

As in (59), the meaning of *unfortunate* plays no role in determining how the proposition that the daughter has a lot of homework is relevant: this is determined by the context and the principle of relevance. In this way, fragmentary utterances may be used as evidence for the distinction I have drawn between two different types of non-truth conditional meaning, or in other words, for the claim that there cannot be a unitary account of the expressions that have been identified as non-truth conditional.

If this claim is right, then there cannot be a unitary account of the semantics of expressions which have been classified as discourse markers or discourse connectives. Some turn out to encode concepts, and can be treated – from a semantic point of view – alongside expressions such as *coffee* or, perhaps more accurately, alongside expressions such as *unfortunately*. This makes the analysis of their meanings relatively unproblematic, although like sentence adverbials, they raise interesting and important questions about truth conditionality and the distinction Wilson and Sperber (1993) have drawn between the proposition expressed and higher-level explicatures (cf. Ifanidou-Trouki 1993). Others turn out to encode procedures, and as a result resist straightforward analysis. The complexity and elusiveness of the meanings encoded by these expressions provide part of the justification for the content of the chapter that follows: not only does it include yet another attempt to provide an analysis of *but*, but it will be restricted to the analysis of relatively few expressions, namely, a selection of the so-called *contrastive* or *adversative* expressions, *but*, *nevertheless*, *however* and perhaps the most slippery of all the English discourse markers, *well*. However, my primary objective in this chapter is not so much to provide the definitive analysis of these expressions, but rather to develop a better understanding of the notion of procedural encoding. For while I might have given some theoretical and empirical justification for the existence of procedural meaning, we still have no real idea of what procedural information is.

4 Procedural meaning

4.1 Constraints on relevance: new questions

According to the arguments of the previous chapter, the distinction between conceptual and procedural encoding cross-cuts the speech act theoretic distinction between describing and indicating: not all of the expressions defined within the speech act theoretic framework as indicators can be analysed as encoding procedures, and not all expressions which encode procedures are analysed within the speech act theoretic framework as indicators. In view of the fact that the two distinctions are not co-extensive, the decision to take the relevance theoretic distinction as the fundamental one in a theory of linguistic semantics could be construed as a recommendation to simply forget the speech act theoretic distinction, and in particular, as a recommendation to drop the notion of indicating or signalling or pointing altogether. After all, it seems that we now have something less metaphorical to work with, namely, coded means for constraining the inferential tasks involved in utterance interpretation. However, in this section I shall show that we still have much to learn about what it means for an expression to encode a procedure. Moreover, it seems that it may be illuminating to compare such expressions with natural or non-coded means for pointing to something.

Let us recall my (1987) analysis of the role of *after all* in (1):

- (1) Ben can open Tom's safe. After all, he knows the combination.

A hearer who interprets (1) will take the conceptual representation in (2a) together with the conceptual representation in (2b) and derive the conceptual representation in (2c). The effect of this inference will be a strengthened assumption, or, in other words, a conceptual representation which is held with a degree of strength that is higher than it would have been prior to the interpretation of the second segment.

- (2) (a) Ben knows the combination of Tom's safe.
 (b) If Ben knows the combination of Tom's safe, then he can open Tom's safe.
 (c) Ben can open Tom's safe.

I have described the interpretation of (1) in this way in order to underline, first, the point that the hearer performs an inference in order to recover the intended interpretation, and, second, the point that what the hearer ends up with is a conceptual representation. My (1987) argument was that while *after all* plays a role in the recovery of this conceptual representation, it does not do this by encoding anything that is a constituent of it. Rather it encodes information about the inferential process that the hearer should use.

Wharton (2001) has suggested that this distinction is a particular instance of a more general distinction between *translational* encoding, where concepts are activated by the use of expressions which translate them, and *non-translational* encoding, where concepts are activated by leading the audience to an inferential route that results in a conceptual representation. In order to explicate this distinction, Wharton uses examples which do not involve a coded signal: for instance, a person points at a cloud, intending to communicate 'It's going to rain'; or a person deliberately and openly shows someone their shiver, intending to communicate 'I feel cold'. In these cases, he argues, the audience is expected to work out the communicator's intended interpretation inferentially. However, she is guided in this process by the communicator's communicative behaviour.

These examples should recall our discussion of Rieber's (1997) attempts to unpack the notion of indicating (chapter 2.3). In particular, it could be argued that in both of Wharton's examples the communicator is indicating something that the audience might have noticed for herself. However, notice that in contrast with Rieber, Wharton is not proposing that the communicator is indicating the fact that it is raining: he is proposing that the communicator is providing a signal which guides the audience towards an inferential route that will result in the conceptual representation 'It's going to rain.'

By the same token, Wharton is not proposing that non-translational coding involves pointing to or signalling a concept in the way that Rieber proposes that, for example, *but* signals the concept of contrast. He is proposing that it involves producing a signal which 'automatically guides the inferential route a hearer should take, a route they would not reliably take unless they knew the code' (2001:144). This is what I mean by procedural encoding in this section: expressions such as *after all*, *but* or *so* do not encode a constituent of a conceptual

representation (or even indicate a concept), but guide the comprehension process so that the hearer ends up with a conceptual representation.¹

With this in mind, let us return to Bach's (1999) objections to Rieber's (1997) re-analysis of Grice's (1989) account of conventional implicature. It will be recalled that Bach's argument was that since an expression such as *but* can feature in indirect thought reports such as (3), it must be analysed as contributing to what is said, and cannot, therefore, be treated as a conventional implicature (*contra* Grice 1989, Rieber 1997).

- (3) Tom thinks that Sheila is rich but unhappy. But I have always thought that all rich people are unhappy.

This sort of example is clearly a problem for any speech act theoretic analysis: since the speaker is reporting thoughts rather than words, he cannot be attributing any speech act to Tom. The question is whether it is a problem for an approach which treats *but* as encoding procedural information. As we have seen in chapter 2, the fact that an expression can appear in an indirect report of someone's thoughts does not in itself show that it is not procedural: pronouns and mood indicators, for example, go unremarked in reports of thoughts. If this sort of example is a problem, then it can only be a problem for the claim that *but* constrains, and hence contributes to, the recovery of implicit content rather than explicit content.

Wilson and Sperber (1993) have argued that within the relevance theoretic approach the speaker of an utterance such as (3) is reporting thoughts rather than words. However, it seems that by 'thought' they do not simply mean thought content, but something which could encompass the attribution of a particular inferential process. Thus they argue that where (4a) is understood as an indirect speech report of (4b) the speaker is 'not drawing an inference herself', but 'attributing a certain inference to Peter' (Wilson and Sperber 1993:15).

- (4) (a) Peter thought that Mary had a holiday, so he should have one too.
 (b) Peter thinks, 'Mary had a holiday, so I should have one too.'
 (Wilson and Sperber 1993:15)

As we have seen in my discussion of Bach's (1999) arguments against conventional implicature accounts (chapter 2.4), it seems that free indirect speech (or thought) and, indeed, indirect speech reports, can include expressions and

¹ Note that Wharton's notion of non-translational coding is more general than the notion of procedural meaning in the sense that it can refer to coded expressions which are not part of the linguistic code, e.g. interjections such as *aha* or *wow*.

devices which are not regarded as contributing to propositional content. Recall the examples of free indirect speech in (5) and indirect speech in (6).

- (5) That was the way to live – *carelessly, recklessly, spending oneself*. He got to his feet and began to wade towards the shore, pressing his toes into the firm, wrinkled sand. *To take things easy, not to fight against the ebb and flow of life*, but to give way to it – that was what was needed. It was this tension that was all wrong. *To live – to live!*
- (6) John pointed out that they couldn't really afford a holiday. But no, she said that she NEEDED to get away. [capitals indicate stress]

(Mansfield, 'At the Bay', 206).

These examples demonstrate that attributed thought does not necessarily mean attributed thought content. Clearly, the study of free indirect style will shed light on exactly what is being attributed in examples involving devices such as repetition and emphatic stress. However, it seems that whatever we say about the interpretation of so-called stylistic devices in free indirect (and indirect) speech, we cannot say that a speaker of an utterance such as (3) or (4a) can be said to be attributing an inference to someone in the sense that she is meta-representing that inference. As I have argued in the previous chapter, we do not have direct access to inferential procedures, or, indeed, any kind of computational process. If this is right, then it is not clear how we could represent – or meta-represent – such a process, for it would have to be represented in conceptual terms. Obviously, it is not impossible for people to represent inferential computations in conceptual terms: teachers of logic do this for a living. Nor is it necessarily impossible to provide a conceptual representation of the inferential procedure encoded by *but*: this is what I shall be attempting to do in the next section. However, I do not believe this is what happens when someone attributes the inferential procedure encoded by *but* to someone else in utterances such as (3).

Let us look at what goes on in a non-attributive example involving *but*:

- (7) Sheila is rich but she is unhappy.

The hearer is intended to perform an inferential computation involving the explicit content of the utterance and accessible contextual assumptions which results in a conceptual representation. In Wharton's (2001) terms, this conceptual representation is not encoded by *but*, but is *activated* by it in the sense that it encodes information about the inferential route the hearer should take in order to arrive at the intended conceptual representation. We shall be examining the meaning of *but* in more detail below. For the moment, let us just say

that this inferential route is such that the hearer of (7) arrives at a conceptual representation which contradicts the assumption in (8).

- (8) Sheila is happy.

However, the speaker can assume that her utterance will achieve relevance in this way only if she assumes that (8) is manifest to the hearer. And so it will be – provided that the hearer can derive it from the first segment of the utterance and accept it as true (or probably true).² Since (8) is only deducible from the first segment of (7) given the contextual assumption in (9), the speaker's use of *but* makes it mutually manifest that she believes that (9) is amongst the assumptions manifest to the hearer.

- (9) All rich people are happy.

Notice that the hearer will not construe the speaker to be communicating that (9) and (8) are assumptions she takes to be true. As Rieber (1997) has pointed out, it would be very strange for a speaker to communicate that she believes a proposition to be true only for the purpose of denying it.³

In some cases, it seems, a speaker may produce an utterance containing *but* even when it is mutually manifest that the hearer does not hold the contextual assumption(s) necessary for the deduction of the assumption being contradicted. Consider, for example, 'jokey' or ironic utterances such as (10) (produced at a linguistics conference).

- (10) This is Paul. He's a syntactician, but he's quite intelligent.

Here the hearer will recognize that the segment introduced by *but* is intended to achieve relevance by virtue of contradicting (11) which is deducible from the assumption in (12) only given the contextual assumption in (13).

- (11) Paul is not intelligent.
(12) Paul is a syntactician.
(13) No syntactician is intelligent.

² See the definition of manifestness in chapter 3, section 3, or Sperber and Wilson (1995:39).
³ This is Rieber's (incorrect) construal of my earlier (1987, 1989) analyses of the interpretation of utterances containing *but*. The speaker's use of *but* does not provide evidence of the speaker's beliefs about rich people, but rather evidence of the speaker's beliefs about what the hearer thinks about rich people. These beliefs may, of course, be mistaken. However, as we have seen in the previous chapter, even when a speaker fails to produce an utterance which is consistent with the presumption of optimal relevance, a hearer is able to consider how the speaker might have intended his utterance to achieve optimal relevance. The point is that in this case, the hearer is guided in her considerations by the meaning of *but*.

However, since it is manifest to the hearer of (10) (in the context described) that the speaker has not attributed the assumptions in (11) or (13) to her, she will not assume that the *but* segment was intended to achieve relevance by contradicting and eliminating an assumption which is assumed to be manifest to her. On the other hand, the hearer may take the speaker to be contradicting and eliminating an assumption which is assumed to be manifest to somebody. In this way, the speaker's use of *but* encourages the hearer to make an inference that would be made by a person (or the sort of person) who did hold the assumptions in (11) and (13), or in other words, to derive the cognitive effects that would be derived by this sort of person.

In this example, the point of activating the attributed assumptions in (11) and (13) is to communicate the speaker's attitude towards those assumptions. In the context described, we may assume that this attitude is one of dissociation; hence the ironic effect (see Sperber and Wilson 1995:237–43, Wilson and Sperber 1992). This is not the case in Rieber's (1997) example in (3) above or in Wilson and Sperber's (1993) example in (4a), where the speaker has made it explicit that he is attributing certain assumptions to someone (Tom in (3) and Peter in (4a)), and the relevance of the utterance simply lies in the information it communicates about what Tom and Peter believe. Thus in (3) the speaker's use of *but* activates the attributed assumption in (9) and the contradiction and elimination of the attributed assumption in (8). In other words, examples such as these arise because it is possible for assumptions to be manifest as attributed assumptions, and the speaker will be understood to be using *but* or *so* in order to attribute an inference to someone in the sense that the use of these expressions encourages the hearer to make use of these attributed assumptions in a particular kind of inference.⁴

In the last chapter, I argued that the notion of procedural meaning can be justified within the relevance theoretic framework in both cognitive and communicative terms. However, according to my original account of semantic constraints on relevance (Blakemore 1987), relevance theory provided not only an explanation for why languages have linguistically encoded constraints on relevance at all, but also an explanation for why there are expressions with particular types of functions. Thus in Blakemore (1992) I suggested a classification of discourse markers corresponding to the three types of cognitive effects summarized below:

⁴ In section 4.2.3 I shall show that the phenomenon I have been discussing here has implications for the way in which the assumption eliminated as the result of the procedure encoded by *but* is characterized.

An input achieves a cognitive effect if:

- (i) it allows the derivation contextual implications;
or
- (ii) it strengthens an existing assumption;
or
- (iii) it leads to the contradiction and elimination of an existing assumption.

It does seem that one can identify discourse connectives whose meanings are linked to these cognitive effects. Consider, for example, the functions of *after all* in (1) (repeated below) and *so* in (14).

- (1) (a) Ben can open Tom's safe. (b) After all, he knows the combination.
- (14) (a) Ben can open Tom's safe. (b) So he knows the combination.

As we have seen, by indicating that the hearer is expected to follow an inferential route in which the proposition expressed by segment (b) is a premise for the deduction of the proposition expressed by segment (a), the speaker of (1) is indicating that segment (b) is relevant by virtue of strengthening an existing assumption. In contrast, by indicating that the hearer is expected to follow an inferential route in which the proposition expressed by segment (b) is a conclusion derived in an inference in which the proposition expressed by (a) is a premise, the speaker of (14) is indicating that segment (b) is relevant by virtue of being a contextual implication.

Similarly, the discussion of the examples in (3) and (10) assumed that we can link the function of *but* to the cognitive effect of contradiction and elimination (see above). Consider, for example, the sequence in (15), where the relevance of the second segment lies in the fact that it contradicts and eliminates an assumption presumed to have been made manifest by the first, namely (16).

- (15) There's a pizza in the fridge, but leave some for tomorrow.
- (16) You can eat all the pizza in the fridge.

I shall return to the analysis of *but* in the next section. My aim here is to raise the general theoretical questions about my original account of procedural meaning which I shall be addressing in the more detailed discussion that follows.

