

**RELEVANCE THEORY AND THE SEMANTICS OF NON-DECLARATIVE
SENTENCES.**

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ABSTRACT

Wilson and Sperber (1988a; Sperber and Wilson 1986) have proposed semantic analyses of declaratives, imperatives and interrogatives which are based on the notion of "a direct semantic link between linguistic form and representations of propositional attitude". They claim, however, that the various syntactic structures encode "procedural" rather than "conceptual" information. Rather than encoding concepts which appear in representations of propositional attitude (or what Sperber and Wilson call "higher-level explicatures") they convey information about how to proceed in recovering such representations.

This thesis is an attempt to extend this analysis to some constructions which have not been explicitly discussed by Wilson and Sperber, to consider the differences between this approach and some alternatives, and to question the status of the notion of a "sentence type", which has often been assumed in analysing the various syntactic structures. Some evidence is provided that certain lexical items also encode procedural information about propositional attitudes, and the role of intonation in utterance-interpretation is also discussed.

This analysis is based on relevance-theoretic assumptions about semantics and pragmatics. Chapter one presents the general approach to semantics assumed by relevance theory and shows how Wilson and Sperber's proposal fits into this framework.

Chapter two is concerned with the proposed semantic analysis of imperatives. This analysis is extended to some "pseudo-imperatives": forms consisting of the conjunction or disjunction of an imperative and a declarative clause, which have often

been treated as conditionals. An analysis of imperative-like constructions containing let or let's is also proposed. This analysis can be extended to related forms containing may.

Chapter three is concerned with the semantic analyses of interrogatives and exclamatives proposed by Wilson and Sperber. This approach is extended to some constructions which seem to resemble interrogatives in some ways and exclamatives in others. The relationship between grammar and intonation is also discussed. Tonal structure can also be seen as encoding procedural information.

Chapter four contrasts this approach with alternatives which treat illocutionary force or mood as semantic categories. Wilson and Sperber's approach is more successful than the alternatives and suggests reasons for their inadequacy. A straightforward account of the relationship between form and force, and the interpretation of utterances which have been said to perform "indirect speech acts", follows from Wilson and Sperber's proposal.

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CHAPTER ONE: RELEVANCE AND SEMANTIC THEORY

1.1 Introduction

This thesis is concerned with the semantic analysis of sentences like the following:

- (1) a. (John) you are calm.
- b. (John) be calm!
- c. (John) are you calm?

Clearly, there are certain aspects of the meanings of (1a-c) which they all share: they are all about the individual John and the property of calmness and about the possibility of a relationship between the two. However, it is also clear that they are not synonymous. A natural way of describing the differences would be to say that the speaker of (1a) is stating that John is calm, the speaker of (1b) is telling John to be calm, and the speaker of (1c) is asking whether John is calm. While an adequate theory of the semantics of English sentences must account more formally for both the similarities and the differences between (1a-c), it has proven extremely difficult for any particular semantic theory to do so.

Interest in non-declarative sentences like the imperative (1b) and the interrogative (1c) has tended to focus on them as a problem for truth-conditional semantic theories. It has been claimed that truth-conditional approaches only work for declaratives like (1a). Thus, we can give the meaning of (1a) by stating under what conditions it would be true, e.g. that it is true in all possible worlds where the individual denoted by the name John has the property of calmness. However, we cannot state such conditions for

sentences like (1b-c). They do not describe states of affairs and so we cannot describe the conditions under which the states of affairs they describe would hold.

A common way of attempting to resolve this problem is to say that the three sentences share the same propositional content but that they differ in some other way. On such a view, at least the propositional content of the sentences would be amenable to truth-conditional semantic treatment. However, it has proven extremely difficult to characterise the differences in a satisfactory way. Certain theorists, for example, have suggested that (1a-c) differ in their illocutionary force or illocutionary force potential, i.e in the speech acts that they are capable of performing when uttered (see, for example, Searle 1969, 1975b, 1979; and papers in Searle, Keifer and Bierwisch 1980). Others have postulated that the three sentences differ in semantic mood (see, for example, Davidson 1979; Hare 1970; McGinn 1977; for survey see Lyons 1977, vol.2 16.2, 16.3). The mood of the sentence then interacts with pragmatics to determine the force of an utterance on a given occasion. Neither of these approaches seems wholly satisfactory. Their shortcomings will be examined in more detail in chapter four below.[Fn.1]

Wilson and Sperber (1988a; see also Sperber and Willson 1986) propose to account for the differences between these sentences in terms of "a direct semantic link between linguistic form and representations of propositional attitude" (Wilson and Sperber 1988a: 86). As they have shown, their proposal works well for a wide range of declarative, imperative and interrogative sentences. In this thesis I want to examine this proposal in more detail. In chapters two and three I attempt to extend it to constructions not explicitly discussed by Wilson and Sperber. In chapter four I consider the

differences between Wilson and Sperber's approach and the alternatives. I will argue not only that Wilson and Sperber's proposal is more successful, but also that it suggests reasons for the lack of success of the alternatives. In this chapter, I focus on the general assumptions on which Wilson and Sperber's proposal is based.

The questions I am concerned with are essentially semantic rather than pragmatic. However, I will assume throughout that the semantic analyses proposed will interact with a relevance-theoretic account of pragmatic processes. In the remainder of this chapter, I want to give an outline of the approach to utterance- interpretation in general, and to linguistic semantics in particular, assumed by relevance theory. My aim is to show how the semantic analyses of English declaratives, imperatives and interrogatives proposed by Wilson and Sperber fit in to this overall approach.

