

## 8 Constraints on Implicatures

### 8.1 Connections in Discourse

In chapter 5 we saw that the notion of textual coherence can be explained in terms of the principle of relevance. Given the hearer's assumption that the speaker has aimed at optimal relevance, it is not surprising that she will assume that an utterance which is part of a text or discourse can be interpreted as somehow following on from the preceding utterances. Thus, for example, in (1) the interpretation of the first segment provides an immediately accessible context for the recovery of the enriched proposition in (2).

- (1) David got on the horse. He rode away.
- (2) David<sub>i</sub> got on [the horse]<sub>i</sub> at  $t_n$ . He<sub>i</sub> rode away on [the horse]<sub>j</sub> at  $t_n + 1$

This is an example in which the interpretation of the first segment gives the hearer access to a context which enables her to recover the proposition expressed by the following segment. As we have seen, utterance interpretation is not simply a matter of identifying the proposition expressed. It is also a matter of recovering the intended contextual effects of the utterance. It is not surprising, then, that the coherence of a text or discourse may derive from the fact that one segment gives the hearer access to a context which enables her to derive the intended contextual effects from the next. In other words, the coherence of a text may derive from the way in which the relevance of one segment depends on the interpretation of another.

For example, in the sequence in (3) the second segment will be understood as being connected to the first by virtue of being an explanation for the state of affairs it describes, or in other words, by virtue of being an answer to a question – Why? – which is raised by the presentation of the first segment.

- (3) David cut his finger. The knife slipped.

Since questions and answers are by their very nature planned as distinct utterances each satisfying the principle of relevance individually, it is not

surprising that this kind of connection cannot be expressed by a conjoined utterance, where only the relevance of the conjoined proposition as a whole is guaranteed under the principle of relevance. Thus although (4) may be acceptable in certain contexts, the second conjunct cannot be interpreted as an explanation for the state of affairs described in the first.

- (4) David cut his finger and the knife slipped.

Of course, the second segment of (3) is only an explanation for the state of affairs described in the first segment given a contextual assumption along the lines of the one in (5).

- (5) Letting a knife slip can cause the user to cut himself.

In other words, the hearer can establish this particular connection only by supplying particular contextual assumptions.

Obviously, this is not the only way in which the relevance of an utterance may depend on the interpretation of the preceding text. As we have seen in chapter 2, there are three ways in which a new item of information may be relevant. First, it may allow the derivation of a contextual implication. Second, it may provide further evidence for and hence strengthen an existing assumption. And third, it may contradict an existing assumption and lead to the elimination of an assumption. In each case establishing the relevance of a new assumption involves inference. And in each case it depends on the contextual assumptions that are brought to bear.

For example, given the contextual assumption in (6), the information in (7) will be relevant in virtue of yielding the contextual implication in (8).

- (6) If David isn't here, then Barbara is in town.
- (7) David isn't here.
- (8) Barbara is in town.

Given the assumptions in (9), then the information in (7) will be relevant in virtue of providing further evidence for the assumption in (9a).

- (9) (a) We shall have to cancel the meeting.  
(b) If David isn't here, we shall have to cancel the meeting.

And given the assumptions in (10), the information in (7) will be relevant in virtue of contradicting and eliminating an existing assumption (namely, the weaker of the two assumptions that led to the contradiction).

- (10) (a) If Barbara is in town, then David will be here.  
 (b) Barbara is in town.

In the light of this consider the sequence in (11). (For the purposes of this discussion it is not important whether or not both segments are uttered by the same speaker.)

- (11) (a) Barbara is in town.  
 (b) David isn't here.

According to the arguments so far, the interpretation of segment (a) should provide the hearer with an immediately accessible assumption for the interpretation of segment (b). The problem is that in principle the utterance in (11a) may give the hearer access to all sorts of contextual assumptions, and it may not be clear which assumptions the hearer is intended to bring to bear on the interpretation of the utterance in (11b). In other words, it may not be clear just how (11b) is intended to be interpreted in the context of (11a).

For example, (11b) may be relevant as something that the hearer is trying to prove by presenting the assumption in (11a). It may be relevant by making explicit an intended contextual effect of (11a). It may be relevant as evidence for the claim in (11a). It may be relevant by providing further evidence for an assumption that has been derived from (11a). Or it may be relevant in virtue of contradicting and eliminating an assumption that has been derived from (11a).

In actual discourse the connection between the two utterances would not be left unspecified, and the speaker would constrain the interpretation of (11b) either by intonation or by the use of *discourse connectives* like *so*, *after all*, *moreover*, or *however*. Consider the differences between the following:

- (12) Barbara isn't in town. So David isn't here.  
 (13) Barbara isn't in town. After all, David isn't here.  
 (14) Barbara isn't in town. Moreover, David isn't here.  
 (15) Barbara isn't in town. However, David isn't here.