The analyses just sketched suggest not only that the meanings of discourse markers or connectives are linked to cognitive effects, but more particularly, that they directly encode the type of cognitive effect intended. Thus *but* is analysed as encoding the information that the hearer is intended to follow an inferential route which ends in the elimination of a contextual assumption, while *after all* is analysed as encoding the information that the intended inferential

route is one which results in the strengthening of an existing assumption. As I pointed out (Blakemore 1987), the hearer of an utterance containing, for example, *after all*, is intended to recognize that she is expected to access a particular set of contextual assumptions for its interpretation. Thus the hearer of (1) will recognize that she is intended to access the assumption in (2b).

- (2) (b) If Ben knows the combination of Tom's safe, then he can open Ben's safe.

However, this is a consequence of the constraint *after all* imposes on the intended cognitive effect and the communicative principle of relevance: the hearer is expected to access the smallest and most accessible set of contextual assumptions that enable her to interpret the (b) segment so that it strengthens an assumption made accessible by the (a) segment. In other words, according to this analysis, *after all* imposes a constraint on the hearer's selection of context only derivatively.

While this notion of a constraint on relevance allows us to distinguish three broad categories of discourse connectives, it does not, however, allow us to draw more finely grained distinctions between the meanings of the different expressions which fall into a particular category. Thus for example, while there is a whole range of expressions whose use seems to be connected to contradiction and elimination, these are not always interchangeable with *but* or, indeed, with each other. For instance, it seems that while examples such as (17) suggest that the function of *nevertheless* is similar to that of *but*, there are other cases, for example (18), in which the substitution of *but* by *nevertheless* yields an odd if not unacceptable result.

- (17) Anna is a wonderful pianist *but/nevertheless* she can't sing.
 (18) A: Did you get my article?
 B: Yes, *but/? nevertheless* the last page is missing.

Similarly, while there are contexts in which *but* and *however* are interchangeable, the fact that there are other contexts in which *but* cannot be substituted by *however* suggests that *however* does not encode exactly the same constraint on interpretation as *but*. Compare, for example, (19) and (20):

- (19) A: I suppose that it's summer in New Zealand now.
 B: Yes it is. *But/However*, the weather is not much better than here at the moment.
 (20) A: Come on, we've got time for another coffee.
 B: *But/?However*, I've got a meeting at 2.00.

Clearly, an account in which these expressions constrain relevance by encoding the cognitive effect of denial and elimination would not capture the differences between them.

As Blass (1990) has pointed out, the range of expressions whose meanings can be analysed in terms of strengthening include a number of expressions which are either not interchangeable at all or are only interchangeable in certain contexts. Thus although one might say that the second segment of both of the sequences in (21) and (22) has the effect of strengthening an assumption communicated by the first, it is clear that *indeed* and *after all* do not make the same kind of contribution to the interpretation of the utterances which contain them.

- (21) I think Verity should be player of the match. *After all/?Indeed*, she scored all the goals.
 (22) Verity played well today. *Indeed/?After all*, she was brilliant.

The situation is complicated further by the fact that *indeed* can be used to play a role which, although it seems to have something to do with strengthening, is not exactly the same as the one in (22). As (23) shows, this role is shared by *too*.

- (23) A: Verity is playing well today.
 B: She is *indeed/too*.

However, the use of *too* is inappropriate in (24).

- (24) ?Verity played well today. She was brilliant *too*.

As Blass (1990) observes, in some dialects *too* has a use which is connected not with strengthening but with contradiction:

- (25) TOM: Anna isn't coming with us.
 BEN: She is *too*.

Moreover, it has a further role, shared by *also*, which, it seems, cannot be analysed in terms of any of the three cognitive effects at all.

- (26) (a) Anna plays the PIANO. She *ALSO* plays the trumpet.
 (b) Anna plays the PIANO. She plays the TRUMPET *too*.

In this role, *too* interacts with the focus phenomena discussed by Prince (1988), which I analysed along the lines suggested by Wilson and Sperber (1979) and Sperber and Wilson (1995) as constraints on the contextual assumptions used in the derivation of cognitive effects (Blakemore 1987). I do not plan to revisit this particular discussion here. The point of (re-)introducing these focus-related

phenomena was to suggest that there are discourse markers which, although they can be analysed as encoding inferential procedures, cannot be analysed as encoding a particular cognitive effect at all. In other words, not only is an analysis of procedural meaning based on the three cognitive effects of contextual implication, strengthening and elimination not fine-grained enough to capture the differences between expressions such as *but* and *nevertheless* and *however*, but also it is not broad enough to capture all the ways in which linguistic expressions and structures can encode information about the computations involved in the interpretation of the utterances that contain them.

My aim in this chapter will not be to give an exhaustive account of the non-truth conditional discourse markers which encode constraints on relevance. Apart from the fact that this would either be frustratingly superficial or impossibly long, it is not clear that it would contribute to a better understanding of the theory of meaning which deals with the way in which elements of linguistic structure map directly on to the computations involved in utterance interpretation (see Blakemore 1987:144). Accordingly, I shall focus on the analysis of *but* (4.2) and its less notorious relatives *nevertheless* and *however* (4.3) in order to show how a more precise account of procedural meaning can capture the (often very subtle) differences between apparently similar discourse markers, and then turn to the analysis of (discourse-initial) *well* in order to show that the explanation of how procedural meaning works must go beyond the encoding of cognitive effects (4.4).

4.2 A procedural analysis of *but*

The discussion that follows will not be a repeat of my earlier discussions of this problematic expression (Blakemore 1987, 1989, 2000). While the resulting analysis represents a return to my original 1987 position that all uses of *but* in English can be accommodated in terms of a single procedure, I reach this conclusion via a different (and, I believe, more straightforward) route. At the same time, I shall argue that there are uses of *but* which suggest that my 1987 definition of the procedure encoded by *but* requires modification if we wish to maintain Sperber and Wilson's (1995) definition of manifestness.⁵

4.2.1 *but* and *contrast*

For both Rieber (1997) and Bach (1999), the problem of accounting for the meaning of *but* is a matter of accounting for what they call its contrastive

import. Similarly, Fraser (1990) concludes that 'the core meaning of *but* is to signal simple contrast, nothing more' (1990:309). As students in introductory semantics classes quickly find out, there is nothing 'simple' about contrast. While each of the following pairs is said to exhibit contrast or antonymy, the relationship must be analysed differently in each case:

- (27) dead alive
 hot cold
 north south
 buy sell

Contrasts are not always determined by the linguistically encoded meanings of the words used. Thus in (28) the contrast between (a) and (b) must be derived inferentially on the basis of contextual assumptions, or, in other words, as contrasting contextual implications, for example, (29a) and (b).

- (28) (a) Anna likes to read.
 (b) Tom likes to play sports.
(29) (a) Anna likes intellectual activities.
 (b) Tom likes physical activities.

The contrasting contextual implications in (29) may also be recovered from an *and* conjunction in which the speaker provides no lexical indication of contrast. Alternatively, the speaker may lead the hearer towards this interpretation by using the subordinators *while* and *whereas* – or, according to Fraser, *but*. In other words, according to Fraser, *but* is simply a linguistic means of indicating the contrasts in symmetric utterances such as the following:

- (30) (a) Ben is rich and Verity is poor.
 (b) Verity is poor and Ben is rich. (≡ 30a)
 (c) Anna likes reading and Tom likes tennis.
 (d) Tom likes tennis and Anna likes reading. (≡ 30c)

And, indeed, it would seem that *but* can be substituted for *and* in these examples. For example:

- (31) Anna likes reading but Tom likes tennis.
(32) Tom likes tennis but Anna likes reading.

My first task in this section is to show that the inter-substitutability of *and* and *but* in utterances such as (30) and (31–2) is an illusion. The contexts in which it is acceptable to use *and* in order to communicate what we might think of as a

⁵ Iten (2000b) gives an excellent critical discussion of a wide range of literature on *but* which includes an account of the discrepancies between my 1987 and 1989 analyses.

symmetric contrast are not contexts in which the use of *but* is acceptable. I shall argue that the unacceptability of *but* in these contexts is a consequence of its role in activating an inference which results in the contradiction and elimination of an assumption, and that uses of *but* which may look like (symmetric) contrastive uses out of context turn out to have a different (non-symmetric) function when examined in contexts that yield an acceptable interpretation.

It will be recalled that according to Lakoff (1971), the apparently contrastive use of *but* in (31) must be distinguished from its use in (33), where the speaker's use of *but* appears to indicate the unexpectedness of the expectation presumed to have been derived from the first segment, namely, that John is dishonest.

- (33) John is a Republican but he is honest.

This would seem to suggest that *but* should be analysed in terms of *concession*, where this is defined along the lines suggested by Quirk *et al.* (1972): 'Concessive conjuncts signal the unexpected, surprising nature of what is being said in view of what was said before that' (1972:674). As Iten (2000b) points out, there is a range of English expressions which might seem to indicate concession, and these are not always inter-substitutable. I shall take this point up in the following section. Here my aim is to show that acceptable uses of *but* do not always conform to Quirk *et al.*'s definition of concessivity. Moreover there are utterances containing *and* which would appear to be concessive on Quirk *et al.*'s definition, but where the use of *but* is unacceptable. Once again, my argument will be that the unacceptability of *but* is a consequence of its role in activating an inference that is linked to the cognitive effect of contradiction and elimination.

First, then, let us consider a contextualized example of an *and* conjunction which can be interpreted as communicating a symmetric contrast. The utterance in (34) was heard as part of a BBC weather report in which the speaker was reviewing the week's weather in Britain.

- (34) The wettest weather has been in Preston where they have had 15mm of rain and the driest weather has been in Ashford where there has been only 3mm of rain.

The substitution of *and* by *but* in this example would have been odd even though the speaker could be described as drawing a contrast between the wettest place and the driest place. The point seems to be that since there is, by definition, only one place which can be described as the wettest, no listener would have expected Ashford to be like Preston with respect to the amount of rainfall it

received. It is simply assumed that listeners realize that there will be one place that is the wettest and one place that is the driest and that they want to know what they are. In other words, while the information explicitly communicated by the conjoined utterance is assumed by the speaker to be relevant to the listeners, it is not assumed that its relevance lies in the denial and elimination of an assumption that Ashford and Preston are alike with respect to the rainfall they received during the week.

It is not difficult to identify similar examples. For instance, the speaker of the following utterance has been sent from the kitchen to find out what everyone would like to drink.

- (35) Larry, Sue and Simon want coffee and Bob, Jane and Tom want wine.

The substitution of *but* would only be acceptable here if there was something surprising either about the fact that Bob, Jane and Tom did not want the same drink as the others or about the fact that they wanted wine. Of course, it is not difficult to think of a context in which this might be the case. If it was assumed that Sue never drank wine or that Sue habitually did everything that her husband Larry did, then (36) would be acceptable.

- (36) Larry wants tea but Sue wants wine.

Similarly, there are contexts in which utterances that look like the weather report example in (34) are acceptable. Consider B's utterance in (37):

- (37) A: What has the weather been like this winter?
B: Well, it was really wet before Christmas, but since then it's been quite dry.

Here B's use of *but* can be taken as evidence of his (possibly mistaken) assumption that A believes that the weather has been uniform throughout the winter and hence that there is a single answer to his question. Thus the hearer is expected to perform the inference in (38).

- (38) The post-Christmas weather would be the same as the pre-Christmas weather only if it was really wet.

The post-Christmas weather was not extremely wet.

Therefore, the post-Christmas weather was not the same as the pre-Christmas weather.

This suggests that the only sense in which *but* has anything to do with contrast in this example is that it introduces a segment which plays a role in the

elimination of the assumption that there is no contrast to be drawn. However, there are other examples involving *but* which although they may *look* like the weather report example in (34), have nothing to do with contrast at all. For example, while the hearer of a British weather report would find the use of *but* unacceptable in (34) on the grounds that there is no reason to expect the rainfall in the two places to be the same, the use of *but* in the (constructed) weather report in (39) will be acceptable to a hearer who knows that Chicago is notorious for its wind.⁶

- (39) New York was the windiest city in the United States today, but Chicago had light winds.

In this case, the assumption being contradicted is not an assumption that New York and Chicago are alike, as in (37), but rather an assumption (presumed to have been derived on the basis of the hearer's encyclopaedic knowledge) that Chicago is invariably the windiest city in the country. This difference should not, however, obscure the fact that in *both* examples the hearer is expected to perform an inference which results in the contradiction and elimination of an assumption. That is, *but* encodes the same procedure in each case, and the only difference is that whereas in (37) the eliminated assumption which the speaker attributes to the hearer is on the basis of the question she has asked (namely, that the weather was uniform throughout winter and hence that there is a single answer to her question), in (39) the eliminated assumption is one which the speaker presumes is held by the hearer on the basis of assumptions he holds about the hearer's encyclopaedic knowledge (namely, that Chicago is an extremely windy city).

The use of *and* in these utterances would not have yielded the same sort of interpretation. Nor, it seems, would the use of *whereas* or *in contrast*. For example, neither of the utterances in (40) could be interpreted as suggesting that the hearer's assumption that she could expect a simple, homogeneous description of the weather was mistaken. Similarly neither of the utterances in (41) would be interpreted as suggesting that the assumption that Chicago had strong winds is incorrect.

- (40) (a) It was really wet before Christmas and after Christmas it was quite dry.
(b) It was really wet before Christmas, whereas after Christmas it was quite dry.

⁶ I am grateful to Wiebke Brockhaus for drawing my attention to this sort of example.

- (41) (a) New York was the windiest city in the United States today and Chicago had light winds.
(b) New York was the windiest city in the United States today. In contrast Chicago had light winds.

I do not want to suggest here that *in contrast* and *whereas* encode the same kind of information. On the contrary, it seems that *in contrast* exhibits behaviour which is symptomatic of conceptual encoding, while *whereas* would seem to have the properties which suggest procedural encoding. In particular, while it is possible to form a complex adverbial by qualifying *in contrast* by, for example, *complete* or *total*, it is not possible to form a complex expression containing *whereas*. At the same time, the procedure which is encoded by *whereas* cannot be the same as the one encoded by *but* since, as we have just seen, its use does not lead to the same sort of cognitive effect. If my analysis of (37B) is right, then *but* encodes a procedure which can be defined in terms of the cognitive effect of contradiction and elimination. The use of *whereas*, on the other hand, seems to indicate that the relevance of the utterance lies in the derivation of a set of parallel and contrasting contextual implications, for example, the ones in (42):

- (42) (a) We were unhappy with the weather before Christmas.
(a') We were happy with the weather after Christmas.
(b) We couldn't go outside much before Christmas.
(b') We could go outside often after Christmas.

etc.

The suggestion, then, is that utterances containing *and* (for example (34)), can be understood as communicating a contrast in this sense: they achieve relevance by virtue of yielding parallel and contrasting contextual implications, and the substitution of *and* by *but* is appropriate only if it is possible to recover an interpretation in which the speaker is understood to be contradicting and eliminating an assumption (which may be an assumption that there is a respect in which the two states of affairs described are the same).

If this is right, then there is no need to distinguish between a contrast *but* and a denial of expectation *but* (see Lakoff 1971, Blakemore 1989, 2000). As Footen (1991) has suggested, the similarities between examples such as (31) and (32) are superficial, and disappear as soon as we consider the contexts in which they are appropriate.