In section 1.2 I discuss the assumptions Sperber and Wilson make about the relationship between semantics and pragmatics. I show how they propose to account for the fact that linguistic expressions greatly underdetermine the content ascribed to them by hearers (what Kempson (forthcoming) calls the "underdeterminacy thesis") by postulating two distinct kinds of semantic theory: "linguistic semantics", which relates linguistic expressions to mental representations, and "real semantics", which relates mental representations to their truth-conditions. In section 1.3 I discuss how the principle of relevance, and the criterion of consistency with the principle of relevance, account for ostensive communication in general and utterance-interpretation in particular. On this approach, one way of looking at the task of pragmatic theory is to say that it must account for how hearers get from the small amount of content encoded in linguistic

forms to the much richer representations recovered in the process of utterance-interpretation. The criterion of consistency with the principle of relevance governs this process. In section 1.4 I outline the distinction drawn by Sperber and Wilson between descriptive and interpretive representation. This distinction plays an important role in the relevance-theoretic account of communication and cognition in general, as well as in the semantic analyses of interrogatives and exclamatives discussed below. In section 1.5 I look at relevance-theoretic assumptions about linguistic semantics and focus on the distinction between the encoding of conceptual and procedural information (as discussed by Wilson and Sperber 1990 and Blakemore 1987). Wilson and Sperber claim that what is encoded by declarative, imperative and interrogative syntax is procedural rather than conceptual information. In section 1.6 I introduce the semantic analyses of declaratives, imperatives and interrogatives which are the starting point of this thesis. In the next section, I begin by looking at the view of the relationship between semantics and pragmatics which Sperber and Wilson assume.

1.2 Linguistic "Semantics" and "Real" Semantics

One of the most important assumptions made by relevance theory is that natural language expressions (i.e. surface linguistic forms) vastly underdetermine the content which hearers ascribe to utterances of them. Thus, the expressions in (2) are open to a wide range of interpretations:

- (2) a. He did.
- b. There's a bat in the cupboard.

c. John was a martyr.

When any of (2a-c) are uttered, there are many tasks which the hearer will have to perform in order to arrive at the intended interpretation. For example, the hearer of (2a) has to work out who the speaker intended he to refer to and what the ellipsed material might be. In (2b) the hearer has to work out which sense of the ambiguous form bat is intended. In (2c) the hearer has to decide whether the proposition expressed is a literal or less-than-literal representation of the thought the speaker wishes to convey (for example, the speaker of (2c) might be speaking metaphorically). In each case, there is the possibility that the speaker is reporting someone else's thoughts or being ironical. Further, any implicatures the hearer might derive are subject to indefinite variation depending on which contextual assumptions he brings to bear. [Fn.2]

All of the linguistic forms in (2) are capable of expressing more than one proposition. However, even the forms in (3), which are not so obviously vague, are open to a wide range of interpretations:

- (3) a. Whales are mammals.
- b. War is war.
- c. A brother is a brother.

(3a) might be taken to express a unique proposition as it stands, and (3b-c) express necessary truths, but the hearer in each case has to work out which subset of the vast set of assumptions which can be inferred from them the speaker actually intended him to recover. The main relevance of (3a) might depend on its implicating that there are mammals that live in the sea, or that someone who thinks that whales are a kind of fish

is wrong, and so on. (3b) might be intended to remind the hearer that war is terrible and that he should not be surprised at some particularly unpleasant aspect of it, or that he should not complain about food shortages in wartime, and so on. (3c) might implicate that the hearer should lend his brother some money, or that he should forgive his brother for not repaying a loan, and so on. (For further discussion of the kinds of underdeterminacy exhibited by linguistic expressions, see Wilson and Sperber 1986a, 1986b).

In order to account for how hearers get from what is semantically encoded by the linguistic expressions to what is actually intended on a particular occasion of utterance, Sperber and Wilson (1986), following Fodor (1975, 1983), assume the existence of two distinct kinds of semantic theory, with a pragmatic theory mediating between the two. (For further discussion within relevance theory see Sperber and Wilson 1986; Blakemore 1987; Carston 1988, forthcoming. For more general discussion see Fodor 1975, 1981a, 1983, 1987, 1990). "Linguistic semantics" is concerned with what is encoded by particular linguistic expressions. Pragmatic processes are involved in enriching the output of linguistic decoding until the hearer arrives at the intended interpretation of the utterance. "Real semantics" provides semantic interpretations for the propositions conveyed. [Fn.3]

Thus, linguistic semantics describes what is encoded by a linguistic expression like (4):

- (4) John won the cup.

which might be (simplifying to some extent) that someone referred to by the name John won some cup at some time. A pragmatic theory has to explain how the hearer recovers the actual, intended interpretation on the basis of this, which might be that John Smith has won the London Pub Quiz Championship Cup in 1990. Real semantics associates this proposition with its truth-conditions.

Relevance theory also follows Fodor (1983) in assuming that the mind is modular. In particular, it is assumed that there is a linguistic "input system" which takes "transduced" acoustic or visual representations as input and gives as output conceptual representations in "mentalese" or what Fodor (1975) calls the "language of thought". In reasoning, the central cognitive system manipulates conceptual representations regardless of their source (i.e. whether derived from a previous reasoning process or an input system, and if the latter regardless of which input system). Thus, the central system has access to information recovered through sight, hearing, smell, touch, taste, memory or from previous central inferential processes. Although input systems are "informationally encapsulated" in that they have access to data from only a limited domain, central processes are "global", having free access to conceptual information derived from any source. (Thus, this approach provides a straightforward answer to what Jackendoff (1987: xii) calls "the fundamental question of how we manage to talk about what we see"). This view of cognitive architecture gives rise to Sperber and Wilson's view that utterance-interpretation consists of two phases: a modular, decoding phase which is within the domain of theories of linguistic semantics, and a central, inferential phase which is within the domain of pragmatic theories.