## 8.2 Discourse Connectives as Constraints on Implicatures

Notice that in order to establish the connection prescribed by *so* or *after all* the hearer must supply the contextual assumption in (16).<sup>1</sup>

- (16) Whenever David isn't here Barbara is in town.

However, whereas the speaker of (12) is suggesting that the hearer did not already know that David isn't here, the speaker of (13) is suggesting that this is something the hearer already knows. This means that the use of *after all*, in contrast with the use of *so*, indicates that the utterance it introduces is relevant as a reminder. Hence the suggestion in (13) that the hearer should have also known that Barbara was in town.

According to the definition developed in chapter 7, the *implicatures* of an utterance include those contextual assumptions which the hearer has to supply in order to preserve her assumption that the utterance is consistent with the principle of relevance. As we have seen, the hearer's choice of utterance sometimes leaves the hearer with very little option as to the contextual assumptions she brings to bear. (Recall here indirect answers.) We may say that these are cases in which the speaker imposes constraints on the implicatures of the utterance. Now we have also seen how a speaker may use a linguistic expression to indicate how the utterance it introduces is to be interpreted as relevant. Since the hearer is forced to supply particular contextual assumptions in order to interpret the utterance in accordance with the meaning of such an expression, these expressions must be regarded as imposing constraints on implicatures.

The idea that there are linguistic constructions which impose constraints on the contexts in which utterances containing them can occur was proposed by Stalnaker (1972).<sup>2</sup> However, in the absence of an adequate account of the selection and use of the context in utterance interpretation it was not clear why such constructions should exist.

It should by now be clear that in a relevance-based framework the existence of these constructions is not surprising. According to this framework, hearers interpret every utterance in the smallest and most accessible context that yields adequate contextual effects for no unjustifiable effort. This means that if a speaker wishes to constrain the interpretation recovered by a hearer, he must constrain the hearer's choice of context. And since the constructions we are considering ensure correct context selection at minimal processing cost, they can be regarded as effective means for constraining the interpretation of utterances in accordance with the principle of relevance.

## 8.3 The Classification of Discourse Connectives

In fact, it seems that this framework allows us to make a more specific claim about the relationship between linguistic structure and pragmatic interpretation. According to section 8.1, there are three ways in which information conveyed by an utterance can be relevant:

- 1 It may allow the derivation of a contextual implication.
- 2 It may strengthen an existing assumption (by providing better evidence for it).
- 3 It may contradict an existing assumption.

As we have seen, one major way in which an utterance may achieve contextual effect is by answering a question raised by the interpretation of the previous utterance. However, a hearer is entitled to expect that she can obtain some sort of contextual effect whether the utterance is part of a text/discourse or not. Moreover, even when an utterance is part of a text/discourse it is not always processed for relevance in a context provided by the interpretation of the previous utterance. Recall the example given in section 5.3, where B's response can be construed either as a report of an assertion made by Jane or as an assertion by B that the bus is coming.

- (17) A: What did Jane say?  
B: The bus is coming.

However, if the hearer *does* interpret an utterance in the context of the interpretation of the preceding text, then it follows that it will be connected to that text in one of the three ways corresponding to 1–3 above. It also follows that a language may develop structures which constrain the hearer's interpretation in any of the three ways corresponding to 1–3, or, in other words, three types of discourse connective. As we shall see in section 8.4, this is not an exhaustive classification: for instance, there are expressions which indicate the role of the utterance in the discourse in which it occurs (for example, *anyway*, *incidentally*, *by the way*, *finally*), and there are also expressions which indicate what *kind* of contextual implications the hearer is expected to derive.<sup>3</sup> We shall be considering some of these expressions in the following section. However, in the mean time let us concentrate on the broad classification just outlined.

### *Discourse Connectives which Introduce Contextual Implications*

So far our discussion of discourse connectives has been restricted to the cases in which an expression is used to indicate how the utterance it introduces is relevant in a context which is made accessible by the interpretation of the preceding utterance. However, many of these so-called 'connectives' can be used to constrain the interpretation of an utterance even though they are not

used to connect two segments of text. The role of *so* in (18) is exactly the same as its role in (19).

- (18) A: You take the first turning on the left.  
B: So we don't go past the university (then).  
  
(19) (Hearer (*who is driving*) makes a left turn)  
So we're not going past the university (then/after all).<sup>4</sup>

In both cases the speaker is confirming that the proposition *so* introduces is indeed a contextual implication of an assumption which has been made accessible. Whereas in (18) this assumption is made accessible by another utterance, in (19) the speaker is drawing attention to an assumption that he has derived from his observation of an event.

This use of *so* is clearly related to the one in (20) where the speaker is asking A what the intended relevance of her utterance is.

- (20) A: Your clothes smell of perfume.  
B: So (what)?