- (31) Anna likes reading but Tom likes tennis.
(32) Tom likes tennis but Anna likes reading.

4.2.2 *but* and *concessivity*

Does this mean that all uses of *but* are concessive? Recall that Quirk *et al.*'s (1972) definition of a concessive expression requires the unexpectedness of what is being said, given what has been said before that. In the same vein, Dascal and Katriel (1977) suggest that the role of *but* in cancelling expectations or assumptions is restricted to those cases such as Lakoff's example in (33) in which the cancelled assumption is one derived inferentially from the interpretation of the segment preceding the one introduced by *but*. However, as we have just seen in example (39), the assumption which the speaker cancels through his use of *but* is not always one which may be derived inferentially from the preceding segment. It is simply an assumption derived from the hearer's encyclopaedic knowledge about Chicago which will be triggered by the mention of Chicago. It is possible that the first segment of (39) may trigger the encyclopaedic information that the hearer has about windy cities in the United States, which may include the assumption that Chicago is one of the windiest cities in the United States. Given this contextual assumption, the hearer may derive the assumption that is contradicted by the second segment, namely, that Chicago was very windy that day. However, this is not to say that the assumption that Chicago was very windy is derived as part of the interpretation of the first segment.

Similarly, although B's reply in (43) may be understood to contradict the assumption in (44), this assumption is not one which is derived from the first segment of the utterance. Indeed, uttered with the appropriate intonation, this segment would be understood to suggest the assumption in (45a) which contextually implies the falsity of (44) given the contextual assumption in (45b).

- (43) A: Do all the buses from this stop go to Piccadilly Gardens?
 B: The 85 and the 86 do, but the 84 and 87 go to Cross Street.
- (44) The 84 and 87 buses go to Piccadilly Gardens.
- (45) (a) All the other buses from this stop do not go to Piccadilly Gardens.
 (b) The 84 and 87 buses go from this stop.

The assumption in (44) would of course follow from the information that the 85 and the 86 buses go to Piccadilly on the assumption which is underlying A's question, namely, that all buses from the stop are alike in respect of whether they go to Piccadilly Gardens, and hence that there is a single 'yes' or 'no' answer to her question. However, uttered with the appropriate intonation, the first segment will suggest that there are other buses from the stop which are not like the 85 and the 86 in this respect, which, given the contextual assumption

in (45b), contextually implies that the 84 and the 87 do not go to Piccadilly Gardens. In the absence of the contextual assumption in (45b), the hearer may find it relevant to know which buses do not go to Piccadilly Gardens (and hence which ones to avoid should she wish to go there), and the speaker would thus be provided with a reason for encouraging the hearer to see the relevance of the second segment as lying in the contradiction and elimination of (44). However, it seems that the *but* segment could also be relevant in a context which included the assumption in (45b). In this case, the falsity of (44) would provide the context for the interpretation of the second segment so that the speaker would be understood to be informing the hearer not just where the 84 and 87 buses go, but where they go given that they do not go to Piccadilly Gardens.

If this is right, then it seems that the cancelled assumption is not necessarily an assumption derived, or even derivable, from an act of communication at all (*contra* Bell 1998:527). And indeed, it is possible for a speaker to use *but* as a means of activating the procedure of contradiction and elimination in utterances which are not preceded by any discourse or act of communication at all (for further discussion, see Blakemore 1998).

- (46) [A gives B, who has just received a shock, a glass of whisky]
 But I don't drink.

Even if one could modify the definition of concessivity so that examples such as (39) and (43) are accommodated, it is extremely difficult to see how one could analyse this use of *but* as concessive, for, intuitively, the speaker is not conceding anything. As a number of authors have pointed out (notably, Anscombe and Ducrot 1977, Horn 1989) this non-concessive use of *but* is not restricted to discourse initial uses of *but*, but is found in utterances such as the one you are reading now. I shall turn to these so-called correction uses of *but* below. My point here is simply to underline the point that concessivity is too narrow for a definition of *but* that can accommodate all its uses.

If concessivity is too narrow, it is also too broad. Kitis (1995) has drawn attention to a use of *and* which seems to conform to Quirk's definition of concessivity, but which cannot be substituted by *but*. Thus she argues that whereas in her example given in (47) the speaker can be understood to be suggesting that the fact that the woman is seeing other men is surprising (and perhaps outrageous) given that her husband is in hospital, the utterance in (48) must have a 'back-tracking' interpretation in which the hearer is denying an assumption presumed to have been derived from the first segment (for example, that the woman is having an unpleasant time).

(47) Her husband is in hospital and she is seeing other men.

(48) Her husband is in hospital but she's seeing other men.
(from Kitis 1995)

There is a similar contrast between the utterance in (49), produced with stress on *honest*, and Lakoff's original example in (33) (repeated below).

(49) John is a Republican and he is HONEST.

(33) John is a Republican but he is honest.⁷

Kitis cites the example in (47) as evidence for her argument that *and* can function as an emotional device signalling the speaker's involvement. Her aim is to explain not only why *and* has this function, but also why it is used in preference to *but*, which is 'the prototypical adversative or contrastive connective' (Kitis 1995). As I have argued elsewhere (Blakemore 2000, Blakemore and Carston 1999), the fact that the speaker of (47) or (49) can be interpreted as communicating an emotional attitude (for example, of surprise or outrage) does not mean that *and* encodes emotional involvement. It is possible to account for the interpretation of these utterances without having to abandon a minimal truth functional semantics for *and*. According to this argument, the use of *and* is justified according to the principle of relevance only if the relevance of the conjoined proposition expressed has cognitive effects over and above the relevance of each of its conjuncts taken individually. In other words, the speaker is understood to be communicating a guarantee of optimal relevance for the *conjoined* proposition. In some cases, this may involve mapping the utterance on to a stereotypical scenario or schema in which one event is a necessary precursor for another. This will result in the sort of narrative interpretations that Grice (1989) analysed in terms of conversational implicatures but which in relevance theory are analysed in terms of the inferential development of linguistically encoded semantic representations (see chapter 3). For example, according to Carston (1993, 2002), the utterance in (50) is interpreted as communicating an explicature of the form in (51).

(50) She got on her horse and rode into the sunset.

(51) [She]_i got on [her horse]_j at *t_n* and [she]_i rode [her horse]_j into the sunset at *t_{n+1}*

⁷ Iten (2000b) seems to mistake the interpretation of (49) for the so-called denial of expectation interpretation recovered from (33) and cites it as evidence that the latter interpretation can be recovered from an *and*-conjunction.

However, the aim of Blakemore and Carston's paper (1999) is to show that an *and* conjunction does not always achieve relevance as a narrative sequence. One of the non-narrative interpretations they mention is the one recovered from (52) produced with stress on the pronoun *he*.

(52) John is a Republican and HE is honest.

This utterance would be acceptable if produced as an argument against the assertion that all Republicans are dishonest. However, notice that the validity of this argument depends on the truth of the conjunction of the two propositions expressed. Neither conjunct taken on its own would constitute proof of the falsity of the proposition that all Republicans are dishonest. In contrast, the use of *but* in (33) indicates that the segment it introduces is relevant by virtue of contradicting an assumption which the hearer is presumed to have derived from the first segment.

The utterances in (47) and (49) illustrate another way in which *and* conjunctions can be relevant: the speaker can be taken to be expressing an attitude to the truth of the conjoined proposition expressed. While it is not the case that the speaker's attitude is encoded by *and*, it seems that there is an expression whose meaning can be analysed in terms of the way it activates this sort of interpretation, namely *yet*. Thus (53) will be interpreted in the same way as (47).

(53) Her husband is in hospital (and) yet she is seeing other men.

The recovery of this interpretation will depend on the hearer's ability to access something like the contextual assumption in (54).

(54) *a.* It is normally the case that a woman whose husband is in hospital will devote herself to his care.

b. ~~Seeing other men is not compatible with (a).~~

Notice that although the hearer is expected to be surprised that the woman is not devoting herself to her husband's care, she is not expected to abandon the assumption in (54). On the contrary, the speaker's assumption that the hearer will share his attitude of moral outrage is based on the (possibly mistaken) assumption that the hearer believes assumptions such as (54) are legitimate. Similar remarks can be made about (49).

In contrast, the use of *but* in (48) and (33) activates an inferential process which results in the contradiction and elimination of an assumption. For example, on one interpretation (suggested to me by the audience of a lecture at Osaka University), the speaker of (48) may intend the hearer to abandon

the assumption in (55c) which is presumed to be the result of the following inference:

- (55) (a) If the woman's husband is in hospital, she will not be having a very good time.
- (b) The woman's husband is in hospital. (first segment of (48))
- (c) The woman isn't having a very good time.

In this case, the identification of the contradiction would depend on the contextual premise that a woman who sees other men is having a good time. This is not the only interpretation of (48), of course. However, in using an expression which activates the cognitive effect of contradiction and elimination, the speaker is signalling that he presumes the hearer to have derived an assumption from the first segment of (48), which is in fact false, or in other words, that he presumes the hearer to have made an inference (for example, the one in (55)) which is illegitimate. This raises the question of why a speaker should utter the first segment of (48) when he has reason to believe that the hearer will use the proposition it expresses in what he considers to be an illegitimate inference. The point is that a hearer who recognizes that she is expected to abandon (55c) will also recognize that she is expected to abandon the contextual premise(s) used in its derivation, in this case (55a). This means that the speaker's intention in producing (48) could be to get the hearer to abandon this assumption and as a result form new assumptions about the woman in question (for example, that she flouts social conventions). A parallel analysis can be given for (33).

This account of (48) (and (33)) follows straightforwardly from the claim that *but* encodes the information that the relevance of the segment it introduces lies in the cognitive effect of contradiction and elimination. By the same token, the fact that *but* activates this cognitive effect means that it cannot be used to achieve the effects which can be achieved by the conjoined utterances in (47) and (49) or by the use of *yet* in (53), for these do not involve contradiction and elimination. *All* of these utterances, including the *but* utterances, might be described as concessive in the sense that they involve unexpectedness. However, this does not help us explain the interpretive differences noted by Kitis (1995). In other words, the answer to Kitis' question (why can't *but* have the same function as *and* in (47)?) lies in its analysis in terms of the cognitive effect of contradiction and elimination.

4.2.3 *but* and *manifestness*

If the use of *but* is linked to the cognitive effect of contradiction and elimination, then it will be acceptable only in those contexts in which the hearer is able to

derive a contradiction, or in other words, only in those contexts in which the interpretation of the utterance prefaced by *but* includes an assumption which is contradictory to an assumption presumed to be manifest to the hearer. As we have seen, a speaker may be mistaken about the contextual resources of the hearer, and may use *but* to indicate that the hearer is expected to eliminate an assumption which she does not in fact hold. Thus, for example, the hearer of (56) may not have had any intention of eating the whole pizza.

- (56) There's a pizza in the fridge, but leave some for tomorrow.

However, we have also seen that people are able to form assumptions about what others believe will be relevant to them, and hence that they are able to form assumptions about what others believe will be manifest to them. Thus the hearer of (56) is able to recognize that the speaker's use of *but* is based on the belief that the assumption in (57) is manifest to her even if she is not capable of deriving it given her contextual resources.

- (57) I can eat the whole pizza.

In this case, the speaker's (possibly mistaken) assumption is based on the assumption that the hearer is capable of deriving (57) from the first segment of (56). However, we have seen that in many cases the assumption which the speaker intends the hearer to eliminate is not derived from the interpretation of the first segment of the *but* utterance at all, but is simply an assumption which the speaker has reason to believe is manifest to the hearer. Thus the speaker's evidence for assuming that the eliminated assumption is manifest to the hearer may be provided by an utterance made by the hearer herself. Or it may be provided by a state of affairs which is mutually manifest to speaker and hearer. For example, in (46) (repeated below), the speaker will have evidence for the assumption that the ~~assumption~~ that the hearer is expected to drink the whisky will be mutually manifest to them.

- (46) [A gives B, who has just received a shock, a glass of whisky]
But I don't drink.

However, Iten (2000b) has argued that the requirement that the eliminated assumption is *manifest* to the hearer is too strong, since there are uses of *but* where the speaker has reason to believe that the hearer is not capable of accepting this assumption as true or as probably true. The cases she has in mind involve the so-called 'correction' use of *but*, for example (58).

- (58) He's not clever, but hardworking.

It has been claimed (for example, by Anscombe and Ducrot 1977 and Horn 1989) that there is a semantic distinction between *but* as used in (58) and *but* as used in examples such as (56) and (46), or in other words, that *but* is ambiguous between two meanings: a denial of expectation meaning and a correction meaning. As these authors point out, these two meanings are encoded by different lexical items in some languages, for example, Spanish, German, Hebrew and Swedish. Moreover, the two *buts* are claimed to have different distributional properties: first, while the first clause of an utterance containing correction *but* must contain an explicit, unincorporated negation, this is not the case in utterances involving denial *but*; and second, while the second clause of an utterance containing correction *but* undergoes conjunction reduction when it shares material with the first clause, this is not the case in utterances involving denial *but*. Thus while the (a) examples in (59–61) can be interpreted as involving correction *but*, the (b) examples must be interpreted as involving denial *but*.

(59) (a) He isn't clever, but hardworking.

(b) He's clever, but not hardworking.

(60) (a) It's not ambiguous, but vague.

(b) It's unambiguous, but vague.

(61) (a) He's not my grandson, but my nephew.

(b) He's not my grandson, but he is my nephew.

However, Iten (2000a,b) has shown that none of the arguments for the ambiguity of *but* are compelling, and hence that it would be worth looking for a unitary semantic analysis which could accommodate all of its uses, including the so-called correction ones. At the same time, she argues that in order to accommodate these uses within a single constraint on implicit content, we must modify my 1987 analysis so that the assumption eliminated as a result of the use of *but* is simply *accessible* in the context. Since an assumption is accessible provided that it is entertainable and hence does not have to be accepted as true or probably true, it is possible to analyse the use of *but* in an example such as (58) in terms of the contradiction and elimination of the assumption in (62), even though this assumption is deemed to be false.

(58) He's not clever, but hardworking.

(62) He is clever.

While there may be a case for modifying the analysis of *but* in this way, it is not, I believe, made by so-called correction uses of *but*. Iten seems to assume that the assumption eliminated by the *but* segment in (58) on its correction interpretation must be one that is made manifest by the first segment of the

sequence. Since the first segment of (58) is denying the truth of (62), either (62) cannot be understood as the assumption eliminated by the *but* segment, which it clearly is, or we must re-analyse *but* so that the inferential procedure it activates does not necessarily have to result in the elimination of a manifest assumption. Iten's solution is based on the generally accepted view that negative sentences make accessible their positive counterparts. While this may be the case, it is not clear that this solution fully accounts for the role that *but* plays in the interpretation of a sequence such as (58).

Like any utterance, a negative utterance such as (63) may achieve relevance in any of the three ways summarized in the first section of this chapter: that is, it may yield contextual implications, or it may strengthen an existing assumption, or it may lead to the contradiction and elimination of an existing assumption.