Sperber and Wilson observe that linguistic expressions vastly underdetermine their real-semantic content. In Fodorean terms, the claim is that the language-of-thought expressions which constitute the output of the linguistic system are semantically incomplete (i.e. are not capable as they stand of being true or false). These incomplete conceptual representations are termed "logical forms" by Sperber and Wilson. Semantically complete logical forms (i.e. those which are capable of being true or false) are termed "propositional forms". Thus, one task of the hearer in interpreting an utterance is to enrich (inferentially) the logical form derived by linguistic decoding until it is fully propositional: to recover the propositional form of the utterance.

In (2a), for example, the logical form which the hearer can recover via linguistic decoding has only minimal semantic content, perhaps signifying that some male entity has done something:

- (2) a. He did.

In order to understand the utterance, the hearer will have to use this incomplete logical form to recover a fully propositional form. This will involve finding a referent for the pronoun he and deciding what the ellipsed material might be. Some conceivable propositional forms (though, for simplicity, I have missed out time references) are given in (5):

- (5) a. John Smith passed his driving test.
b. Fred Brown paid for a round of drinks.
c. Alan Jones went to the zoo. [Fn.4]

However, recovering the propositional form of the utterance is only one of the hearer's tasks. He must also decide how the speaker thought this propositional form would be relevant: does it represent a belief of the speaker's or of someone else? Is the speaker being ironical? Is the propositional form of the speaker's thought identical to that of the utterance or is the relationship less close? (Some of these questions concern the speaker's attitude to the proposition expressed. This is central to the present thesis but I will postpone further discussion at this point.) Also, the hearer must work out the implicatures of the utterance. This involves integrating the propositional form with contextual assumptions, accessing certain of its analytic and contextual implications, and deciding which of these the speaker intended the hearer to derive. Thus, if the propositional form is (5a) and the hearer accesses the contextual assumptions in (6) the implicatures of the utterance might include those in (7):

- (6) a. If John passed his driving test, he is happy.
- b. If John passed his driving test, he will start driving to work.
- c. If John is happy, he will lend me five pounds.
- (7) a. John is happy.
- b. John will start driving to work.
- c. John will lend me five pounds.

Assuming that (5a) and (6)-(7) all express complete propositions, they can then be semantically interpreted, i.e. assigned truth-conditions. This is the concern of real semantics. Following the assumptions of "methodological solipsism" (Fodor 1981a)

Sperber and Wilson assume that semantic interpretation is not itself a mental process.

The overall picture is represented in Figure 1:

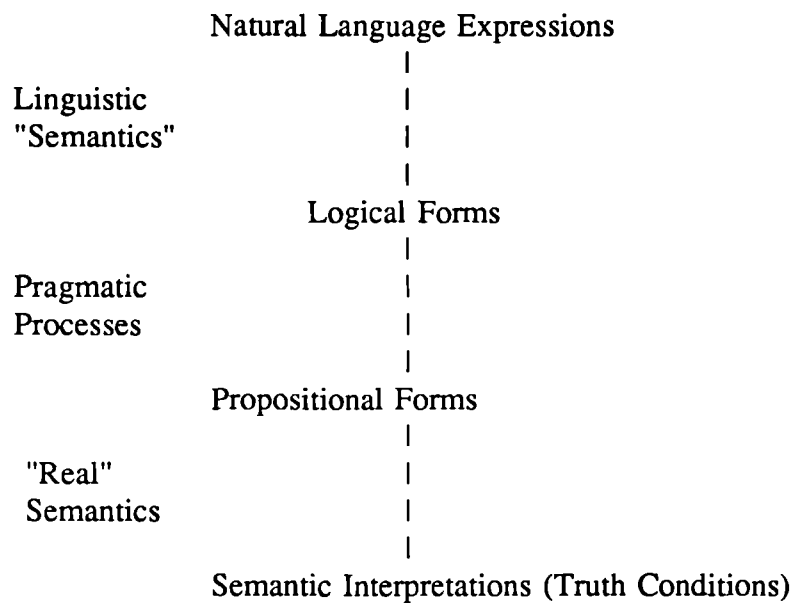


Figure 1

(Although not explicitly mentioned on this diagram, both logical and fully propositional forms may be derived from other logical and propositional forms via inferential processes). On this view, then, linguistic semantics is concerned with the (coded) relationship between natural language expressions and their logical forms. Pragmatics is concerned with the (inferential) relationship between these logical forms and the overall interpretation of the utterance (consisting of the proposition expressed plus some representation of the speaker's attitude to it plus any implicatures derived). Real semantics is concerned with the truth-conditional interpretation of propositions, i.e. with the relation of mental representations to the states of affairs they represent.

The inverted commas in linguistic "semantics" and "real" semantics reflect a disagreement between certain truth-conditional semanticists and certain cognitive theorists about what the term "semantics" may legitimately refer to. The issue is mainly terminological but Sperber and Wilson's view on this terminological issue is theoretically motivated. The issue arises because certain truth-conditional theorists, notably Lewis (1970), would object to the use of the term "semantics" to describe Sperber and Wilson's brand of linguistic semantics, which is purely translational: it takes expressions in one language (a natural language) as input and gives expressions in another language (the language of thought) as output. On the other hand, Sperber and Wilson might object to the use of the term "real" to describe truth-conditional semantics, because it suggests that other kinds of semantics, for example translational varieties, are not real. Incidentally, there is a sense in which "real" semantics is not real, according to Sperber and Wilson: they claim, following Fodor's (1981a) assumptions of "methodological solipsism", that the semantics of mental representations are not psychologically real. On this view, truth-conditional semantic interpretation is not a psychological process which individuals perform in comprehending utterances. Rather it is a theoretical means of characterising the content of mental representations. I want to conclude this section by discussing Lewis's claim that purely translational semantics is not semantics.