B is, of course, asking (rhetorically) what conclusion is he is expected to draw. A proposition that is introduced by *so* must be interpreted as a conclusion. The same point can, of course, be made about *therefore*. However, while *so* can be used as a (more informal) substitute for *therefore*, it seems that *therefore* cannot always be substituted for *so*. Thus while both *so* and *therefore* are acceptable in (21), the use of *therefore* is unacceptable in examples like (19) and (20).

- (21) This suggestion can be cancelled without contradiction. Therefore/So it is an implicature.

- (22) (Hearer arrives laden with parcels)  
?Therefore you've spent all your money?

- (23) A: Your clothes smell of perfume.  
?B: Therefore (what)?

Whereas in (21) *so* is being used to introduce a proposition that the speaker is aiming to *prove* by the presentation of another, in (18) to (20) it is not. That this use of *so* (and *therefore*) must be preceded by another utterance is not surprising in view of the fact, first, that an assumption may provide proof only if it comes with a guarantee of factuality, and, second, that only communicated

assumptions come with any sort of guarantee of relevance. In other words, a speaker can't be said to be *proving* something if he doesn't present the proof.<sup>5</sup>

### Discourse Connectives concerned with Strengthening

Of-course speakers do not always present the proof and then the conclusion. As we have seen, the use of *after all* indicates that the proposition it introduces is evidence for an assumption which has just been made accessible. In (24) the proposition introduced by *after all* is relevant as justification for the claim in the first utterance of the sequence.

- (24) You have to have another drink. After all it is your birthday.

In other words, the aim is to increase the strength of the hearer's commitment to the assumption conveyed in the first utterance.

The aim is rather similar in (25), except here speaker B is providing *additional* evidence for an assumption which is derived from the first segment.

- (25) A: Will you make pancakes?  
B: I haven't really got time tonight. Besides there's no milk.

The suggestion is that the hearer is expected to derive the conclusion in (26) from the proposition expressed by the first utterance *and* from the proposition expressed by the second utterance.

- (26) B will not make pancakes.

Since a conclusion that is derived from two separate sets of premises will inherit a degree of strength greater than the one that it inherits from either set alone, the effect of presenting the additional evidence is to strengthen the guarantee that the speaker is offering for the factuality of (26) in his first utterance. Other expressions which introduce additional evidence are *moreover*, *furthermore* and utterance-initial *also*.<sup>6</sup>

These are not, however, the only expressions which have to do with the strengthening of existing assumptions. In (27) B's use of *indeed* indicates that his utterance is relevant as confirmation of the assumption conveyed by A's utterance.<sup>7</sup>

- (27) A: That's good news.  
B: It is, indeed.

This kind of utterance stands in direct contrast to the type we shall consider next, where the speaker's intention is to contradict some element of the interpretation of a preceding utterance.

### Discourse Connectives which Introduce Denials

Consider the exchange in (28) where B's intention is to *deny* the assumption conveyed in the preceding utterance.

- (28) A: David isn't here.  
B: Yes he is.

As we have seen, a hearer who is presented with an assumption which is inconsistent with an existing one will abandon the one for which she has the least evidence. This means that an utterance may be relevant in virtue of providing evidence for an assumption which is inconsistent with an assumption which the speaker believes the hearer to hold. In (28) the speaker simply presents a proposition which is inconsistent with the one expressed by A's utterance, and the hearer will abandon her assumption only if she thinks that B has better evidence than she has. In (29) speaker B presents evidence for the truth of a proposition which is inconsistent with the one expressed by A's utterance, and the effect will depend on just how good the hearer thinks this evidence is.

- (29) A: David isn't here.  
B: I just saw him in his office.

In these examples there is no need for the speaker to indicate how he expects his utterance to be interpreted. However, there are cases in which the speaker must indicate that his utterance is relevant as a denial. In (30), for example, the use of *however* indicates that the proposition it introduces is inconsistent with a proposition that the speaker assumes the hearer has derived as a contextual implication from the first utterance.

- (30) David is here. However, you can't see him.

This means that the speaker's use of *however* is appropriate only if he assumes that the speaker has immediate access to contextual assumptions which allow the derivation of the implication that the hearer can see David. And this, of course, is not necessarily the case – the hearer might have brought quite

different contextual assumptions to bear and derived quite different contextual implications. The use of *however* indicates how the speaker thought the hearer would have interpreted the first utterance.

There are a number of other expressions that play this sort of role, for example *still*, *nevertheless* and, most notoriously, *but*.<sup>8</sup> Evidently, these are not completely interchangeable in all contexts. That is, they do not impose exactly the same constraint. However, I shall have to leave it to the reader to identify the precise nature of the differences between these expressions.

### 8.4 Parallel Implications

As we saw in section 8.3, a speaker may intend to achieve relevance by contradicting (and thus eliminating) an assumption communicated by the previous utterance. Now, it is possible that B's utterance in (31) is relevant in this way.