(63) He's not clever. (= first segment of (58))

In some cases, the actual interpretation of (63) will depend on the principle of relevance and the contextual assumptions which are accessible to the hearer. However, in other cases the hearer will be given linguistic clues as to the direction in which relevance is to be sought. Intonation is one means of guiding the interpretation process. However, my concern here is with the role played by *but* in utterances such as (58).

For an utterance to achieve relevance as a contradiction, it must communicate an assumption which is contradictory to an assumption which the hearer believes to be true. This means that a speaker who indicates that the hearer is expected to derive this kind of cognitive effect from an utterance, is communicating his (possibly mistaken) assumption that a given assumption is manifest to the hearer. Thus a speaker who intends (63) to achieve relevance as a contradiction is communicating his assumption that the assumption in (62) is manifest to her. Now, let us consider (63) as a part of the utterance in (58). If *but* is, as I have argued, a means of activating an inference which results in the contradiction and elimination of an assumption, then its use will indicate that the speaker believes there is an assumption manifest to the hearer which is contradictory to an assumption he is communicating. What is this assumption? Since being hardworking is not in itself incompatible with being clever, there would seem to be no reason for the hearer to opt for (62). On the other hand, this is an assumption which would be presumed to be manifest to the hearer provided that the first segment (that is, (63)) is itself relevant as a contradiction.

In making this interpretation salient for the interpretation of the segment it introduces, *but* is also making it salient for the first segment. This effect is to make (62) manifest to the hearer for the interpretation of *both* segments.

In other words, what distinguishes utterances such as (58) from other utterances involving *but* is that the interpretation of each of its segments involves an inferential procedure that results in the contradiction and elimination of the same assumption.

The fact that *but* sends the hearer on this inferential route for the interpretation of the segment it introduces does not always mean that it makes this route salient for the interpretation of the first segment. For example, while it is not impossible to think of a scenario in which the speaker of (64) might wish to contradict the hearer's assumption that he had homework and replace it with the assumption that the teachers want the pupils to cover their books, the sequence will not receive a correction interpretation analogous to the interpretation recovered from (58).

- (64) I haven't got any homework, but the teachers want us to cover our books.

This raises the question of why the speaker of an example such as (58) can be understood to be communicating that the relevance of both segments lies in the contradiction and elimination of the same assumption and why he cannot be understood in this way in examples such as (64). The answer, or at least the key to an answer, seems to lie in the formal (or linguistic properties) of the utterances in question. In the first place, the intonation of the first segment of (64) may be inconsistent with its interpretation as a denial: imagine, for example, how this segment would be uttered by a child who has been asked by a friend whether he will have time to go to the park for a game of football. However, apart from this, it seems that the correction interpretation is ruled out by the fact that the two clauses share no linguistic material at all, and hence that there is not an appropriate linguistic environment for the conjunction reduction, which, as we have seen, characterizes correction uses of *but* in English. By the same token, the conjunction reduction in the second clause of (58) suggests a correction interpretation in which each segment achieves relevance by contradicting and eliminating the same assumption.

This suggestion would seem to be supported by Iten's (2000b:144) observation that whereas (65) cannot receive a correction interpretation, its German translation with *sondern* in (66) must be interpreted in this way (in spite of the fact that the two segments share no linguistic material at all).

- (65) John didn't make a salad, but Jack bought a cake.
 (66) John hat keinen Salat gemacht, sondern Jack hat einen Kuchen gekauft.

In other words, whereas English *but* encodes a single constraint linked to the cognitive effect of contradiction and elimination, and the way in which a hearer will interpret an utterance in accordance with this constraint depends on the linguistic environment in which *but* occurs, in German the information that the hearer is expected to recover an interpretation in which each segment is relevant as a contradiction of the same assumption is encoded in the meaning of *sondern*.

If my analysis of so-called correction uses of *but* is correct, then they do not show the requirement that the eliminated assumption must be accessible rather than manifest. However, there are other types of examples mentioned by Iten (2000b) which do seem to suggest that the requirement that the eliminated assumption be manifest cannot be met. Consider, for example, the utterances in (67) and (68):

- (67) Tom was meant to be here, but his car broke down.
 (68) I would have liked to go on holiday this year, but I couldn't afford it.

The use of *but* in (67) will be understood to indicate that the hearer should abandon the assumption in (69). However, this assumption is manifestly false. Similarly, the use of *but* in (68) will be understood to activate an inferential process which results in the elimination of the assumption in (70) whose falsity is made manifest by the first segment of the sequence.

- (69) Tom is here.
 (70) I can come.

In these cases, it seems, there is a case for saying that while the speaker presumes the eliminated assumption to be manifestly false, he will assume that it will be accessible to the hearer in the sense that the speaker will judge it to be one which is 'likely to occur to the hearer for consideration in the context' (Iten 2000b:160). In particular, it seems that the speaker of, for example (67), expects the hearer to speculate on the consequences of (69) should it have been true, or in other words, that the hearer is expected to consider the consequences of (69) being true in a possible world which is in all other respects the actual world. For instance, in such a world it may be possible to make the inference in (71):

- (71) (a) If Tom is here, we will have a quorum for the meeting. (contextual premise)
 (b) Tom is here. (= 69)
 (c) We will have a quorum for the meeting. (conclusion)

In this case, the point of the *but* segment is to activate an inferential process which results in the elimination of (69) and thus encourage the hearer to recognize that the conclusion in (71c) is not actually valid. A similar kind of analysis could be given for (68).

The claim that *but* always activates an inferential procedure which results in the elimination of an assumption which is manifest to the hearer would also seem to be undermined by the attributive uses of *but* discussed in 4.1. According to my analysis of Rieber's (1997) example in (3), the speaker is explicitly attributing the inference which is activated by the use of *but* to Tom and thereby indicates that the hearer is expected to derive the cognitive effects which would be derived by a person who held the assumption in (9), namely the elimination of (8).

- (3) Tom thinks that Sheila is rich but unhappy. But I have always thought that all rich people are unhappy.
- (9) All rich people are happy.
- (8) Sheila is happy.

Similarly, according to my analysis of the ironic utterance in (10), the speaker is using *but* in order to lead the hearer to the cognitive effects that would be derived by the sort of person who held the assumption in (13), namely the elimination of (11).

- (10) This is Paul. He's a syntactician, but he's quite intelligent.
- (13) No syntactician is intelligent.
- (11) Paul is not intelligent.

If this is right, then the speaker's use of *but* does not indicate that he presumes the assumptions in (8) and (11) to be manifest to the hearer – at least not as assumptions which she is capable of accepting as true (or probably true) – but only that they are manifest as attributed assumptions. In other words, it seems that what the speaker is assuming in each of these cases is that (72) and (73) are manifest to the hearer.

- (72) Tom believes that Sheila is happy.
- (73) There are people who believe that Paul is not intelligent.

It might be argued that the manifestness of an assumption like (72) might be sufficient for the manifestness of (8). And indeed, the fact that someone believes something to be the case would in some cases be regarded as sufficient evidence for accepting it as true or probably true. However, as we have seen, in an example such as (10) the speaker intends the hearer to recognize that he has

dissociated himself from the use of *but* and hence the inference made on the basis of (13). Moreover, as Sperber and Wilson's (1995) account of irony shows, the success of the irony will depend on whether this attitude of dissociation is one which is shared by the hearer. Hence the speaker of the ironic utterance in (10) cannot be said to presume that the conclusion that would be derived on the basis of (13), namely (11), is manifest to the hearer. On the other hand, it seems that the hearer could be said to presume that (11) is accessible to the hearer in the sense proposed by Ilen (2000b). That is, the speaker's use of *but* in this example is based on his assumption that (13), and, therefore (11), are available to the hearer for consideration in the context. As in the examples in (67) and (68), the hearer is expected to be able to consider what kind of inference would be made if a given assumption were true. In other words, she can be expected to recognize (13) as the conclusion that would be derived by someone who accepted the truth of (11).

4.3 *However and nevertheless*

4.3.1 *The but, however, nevertheless hierarchy*

As Fraser (1990) suggests, the more general the constraint imposed by a discourse connective, the more difficult it is to analyse. Fraser has described *but* as the most general of the contrastive discourse markers in the sense that it 'imposes the least restrictions on the relationship between S2 and the S1 with which it is contrasted' (1990:308). The fact that the already extensive literature on *but* continues to grow would seem to bear this out, as does the fact that my analysis of *but* proposed in 4.2 is the result of many previous attempts. However, if this analysis is right, we can at least link *but* to a specific cognitive effect. Moreover, if this analysis is right, *but* does not encode contrast, as suggested by Fraser. On the other hand, there does seem to be something in the claim that there is a cluster of expressions which are somehow related to *but*, and that of these *but* has the most general meaning. In fact, it seems that one can order at least some of the members of this family of expressions according to their inter-substitutability. Thus it seems that while *but* has the most general meaning in the sense that it can always be used in utterances in which *however* and *nevertheless* are acceptable, *however* and *nevertheless* must be more restrictive since they cannot always be used in utterances in which *but* is acceptable. Moreover, it seems that *nevertheless* must be more restrictive than *however*, since while there are utterances in which both *nevertheless* and *however* are acceptable, there are also utterances in which *however* is acceptable but not *nevertheless*. This is illustrated in the examples in (74–6). While (74) shows utterances in

which all three expressions are equally acceptable, (75) contains examples of utterances in which *but* and *however* are acceptable, but not *nevertheless*, and (76) has examples of utterances in which only *but* is acceptable.

- (74) (a) I am sure she is honest. Nevertheless, the papers are missing.
 (b) I am sure she is honest. But the papers are missing.
 (c) I am sure she is honest. However the papers are missing.

(75) [in response to: Have you got my article?]

- (a) Yes, but the last page is missing.
 (b) Yes. However, the last page is missing.
 (c) Yes. ?Nevertheless, the last page is missing.

(76) [speaker, who is in shock, has been given a whisky]

- (a) But I don't drink.
 (b) ?However, I don't drink.
 (c) ?Nevertheless I don't drink.

I do not want to suggest that the aim of anybody analysing the family of so-called contrastive discourse connectives should be to produce a hierarchy such as this. It is not at all clear that the full range of such expressions could be accommodated in this way. Nor is it clear what this exercise would contribute to the understanding of the roles that these expressions play in the interpretation of the utterances that contain them. However, it does seem that an analysis of the expressions I have mentioned here must account for the sort of facts in (74–6), and that an account of *however*, for example, must explain why it can be used in utterances such as (74c) and (75b) but not in (76b).

As I explained in the first section of the chapter, it is difficult to see how such an explanation could be provided by the analysis of these expressions as semantic constraints on relevance, where these are understood along the lines suggested in Blakemore (1987). For according to this account, expressions which constrain relevance perform this role by encoding constraints on cognitive effects. Thus *so* was analysed as encoding the cognitive effect of contextual implication, *after all* was analysed as encoding the cognitive effect of strengthening, and *but* was analysed as encoding the cognitive effect of contradiction and elimination. However, while this notion may allow us to distinguish between three broad categories of discourse connectives, it does not enable us to capture the fine-grained distinctions in meaning between the range of expressions that fall into each category. If we are to provide an explanation of the facts illustrated in (74–6) within the semantic framework I have proposed, then clearly we must take another look at the notion of a semantic constraint on relevance and ask whether it can be extended to include other information about inferential processes.

4.3.2 however

Fraser (1990) claims that the difference between *but* and *however* lies in the fact that 'whereas *but* signals a simple contrast between S1 and S2 with no particular emphasis on S1 or S2, hence the interchangeability of the segments when the target [of the contrast] is the direct message conveyed by S1', *however* 'signals that S1 is being emphasized, placing the S2 message in a more subordinate role' (1990:313). He goes on to argue that although *but* can be used in all *however* contexts, it will 'be interpreted as emphasizing S2 when it does so' (1990:313).

Since Fraser does not explain what he means by 'emphasis' or 'subordinate', or, indeed, 'simple contrast', it is difficult to say how it enables us to account for the discrepancies between *however* and *but*. As we have seen in 4.2.1, the claim that *but* encodes a symmetric relation of contrast is based on the assumption that it is based on its apparent inter-substitutability with *and* in utterances such as (30c) and (d).

- (30) (c) Anna likes reading and Tom likes tennis. ≠
 (d) Tom likes tennis and Anna likes reading.

However, once these utterances are contextualized it becomes evident that the substitution of *but* results in a different non-symmetric interpretation in which the speaker is signalling that the segment introduced by *but* is relevant by virtue of contradicting an assumption presumed to be manifest (or accessible) to the hearer. In other words, according to this argument, these uses of *but* are as asymmetric as those uses which are generally recognized as asymmetric uses of *but*, namely, the use known as denial of expectation *but* illustrated by Lakoff's (1971) example in (33) (repeated below), and the so-called correction use illustrated in (58) (repeated below).

- (33) John is a Republican but he is honest. ≠
 (33') John is honest but he is a Republican.
 (58) He's not clever, but hardworking. ≠
 (58') He's hardworking, but not clever.

Fraser might want to say that *however* can be substituted for *but* only in its asymmetric uses, thus maintaining his claim that *however* is always asymmetric. However, this would not explain why *however* can be substituted for *but* in its denial of expectation use in (33) but cannot be substituted for *but* in its correction use. Compare, for example (58) and (77).

- (77) ?He is not clever; however, not hardworking.

The fact that (77) cannot be given a correction interpretation might be attributed to the fact that *however*, in contrast with *but*, does not form a co-ordinated structure and hence cannot introduce a clause which has undergone conjunction reduction. However, it seems that it is possible to recover an interpretation from (78), where the absence of an explicit negation rules out a correction reading, and hence that the problem in (77) is that the meaning of *however* is not compatible with a correction interpretation.

(78) He is clever; however, not hardworking.

It will be recalled that there is another use of *but* where it cannot be replaced by *however*, namely, the use which Fraser (1998) calls the protest use, illustrated in (76b) (repeated below).

(76) [speaker, who is in shock, has been given a whisky]

(a) But I don't drink.

(b) ?However, I don't drink.

If it is indeed the case that *but* is a co-ordinator and *however* is not, as suggested above, then this discrepancy might appear odd. However, as Schiffrin (1987) has pointed out, the fact that an expression is classified as a co-ordinator from a syntactic point of view, does not mean that it cannot be used discourse-initially. For instance, neither of the utterances below would be regarded as continuations or interruptions of another speaker's utterance.

(79) [the speaker (a young child) triumphantly presents her mother with flowers] AND I've got you a present.

(80) [speaker finds bunch of flowers and birthday card on doorstep] And I thought she'd forgotten.

Moreover, as I have pointed out elsewhere (Blakemore 1987, 1998), there are other discourse connectives which cannot function as co-ordinators but which are unacceptable if used discourse-initially. For example, while *so* is acceptable in a sequence such as (81), the use of *therefore* is unacceptable.

(81) [driver takes a right turn at an intersection]

PASSENGER: So we're not going past the post office.

PASSENGER: ?Therefore we're not going past the post office.

This would suggest that the discrepancy between (76a) and (b) must be explained in terms of the meanings of *but* and *however*.

It might be argued that the problem in (76b) is not so much that *however* cannot be used discourse-initially, as that it cannot be used to preface an objection

or protest. And indeed, it would seem that its use would be odd in an example such as (82) (adapted from Iten 2000b).

