct rather than indirect speech (See Noh (1995)). Consider (79)-(80):

- (79) (At a primary school, a teacher to a new student)If you come across me in school, 'How are you Miss Smith?', always. Understand?
- (80) (The door bell is ringing) Mary (to Jane): If that's John, 'Sorry, I'm afraid she's out'.

In (79), the consequent directly quotes the utterance that the student should make. It is hard to analyse this as involving a speech-act performed by the speaker (i.e. the teacher), nor is the antecedent a felicity condition for such a speech-act. The same holds for (80).

The original representations metarepresented in consequents of this type are not restricted to utterances that the speaker wants the hearer to produce. The speaker can represent an utterance which she herself would like to make in the case that the antecedent is true. Consider (81)-(82):

(81) If I don't see you before Christmas, 'Merry Christmas!'

(82) If you are the winner, 'Congratulations!'

In these conditionals, the consequent represents the utterance that the speaker wants to make in the case that the antecedent is true. For example, (81) means that the speaker wants to say 'Merry Christmas!', on condition that she does not see the hearer before Christmas. Whether she meets the hearer before Christmas or not, he can see what the speaker wants to do. The same holds for (82). Has the speaker of (82) performed the speech-act of congratulating? That is not entirely within her power: you cannot succeed in congratulating someone who is not a winner. What the speaker can do is metarepresent an utterance she would like to make, assuming that the appropriate conditions hold. And this is what she does. Notice too that in (81), it is not a felicity condition for the greeting that the speaker and hearer should not meet again before Christmas. If I wish you 'Merry Christmas!', and we meet again before Christmas, we do not say that the wish was infelicitous. So the antecedent of (81) does not involve a speech-act condition, as Sweetser or van der Auwera propose.

Let us look now at conditionals where the antecedent involves future time. Consider (73)-(74), repeated below as (83)-(84):

(83) Mum, don't worry. If I'm hungry, there's a sandwich in the fridge.

(84) If he dies without a will, I am his son, though not from his first marriage.

In (83), the conditional might be analysed as communicating that if the speaker gets hungry, which his mother may be worrying about, he will remember that there's a sandwich in the fridge. A similar analysis holds for (84). If the father dies without a will,

the speaker will claim/assert that he is his son (who can inherit his property). In this case, the consequent is a metarepresentation of an utterance that he will make in the situation.

Now let us apply this approach to 'speech-act conditionals'. Consider (61) and (62) again. In (61), the speaker is metarepresenting a direction which she would want to give if the condition in the antecedent is satisfied. Similarly, in (62), the consequent can be said to represent a question which she would want to ask if it was not rude. Accordingly, the new approach can deal with speech-act conditionals in the same way as the counterexamples to the speech-act approach.

Metatextual conditionals can also be handled in metarepresentational terms. Consider (69)'-(70)':

- (69)' a. If this is how you make a plural of 'mongoose', he trapped two mongeese.
 - b. If 'mongeese' is the right form, he trapped two mongeese.
- (70)' a. If I may put it this way, grandma is feeling lousy.
 - b. If this is an appropriate expression, grandma is feeling lousy.

In (69)', we can say that in the consequent, the speaker metarepresents a term that she wants to use if it's the right one. This is a case of metalinguistic use. Notice that this is compatible with the view that the rest of the consequent is descriptively used — an option that seems incompatible with standard speech-act accounts, and may explain why metatextual conditionals are not generally analysed in speech-act terms. It contrasts with the case where the whole utterance is metarepresented, as in (81)-(82).

However, there seems to be a problem with the account I have just sketched. So far, all my examples have had preposed antecedents. Conditionals with postposed antecedents seem to be counterexamples to my approach, because they look like real assertions, questions, or imperatives. Consider (56)-(57) again. The consequents in (56)-(57) sound like genuine speech-acts of asking or requesting. As the consequent is used before the antecedent, the hearer is likely to interpret it as a real request, until he hears the antecedent and comes to realise that it is not a real one in effect. These are garden-path utterances. These conditionals certainly implicate a request, but whether the antecedent is preposed or postposed, the illocutionary force is weaker than that of unconditional utterances, because it is not explicitly communicated but pragmatically implied.