- (31) A: Jane has a laser printer.
- B: Simon has a laser printer.

However, it will be recognized that there is another possibility, namely, that B is simply intending to give some additional information that is relevant in the same way as the information that was presented by A. In other words, B might have been intending the hearer to derive contextual effects *parallel* to the ones that she has derived from A.

In (31) this parallelism is suggested by the parallelism of the syntax. Similarly, in (32) the parallelism in structure encourages the hearer to derive parallel implicatures – hence the amusing effect.<sup>9</sup>

- (32) Mary came with Peter, Joan with Bob, and Lily with a sad smile on her face. (from Sperber and Wilson (1987))

However, there are linguistic expressions that can be used to make the speaker's intentions more explicit. Thus B might have responded to A with either (33a) or (33b).

- (32) (a) Simon has also got a laser printer.
- (b) Simon's got a laser printer too.

The use of *too* and *also* indicates that the utterance should be processed in such a way as to yield the same sort of contextual effects as were derived from the previous utterance.<sup>10</sup>

As the following examples show, both *too* and *also* interact with the phenomenon known as *focus*. (Capitals indicate heavy stress.)

- (34) (a) Simon cooked a chicken. He also cooked a DUCK.
- (b) Simon bought a chicken. He also COOKED one.
- (c) Jane cooked a chicken. Simon ALSO cooked one.

The speaker of (34a) will be understood as having taken (35a) for granted, the speaker of (34b) will be understood as having taken (35b) for granted, and the speaker of (34c) will be understood as taking (35c) for granted.

- (35) (a) Simon cooked something else.
- (b) Simon did something else with a chicken.
- (c) Someone else cooked a chicken.

The values of the variables *something else* and *someone else* are, of course, given in the first utterance of the sequence.

The differences in interpretation are due to a different constituent being focused in each case. Let us consider this phenomenon in isolation from the meaning of *also*.<sup>11</sup>

Each of the following expresses the same proposition – namely that Simon cooked a chicken. However, they convey this information in different ways.

- (36) (a) It was Simon who cooked a chicken.
- (b) It was a chicken that Simon cooked.

While both (36a) and (36b) entail the propositions in (37), the speaker of (36a) will be understood as having taken (37a) but not (37b) for granted, while the speaker of (36b) will be understood as having taken (37b) but not (37a) for granted:

- (37) (a) Someone cooked a chicken.
- (b) Simon cooked something.

Wilson and Sperber (1979) would analyse the difference between these two utterances in terms of the way they are interpreted as relevant. Whereas the main relevance of the utterance in (36a) derives from the identity of the person who cooked the chicken, the main relevance of (36b) derives from the identity

of the thing that was cooked. Since the relevance of an assumption depends on the contextual assumptions that are brought to bear on its interpretation, this means that the difference between these utterances must be due to their being processed in different contexts.

As we have seen, both (36a) and (36b) entail the propositions in (37a) and (37b). These entailments are obtained by substituting a variable for a grammatical constituent. Hence Wilson and Sperber's term *grammatically specified entailments*. Other grammatically specified entailments of (36a) and (36b) are given below:

- (37) (c) Simon did something with a chicken.  
(d) Simon did something.

Their first point is that although a speaker who expresses the proposition in (38) will have committed himself to the truth of all these entailments, he will not expect them all to play the same role in establishing the relevance of his utterance.

- (38) Simon cooked a chicken.

In their terms, the relevance of the utterance will depend on which of these entailments is taken as *background*. If, for example, (37a) is taken as background, then the hearer will process the utterance in a context in which it would be relevant to know the identity of the person who cooked a chicken. If, on the other hand, (37b) is taken as background, then the utterance will be processed in a context in which it would be relevant to know what Simon cooked. The point or main relevance of the utterance derives from information that has to be added to the background to obtain the proposition as a whole.

How does the hearer know which entailment she is expected to take as background? As the examples in (36a) and (36b) show, there are linguistic devices which serve to highlight a constituent so that it is understood to be part of the point of the utterance. In contrast, a speaker who presents information in a parenthetical clause, as for example in (39), will indicate that this is not part of the main point of the utterance.

- (39) Simon, who is a mathematician, cooked a chicken.

As Wilson and Sperber point out, these syntactic devices affect pragmatic interpretation only through their interaction with stress assignment. Thus for example, the heavy stress on *cooked* in (40) indicates that the background is the entailment in (37a).

- (40) Simon COOKED a chicken.

On the other hand, normal stress is ambivalent in its contribution to utterance interpretation and does not determine a unique focus. Thus a speaker who places focal stress on *chicken* in (41) may be using it to focus on any of the constituents that contain it – for example, the NP *a chicken*, the VP *bought a chicken*, or the entire S.

- (41) Simon cooked a chicken.