Linguistic semantics is concerned with what is actually encoded by linguistic expressions. It involves translation from representations in a natural language to representations in the language of thought. As such, it falls within the range of

approaches which Lewis (1970) attacked as merely "markerese". For him, "semantics" is a term which applies only to theories which account for the relationship between language and the world. It is arguable that truth-conditional theories are currently the only theories which seem likely to provide an account of this relationship. Thus, Lewis suggests that "semantics with no treatment of truth-conditions is not semantics" (Lewis 1970: 18); and, if he is right, it is odd to refer to a translational theory as a semantic theory.

However, according to Fodor (1975: 119-122) this objection is "true, but...a little beside the point". He draws attention to the fact that any semantic theory which formalises meanings in a symbolic system is only useful to the extent that its users understand the language in which the representations are phrased. While it is true that translation from one language into another is only useful if we know the meanings of the expressions in the target language, Fodor's claim is precisely that the only language for which any of us actually know the meanings is the language of thought. Before we can understand an expression, even in our first natural language, we have to translate it into our internal, private language. Responding to Lewis's claim that translating English into a canonical representation is no better than translating English into Latin, he says that this argument:

...is unlikely to impress a Latin speaker who wants to know what some or other English sentence means. A mere translation scheme is just what his case requires. Now, we have been supposing that the nervous system "speaks" an internal language which is neither English, nor Latin, nor any

other human tongue [the "language of thought"] ...though such a theory doesn't in Lewis's sense, accomplish real semantics, it must nevertheless be internalised by any organism which can use a natural language as a vehicle of communication.

(Fodor 1975: 122).

Thus, translating natural language expressions into their language of thought counterparts is seen by Fodor as an essential part of understanding utterances. For Sperber and Wilson it is the first stage of utterance-interpretation.

Sperber and Wilson suggest a wider definition of semantic interpretation than the one assumed by Lewis. They say that:

a formula is semantically interpreted by being put into systematic correspondence with other objects: for example, with the formulas of another language, with states of the user of the language, or with possible states of the world. (Sperber and Wilson 1986: 173)

I believe that this difference is purely terminological. The empirical content of Sperber and Wilson's claim can be put in either of the following ways:

- (8) a. There are two kinds of semantics involved in the interpretation of utterances: "linguistic semantics" involves the translation of natural language expressions into incomplete language of thought expressions, "real semantics" involves the truth-conditional semantic interpretation of complete language of thought expressions. [Fn.5]

- b. Natural languages do not have a semantics. Semantic theories apply only to complete language of thought expressions, which are recovered by the "mere translation" of natural language expressions into the language of thought and the pragmatic enrichment of the output of this translation process.

Sperber and Wilson opt for (8a). However, I believe that the two options are logically equivalent and that no serious consequences are dependent on whether we allow ourselves to call the translation processes "semantics" or not. From now on, I will refer to the translation process as "linguistic semantics" and to the semantic interpretation process as "the semantics of mental representations" or "real semantics".

Thus, for relevance theory, utterance-interpretation consists of two phases: the first phase involves the decoding of linguistic content, or the translation from natural language sentences to sentences in the language of thought. The second, inferential, phase involves the integration of the information derived from linguistic decoding with information derived from other sources, such as sight, hearing or memory. In the next section I give a brief outline of the relevance-theoretic account of the pragmatic processes which relate the logical forms which are the output of linguistic semantics to the propositional forms which are the input to the semantics of mental representations. According to relevance theory, this inferential process is governed by a single rational criterion: the criterion of consistency with the principle of relevance.

1.3 The Principle of Relevance

As we have just seen, relevance theory assumes a distinction between linguistic semantics and real semantics. Linguistic semantics is concerned with the relationship between natural language sentences and logical forms. Real semantics is concerned with the relationship between propositions and truth-conditions. The goal of pragmatic theorists is to explain how hearers get from the logical forms which are the output of linguistic semantics to the propositional forms which are the input to the semantics of mental representations. This thesis is concerned with an issue in linguistic semantics: what is encoded by the various syntactic structures of English? I will have nothing to say about real semantics which, on this view, is concerned with propositions in general rather than with human psychology in particular. Throughout, I will be assuming the existence of a pragmatic theory strong enough to fill the gap between the semantic representations postulated and the overall interpretation of utterances on a given occasion of use. In this section, I want to give a brief account of the pragmatic theory which I will be assuming to bridge the gap between linguistic and real semantics, namely relevance theory. (The theory is presented in detail in Sperber and Wilson 1986, see also Sperber and Wilson 1987; for critical discussion see Levinson 1989; Mey and Talbot 1988; Hirst, Leslie and Walker (Multiple Review) 1989; and Open Peer Commentary in Sperber and Wilson 1987).

In common with many pragmatic theorists, Sperber and Wilson view utterance-interpretation as an inferential process. The central problem for pragmatic theorists is to explain how hearers decide which inferences to draw and which of the many

conceivable interpretations of a given utterance is the one the speaker intended them to recover. Sperber and Wilson claim that one criterion governs the process of utterance-interpretation and provides the solution to this problem: the criterion of consistency with the principle of relevance. In the rest of this section I want first to explain what the criterion of consistency with the principle of relevance is and second to look at some of the inferential sub-tasks which hearers must perform and which are governed by this criterion.