(82) A: We had a very nice lunch. I had an excellent lobster.

B: But what about the money?

B': ?However, what about the money?

However, as (83) shows, it seems that there are acceptable uses of *however* in which it is understood to preface an objection.

(83) A: She's had a very difficult time this semester.

B: However, I think she should hand in at least some of the work.

As we have seen, the fact that *but* can be used in correction utterances such as (58) and objections such as (76a) and (82) can be explained in terms of its analysis as an expression which encodes the information that the speaker is expected to perform an inference which results in the elimination of an accessible assumption. The question is, then, what information does *however* encode that is inconsistent with its use in these cases but is consistent with its uses in examples such as (83) (above), (84) (the *however* counterpart of (33)), (85) (the *however* counterpart of (39)), or the partial answer in (86) (the *however* counterpart of (43)).

(84) John is a Republican; however, he's honest.

(33) John is a Republican, but he's honest.

(85) New York was the windiest city in the United States today; however, Chicago had light winds.

(39) New York was the windiest city in the United States today, but Chicago had light winds.

(86) A: Do all the buses from this stop go to Piccadilly Gardens?

B: The 85 and the 86 do; however, the 84 and 87 go to Cross Street.

(43) A: Do all the buses from this stop go to Piccadilly Gardens?

B: The 85 and the 86 do, but the 84 and 87 go to Cross Street.

As we have seen, the speaker's use of *but* in (33), (39) and (43) activates the procedure of contradiction and elimination so that the relevance of the segment it introduces is understood to lie in the elimination of an accessible assumption, that is, in the elimination of (87) and (88) and (89) respectively.

(87) John is honest.

(88) Chicago had strong winds.

(89) The 84 and 87 buses go to Piccadilly Gardens.

However, in all of these utterances the speaker can also be understood to be communicating information which yields cognitive effects which do *not* involve the elimination of these assumptions. Let us consider them each in turn.

According to the analysis generally given for (33) (for example, Lakoff 1971, Blakemore 1987), the assumption eliminated by the use of *but* is one which is made manifest by the interpretation of the first segment. In other words, the use of *but* in this example is based on the speaker's (possibly mistaken) assumption that the hearer will derive (87) as an implicature from the first segment. However, in contradicting this assumption, the speaker will not be understood to be suggesting that the first segment has no relevance at all. On the contrary, the hearer is encouraged to seek relevance in a different direction, and in this sense receives the speaker's guarantee that the information that John is a Republican is relevant in some other way.

As we have seen in 4.2.1, the interpretation of (39) is slightly different in that the eliminated assumption in (88) is not one that is presumed to have been derived as an implicature from the first segment. It is simply an assumption that is presumed to be part of the hearer's encyclopaedic knowledge, perhaps triggered by the mention of winds in the first segment or simply by the mention of Chicago (in the context of a weather report). However, while it cannot be assumed that the hearer will have derived (88) as an implicature from the first segment, it can be assumed that she will have derived other information from it and on this basis judge it to be relevant. In other words, the speaker can be understood to be communicating her assumption that this segment will have relevance that does not involve the elimination of (88).

According to the analysis given in 4.2.2, the point of the *but* segment in (43) is to indicate that the assumption underlying the hearer's enquiry, namely, that all the buses leaving from the bus stop are headed for the same destination, is mistaken, and hence that there is not a single 'yes' or 'no' answer to her question. However, as I observed, it could be argued that the elimination of (89) could be achieved simply by the utterance of the first segment, particularly if this were uttered with a contrastive intonation. In this case, then it would seem that the second segment does not achieve relevance in a way that is not already achieved by the first. However, even if this were the case, the relevance of the first segment is not exhausted by the elimination of (89). On the contrary, the speaker may believe it is relevant by virtue of the fact that the hearer will now know that there are two buses which go to Piccadilly Gardens, and that the 85 and the 86 buses are the ones she should get should she want to go there.

In other words, in all these three cases, the cognitive effect which according to the arguments of 4.2 is activated by *but* is activated in a context in which the speaker has achieved relevance in a way which does not involve the same

cognitive effect, or in other words, in which the total relevance achieved by the speaker is not exhausted by the elimination of a single accessible assumption. While this happens to be the case in (33), (39) and (43), it is not the case either in the objection use of *but* in (76a) and (82) or the correction use in (58).

(76) [speaker, who is in shock, has been given a whisky]

(a) But I don't drink.

(82) A: We had a very nice lunch. I had an excellent lobster.

B: But what about the money?

(58) He's not clever, but hardworking.

The fact that the intended relevance of the utterance in (76a) is exhausted by the elimination of the assumption in (90) is self-evident: the speaker has not communicated any other information which could achieve relevance in another way.

(90) The speaker of (76a) can be expected to drink the whisky that is being offered.

The same is true of (82). However, it is also true of (83), where *however* is acceptable.

(83) A: She's had a very difficult time this semester.

B: However, I think she should hand in at least some of the work.

This would suggest that the fact that the speaker has not communicated information which he judges to be relevant in a way which does not involve the elimination of the assumption in (91) is beside the point.

(91) She does not need to hand in any work.

Rather, the point is that whereas in (82) B will be taken to be suggesting that the information communicated by A is of no relevance at all, in (83) he will be taken to be suggesting that the information that has been communicated by A has some relevance, or in other words, that he has accepted the guarantee of relevance communicated by A. In other words, the hearer is intended to recognize that the context includes assumptions whose relevance comes with a guarantee that is accepted by the speaker, and whose cognitive effects do not include the elimination of (91).

The speaker of (58) has, of course, communicated information which, in principle, could achieve relevance in a way that does not involve the elimination of (92).

(92) He is clever. (= 62)

For example, from the information that he is not clever, the hearer might derive the assumption that he will not pass the examination he is about to sit. However, as I argued in 4.2.3, when this information is communicated in an utterance such as (58) – that is, an utterance with a reduced second clause – the hearer is encouraged to assume that the cognitive effect activated by *but* in the interpretation of the segment it introduces and the cognitive effect that the speaker intends her to derive from the first segment are one and the same. In this respect, the correction example in (58) must be distinguished from the counterfactual example in (68).

(68) I would have liked to go on holiday this year, but I couldn't afford it.

For although the falsity of (93) is made manifest by the first segment, it is evident this segment does not itself achieve relevance as a correction and that the speaker can be interpreted as having communicated information which he believes is relevant in a way that does not include the elimination of (93).

(93) I went on holiday this year.

In other words, this utterance, in contrast with (58), satisfies the conditions for the acceptable use of *however*. Hence the acceptability of (94):

(94) I would have liked to go on holiday this year; however, I couldn't afford it.

The fact that *but* can be used both in utterances such as (33), (39), (43) and in utterances such as (76a) and (58) suggests that it cannot be said to encode any information about the contexts in which the effect of contradiction and elimination is achieved. This is in line with the analysis in 4.2. Moreover, it is in line with the assumption underlying my original account of semantic constraints on relevance, namely, that they are restricted to information about cognitive effects. However, the fact that *however* is acceptable in utterances such as (33), (39), (43) and (83), but not in utterances such as (76a) or (58), would suggest that it does not simply encode the information that the hearer is expected to follow an inferential route which results in the contradiction and elimination of an accessible assumption *A*, but also that there is a restriction on the context in which this cognitive effect is derived. Specifically, it restricts the recovery of this effect to contexts which include assumptions which carry a guarantee of relevance accepted by the speaker and whose cognitive effects do not include the elimination of *A*. If this is right, then the notion of a semantic constraint on relevance must be broadened to incorporate constraints on contexts as well as constraints on cognitive effects.

4.3.3 nevertheless

The analysis of *nevertheless* must not only account for its unacceptability in objections such as (76c) and (95) or corrections such as (95), but also a range of utterances in which both *but* and *however* are acceptable, for example (96–9).

(76) [speaker, who is in shock, has been given a whisky]

(c) *But/?Nevertheless* I don't drink.

(95) A: I had a very nice lunch. I had an excellent lobster.

B: *But/?Nevertheless* what about the money?

(96) He's not clever, *but/?nevertheless* hardworking.

(97) A: Do all the buses from this stop go to Piccadilly Gardens?

B: The 85 and the 86 do, *but/however/?nevertheless* the 84 and 87 go to Cross Street.

(98) [mother's response to hungry child's request for food]

There's a pizza in the fridge, *but/ however/?nevertheless* leave some for tomorrow.

(99) I've just received a copy of Anne's latest paper. *But/ However/?Nevertheless* it's in French.

The key to the meaning of *nevertheless* will be found in whatever it is that distinguishes these utterances from the ones in which *nevertheless* is acceptable, for example, the ones below:

(74a) I am sure she is honest. Nevertheless, the papers are missing.

(100) A: She's had a very difficult time this semester.

B: Nevertheless, she should hand in at least some of the work.

(101) It is natural that learners in the early stages of learning should feel a need to stay firmly in familiar territory. Nevertheless, the unpredictable nature of much communication is a feature of naturally occurring language, and teachers have a responsibility to gradually expose learners to such language and enable them to develop strategies which will help them cope.

[from a typescript on communicative methods in language teaching originally cited in Blakemore 2000]

Yorick Wilks (personal communication) has suggested that *nevertheless* is distinguished from *but* by the fact that it is a rhetorical device or that it is appropriate in rhetorical contexts. This does not amount to an analysis of *nevertheless*, for there are many expressions and constructions which have been described as 'rhetorical' – for example, epizeuxis (or repetition) or so-called rhetorical questions – but whose contribution has very little to do with the one made by

nevertheless. Nevertheless, it seems that this suggestion may point us in the right sort of direction.

Let us return to the paragraph you have just read, where the last sentence is prefaced by *nevertheless*, and ask what was going on here. It is, I presume, mutually manifest that I am attempting to ask the question, 'What is the meaning of *nevertheless* and how is it different from the meaning of *but*?' Given this context, I am further assuming that I am justified in thinking that you will recognize that my aim in describing an answer suggested by someone else was to raise the question, 'Is this suggestion tenable?', or, in other words, that this question is not simply mutually manifest but highly accessible. Moreover, I am assuming that the utterance following my representation of this suggestion (that is, the second sentence of the paragraph) will be interpreted as suggesting that the answer to this question is, 'No, it is not tenable.' In other words, my use of *nevertheless* in the final sentence of the paragraph was based on the assumption that the preceding utterance communicated an answer to a mutually manifest (and highly accessible) question. It is this answer, of course, which is contradicted and eliminated by the utterance introduced by *nevertheless*. In other words, having given you one answer to a question which I assumed was mutually manifest, I then gave you another which contradicted it.

You are, of course, justified in thinking that I have set you up. On the other hand, I believe that what I have just described will be recognized as a typical example of a *nevertheless* context. (Moreover, I believe that it will enable us to explain the sense in which *nevertheless* operates as a rhetorical device.) Let us return to the acceptable uses of *nevertheless* in (74a), (100) and (101).

The fact that the speaker of (74a) (repeated below) is reassuring the hearer that he does not doubt the honesty of the woman referred to suggests that it must be understood as part of a dialogue in which the question of the woman's honesty has arisen, if not explicitly, implicitly. This reassurance could be taken to suggest that the missing papers had nothing to do with this woman. However, this suggestion is contradicted by the *nevertheless* segment, and the speaker will be understood to be suggesting that while he is not accusing the woman of dishonesty, he is accusing her of having something to do with the loss of the papers.

(74a) I am sure she is honest. Nevertheless, the papers are missing.

Similarly, (100) (repeated below) can be understood as part of a dialogue in which the participants are discussing the question of whether a student should be absolved from the course requirements regarding assessed work. A's contribution could be interpreted as a reason for waiving the rules entirely, a suggestion which is contradicted by B.

- (100) A: She's had a very difficult time this semester.
B: Nevertheless, she should hand in at least some of the work.

Notice that the discussion of these examples has not assumed that the question whose answer is being contradicted by the *nevertheless* segment is one that is posed explicitly in the preceding discourse. This may be the case, of course. But it is equally acceptable for it to be a question which is inferred by the hearer on the basis of contextual assumptions and the principle of relevance. Thus the writer of the passage in (101) (repeated below) will be understood to be addressing the question raised by the utterance which preceded it, namely (102).

- (102) Inexperienced language learners often express fears about jumping into conversations in a foreign language because they fear the unexpected.
(101) It is natural that learners in the early stages of learning should feel a need to stay firmly in familiar territory. Nevertheless, the unpredictable nature of much communication is a feature of naturally occurring language, and teachers have a responsibility to gradually expose learners to such language and enable them to develop strategies which will help them cope.

For example, this question could be taken to be 'How should teachers deal with language learners' fear of the unexpected', and the answer suggested by the first segment of (101) could be 'they should protect them from unexpected problems'. As in the previous examples, this answer is contradicted by the segment introduced by *nevertheless*.

Within the framework of speech act theory (see Searle 1969, Bach and Harnish 1979), it is not clear how the utterance introduced by *nevertheless* in these examples could be regarded as an answer to a question. For according to this account, questions are requests for information, and hence must be posed explicitly. As we shall see in the following chapter, the phenomenon of implicit questions is not restricted to utterances involving *nevertheless*. For example, the second segment of (103) can be understood as an answer to a WH question (for example, 'Why?') which has been raised by the first.

- (103) She's going back to France next week. Her contract has expired.

For these phenomena, it seems that we need not an account of what it means for a speaker to produce an utterance which has a particular kind of illocutionary

force, but rather an account of what it means for someone to have a particular kind of thought.

In fact, as Sperber and Wilson (Wilson and Sperber 1988, Sperber and Wilson 1995) point out, not all interrogative utterances are requests for information: consider, rhetorical questions, expository questions, examination questions, speculative questions, for example. They argue that within relevance theory it is possible to give a unitary account of interrogative utterances in terms of the notion of *interpretive use* (Sperber and Wilson 1995:224–31). For Sperber and Wilson, there is a basic sense in which every utterance is an interpretation: it is a public representation of a private representation, that is, a thought. The relationship between the propositional form of an utterance and the thought it represents is not one of identity, but rather of resemblance, so that literal resemblance is a limiting case rather than the norm. Hence the possibility of metaphor, for example.⁸ Whereas in cases of descriptive language use, the thought interpreted is entertained as a description of a state of affairs (the one which would make it true), other utterances must be analysed as interpretations of thoughts which are themselves interpretive representations of other thoughts. Ironic utterances, varieties of reported speech, fall within this category. And so do interrogative utterances. However, while ironic utterances and reported speech are interpretations of thoughts which are interpretive representations of attributed thoughts, an interrogative utterance is an interpretation of a thought which is a representation of a thought which the speaker believes to be *desirable* – that is, relevant – to someone (not necessarily herself). In other words, the thought interpreted by an interrogative utterance is a representation of an answer which the speaker believes would be relevant to someone if true. Since this thought is not necessarily a representation of an answer which is relevant to the speaker, this analysis is able to account for interrogative utterances which are not requests for information. And since this thought is not necessarily a thought which is publicly represented by an utterance, this analysis, in contrast with the speech act theoretic one, is also able to account for implicit questions.