In fact, if these utterances perform genuine speech-acts, they are also counterexamples to the speech-act account, since the speech-act account also claims that in the case where the hearer of (56) does mind giving the information, no speech-act is performed. It is easy

to show that no speech-act need be performed even with postposed antecedents. Imagine receiving an advertisement on the following lines (example due to Deirdre Wilson):

- (85) a. Congratulations, if you've just bought a new Renault.
 - b. Happy birthday, if today's the day.

Or imagine a market-researcher saying these things to you in the street. Clearly, you are not being congratulated unless you have bought a new Renault, or unless it is your birthday. In that case, these are not counterexamples to my metarepresentational account: the speaker is metarepresenting an utterance she would want to make if the appropriate conditions are fulfilled.

To sum up: the main difference between the speech-act account and the metarepresentational account I have sketched here is that on the speech-act account, a speech-act is performed at the time of the utterance and by the speaker, whereas a metarepresentation can represent not only past or present utterances and thoughts, but also future or possible ones. A second difference is that metarepresentation can cover the cases where linguistic forms are represented, eg. 'metatextual' conditionals. A third difference is that the metarepresentational account can explain how the consequent can have interrogative or imperative form. The consequent can have those forms because it is representing another representation, i.e., an interrogative or an imperative utterance, which is implicitly embedded under a speech-act or propositional-attitude verb. This is a problem for the speech-act account, since in general the force of the main clause of a conditional should determine the force of the utterance as a whole — but as we can see in van der Auwera's analysis in (57)' above, in the case of 'conditional speech-acts', the consequent is imperative, but the whole conditional is an assertion. Finally, as it is metarepresenting another representation, the proposition literally expressed by the consequent is given a guarantee not of truthfulness, but of faithfulness. This explains why the consequents in these conditionals do not have a regular truth-functional relation with their antecedents, which describe a state of affairs in the world.

4.3.2 Truth conditions of metarepresentational consequents. Now we need to examine the truth conditions of these conditionals. As mentioned in the introduction to this section, these conditionals have been distinguished from ordinary conditionals by their seemingly non-truth-functional status. However, if we analyse them as metarepresentational, we can see that they do involve a truth-functional relation between antecedent and consequent. Before putting the case, we need to be reminded of two

points. One is that a metarepresentational utterance should be faithful rather than truthful, and its truth conditions are different from those of descriptive use. Consider (86):

(86) (Mary is talking to Jane about her date with a guy.) Jane: Then what did he say? Mary: He loves me.

In (86), we do not blame Mary for telling a lie when we come to know that the guy does not love her, as long as he actually said 'I love you'. What is important is faithfulness of the metarepresentation, not truthfulness of the proposition expressed. To put it another way, when intended as a metarepresentation, Mary's utterance in (86) will be true if and only if 'He loves me' is a faithful enough interpretation of what he said: it shares its truth conditions with 'He said he loves me'.

A second point is that declarative and non-declarative sentences share a propositional form. Consider (87)-(89):

- (87) John goes to school.
- (88) Does John go to school?
- (89) (To John) Go to school.

All these sentences have something like (90) as their propositional form:

(90) [John goes to school]

The difference is in their higher-level explicatures: in speech-act terms, in (87) the speaker is saying that P, in (88) she is asking whether P, and in (89), she is telling to P; in propositional attitude terms, in (87), the speaker is presenting P as a description of a state of affairs, in (88), as an interpretation of a desirable thought, and in (89), as a description of a desirable state of affairs. (See Wilson & Sperber (1988b) for details.) Similarly, conditionals have the same propositional forms, regardless of the different speech-acts they may perform. Let us look at conditional (75) again. In (75), the consequent metarepresents the utterance that Mary wants Jane to make if John is at the door. Its truth conditions are equivalent to those of 'If that's John, tell him I'm not here'. I propose to consider the truth conditions of these conditionals in the same way as we did

in the last section. That is, the fact that something is metarepresented should be included in the propositional form, as in (75)':