Evidently, some account has to be given of how the actual focus is chosen from a range of possible foci. However, this would take us beyond the scope of this section of the book, which is not concerned with stress and focus in themselves, but with expressions which interact with focal stress to impose a particular constraint on the interpretation of the utterances that contain it.

As we have seen, the use of *also* indicates that the hearer is expected to derive implicatures parallel to the ones she has derived from the previous utterance. We have also seen that contrastive stress serves to highlight a constituent so that it will be understood as contributing to the point of the utterance. This means that in (34b) (repeated here as (42)) the speaker expects the hearer to process the second segment in a context in which (a) it is relevant to know what Simon did with a chicken, and (b) the contextual effects of knowing what Simon did with a chicken are parallel to the ones derived from knowing that Simon did something else with a chicken. As I have pointed out, the hearer is told what else Simon did with a chicken in the preceding segment.

- (42) Simon bought a chicken. He also COOKED a chicken.

In contrast, the hearer of (43) is not informed as to what Simon did with a chicken in the first segment. Hence the unacceptability of the sequence as a whole.

- (43) Jane cooked a chicken. Simon also COOKED a chicken.

### Exercise 1

- 1 It is generally recognized that the use of *but* mentioned above (section 8.3) must be distinguished from the uses illustrated in (a) to (c).

- (a) David is in but Nigel is out.  
(b) Jane is tall but Anne is short.  
(c) Simon eats wholefood but Tom eats at McDonald's.

In these uses (which are distinguished from the one discussed above by being symmetric) *but* is said to have a *contrastive* function. To what extent do you think this use can be analysed in terms of parallel implicature?

Note the characteristic intonation pattern associated with this use of *but*.

David is ~ in but Nigel is ~ out.

For further reading see Blakemore (1987: 125–41; 1989) and R. Lakoff (1971).

- 2 Discuss the contribution made to the interpretation of the following text by the italicised expressions and constructions. The reference is to an interview with Madonna conducted by Wogan, a British television chat-show host.

*Well, what do you ask the girl who has everything? Perhaps not, 'Have you met Andrew Lloyd Webber', as Wogan did, but clearly the man was out of his familiar studio, out of his depth, and in a very strange shirt. Maybe it was not fair to expect anything more raunchy or, indeed, relevant from Wogan; after all, it was early evening on the BBC. (Guardian, 30 July 1990)*

Note: For two very different analyses of *well*, see Schiffrin (1985b) and Carlson (1984).

## 8.5 Non-Truth-Conditional Meaning: Semantics and Pragmatics

Some of the expressions and constructions we have been examining, for example *after all* and *moreover*, have received relatively little attention in the literature on semantics and pragmatics. Others, for example *but*, *too*, and focusing devices (like contrastive stress and clefting), have gained a certain notoriety. This notoriety derives from a property which is shared by virtually all the expressions we have been considering (including *after all* and *moreover*) – namely, that they do not contribute towards the *truth conditions* of the utterances that contain them. In other words, they are counter-examples to the view that all meaning can be analysed in truth-conditional terms. Thus, to

take one of the more notorious examples, it is generally agreed that (44a) and (44b) are true under the same conditions – namely, when Nigel is home and he is busy. A hearer who was unable to interpret the second conjunct of (44a) as denying an expectation created by the interpretation of the first conjunct would not accuse the speaker of speaking *falsely*.

- (44) (a) Nigel is home but he's busy.  
(b) Nigel is home and he is busy.

Similarly, to take another notorious example, it is generally agreed that both (45a) and (45b) are true if and only if David kissed Barbara.

- (45) (a) It was David who kissed Barbara.  
(b) It was Barbara whom David kissed.

Yet as we have seen, they will have very different interpretations.

It seems that Grice (1975), who first introduced the term *implicature*, used it to refer to any aspect of meaning that could not be analysed in truth-conditional terms. A *conversational implicature* was a proposition which was derived from an utterance on the basis of the meanings of the words uttered, the context and the assumption that the speaker had been speaking in accordance with a co-operative principle and certain maxims of conversation. Thus for example, on the assumption that the speaker was trying to be informative, the hearer of (46) will derive the assumption in (47).

- (46) A: I've run out of petrol.  
B: There's a garage down the road.

- (47) A can obtain petrol from the garage down the road.

As I have mentioned, the advantage of this approach was that it enabled Grice to provide a non-linguistic account of phenomena which had seemed to be problematic for a truth-conditional theory of semantics. For example, it seemed to provide a non-linguistic explanation for the non-truth-functional uses of the logical connectives (for example, *and* and *or*).<sup>12</sup> However, as Grice recognized, there are examples of non-truth-conditional meaning which cannot be analysed in non-linguistic terms. Thus the suggestion conveyed in (48), that his being brave is a consequence of his being an Englishman) is due to the meaning of *therefore*, and yet, according to Grice, the speaker could not be accused of speaking falsely should the consequence in question fail to hold.