The relevance-theoretic account of utterance-interpretation is based on three crucial ideas:

- (a) every utterance has a range of possible interpretations, all compatible with the information encoded by the linguistic expressions used.
- (b) not all of these interpretations are equivalently easy for the hearer to access on any given occasion of utterance.
- (c) hearers have a particular means of evaluating interpretations as they occur to them.

This means of evaluating interpretations is the criterion of consistency with the principle of relevance which I will now attempt to characterise. This criterion emerges from some more general assumptions about human cognition.

One of the general assumptions on which relevance theory is based is that human beings tend to pay attention to stimuli which seem relevant to them, where relevance is defined in terms of contextual effects and processing effort. In ostensive communication, communicators make manifest an intention to inform by means of an ostensive stimulus.

In so doing, they create a presumption that the stimulus they produce is relevant enough to be worth the audience's attention, i.e. that it is optimally relevant. The fact that communication creates this presumption plays a major role in utterance-interpretation. Sperber and Wilson formulate it in the following Principle of Relevance:

Principle of Relevance:

Every act of ostensive communication communicates the presumption of its own optimal relevance.

In identifying the intended interpretation of an utterance, hearers look for an interpretation which is consistent with this principle, i.e. an interpretation on which a rational communicator could have expected her utterance to be optimally relevant. This means, then, that the interpretation of utterances is governed by considerations of optimal relevance. Therefore, in order to understand the criterion which hearers use in interpreting utterances it is necessary to know what relevance is and what optimal relevance is. I turn now to explaining these notions.

First, here is a comparative definition of relevance (from Sperber and Wilson 1986: 153):

- (9) a. a phenomenon is relevant to an individual to the extent that the contextual effects achieved when it is optimally processed are large.
- b. a phenomenon is relevant to an individual to the extent that the effort required to process it optimally is small.

What does this mean for our account of utterance-interpretation? First, that the more contextual effects an utterance or a particular interpretation of an utterance has, the more relevant it is. Second, that the more effort involved in deriving those effects, the less relevant it is. We now need to define what we mean by a "contextual effect".

Sperber and Wilson suggest that there are three kinds:

- (10) a. Contextual implication: where P is an existing assumption (or set of assumptions) and Q is a new assumption (or set of assumptions), and R is deducible from $\{P \ \& \ Q\}$ but not from either P alone or from Q alone, then Q contextually implies R in the context P .
- b. Strengthening an existing assumption: P is an existing assumption of a certain strength, Q is a new assumption which provides more evidence for P . Hence, Q strengthens or confirms P .
- c. Contradicting an existing assumption: P is an existing assumption of a certain strength, Q is a new assumption which contradicts P and Q is more strongly evidenced than P . Hence, Q leads to the elimination of P .

Consider the propositions (ignoring the previously-mentioned underdeterminacy of natural language expressions for the moment) in (11):

- (11) a. If there are no tickets left for the theatre, we'll go to the cinema.
- b. There are no tickets left for the theatre.
- c. There are tickets left for the theatre.

d. We'll go to the cinema.

If you are entertaining (11a) and I tell you that (11b) is true, one effect of my utterance will be to contextually imply (11d). If you have only a little evidence for (11b) and I tell you that (11b) is true, one effect of my utterance will be to strengthen your belief that (11b) is true. If you suspect (11b) and I tell you that (11c) is true, then (providing you trust me enough) one effect of my utterance will be to contradict (11b), and lead you to reject it as false.

The two major points which follow from what I have said so far are: first, that the more effects such as these an utterance or an interpretation of an utterance has, the more relevant it is. Second, that the more effort involved in recovering those effects, the less relevant it is.

To provide the basis for an account of utterance- interpretation, we need now to characterise the notion of optimal relevance. A stimulus is optimally relevant to an individual if it provides enough contextual effects to be worth processing and does not put the individual to any unnecessary effort in recovering those effects, i.e. if it provides adequate contextual effects for no unjustifiable processing effort. Sperber and Wilson maintain that, by claiming the hearer's attention, speakers create a presumption of optimal relevance. This fact is described in the principle of relevance mentioned above:

Principle of relevance:

Every act of ostensive communication communicates the presumption of its own optimal relevance.

Sperber and Wilson claim that the principle of relevance, and the criterion of consistency with the principle of relevance, are the key to explaining ostensive communication in general and utterance- interpretation in particular. To see what the criterion of consistency with the principle of relevance amounts to, and how it governs utterance-interpretation, let us see how relevance theory would explain the interpretation of the utterances in (12):

- (12) a. He did.
b. There's a bat in the cupboard.
c. There's a cat on the roof.

Imagine that I have just expressed my opinion that John did not pass his driving-test. You utter (12a). In order to interpret your utterance successfully, I must look for a relevant completion of the logical form of (12a). In the circumstances, the most accessible completion would be one that achieved relevance by contradicting the opinion you have just expressed. Thus, it would not involve much effort to form the hypothesis that you are telling me that John did, in fact, pass his driving test. Further, this will clearly give rise to an adequate range of contextual effects. In particular, it contradicts my assumption that he failed and weakens my confidence in everything that follows from that. So long as this interpretation might rationally have been expected to give rise to adequate contextual effects (enough to justify my processing of your utterance), and puts me to no unjustifiable effort in achieving those effects, then it will be consistent with the principle of relevance. The question of whether there could be more than one

interpretation consistent with the principle of relevance will be discussed below, in connection with the interpretation of (12c).