(75)' If [that's John], [you tell him I am not here]

In (75)', the antecedent and consequent have a regular truth-functional relation as predicted by the truth-table for material implication. (The *if and only if* reading is implicated pragmatically.) Notice that (75)' can be the propositional form of a declarative, interrogative or imperative sentence. In (75), the hearer is being requested to make true a conditional of the form 'If John's at the door, I (the hearer) tell him Mary is not here'. So the information communicated by (75) will be something like (75)":

(75)" I am telling you the following is a desirable state of affairs: if [that's John], [you tell him I am not here]

Now, we have a proposition which expresses a truth-functional relation, and the 'speechact' associated with the consequent (i.e., a request) has wide scope, as we wanted. Now, consider an interrogative example:

(91) (The door bell is ringing. Jane knows that Mary does not want to see John.) Jane (to Mary): If that's John, are you not here?

This is more complicated than (75) in that it involves two layers of metarepresentation: one for interrogatives and one for attributed speech. But we can apply our analysis in the same basic way. (91) has the same propositional form as (75), but the difference is that the consequent is interrogative, as seen in the description in (91)':

(91)' I am asking whether the following is an interpretation of a desirable thought: if [that's John], [I tell him you are not here]

In (91)', we can see that the propositional form of the conditional has a regular truthfunctional relation, and the speech-act associated with the consequent has wide scope.

D. Wilson (personal communication) points out that a consequent can be ambiguous between descriptive and metarepresentative uses. Consider (92):

(92) If you are available, our meeting will be in Hilary Term.

This can be interpreted as a regular conditional, or as a conditional with a metarepresentational consequent, as in (92)':

- (92)' a. We will meet in Hilary Term on condition that you are able to come and speak to us then.
 - b. If you are available, we would want to let you know that our next meeting will be in Hilary Term.

In (a), the consequent is used to describe a state of affairs and in (b), it is used to represent information the hearer should have. We can clearly see the different truth conditions of the two uses of language (i.e., descriptive and metarepresentative) determined by the different propositions expressed by the conditional.

To sum up: speech-act accounts meet many counterexamples in their attempt to deal with conditionals on the assumption that *if* is non-truth-functional. In this section, I have proposed to analyse the consequents of certain conditionals as involving metarepresentative use in the sense defined in relevance theory. This analysis can handle not only speech-act conditionals but also some counterexamples to the speech-act approach. Using the relevance-theoretic notions of metarepresentation and pragmatic enrichment should enable us to maintain that natural language conditionals are semantically equivalent to material implication.

5 A suggestion: metarepresentative use in antecedent and consequent

5.1 Introduction

We have seen in section 3 cases where the antecedent is used to metarepresent another representation available in the context, and in section 4 cases where the consequent is used to metarepresent another representation which the speaker wants herself or the hearer to make. The metarepresentation can involve resemblance of content ('interpretive use'), or resemblance of form ('metalinguistic use'). In this section, I shall suggest that some conditionals can be analysed as having both a metarepresentational antecedent and a metarepresentational consequent.

5.2 Metarepresentative uses in both clauses of a conditional

If antecedents and consequents can be used as metarepresentations, we should expect that there will be cases where both clauses are so used. Consider (93):

(93) Travel agent: Mexico City is beautiful.Customer: If Mexico City is beautiful, do they have a room?

In (93), the propositions 'Mexico City is beautiful' and 'they have a room' are not put forward as truth-functionally related. That is, the speaker is not asking whether they have a room if Mexico City is beautiful. Rather, the antecedent is metarepresenting A's utterance, meaning 'if you say/think Mexico City is beautiful', and the consequent is metarepresenting the utterance which he wants to make in the case that the antecedent is UTTERED or ENTERTAINED. The propositions expressed by each clause will be something like (93)':

(93)' If you say/think Mexico City is beautiful, I want to ask 'do they have a room?'

This is a case where both clauses are interpretively used.