Returning to *nevertheless*, we can now say what it means to say that the utterance introduced by *nevertheless* is understood as an answer to a question which has been raised (explicitly or implicitly) by the preceding discourse or which has been made relevant through the interpretation of the preceding discourse. An utterance *U* is relevant as an answer to a question if there is a mutually manifest assumption in the context which is an interpretation of some desirable proposition *p* and *p* is communicated (explicitated or implicated) by *U*.

⁸ For a fuller discussion of this, see Sperber and Wilson (1985/6), Sperber and Wilson (1995:231–7).

My suggestion is that not only is the utterance introduced by *nevertheless* relevant in this way but it is relevant as an answer in a context which includes a contradictory assumption which is relevant as an answer to the same question.

While this is invariably the case for utterances prefaced by *nevertheless*, utterances containing *but* and *however* may be acceptable in contexts which do not satisfy this condition. Recall the example in (97), where the use of *nevertheless* is unacceptable.

- (97) A: Do all the buses from this stop go to Piccadilly Gardens?
 B: The 85 and the 86 do, but/however/?nevertheless the 84 and 87 go to Cross Street.

For *nevertheless* to be acceptable the second segment would have to be construed as an answer to a question in a context which includes a contradictory answer to the same question. The problem is that while it can be construed as communicating information which is relevant as an answer to a question which is answered by the first segment, namely, the one asked by A, it cannot be interpreted as contradicting the answer communicated by the first segment. As I argued in 4.2.2, this segment suggests that the 85 and the 86 are the only buses from the stop that go to Piccadilly Gardens.

In (98) (repeated below), the first segment is relevant as an answer to the child's question, 'Is there anything to eat?' While the second segment eliminates the assumption that might have been derived from the first, namely, that the child can eat all of the pizza, the effect of this is not to contradict the answer to this question. There is still something for the child to eat. Nor is it possible to construe the first segment as an answer to the question 'Can I eat the whole pizza?'

- (98) [mother's response to hungry child's request for food]
 There's a pizza in the fridge, but/however/?nevertheless leave some for tomorrow.

Examples (75) and (99) (repeated below) can be explained in the same way.

- (75) [in response to: Have you got my article?]
 (a) Yes, but the last page is missing.
 (b) Yes. However, the last page is missing.
 (c) Yes. ?Nevertheless, the last page is missing.
 (99) I've just received a copy of Anne's latest paper. But/ However/?Nevertheless it's in French.

These differences seem to suggest that while the use of *nevertheless* is linked to the cognitive effect of contradiction and elimination, it also encodes a restriction on the contexts in which this effect is recovered. At the same time, the fact that *nevertheless* cannot always be substituted for *however* suggests that this restriction cannot be the same as the one encoded by *however*. As we have seen, *nevertheless* is acceptable only in contexts in which there is an assumption whose truth is an issue, or in other words, in contexts in which the elimination of the assumption amounts to accepting one answer (the speaker's) rather than another. It is in this sense that *nevertheless* operates in a rhetorical context.

This account of the differences between *but*, *however* and *nevertheless* is in line with the suggestion made by Blass (1990) that a discourse connective may have a cluster of functions some of which may be shared by other connectives. Thus while the function of contradiction and elimination is shared by all these expressions, *however* and *nevertheless* have additional functions which are not encoded by *but*. The point is that these additional functions must be defined in terms of restrictions on the contexts in which the cognitive effect of contradiction and elimination is achieved, and hence that the notion of a semantic constraint on relevance is more complex than the one proposed in my earlier work (Blakemore 1987). However, it is more complex in a way which is consistent with the cognitive theory from which it derives. As I argued in the previous chapter, the possibility of procedural encoding is a consequence of the fact that the inferential phase of utterance understanding involves the construction and manipulation of conceptual representations. Since the results of this phase of understanding depend not only on the activation of particular inferential routes (for example, contradiction and elimination or independent strengthening), but also on the activation of contextual assumptions, it seems reasonable to assume that the information encoded by a linguistic expression or construction may activate either an inferential route or a particular kind of context or, indeed, both.

4.4 *Well*

4.4.1 *The elusiveness of well*

Over the course of this chapter I have given the impression that *but* has received more attention than any other English expression classified as a discourse marker. However, this impression requires qualification. While *but* may be the favourite among those philosophers and linguists who are interested in the question of how non-truth conditional meaning can be accommodated in a theory of meaning, linguists with an interest in the role that these expressions play in

discourse are more interested in *well*. Thus *well* not only features in more general accounts of discourse connectives or markers (for example, Halliday and Hasan 1976, Schiffrin 1987, Bolinger 1989, Fraser 1990), but it has also been the focus of a range of papers (for example, Murray 1979, Owen 1981, Watts 1989, Jucker 1993 and Schourup 2001) and, indeed, a book (Carlson 1984). One could speculate on the reasons for semanticists' relative lack of interest in *well*, which is, after all, non-truth conditional in the same way as any of the expressions analysed as conventional implicatures. The popularity of *but* may derive from the fact that it contrasts with truth functional *and*. However, it is not entirely clear why *well* does not feature alongside expressions such as *so*, *therefore* or *however* in discussions of conventional implicature. One possibility is that in contrast with these expressions, it is impossible to say what *well* conventionally implicates. As we shall see below, the meaning of *well* is frustratingly elusive and appears to change with each of its uses. Another possibility is that *well* is regarded as a species of interjection that has more in common with expressions such as *ouch* or *hm* or *oh*. And indeed, as we shall see, it has been claimed that *well* is allied with interjections (see Schourup 2001).

In this section I do not aim to give a comprehensive review of the (expanding) literature on *well*. However, in order to locate my own proposal for the analysis of *well* in this research, I shall discuss examples of what I take to be two broad trends. Whereas for some writers, *well* signals that something has gone wrong with the discourse, or, in other words, that things are *not well*, for others, it signals that all *is well*. As we shall see, what is *well* or not *well* is spelt out in a variety of ways. For example, while both Schiffrin (1987) and Jucker (1993) analyse the use of *well* in terms of a signal that something is not *well*, Schiffrin sees it as a signal that the speaker has diverged from *coherence*, while Jucker sees it as a signal that the speaker has diverged from *relevance*. Similarly, while Bolinger (1989) and Carlson (1984) take the use of *well* to indicate the speaker's acceptance of something, Bolinger takes this to be the acceptance of a norm (which may vary from situation to situation), while Carlson takes it to be the acceptance of a move in a dialogue game.

My analysis of *well*, developed in 4.4.4, could be said to follow in the steps of Carlson and Bolinger rather than Schiffrin and Jucker in that it claims that *well* encodes the information that the utterance it introduces is consistent with the principle of relevance, and hence that things are *well*. However, in contrast with both Bolinger and Carlson, I shall argue against the semantic identity of the discourse marker *well* and the adverb *well*. In particular, I shall argue that while the adverb encodes a constituent of a conceptual representation, the discourse marker encodes a procedure. At the same time, however, I shall show

that the kind of procedural information encoded by *well* must be distinguished from the sort of information which is encoded by *but*, *nevertheless* and *however*, and hence that the analysis of *well* shows that the notion of procedural meaning must be considerably broader than the one introduced in 4.1, where it is tied to the activation of a particular cognitive effect or a particular inferential route.

As we have seen, the existence of expressions (such as *but* or *so*) which activate a particular inferential route is justified by the communicative principle of relevance: they ensure the recovery of the intended cognitive effects for a minimum cost in processing. However, it is difficult to see why there should be an expression which indicates relevance when, according to relevance theory, every utterance (or more generally, every act of ostensive communication) communicates a presumption of its own optimal relevance in any case. I shall argue that the answer to this question lies in the communicative principle of relevance itself, and that this also provides the explanation for Schourup's (2001) observation that the use of *well* must be tied to the speaker rather than the hearer.

As Jucker (1993) has observed, the elusiveness of *well* derives from the range of purposes it seems to serve in different contexts. Thus for example, it can preface both questions (e.g. (104)) and answers to questions (e.g. (105)).

- (104) PASSENGER: A £1.20 return please.

BUS-DRIVER [after failing to get the ticket machine to work several times]: Sorry, it's a brand-new machine and it's playing up.

PASSENGER: Well, what do I do?

- (105) A: How long have you two been married?

B: Well, actually we're not.

In an argument it may introduce a counter-argument (e.g. (106)), a direct denial (e.g. (107)), or an utterance which communicates concessive dissent (e.g. (108)).

- (106) – A dog is capable of great loyalty. In order to develop his own character to the best advantage he needs an outlet for that affection, for that feeling of loyalty. Linda looked at him thoughtfully. – Isn't the same true of a woman? she asked. – I wouldn't know. I've never been a woman. – You've never been a dog, she retorted. – Well, he told her, I've studied dogs. – All right, she said, with an amused smile. You win.

(Gardner, *The Case of the Musical Cow*, cited in Carlson 1984:43)

- (107) – It seems to me an excellent plan. – Well, I disagree. Holder-Watts sounded sulky.

(Moyes, *Black Widower*, cited in Carlson 1984:42)

- (108) A: Anna's much taller than Verity.

B: Well, she is two years older.

Speakers can use *well* in both defensive responses (e.g. (109)) and diffident responses (e.g. (110)).

- (109) A: Why did you accept the money?

B: Well, I couldn't see any reason why I shouldn't.

- (110) A: Would you like to stay to dinner?

B: Well, that would be lovely. Are you sure?

It can appear in (antagonistic) refusals (e.g. (111)) and in a consent to a request (e.g. (112)).

- (111) Jack flushed. – We want meat. – Well, we haven't got any meat ...

(Golding, *Lord of the Flies*, cited in Carlson 1984:45)

- (112) A: Mum, can I go down to the park with my roller-blades?

B: Well, I don't see why not.

Speakers may use it to correct wording (e.g. (113)) or a strategy (e.g. (114)):

- (113) This programme is not for the fainthearted. Well, it's not about the fainthearted anyway.

(Radio 4, 26 July 2000)

- (114) A: Can I phone you later?

B: I won't be in.

A: Well, can I e-mail you then?

Within a single contribution, *well* can be used by a speaker whose form of words is a less than faithful representation of what he thinks (e.g. (115)), or by a speaker who is emphasizing a point (e.g. (116)), or by a speaker who has felt the need to establish that his reference to an individual has succeeded (e.g. (117)).

- (115) A: What do you think of my dress?

B: It's very, well, colourful.

- (116) A: It must be rather disturbing when your cat goes around spraying all the time, though, mustn't it?

B: It's not so bad if it's a female that's spraying, but if you have a good tomcat that's spraying, well, it can empty the room, it can empty the house.

(from Watts 1989:51)

- (117) Do you remember Tom? Well, he's just bought a motorbike.

On its own, it can be used (with the appropriate intonation) as a question (e.g. (118)), or to indicate astonishment or surprise (e.g. (119)), or to indicate the speaker's reluctance to say anything at all (e.g. (120)).

- (118) [hearer returns after finding out examination results]
Well?
- (119) [someone has just left the room after losing their temper]
Well. [intonation fall]
- (120) A: Have you done the essay?
B: Well. [intonation rise]

And then, of course, there is the double *well well* indicating mild curiosity, and the cliché associated with (British) policemen, *well, well, well*.

4.4.2 well = 'all is not well'

Some treatments of *well* have not aimed to find a unitary explanation for all these uses. For example, Lakoff (1973) restricted her analysis to the use of *well* in question-answer exchanges. She argued that *well* is used by a speaker in an answer to a question if he 'senses some sort of insufficiency in his answer, whether because he is leaving it to the questioner to fill in information on his own or because he is about to give additional information himself' (1973:463). Thus the speaker of (121B) (adapted from Lakoff 1973:459) would be taken to be suggesting that his answer is not a complete answer on its own (presumably because he believes that there were extenuating circumstances).

- (121) A: Did you kill your wife?
B: Well, yes.

Similarly, *well* can be used in response to a question to which the hearer does not have the complete or precise answer.

- (122) A: How long is she going to be away?
B: Well, I'm not exactly sure. About three weeks.
- (123) A: Are you from Wellington?
B: Well, I was born there.

As Lakoff observed, the insufficiency in some cases is not always attributed to the utterance prefaced by *well*, but is felt by the user of *well* to have occurred in the utterance or action to which his utterance is a response (1973:463). This seems to be the case in the question-answer exchange in (105) above, where B's inability to give a straightforward answer derives from the fact that A has incorrectly assumed that B and his partner are married. However, it is also the case in other types of exchanges. Recall, for example (108), where B's response indicates that A's assumption that there is something remarkable about the fact that Anna is taller than Verity is incorrect. And in (104), where *well* introduces a

question, the passenger seems to be suggesting that the bus-driver's explanation is insufficient in that it does not help her understand what she is expected to do in the situation.

However, Lakoff's notion of insufficiency is too narrow to accommodate other uses of *well*, for it is invariably insufficiency of *information*. Although the speaker of (110B) (repeated below) could be said to be communicating his recognition that there is something inadequate about his answer to A's invitation, this could not be described in terms of a failure to give 'the information sought' (see Lakoff 1973:458).

- (110) A: Would you like to stay to dinner?
B: Well, that would be lovely. Are you sure?

Within a coherence-based approach to discourse (see chapter 5) the notion of insufficiency may be unpacked in terms of a failure to achieve coherence, or at least a failure to achieve coherence in a way that is anticipated by the hearer. Thus Schiffrin (1987) argues that '*well* anchors the speaker precisely at those points where upcoming coherence is not guaranteed' (1987:126) or that *well* is appropriate precisely at those points when 'the coherence options offered by one component of talk differ from those of another' (1987:127). In this way, the use of *well* constitutes evidence for the claim that speakers are alive to the need to achieve coherence and that hearers' understanding of utterances depends on their recognition of the 'coherence option' that the speaker has chosen. For according to this approach, the assumption underlying the use of *well* is that any divergence from coherence must be marked by the speaker.⁹

We will be examining this approach to discourse and discourse understanding in more detail in the following chapter. Here it is sufficient to say that Schiffrin seems to assume that each conversational move or utterance is governed by the requirement to produce an utterance which is coherent in the sense that it stands in an identifiable coherence relation with the preceding discourse, and that there is at each stage a menu of possible coherence relations to choose from, or in other words, a number of different means of achieving coherence. Moreover, it is assumed that the coherence relation chosen in a particular case (the coherence option) is determined in some (unspecified way) by the previous discourse. Thus *well* is used when the speaker chooses a continuation which diverges from the expectations set up by the preceding discourse.

⁹ As we will see in chapter 5, it has been argued more generally that all interruptions can be accounted for within a coherence-based framework in this way (see for example Tsui 1991).

The problem is that *well* can be used to introduce an utterance which is *not* a continuation of preceding discourse. For example, it is possible to open a conversation with the utterance in (124).

(124) Well, what would you like to do today?

Or consider (125), produced in a situation in which speaker and hearer are leaving a building after having failed to get the information they require:

(125) Well, that wasn't much help.

Moreover, as we have seen, *well* can be used as a fragment either within a discourse or discourse-initially. Recall (118–19):

(118) [hearer returns after finding out examination results]
Well?