The disambiguation of the form bat in (12b) is also easily explained on this account. If I have just asked you whether we can play cricket, then assumptions relating to cricket will be highly accessible to me. Thus, the interpretation of bat as referring to a cricket bat will also be highly accessible. This will obviously give rise to adequate effects since it implies that we can play cricket. Clearly, given that I have asked the question, this information will enable me to derive further contextual implications. In the circumstances, then, the resulting interpretation will be consistent with the principle of relevance. For a demonstration that the first interpretation consistent with the principle of relevance is the only interpretation consistent with the principle of relevance, see below.

Imagine, on the other hand, that I have just seen John run out of the house screaming. I ask you what is going on and you reply as in (12b). This time, even if the same sense of bat (cricket) is the more accessible one, I cannot assume that this is what you intended. This is because the only assumption that will give rise to adequate effects here will be one that explains John's unusual behaviour. In order to assume that you intended to refer to a cricket bat, I would have to have some accessible contextual assumptions associating cricket bats with such unusual behaviour in John.

(12c) (adapted from Sperber and Wilson 1986: 168-171) is intended to demonstrate an essential point about relevance theory: at most one interpretation can be consistent with the principle of relevance. If I utter (12c), the form cat is open to more than

one interpretation: it could be taken to refer to a domestic cat or to any member of the cat family. (12c) could express a true proposition equally if a domestic cat is on the roof or if a tiger is on the roof. However, in normal circumstances, you are not likely to assume that I am telling you that a tiger is on the roof. Why? The reason for this is that the alternative interpretation, on which I am referring to a domestic cat, is the first to come to mind, and will itself be consistent with the principle of relevance. It would clearly be quite reasonable for me to expect my utterance to achieve adequate effects by informing you that a domestic cat is on the roof, and no alternative utterance would have achieved these effects more economically. Given this, and the fact that this interpretation will manifestly be the first to come to mind, Sperber and Wilson argue that no other, less accessible interpretation can satisfy the criterion of consistency with the principle of relevance.

Sperber and Wilson's claim is that if, in the circumstances described, I intended to communicate that a tiger was on the roof, I would be putting you to unjustifiable effort by phrasing my utterance as in (12c). I would be expecting you to access a reasonable interpretation based on the 'domestic cat' sense, and then devote some effort to choosing between it and another, less accessible interpretation based on the 'tiger' sense. Apart from the obvious risks of misunderstanding, this less accessible interpretation would be inconsistent with the principle of relevance precisely because it would put you to the unjustifiable processing effort of choosing between two otherwise acceptable interpretations: in other words, it would satisfy the first part of the presumption of optimal relevance (adequate effects) but not the second (no unjustifiable

processing effort). The only way I could get you to arrive at such an interpretation would be by uttering something like (13):

(13) There's a tiger on the roof.

Thus, the first interpretation found to be consistent with the principle of relevance is the only interpretation consistent with the principle of relevance, even if there exist alternative interpretations with far greater contextual effects. As Sperber and Wilson put it:

...the principle of relevance...warrants the selection of the first accessible interpretation consistent with the principle, if there is one, and otherwise no interpretation at all. In other words, relevance theory explains how ostensive communication is possible, and how it may fail. (Sperber and Wilson 1986: 170)

In this section I have given only a very brief account of how the principle of relevance, and the criterion of consistency with the principle of relevance, account for utterance-interpretation. In the rest of the thesis I will be assuming that this principle governs all the pragmatic processes involved in utterance- interpretation, i.e. every step the hearer follows in getting from what is linguistically encoded to the set of assumptions which he takes the speaker to have intentionally communicated. I would like to conclude this section by discussing some of the sub-tasks involved in arriving at the intended interpretation. In particular, I want to look at the relationship between the explicit and the implicit as it is seen by relevance theory.

The overall task which hearers must perform in interpreting an utterance can be seen as that of recovering the set of assumptions which the speaker wishes to intentionally communicate. This set of assumptions is communicated partly explicitly and partly implicitly. Relevance theory makes a principled distinction between the explicit and the implicit. On the basis of this distinction, the set of assumptions communicated by an utterance can be subdivided into the set of explicatures and the set of implicatures. I would now like to give a brief account of this distinction. (For further discussion, see Carston 1988, forthcoming; Recanati 1989; Sperber and Wilson 1986). Consider the following example:

(14) He's a hardworking student.

The propositional form of this utterance, the fully propositional development of its logical form, might be (15):

(15) John Smith is a hardworking student.

(Again ignoring the fact that this sentence itself does not express a complete proposition). Now, this proposition is not wholly encoded by (14). The hearer has to infer, on the basis of contextual assumptions and the criterion of consistency with the principle of relevance, that the person referred to by the pronoun he is John Smith. An explicitly communicated assumption, then, need not consist entirely of linguistically-encoded information. In fact, Sperber and Wilson claim that assumptions are never recovered simply by decoding. They say that their view constitutes:

...an unconventional way of drawing the distinction between the explicit and implicit 'content' of an utterance. On a more traditional view, the

explicit content of an utterance is a set of decoded assumptions, and the implicit content a set of inferred assumptions. Since we are claiming that no assumption is simply decoded, and that the recovery of any assumption requires an element of inference, we deny that the distinction between the explicit and the implicit can be drawn in this way. (Sperber and Wilson 1986: 182)

Hence, at least part of the propositional form of any utterance must be contextually inferred.

There are other propositions which might be communicated by an utterance of

(14). Some possibilities are:

- (16) a. Fred Brown believes that John Smith is a hard-working student.
- b. Tom Cruise plays the part of a hard-working student in Oliver Stone's latest movie.

(16a) might be communicated by (14) if it is uttered in reply to an utterance like (17):

(17) What does Fred think of John?

(16b) might be communicated by (14) if it is uttered in reply to an utterance like (18):

(18) What part does Tom Cruise play in the new Oliver Stone movie?