- (48) He is an Englishman. He is, therefore, brave.

Grice gives this as an example of *conventional implicature* – that is, an implicature which is not derived on the basis of the maxims of conversation, but which is encoded linguistically.

As we have seen, a number of linguists and philosophers have proposed that this notion could form the basis for an account of non-truth-conditional meaning (see Karttunen (1974) and Karttunen and Peters (1975)). The problem is that in introducing this notion Grice said no more than that conventional implicatures (like the one associated with *therefore*) did not contribute to truth conditions.

However, more recently Grice (1989) developed this notion further. His first example is the use of the contrastive expression *on the other hand* in (49).

- (49) My brother-in-law lives on a peak in Darien; his great aunt, on the other hand, was a nurse in World War I.

He says:

Speakers may be at the one and the same time engaged in performing speech acts at different but related levels. One part of what [the speaker of (48)] is doing is making what might be called ground floor statements about the brother-in-law and his great aunt, but at the same time he is also performing a higher-order speech act of commenting in a certain way on the lower-order speech acts. (Grice 1989: 362)

Specifically, the speaker of (49) is performing a higher-level speech act of contrasting, and he indicates this by his use of *on the other hand*. The performance or misperformance of this higher-level act will not, claims Grice, affect the truth value of the speaker's words. The truth conditions of (49) are determined only by the lower-level act.

His second example of conventional implicature is the suggestion carried by *so*. He claims that in an example like the one in (50) the speaker is performing two speech acts, a lower-order one in which he communicates the propositions in (51), and a higher-order one in which he communicates the proposition in (52).

- (50) Our computer is down. So I can't help you.

(51) (a) The computer at the speaker's office is down.

(b) The speaker can't help the hearer.

- (52) The proposition in (51b) is an explanation for the state of affairs represented in (51a).

This analysis is reminiscent of the analysis proposed for performative expressions in chapter 6. It will be recalled that, according to this analysis, the

utterance in (53) communicates two explicatures, the lower-level explicature in (54a) and the higher-level explicature in (54b).

- (53) I warn you that the roads are icy.

(54) (a) The roads are icy.

(b) The speaker of (53) is warning the hearer that the roads are icy.

The main relevance of the utterance generally lies in (54a) rather than in (54b). Moreover, it has often been claimed that in this sort of example the truth value of the utterance depends only on the state of affairs represented in (54a). The function of the higher-order proposition is to constrain the interpretation of the lower-order proposition so that the hearer is encouraged to derive certain sorts of implicatures (ones that have to do with the dangerous consequences of the state of affairs represented in (54a)).

Notice that according to this account, although the meaning of the performative expression does not contribute to the proposition expressed by the utterance and hence its truth conditions, it is analysed in *representational* terms. That is, while it does not contribute to the proposition expressed by the utterance, it does contribute to a propositional representation. The question is whether we can analyse all examples of non-truth-conditional meaning in this way.<sup>13</sup> In particular, the question is whether we can analyse all Grice's examples of conventional implicature in this way, as Grice himself seems to have intended.

What other way is there? Recall that according to the relevance-theoretic framework adopted in this book, understanding utterances involves the construction of mental (propositional) representations which undergo inferential computations. That is, establishing the relevance of the proposition expressed by the second segment of (55) involves combining it with other (contextual) assumptions and making an inference.

- (55) (a) David isn't here.

(b) Barbara's in town.

Now, it is generally accepted that linguistic meaning plays a role in the identification of the propositional representations that are manipulated in these computations – in, for example, the identification of the proposition that Barbara is in town.<sup>14</sup> But given that these representations are intended to undergo mental computations – to act as premises in deductions – it is surely possible that linguistic meaning also plays a role in determining *how* they are to be manipulated. In other words, it is possible that some linguistic meaning is *procedural* rather than *representational*.

This is the idea underlying the analysis of expressions like *so*, *after all*, *however* and *moreover* in section 8.3 above. According to this analysis, the



hearer of a sequence like (55) could be instructed to process the proposition expressed by (55b) in a particular kind of context – for example, in a context which enabled her to identify the proposition as a contextual effect of the preceding segment. Or she could be instructed to process it in a context which enabled her to identify the proposition as justification for the proposition expressed in the previous utterance. The first kind of instruction is given by *so*, while the second is given by *after all*.

This procedural analysis of *so* contrasts with Grice's representational one. It treats the speaker of (56) as instructing the hearer to interpret (56b) as a conclusion (a contextual implication), while Grice treats him as communicating the information that (56a) is an explanation.

- (56) (a) David isn't here.  
(b) So Barbara's in town.

However, while Grice's account might work in (56), it does not seem to work in cases where the utterance containing *so* is not preceded by another utterance. Recall the example given in section 8.3 in which the hearer enters the room laden with parcels and the speaker produces the utterance in (57).