(119) [someone has just left the room after losing their temper]
Well. [intonation fall]

Since there is no preceding discourse in any of these examples, it seems impossible to analyse *well* as encoding the information that the utterance it prefaces is not coherent in a way which is consonant with the expectations set up by the preceding discourse.

It has been argued that these utterance-initial uses of discourse connectives can be explained by saying that they connect the utterance with an imagined utterance (see, for example, Knott and Dale 1994). However, as Schourup (2001) points out, it seems that in many instances the speaker would be regarded as responding to a non-verbal situation rather than an imagined utterance. This certainly seems to be the case in (125), as it is in Schourup's example in (126), produced by a speaker who has just opened the bedroom curtains.

(126) Well, isn't it beautiful outside.
(Schourup 2001:1027)

In any case, it is extremely difficult to see how this defence could work in the case of fragmentary utterances such as (118–19).

Oddly, Jucker's (1993) relevance theoretic analysis is subject to the same sort of criticisms. I say 'oddly' because Sperber and Wilson's (1995) notion of relevance is not exclusively a property of verbal stimuli. Nor can it be construed as a relation between utterances or segments of a text. An utterance is relevant in a context of assumptions which may include assumptions derived through perception or assumptions derived from memory. However, Jucker claims that '*well* signifies that the most immediately accessible context is not the most

relevant one for the interpretation of the impending utterance' (1993:435) and hence that the hearer is expected to 'reconstruct the background against which he can process the upcoming utterance' (1993:438).

As Schourup (2001) points out, it may be possible to reformulate Jucker's proposal in terms which do not refer to successive utterances. And indeed, Jucker seems to do this himself when he claims that '*well* indicates that the addressee has to reconstruct the background against which he can process the upcoming utterance' and that 'what seems to be the most relevant context is not appropriate' (1993:428). However, as we have just seen, sometimes there is no upcoming utterance. Perhaps more fundamentally, it seems that not all uses of *well* indicate that there is something inadequate or insufficient about the utterance it prefaces, and hence that neither Schiffrin's coherence-based approach nor Jucker's relevance theoretic one provides a fully comprehensive account. For example, in (117) (repeated below) the relevance of the first segment lies in the way it makes a particular context accessible for the interpretation of the second. More particularly, it ensures that the referent of *Tom* is accessible.

(117) Do you remember Tom? Well, he's just bought a motorbike.

It is difficult to see how *well* could be interpreted as signalling that the hearer is to renegotiate this context: the context made accessible by the first segment simply *is* the context for the interpretation for the next. By the same token, it is difficult to see how the second segment diverges from expectations of coherence set up by the first.

Similarly, it is not clear that the hearer is being asked to renegotiate the context in an utterance such as (127), produced in a situation in which the audience are all sitting expectantly waiting for a well-known person to begin her lecture:

(127) Well, as you all know, our speaker today is ...

Nor is it clear how Jucker (or, indeed, Schiffrin) would analyse the use of *well* in Schourup's example in (128):

(128) A: What's 221 divided by 13?

B: Um, let me think ... OK, that's 17.

A: How did you work it out?

B: Well, first I divided 13 into 22. Then I subtracted the remainder, and that left 9.

A: Then I ...

(Schourup 2001:1053)

As Schourup says, the pupil's answer is an earnest one, designed to do the question justice, and hence there seems to be no sense in which he would regard it as insufficient.

4.4.3 well = 'all is well'

Bolinger (1989) and Carlson (1984) give a range of examples which they claim are evidence against the view that *well* encodes insufficiency of some kind. Although their analyses are couched in very different kinds of theoretical frameworks, they both argue for an analysis in which the meaning of the discourse marker *well* is related to its meaning in adverbial uses such as the one in (129).

(129) She did very well at school this year.

Thus Bolinger (1989) argues that the only difference between the meaning of *well* as it is used in (129) and the meaning of *well* as its discourse marker uses is that in these latter uses its meaning has been 'transferred from the locutionary sphere ("relatively good, relatively strong") to the illocutionary sphere ("matched to a standard or a norm")' (1989:332). The norms which Bolinger has in mind are not norms governing discourse or communication, but range from norms of behaviour to norms in the physical world. Thus, for example, while he glosses the use of *well* in examples such as (130) as 'In view of the normal state of affairs, this bowl's me over', he analyses its use as a prompt in examples such as (131) in terms of its role in invoking a norm of proper behaviour.

(130) Well, I never, look who is here.

(131) Well?

In contrast, Carlson analyses *well* as signalling the speaker's acceptance of a move in a *dialogue game*, or in other words that things are well or acceptable in the sense that the utterance provides an acceptable strategy for continuing the dialogue. Hence his rule 'Begin a dialogue move with *well* only if you accept a game situation in which the move is entered' (1984:29). Carlson's use of the word 'game' is not intended to be metaphorical: his analysis derives from an approach to discourse analysis in which conversation is reconstructed as a game in the sense of the mathematical theory of games (Carlson 1983). He conceives of this game as having an epistemic aim: it involves 'a number of players, engaged in a co-operative dialogue on antecedently agreed problems or topics of interest (represented as direct questions in their minds) and who are trying to come to a common understanding about epistemically optimal answers to the questions by means of observation, inference and exchange of opinion' (1984:6). While strategies in an idealized game situation are determined only by

a number of internal aims which Carlson captures in a number of conversational maxims (e.g. 'Accept only what is true', 'Prefer agreement among players', 'Do not admit contradiction' and 'Prefer a short dialogue'), in a real-life dialogue strategies are also affected by external motivations such as ulterior preferences and plans, hopes and fears, likes and dislikes. It is the conflict between the idealized and the real, the internal aims and the external aims which, according to Carlson, gives rise to the use of *well*. For such conflict causes a break in the conversational routine, an aberration from the expected path of optimal play (see Carlson 1984:30), and it is this which motivates the use of *well*.

To say that the use of *well* is motivated by an interruption to the conversational routine is not to say that it *encodes* the information that all is not well. According to Carlson, *well* simply encodes the information that the speaker finds the game situation acceptable, and the fact that the game situation is less than optimal falls out as a conversational implicature. His argument is that since there is nothing to be gained by commenting on the acceptance of a game, the use of *well* would violate the maxim of least effort ('Prefer a short dialogue'). This implies that when *well* is used, the audience is justified in asking what calls for the extra effort. The answer, according to Carlson, is a situation in which acceptance of a game situation is problematic or in which 'someone or something causes an aberration from the expected path of optimal play' (1984:30). Thus while *well* encodes acceptance, it is motivated by either acceptance of a sub-optimal game situation or acceptance of an exceptional game situation.

In this way, argues Carlson, the use of *well* enables the speaker to draw attention to the features of the game situation which are problematic or defective while allowing him to continue the play. For example, in (108) (repeated below) B's use of *well* enables him to draw attention to the fact that A's utterance is based on contextual assumptions which should have included the information that the two girls are not the same age.

(108) A: Anna's much taller than Verity.

B: Well, she is two years older.

Alternatively, a player may wish to shift the topic, transfer his turn to another player, or close the dialogues, situations which, according to Carlson, 'deserve exceptionally careful evaluation, which makes them natural contexts for *well*' (1984:31).

While I believe that Carlson is right to distinguish between what *well* encodes and what motivates its use, I do not believe that his general approach to discourse can be maintained. In particular, it is not clear that discourse is always directed towards antecedently agreed problems or questions of interest. Indeed, it

is not clear that we can always identify the direction of a discourse at all. If the overall aim of a discourse or dialogue were to find an answer to an antecedently agreed question or set of questions represented in the minds of the participants in the discourse, then these questions would be part of the context for the interpretation of the discourse. However, as Sperber and Wilson (1995:15–21, 39–46) have shown, the context for the interpretation of utterances is not set up in advance but constructed as part of the interpretation process so that it becomes a result of interpretation rather than a prerequisite for it (see also Blakemore 1992:16–22).

Carlson might argue that this is simply an example of the way in which real-life discourse diverges from idealized discourse. However, the assumption that actual discourse can be regarded as something that happens by default raises some difficult questions. If actual discourse is the result of diverging from the internal aims or rules which define the ideal, then we would need to know what constitutes an acceptable divergence from the ideal, or in other words, what constrains the speaker's strategy when external factors intervene. For the point is that not every break in the conversational routine is acceptable. Applying this to the use of *well*, we need to know what makes an utterance containing *well* an acceptable means of failing to meet the ideals set by the rules governing the game.

4.4.4 *well* and optimal relevance

In this section, I shall argue that the key to the analysis of *well* lies in the communicative principle of relevance itself. In contrast with Jucker's (1993) relevance theoretic account which argues that *well* encodes *deviation* from optimal relevance and hence is an instruction to renegotiate the context, this account will propose that the information it encodes amounts to a green light for going ahead with the inferential processes involved in the recovery of cognitive effects, and the renegotiation of the context may be, but is not always, a consequence of interpreting the utterance in accordance with the constraint which *well* encodes. In this way, this account, in contrast with Jucker's, is consistent with the fundamental relevance theoretic assumption that the communicative principle of relevance is an exceptionless generalization about ostensive inferential communication rather than a norm which people either follow or violate. As Sperber and Wilson (1995) say,

communicators do not 'follow' the principle of relevance; and they could not violate it even if they wanted to. The principle of relevance applies without exception: every act of ostensive communication communicates a presumption of

relevance. It is not the general principle, but the fact that a particular presumption of relevance has been communicated by and about a particular act of communication, that the audience uses in inferential communication. (1995:162)

In contrast, Grice's (1989) and Carlson's (1984) maxims are norms which although they are generally followed, are sometimes violated to achieve a particular effect. In analysing *well* as a means of indicating that optimal relevance has not been achieved, Jucker (1993) is treating Sperber and Wilson's principle more like a Gricean maxim.

As I explained in chapter 3, in saying that the principle of relevance is an exceptionless generalization about ostensive inferential communication, Sperber and Wilson are not saying that the presumption of relevance communicated is never false. Speakers may be mistaken about the contextual and processing resources of hearers, and as a result the utterances they produce may fail to be optimally relevant. The point is that hearers are able to form beliefs about speakers' beliefs about what their audiences would find relevant, or in other words, that hearers are able to use the presumption of relevance communicated by a particular utterance in its interpretation even when it is false. Of course, if a speaker has a particularly poor record as a communicator, the hearer may not bother attending to the utterance at all. However, even poor communicators communicate on the assumption that they are being optimally relevant.

If the principle of relevance is an exceptionless generalization and every act of communication communicates a presumption of its own optimal relevance, then why should a speaker use an expression to indicate that the utterance that contains it is optimally relevant? The answer to this question can be found in the communicative principle of relevance itself, and, more particularly, in the definition of optimal relevance. So let us return to this principle and recall what it entitles a hearer to expect. As Sperber and Wilson (1995:271) point out, since a hearer will not pay attention to an utterance at all unless it achieves a level of relevance which makes it worth paying attention to, a rational communicator must intend the hearer to expect a level of relevance at least as high as this. This is encapsulated in the first clause of the (1995) definition of the presumption of optimal relevance:

(132) *Presumption of optimal relevance*

- (a) The ostensive stimulus is relevant enough for it to be worth the hearer's effort to process it.

At the same time, however, a rational communicator will know that the hearer will not invest the effort needed for comprehension unless he achieves a degree

of relevance much higher than this. This means that it is to the communicator's advantage that the hearer should expect that the level of relevance should be as high as possible both on the effect side and the effort side. If this were the only consideration, then a hearer would be entitled to expect an utterance which yielded the maximum number of cognitive effects for the minimum amount of processing effort. However, it is not, of course, the only consideration. Hearers know that speakers are not always in a position to produce the utterance which is maximally relevant to the hearer. They are not able to give information that they have not got or that they feel they should not give (for ethical or legal reasons, for instance). Nor are they always capable of producing an utterance in the most hearer-friendly manner possible. In other words, speakers are constrained by what Sperber and Wilson (1995) describe as their own abilities and preferences. In other words, according to Sperber and Wilson, 'it is necessary for the first clause of the presumption of optimal relevance [given in (132a)] to be manifest to the addressee, and it is advantageous for the second clause [given in (132b)] to be manifest too' (Sperber and Wilson 1995:271-2).

(132) *Presumption of optimal relevance*

- (b) The ostensive stimulus is the most relevant one compatible with the speaker's abilities and preferences.

Since (132) encapsulates a fact which is known to every communicator and every hearer, it follows that 'whenever a communicator makes it mutually manifest that she is trying to communicate by means of a given stimulus, she thereby makes it mutually manifest that she intends a presumption of relevance is communicated' (Sperber and Wilson 1995:272).

The question, then, is why should a hearer who is not expecting maximal relevance but optimal relevance find it relevant to know that the speaker is not aiming at maximal relevance? At first, it seems that, broadly speaking, the presumption of relevance allows for two kinds of answer, and, consequently a distinction between two uses of *well*, the first deriving from the speaker's estimation of the hearer's processing abilities and the second deriving from the speaker's recognition of the constraints on his own capacities. However, this distinction becomes difficult to maintain when we come to look at actual cases in detail, which is not surprising once one recognizes that in a relevance theoretic framework the responsibility for ensuring successful interpretation lies with the speaker and hence that any constraints on the processing abilities of the hearer become the speaker's problem.

However, let us for the moment treat the two types of case separately. According to the second clause of the presumption of relevance, the hearer can

expect the speaker to have produced the most relevant utterance compatible with his preferences and abilities. For the purposes of this discussion, let us forget the fact that the level of relevance attempted may be affected by the speaker's preferences and capacities and consider what it means for a speaker to produce an utterance which is the most relevant one for the hearer. In particular, let us consider what would count as the most relevant utterance from the point of view of the effort that the hearer is expected to expend in the derivation of cognitive effects. Since the cost of processing an utterance increases with the cost of accessing the context required for the derivation of the intended cognitive effects, it is in the interests of a speaker aiming to maximize relevance to produce an utterance whose cognitive effects can be derived in a context which he has grounds for thinking is immediately accessible to the hearer. It might be the case that he has grounds for thinking that this context is already accessible to the hearer or that his utterance will trigger highly accessible assumptions. Indeed, it might be the case that the speaker has ensured that these assumptions are accessible to the hearer by making them accessible, for example, by jogging her memory about an individual or event which the speaker believes may have been forgotten:

(133) Remember Tom?

On the other hand, it might be the case that although the speaker has grounds for thinking that assumptions about Tom are now amongst the hearer's immediately accessible assumptions, there may be reasons for thinking that the hearer recognizes that they are intended to play a role in the derivation of the cognitive effects that she is intended to derive from a following utterance. It may be that a question such as (133) is taken as a genuine request for information. Or it may be that the hearer has no idea of why the preparatory utterance was produced in the first place. Or it may be that the speaker is not sure that even with the preparation, the hearer is able to derive the intended effects. In such a case, it would be in the speaker's interests (and of course, in the hearer's interests) to signal that the following utterance is relevant in the context which has been made accessible. Hence the use of *well* in (117) (repeated below).

(117) Remember Tom? Well, he's just bought a motorbike.

In other words, *well* is being used to encourage the hearer to process the utterance for relevance in a context which the speaker believes would not have otherwise yielded a maximally relevant interpretation.