(16a-b) contain pieces of information which are linguistically encoded. They include the logical form of the utterance as a sub-part and are recovered by developing the logical form of the utterance inferentially. They are, in this respect, distinguishable from any implicatures which the utterance may have. If (14) is uttered in reply to an utterance of (19) it might cause the hearer to infer (20):

(19) Should John Smith be allowed to register for a Ph.D?

(20) John Smith should be allowed to register for a Ph.D.

(20) is not recovered by developing the logical form of (14). Rather, it is entirely contextually inferred. Sperber and Wilson distinguish what they term explicatures from implicatures on this basis. They define explicitness as follows:

Any assumption communicated by an utterance *U* is explicit if and only if it is a development of a logical form encoded by *U*. (Sperber and Wilson 1986: 182)

Any explicitly communicated assumption is an explicature. Any assumption which is communicated, but not explicitly, is an implicature. Thus (16a-b) are explicatures while (20) is an implicature. (16a-b) also contain the propositional form of the utterance as a sub-part. As such, they are "higher-level explicatures" of the utterance. We will see below that explicatures may contain explicatures as sub-parts which themselves contain explicatures as sub-parts and so on. We will also see that the propositional form of the utterance need not be an explicature, i.e. it may not be one of the assumptions which is intentionally communicated. (Recall that explicatures are assumptions which are both developments of a logical form encoded by the utterance and intentionally communicated). In such cases, the only explicatures of the utterance are "higher-level explicatures". The notion of a higher-level explicature is central to the semantic analysis of declaratives, imperatives and interrogatives proposed by Wilson and Sperber.

The task of the hearer may, then, be divided into certain sub-tasks. He must contextually infer the propositional form of the utterance by developing its logical form.

He must also develop it further to derive further explicatures (such as those in (16)). He must also use the explicatures of the utterance, together with contextual assumptions, to derive any implicatures of the utterance.

It is important to notice that the relevance-theoretic approach sketched here involves much more than a straightforward development of Grice's ideas: the principle of relevance is a generalisation about human behaviour rather than a maxim which speakers and hearers attempt to observe. Sperber and Wilson are claiming that ostensive communication always creates a presumption of optimal relevance. There is no question of violating or exploiting, or even of learning or knowing, the principle of relevance.

This approach has been extremely fruitful, providing explanations in a wide range of areas (see, for example, Blakemore 1987; Blass 1990; Carston 1988; Gutt 1990; Kempson 1988 and forthcoming; Smith and Smith 1988). Wilson and Sperber (1988a) have shown how the semantic analyses they propose can interact with this pragmatic theory to account for the interpretation of a wide range of declarative, imperative and interrogative utterances in English. In the rest of this thesis I hope to show how this approach can be extended to a wider range of data than that so far considered by Wilson and Sperber. In the next section, I discuss another notion proposed by Sperber and Wilson which will be involved at various points in the discussion below: the distinction they draw between descriptive and interpretive use.

1.4 Description and Interpretation

One important aspect of Sperber and Wilson's theory of cognition is the distinction they draw between the descriptive and interpretive use of representations (for further discussion see Sperber and Wilson 1986: 224-243; Wilson and Sperber 1988b). Descriptive use of a representation is the traditional, truth-conditional variety where a thought, or an utterance, or any other representation with a propositional form, is used to represent a state of affairs in virtue of its propositional form being true of that state of affairs. As well as this, Sperber and Wilson recognise another kind of representation: representation by resemblance. As Sperber and Wilson point out, anything can be used to represent anything else which it resembles: salt and pepper pots can represent regiments, shadows can represent animals, coloured lines can represent underground railways, and so on. When a representation with a propositional form is used to represent some other representation with a propositional form in virtue of a resemblance between the two propositional forms, then it is used interpretively. How can one propositional form resemble another? Sperber and Wilson suggest that this is the case when the two propositional forms share logical or contextual implications.

Sperber and Wilson claim that all utterances are interpretive representations of a thought of the speaker's. This thought may itself be a description of a state of affairs or an interpretation of another thought or utterance. When the thought of the speaker's which her utterance interpretively represents is itself an interpretation the utterance is "interpretively used". Typically, this is the case when the speaker wants to attribute a thought or utterance to someone other than herself. One of the assumptions which the

hearer must make in interpreting any utterance is about who the speaker regards as entertaining the thought it represents.

When an utterance is used descriptively, the speaker communicates that she herself is entertaining the thought represented. When an utterance is used interpretively, the speaker attributes the thought represented by her utterance to someone (or to a range of people) other than herself at the time of utterance. This distinction accounts for the difference between echoic and non-echoic utterances.

(20) A: Have you read the manifesto?

B: Yes. We'll all be rich and happy if we vote for them.

B's utterance in (20) could well be echoic. B reports her interpretation of the content of the manifesto and there is no reason to assume that B accepts the thought which her utterance represents. Sperber and Wilson also claim that irony is echoic.

Imagine that I have asked you to be careful not to spill anything on my new carpet, following which you spill a glass of wine on it. In such a situation I might utter (21):

(21) That was careful.

It would seem strange to claim that I am entertaining as a true description of the world the thought that you were being careful when you knocked over the wine. According to Sperber and Wilson, the speaker of (21) is attributing such a thought to the hearer in order to dissociate herself from it. Informally, the gist of my utterance is 'You behave as if you think (or think that I think) that being careful is consistent with spilling wine on my carpet - which is ridiculous'.

There are also occasions where a speaker uses an utterance interpretively to represent an earlier thought of her own and to highlight the absurdity of that thought. For example, I might utter (22) as I leave the room:

(22) I won't take long.

On returning after a long time, I might utter (23):

(23) See. That didn't take long.