- (57) So you've spent all your money.

Since there is no preceding utterance which can be interpreted as an explanation, the speaker cannot be explaining why the hearer has spent all her money. In contrast, in both (56) and (57) the utterance introduced by *so* can be interpreted as a conclusion.

If Grice's analysis is right, then there is a concept corresponding to *so*. However, while this may be the case for the ProVP *so*, and the manner adverbial *so*, it does not seem to be the case for the inferential *so* that we have been discussing here.<sup>15</sup> Moreover, it certainly does not seem to be the case for expressions like *moreover*, *after all*, or *however*.<sup>16</sup>

According to standard speech-act analyses, performatives like *I warn* and *I predict* do not contribute to the truth conditions of the utterances that contain them.<sup>17</sup> However, as has been shown in chapter 6, these expressions must be analysed in representational terms. In particular, they contribute towards a proposition whose relevance lies in the way it directs the hearer towards a particular interpretation of another proposition. In other words, some linguistic meaning is representational but non-truth-conditional.

But now we have also seen that there are expressions whose meanings cannot be analysed in representational terms at all. *But*, *after all*, *moreover* and inferential *so* do not contribute to a propositional representation, but simply

encode instructions for processing propositional representations. The existence of non-truth-conditional meaning has led linguists and philosophers to realize that there may not after all be a unitary theory of linguistic semantics. However, the point is not simply that linguistic meaning may be either truth-conditional or non-truth-conditional. It may also be either representational or procedural. That there can be these different types of meaning is not surprising given the nature of the processes involved in understanding utterances and the nature of the principle governing those processes.

### Recommended Reading

#### *Connections in Discourse: Relevance-Theoretic Approaches*

Blass 1990: 72–91.  
Blakemore 1987: 105–131; 1988

#### *Connections in Discourse: Other Approaches*

Brown and Yule 1983: 223–6.  
Halliday and Hasan 1976: chs 1 and 7.  
van Dijk 1977: 1–11, 86–90.

#### *Discourse Connectives*

Blakemore 1987: 72–141.  
Blass 1990: ch. 4.  
Grice 1975: 44 (*therefore*).  
Karttunen and Peters 1975(a formal analysis of conventional implicature).

#### *Parallel Implications*

Wilson and Sperber 1979.  
Sperber and Wilson 1986: 202–17.  
Blass 1990: 134–56.

#### *Non-Truth-Conditional Meaning*

Grice 1975: 44; 1989: 359–65.  
Karttunen and Peters 1975.  
Wilson and Sperber 1990.

Notes

- 1 The ideas in sections 8.2 to 8.5 are based on those developed in Blakemore (1987).
- 2 Stalnaker refers to this phenomenon as *pragmatic presupposition*. Karttunen (1974) and Karttunen and Peters (1975) link this notion to Grice's (1975) notion of *conventional implicature*. However, their account, like Stalnaker's, raises the question of why such structures should exist. See Blakemore (1987) for a more detailed commentary.
- 3 We have already seen an example of such an expression – namely, the performative expression *I warn* (see section 6.2) which indicates that the hearer is expected to derive implicatures which have to do with the dangerous or unpleasant consequences of the state of affairs represented in the proposition it introduces. The discussion that follows is very brief. For more detailed analyses see Blakemore (1987).
- 4 Note that this utterance-final use of *after all* must be distinguished from the utterance-initial use discussed earlier.
- 5 See section 8.5 for further discussion of *therefore*.
- 6 See section 8.4 for discussion of *also* in its non-utterance-initial use.
- 7 Blass (1990) proposes that the so-called 'modal' use of the German expression *auch* can be analysed in terms of backwards confirmation, for example:  
A: Deine Schuhe sind genau richtig für dieses Wetter.  
Your shoes are just right for this weather.  
B: Sind sie auch.  
Indeed they are.

As she notes, in this kind of case, the speaker is confirming an explicature of the previous utterance. However, she also gives examples in which a speaker may use *auch* to indicate that he is confirming an implicature.  
This is not, however, the only use of *auch*. Consider Blass's example:

Klaus hat fünf Autos und auch eine Yacht.  
Klaus has five cars and also a yacht.

Blass analyses this use in terms of *parallel processing* (see section 8.4). English is unlike German in that *also* cannot be used for backwards confirmation. However, Blass notes that there are other languages, for example, Sissala (a Niger-Congo language) which have expressions that can perform both functions.  
Part of the notoriety of *but* derives from the fact that it is not always used in this way. R. Lakoff (1971) distinguishes between an asymmetric *denial of expectation but*, which corresponds to the use of *however* discussed here, and a symmetric *semantic contrast but* which is exemplified in

Tom is short but Ben is short

For further discussion of this use see section 8.4.  
A number of writers, for example Kempson (1975) and Dascal and Kartiel (1977), have argued against the claim that *but* is ambiguous. However, little

progress has been made in formulating a description of its meaning that unites all its uses. See Blakemore (1987: 125–41; 1989) for a detailed examination of this point.  
9 Linguists will recognize this sort of phenomenon as gapping, while rhetoricians will recognize it as zeugma. The interpretation of this type of utterance will be discussed in more detail in chapter 9.