It seems that this kind of account can accommodate those cases which Carlson (1984:51) classified as 'transition' uses, in which *well* plays a role in 'easing

recognition of the resulting topic shift'. Hence its use in Watts' example in (116) and the planned reformulation in (113) (repeated below).

(116) A: It must be rather disturbing when your cat goes around spraying all the time, though, mustn't it?

B: It's not so bad if it's a female that's spraying, but if you have a good tomcat that's spraying, well, it can empty the room, it can empty the house.

(from Watts 1989:51)

(113) This programme is not for the fainthearted. Well, it's not about the fainthearted anyway.

(Radio 4, 26 July 2000)

However, it is also able to accommodate cases where the speaker has grounds for believing that the context required for the interpretation of the information he wants to communicate is not accessible to the hearer at all. Recall for example (104):

(104) PASSENGER: A £1.20 return please.

BUS-DRIVER [after failing to get the ticket machine to work several times]: Sorry, it's a brand-new machine and it's playing up.

PASSENGER: Well, what do I do?

It seems that in this case, the use of *well* derives from the passenger's belief that while she was aware of the driver's predicament (and hence the reason for his apology), the driver had not addressed her own problem, namely, how was she to travel to (and home from) work without a ticket. In other words, *well* signals that her question is relevant, but only on condition that the driver turns his attention from his problem to hers.

The analysis of examples such as (104) provides a clue to the role of *well* in interrogative fragmentary utterances such as the one in (118) (repeated below).

(118) [hearer returns after finding out examination results]
Well?

It is possible, of course, that the hearer was bursting to tell the speaker the results. However, the use of *well* signals that the speaker believes that the hearer was not aware of the speaker's desire to know the result, or, in other words, that the hearer did not recognize that the answer to the implicit question was relevant. As Bolinger (1989:312) points out, this use of *well* can be insulting in certain situations. Thus in Bolinger's example, a waiter who addresses a patron with an 'unadorned' *well?* seems to suggest that the patron was not aware of the waiter's desire to know what he wanted to order and hence that the waiter should not

have had to ask. Alternatively, the speaker might be taken to be asking whether there is anything at all that the hearer could say that the speaker would find relevant.

Although the passenger may have taken the driver's utterance in (104) as evidence that he did not have the contextual assumptions necessary for understanding her problem, it is not necessarily the case that she was intending to suggest that he should have had them. This does, however, seem to be the speaker's intention when *well* is used in arguments and disagreements. For example, in (108) (repeated below) B evidently believes that A's utterance is relevant only if she believes that there is little or no difference in age between the two girls.

(108) A: Anna's much taller than Verity.

B: Well, she is two years older.

In this way, the use of *well* could be said to encourage the hearer to recognize a contextual assumption which the speaker believes that she should have recognized was relevant but did not. Similarly, in the examples given by Carlson (1984), the use of *well* in arguments and counter-arguments is intended to signal that the utterance is relevant as a premise in an argument which the hearer had failed to recognize on her own. Recall (106):

(106) – You've never been a dog, she retorted. – Well, he told her, I've studied dogs. – All right, she said, with an amused smile. You win.

(Gardner, *The Case of the Musical Cow*, cited in Carlson 1984:43)

So far all of the cases seem to conform to Jucker's (1993) observation that *well* is used when the hearer is expected to renegotiate the context. However, in each case this 'renegotiation' is a consequence of the hearer's recognition that the speaker is aiming at optimal relevance. As we have seen, the speaker's assumption that his utterance is relevant to the hearer is based on his estimation of the hearer's contextual resources. However, this does not mean that optimal relevance is achieved only when the required contextual assumptions are among the assumptions already entertained by the hearer. It means that the speaker's estimation of what is relevant to the hearer depends on what assumptions are manifest to her, or, in other words, on what assumptions the hearer is capable of entertaining at a given moment. In some cases, the required assumptions may be among the assumptions in the hearer's memory; in other cases, they may be triggered by the utterance itself; in some cases the speaker may have to make them manifest to the hearer. Strictly speaking, there is no negotiation of the context – and hence no renegotiation either. The speaker simply takes

the responsibility for the success of the communication either by producing an utterance which yields the intended cognitive effects in a context of assumptions which the hearer is capable of entertaining or by reorienting the hearer to a context of assumptions which will yield the intended interpretation. Those cases which Jucker has described in terms of the renegotiation of contextual assumptions are better described in terms of reorienting hearers for the purpose of achieving optimal relevance. However, as Carlson (1984) recognized, one must draw a distinction between what justifies the use of *well* and what it encodes. What it encodes is the information that the utterance is relevant. What justifies its use – in the utterances just discussed – is the speaker's belief that certain assumptions are not manifest to the hearer.

In fact, as we have seen, there is a whole range of cases in which the use of *well* is *not* motivated by the speaker's desire that the hearer 'renegotiate' the context. These are cases in which the speaker recognizes that the level of relevance that he can achieve is affected by constraints that he himself is under. Recall that according to the second clause of the presumption of optimal relevance, the hearer is only entitled to expect a level of relevance that is consistent with the speaker's preferences and abilities. If the presumption of optimal relevance is mutually manifest to speaker and hearer as Sperber and Wilson (1995) argue, it can be assumed that it is mutually manifest to speaker and hearer that the hearer's expectations of relevance must take the speaker's capabilities and preferences into account. At the same time, however, it cannot necessarily be assumed that it is mutually manifest that the level of relevance attempted on a particular occasion has been affected by the speaker's own preferences and capabilities and hence that the utterance is not the one which the speaker believes would have been maximally relevant to the hearer. Since an utterance which is not maximally relevant for the hearer will entail processing effort not required otherwise and since it is always in the speaker's interests to minimize the hearer's processing costs inasmuch as this is compatible with his interests and preferences, it will be in the speaker's interests that the hearer should know that the level of relevance attempted has been constrained by the speaker's preferences and capabilities.

Perhaps the most straightforward illustration of how *well* plays a role here are cases such as (122), where B takes A's question as evidence that he would find it relevant to have a more precise specification of the time she is going to be away than he is able to provide.

- (122) A: How long is she going to be away?
B: Well, I'm not exactly sure. About three weeks.

As Lakoff's example in (121) shows, it is possible to use *well* even when the utterance appears to be the one which the hearer would find the most relevant.

- (121) A: Did you kill your wife?
B: Well, yes.

However, the use of *well* leads the hearer to derive further assumptions which, while they are not relevant from the hearer's point of view, are relevant if one takes the speaker's preferences into account (in this case, the desire to demonstrate he is not a cold-blooded killer). In this way, the hearer is led to entertain assumptions (about the circumstances of B's behaviour) which he would not have derived had the speaker simply answered 'Yes'.

Clearly, there is a wealth of difference between morality and tact. However, it seems that the use of *well* in examples such as (110) is also motivated by the speaker's wish to communicate that his answer is to be interpreted as being constrained by a preference for not wishing to impose himself on his hosts.

- (110) A: Would you like to stay to dinner?
B: Well, that would be lovely. Are you sure?

In the same way, the use of *well* in (115) allows the speaker to communicate doubts about the dress which would not have been communicated by the response in (B').

- (115) A: What do you think of my dress?
B: It's very, well, colourful.
B': It's very colourful.

Here it is evident that B's answer is a rather less than frank representation of his thoughts. A frank answer (for example, 'It's gaudy and tasteless') would, of course have achieved far more cognitive effects and hence would have been the most relevant one from the hearer's point of view (by virtue of being the least welcome). The choice of the word *colourful*, which generally has positive connotations, was presumably determined by a desire to appear polite or perhaps to avoid an argument. At the same time, however, the use of *well* indicates that his choice of answer has been constrained by his own preferences and capabilities – in this case, his preference to seem polite – and, as a result, A will know that in spite of the use of a word with positive connotations, B has doubts about the dress.

Schourup (2001) has argued that an utterance containing *well* can only be interpreted as a representation of the speaker's own thoughts, and that in this sense *well* 'ties an utterance they preface to the current speaker' (2001:1041).

Thus for example, he claims that whereas in (134) B's utterance must be understood as representing his own thought and not as an attempt to 'ventriloquize' A's, in (135) B can be understood as 'filling in' A's thought.

- (134) A: I never miss a day's illness.
 B: Well, you deserve a longer vacation.
 (135) A: I never miss a day's illness.
 B: So you deserve a longer vacation.

(Schourup 2001: 1041)

As (136) and (137) show, Schourup's point here cannot be that *well* cannot be used in an utterance which achieves relevance as an attributive representation of another speaker's thought. In (136) the hearer is expected to recognize the proposition expressed as an attributive representation on the basis of contextual assumptions and the principle of relevance, while in (137) the speaker makes his intentions explicit.

- (136) A: What did the report have to say about her?
 B: Her performance is rather, well, amateurish.
 (137) The report said that her performance was quite, well, amateurish.

However, notice that while both B's response in (136) and the utterance in (137) are relevant as a representation of another person's thoughts or utterance, the use of *well* cannot itself be interpreted as being attributed to anyone other than the speaker. The fact that it is used before the word *amateurish* seems to suggest that its role is to comment on the particular contribution of this word to the relevance of the utterance.¹⁰ Thus its use might have been motivated by the fact that the speaker's decision to use *amateurish* as a representation of the report's judgement was governed less by his aim of producing a faithful representation than by his aim of finding a diplomatic representation. Alternatively, it might have been motivated by his desire to ensure that the hearer recognizes that this is the report's word and not his. In contrast, as we have seen in 4.1 and 4.2, the meanings of *so* and *but* may be included in what is being attributed to another speaker. Recall (3) and (4).

- (3) Tom thinks that Sheila is rich but unhappy. But I have always thought that all rich people are unhappy.
 (4) Peter thought that Mary had a holiday, so he should have one too.

¹⁰ Schourup (2001: 1038) points out that *well* is unique among adverbial discourse connectives in being able to 'focus down' on the choice of a particular word or phrase.

As I have argued, in these utterances the speaker's use of *but* and *so* indicate that he is attributing a certain inference to someone in the sense that the cognitive effects that they activate are to be attributed to someone other than the speaker. The question is, why can't *well* be used in this way?

The answer lies in the fact that in contrast with *so* and *but*, *well* does not activate a particular cognitive effect but simply encodes the speaker's guarantee that his utterance yields cognitive effects.¹¹ An utterance may be relevant as an interpretation of someone else's thought or utterance. Moreover, it may yield cognitive effects which are relevant as an interpretation of the assumptions derived by another speaker. However, a speaker cannot be expected to guarantee the optimal relevance of another person's utterance or thoughts. The guarantee of relevance communicated by a speaker can only be a guarantee of relevance for his own utterance. As we have seen, this guarantee is communicated by any speaker who is manifestly engaged in ostensive inferential communication. However, a speaker may recognize that there are circumstances in which his utterance will be recognized as being consistent with the principle of relevance only if certain assumptions which are manifestly not manifest to the hearer are made manifest. These may be assumptions which the hearer uses in the derivation of cognitive effects, or they may be assumptions about the speaker's interests and preferences. Since it is in the speaker's interests that the hearer take up the guarantee of relevance he is communicating and invest effort in the derivation of cognitive effects, it will be in his interests in such circumstances for him to provide a linguistically encoded signal that there are cognitive effects to be derived, or, in other words, that all is well.

Well could be regarded as a signal simply in the sense that it provides a green light for the hearer, a sign to go ahead with the inferential processes involved in the derivation of cognitive effects. Considered in this way, it would contribute to implicit content along with *but*, *however* and *so*, but in a far more general

¹¹ Schourup (2001) notes that although *so* and *well* share a prompting use in (i) and (ii), there is an important difference in the way they are interpreted.

- (i) A: I learned three new words today.
 B: So?
 (ii) A: I learned three new words today.
 B: Well?

Whereas in (i) B will be understood to be asking A what follows from her remark (see Blakemore 1992:139), in (ii) B will be understood to be asking for the three words. This difference is explained if *so* is understood to be activating a particular cognitive effect (contextual implication), and *well* is understood to signal that B would find the answer to the question raised by A's utterance (what are the three words?) relevant.

sort of way. On the other hand, it could be regarded as a signal in the sense that it activates a higher-level explicature of the form in (138).

- (138) The speaker believes *U* is relevant (where *U* is the utterance containing *well*).

Schourup (2001) has proposed that in contrast with *so* and *but*, *well* contributes to explicatures. However, he analyses it as contributing to an explicature of the form in (139), and is in this way suggesting that it behaves as a kind of illocutionary particle.

- (139) The speaker is saying with consideration *p* (where *p* is the proposition expressed).

Schourup admits that this is only a vague characterization of what is conveyed. And, indeed, the problem is that as it stands, it is difficult to see how such an explicature would contribute to the relevance of the utterance, or, more generally, how the hearer is expected to gain from its recovery. As I hope I have shown in this section, there are circumstances in which there is much to be gained by a signal from the speaker that his utterance yields a level of relevance consistent with the guarantee communicated by every act of ostensive inferential communication. Given such a signal, the hearer will make whatever assumptions are required in order to recover an interpretation consistent with this guarantee. However, whether this is a signal in the sense that it leads a hearer to entertain a higher level explicature of the form in (138), or whether it simply amounts to a kind of go-ahead sign, requires further research. Whichever it is, it is clear that *well* does not encode a procedure in the same way in which expressions such as *but*, *however*, *after all* and *so* do, and hence that the notion of procedural meaning must be broader than the one that we started with at the beginning of this chapter.

5 *Relevance and discourse*

5.1 The location of discourse on the theoretical map

As I have said in my introduction, this book is about the two properties which have brought discourse markers into the forefront of pragmatics research. On the one hand, expressions classified as discourse markers are said to be non-truth conditional, which means that they play a role in discussions of the non-truth nature of linguistic meaning and the relationship between semantics and pragmatics. On the other, they are generally claimed to signal connections in discourse, which means that they play a role in the discussion of how we account for the unity of discourse. So far the emphasis has been on the first property. However, the section on *well* (4.4) should have reminded us that I have yet to discuss the second.

In fact, it seems that discussions of the non-truth conditionality of discourse markers rarely make reference to their role in discourse, while discussions of role in discourse rarely include an investigation of their non-truth conditionality. Indeed, it seems that some writers whose concern is with their analysis within a discourse perspective classify expressions as discourse markers in a way which cuts across the distinctions that we have been discussing in the previous chapter. For example Knott and Dale (1994) include within their list of expressions they call *cue markers* both truth conditional expressions (for example, *because*, *and*, *then*) and expressions which are regarded as non-truth conditional (for example, *but*, *furthermore*, *hence*). The same point can be made about Schiffrin's (1987) list of discourse markers, which includes both truth conditional and non-truth conditional expressions. For Fraser (1990, 1996), discourse markers are always non-truth conditional. However, like Knott and Dale and Schiffrin, he includes in his list expressions which, according to the criteria outlined in chapter 3, encode concepts (for example, *as a result*) and expressions which encode inferential procedures (for example, *however*, *so*).

It would seem that the framework I have proposed for the analysis of expressions such as *after all*, *so*, *but*, *however*, *nevertheless* and *well* is guilty of similar

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