There are also examples where both clauses are used metalinguistically. Consider (94):

- (94) A: I eat TOMEIDOUZ. (pronunciation of 'tomatoes')
 - B: If you eat TOMEIDOUZ, I eat TOMATOUZ.

In (94), the antecedent is representing A's pronunciation of 'tomatoes' and the consequent is representing B's pronunciation. The proposition expressed by the conditional is something like 'if you say you eat TOMEIDOUZ, I say I eat TOMATOUZ, or 'if you eat what you call TOMEIDOUZ, I eat what I call TOMATOUZ.

5.3 'Counterfactual indicative' conditionals

Akatsuka (1986) calls the conditional in (15), repeated below as (95), a 'counterfactual indicative conditional,' in the sense that both the antecedent and the consequent are false:

(95) (Pope to the telephone operator in a small Swiss village)Pope: I'm the Pope.Operator: If you're the Pope, I'm the Empress of China.

Akatsuka claims that the conditional in (95) is used as a denial of a given assertion, which she represents as in (95)':

(95)' Pope: p Operator: If p, as you say, q

In (95)', according to her, p is analysed as a 'contextually given' antecedent, which is a quotation, and the consequent conveys the speaker's attitude to the quotation. So in (95), the speaker expresses her dissociative attitude to what was given by the hearer, i.e., 'I am the Pope.'

I think that (95) means something like 'if you say 'I'm the Pope', I say 'I'm the Empress of China'. Clearly, it does not mean 'if you are the Pope in reality, I am the Empress of China' or something like that. The antecedent is used to represent the hearer's utterance, and the consequent is used to represent an utterance that the speaker wants to make in the case not where the antecedent is true, but where the antecedent is uttered. The speaker does not describe a state of affairs where she is the Empress of China. She is saying that she will say that she is the Empress if the hearer says that he is the Pope. Both utterances are blatantly false in the speaker's view.

The main advantage of this treatment is that it allows a unitary account of these conditionals and corresponding non-conditionals of the type, in (96):

- (96) A: I'm the Pope.
 - B: And I'm the Empress of China.

As Dan Sperber has pointed out (personal communication), (B) is best analysed as echoing/mimicking at a rather abstract level the utterance in (A). What (A) and (B) have in common, and hence what is being echoed back in (B), is the property of being patently false. My analysis of the conditionals in (95) allows us to preserve this intuitive idea of how such utterances function as abstract echoes.

5.4 Horn's metalinguistic metaphorical conditionals

Horn's metalinguistic conditionals (1989: 380-381) are of two types: one is the speech-act type, as seen in section 4.3, and the other is the metaphor type as in (97), repeated from (67):

(97) If the Cité is the heart of Paris, the Latin Quarter is its soul.

Ducrot sees the if-clause in (97) as offering a justification for the metaphor used in the consequent; Horn says that this type of conditional means, 'if you're willing to grant p, you must equally grant q'. Dancygier (1992: 73), along the same lines, adds that not only are both clauses of (97) metaphorical, but also their justification is reciprocal. All these writers have the same idea that the antecedent and the consequent are symmetric.

I think that here too, a metarepresentational account might be of use. The antecedent represents the utterance that the Cité is the heart of Paris, meaning 'if we say 'the Cité is the heart of Paris'. And the consequent represents an utterance which the speaker wants to make in the case that the antecedent is UTTERED, meaning something like 'I will say/we should say 'the Latin Quarter is its soul.

I have suggested that 'counterfactual indicative conditionals' and metalinguistic metaphorical conditionals should be analysed as belonging to the same type, i.e., the type where both the antecedent and the consequent are used to represent another representation, but not to describe a state of affairs. This is not a fully worked out idea, but I think that it is worth pursuing.

6 Conclusion

We have seen that some 'non-basic' conditionals (i.e., 'given' conditionals and speech-act conditionals) can be analysed in terms of the relevance-theoretic notion of metarepresentation. This has enabled us to get the right interpretation of an antecedent or consequent and maintain the truth-table account for 'non-basic' as well as 'basic' conditionals. This proposal may not be a full-fledged analysis, but I think that it is a good starting point for a pragmatics of conditionals.

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