- 10 As we have seen in n. 8, the German expression *auch* can play a similar role. However, in contrast with *too* and *also*, *auch* can also play a role in indicating backwards confirmation. See Blass (1990: 136–56) for further discussion.
- 11 This type of phenomenon has been discussed in the pragmatics and semantics literature in terms of a variety of distinctions – for example the distinction between given and new information, topic and comment, theme and rheme, presupposition and focus. The difficulties associated with these distinctions have been discussed fully by Sperber and Wilson (1986: 202, 217) and Reinhart (1983). Here it suffices to say that there are two main problems. First, it is difficult to give the criteria for identifying information as, for example, old or as topic. Second, none of the distinctions is accompanied by an adequate account of the role that each type of information plays in utterance interpretation.
- 12 But see the discussion of conjoined utterances in section 5.2.
- 13 Deirdre Wilson (1990) has argued that so-called sentence adverbials like *frankly* and *unfortunately* can be analysed in terms of higher-level explicatures. That is, they are representational (in that they contribute to a propositional representation) but non-truth-conditional (in the sense that they do not contribute to the proposition expressed by the utterance, and hence to the truth conditions of the utterance).
- 14 However, as we saw in chapter 5, the proposition expressed by an utterance is very rarely fully determined by its linguistic properties.
- 15 In Blakemore (1987) I discuss a further use of *so* – the *and so* which is equivalent to *and as a result*.

- (a) It started to rain and so we stopped the game.
- (b) It started to rain and as a result we stopped the game.

This use of *so*, in contrast with the inferential one, seems to contribute to truth conditions.

- 16 Deirdre Wilson (personal communication) has persuaded me that a representational analysis does work for *therefore*. That is, she has suggested that in (a) *therefore* contributes to the higher-level explicature (b).

- (a) He is an Englishman. He is, therefore, brave.
- (b) It is a consequence of his being an Englishman that he is brave.

On this analysis there is no essential difference between *therefore* and the adverbial *consequently*.

As Ruth Kempson (1975) pointed out, there are certain uses of *therefore* in which it contributes to truth conditions. If *therefore* does not contribute to the truth conditions of (c), for example, Mary will have won her suit for damages if and only of (1) Bill hit her and (2) she was covered in bruises. This is not right. Mary will have won her suit for damages only if (1) Bill hit her and (2) she was covered in bruises as a result of Bill's hitting her.

- (c) If Bill hit Mary and therefore she was covered in bruises, she will have won her suit for damages.

Notice, however, that the use of *therefore* in (a) is parenthetical. As Wilson (personal communication) has pointed out, whereas non-parenthetical uses of sentence adverbials like *unfortunately* do contribute to the truth conditions of utterances in which they occur, parenthetical uses arguably do not. The use of *unfortunately* in (d) contributes only to the higher-level explicature in (e), without affecting the truth conditions of the utterance at all.

- (d) He is, unfortunately, an Englishman.  
 (e) It is unfortunate that he is an Englishman.

17 Recanati (1987) argues against this position.

## 9 Implicatures and Style

### 9.1 Poetic Effects

In the last chapter we considered examples in which the use of linguistic parallelisms encouraged the hearer to find matching parallelisms in implicatures. Thus in Sperber and Wilson's example (repeated here as (1)) the gapping indicates that the hearer's task is to find a set of contextual assumptions in which the facts that Mary came with Peter, Joan with Bob, Lily with a sad smile on her face have identical or directly contrasting implicatures.

- (1) Mary came with Peter, Joan with Bob, and Lily with a sad smile on her face.

However, although the linguistic form of the utterance suggests a specific processing strategy to the hearer, this strategy may yield a variety of acceptable interpretations. For there is a whole range of ways in which the hearer can recover the required parallelisms. Is Lily sad because, in contrast with the others, she had no one to come with? Does Lily make a point of appearing alone and sad? Is Lily's sad smile as familiar as the sight of the other comedians? Do the others have anything to do with Lily's sad smile? In other words, the strategy leaves the hearer with a great deal of the responsibility for the interpretation process.

It is not that the hearer has to decide *which* of a range of possible interpretations the speaker intended. Indeed, it seems that a hearer interprets (1) as conveying merely a specific proposition or set of propositions, which would miss out on much of its intended relevance. Consider, for example, the hearer who interpreted (1) as conveying merely the proposition in (2).

- (2) Mary came with Peter, Joan came with Bob, but Lily had no one to come with.