Here I am interpretively representing my earlier, and now clearly mistaken, thought in order to highlight its stupidity. When a speaker uses an utterance interpretively to represent her own thought, she normally intends to communicate that the thought represented is not one she is currently entertaining. Usually, as in (23), the speaker echoes a previous thought, which she now sees to have been mistaken.

Sometimes it is not so clear to whom the speaker is attributing the thought represented:

(24) What a lovely day!

If (24) is uttered on a rainy day, the speaker is attributing the thought that it would be a lovely day to an unspecified range of people, or perhaps she is simply echoing our standard hopes about the weather. I would like to suggest that (24) is an example of an attributed potential thought. It is extremely common to hope that when we wake up in the morning we will be able to think "What a lovely day". So (24) echoes hopes which are not only about the weather but may also take the form of representations of future (possible and potential) thoughts. Obviously not all hopes are hopes about future thoughts, but often we imagine our future reactions and thoughts and we may comment

ironically when they fail to materialise. The fact that individuals can interpretively represent not only actual thoughts but also potential thoughts will be important in the analysis of some of the constructions discussed in subsequent chapters. More generally, the distinction between description and interpretation is crucial both to the relevance-theoretic account of utterance-interpretation in general and to the proposed semantic analyses of interrogatives and exclamatives in particular.

1.5 Conceptual and procedural encoding

In "Mood and the analysis of non-declarative sentences" (1988a) Wilson and Sperber develop some ideas originally put forward in Relevance (Sperber and Wilson 1986: 243-254). As mentioned above, they propose semantic analyses of English declaratives, imperatives and interrogatives based on the notion of "a direct semantic link between linguistic form and representations of propositional attitude" (Wilson and Sperber 1988a: 86). Before looking at this approach in more detail I want to give a brief outline of another paper by Wilson and Sperber (1990), "Linguistic form and relevance", which surveys the relevance-theoretic approach to linguistic semantics. In this section I hope to show how the proposal in the former paper (1988a) fits into the overall framework presented in the latter (1990).

In "Linguistic form and relevance", Wilson and Sperber discuss the various kinds of information which an utterance can convey and the various kinds of information which a linguistic expression can encode. My concern here is with what might be linguistically encoded. Figure 2, based on a sub-part of a figure used by Wilson and

Sperber, shows the kinds of information which might be encoded in linguistic expressions:

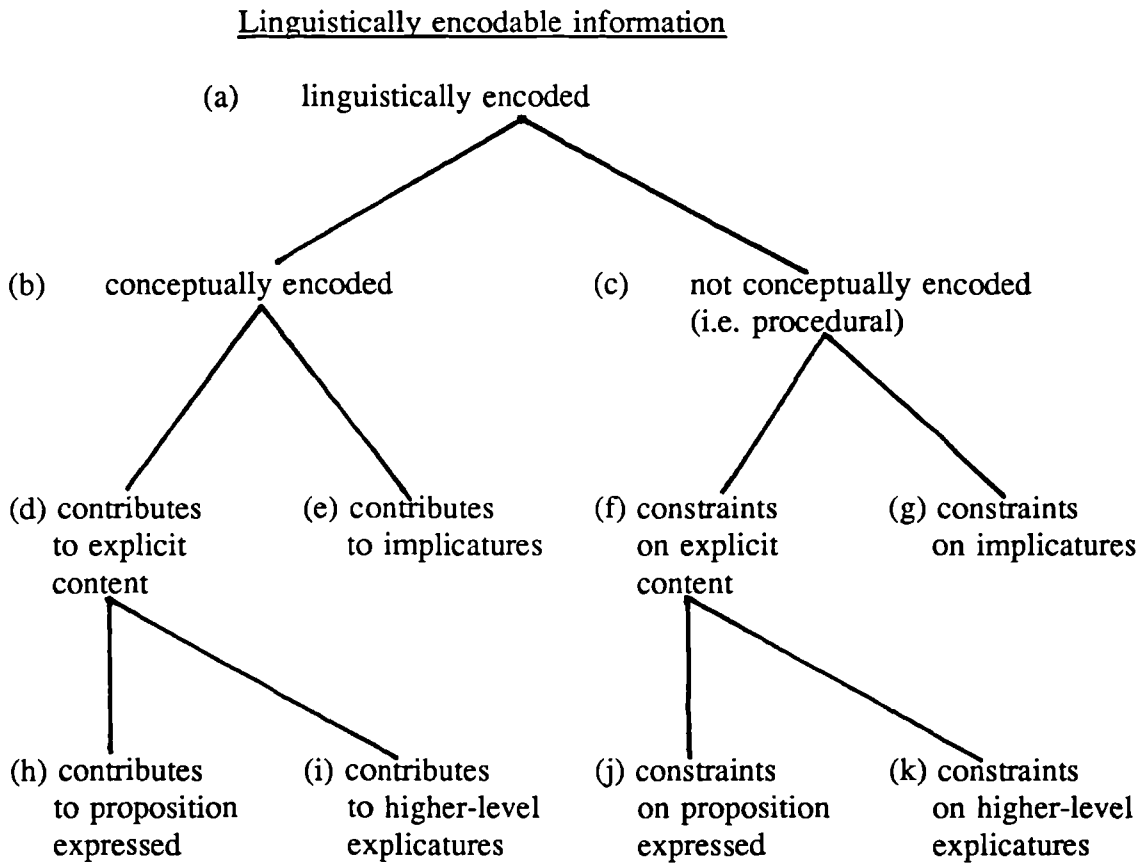


Figure 2

Wilson and Sperber argue for a cognitively-justified distinction between conceptual information ((b) on the diagram) and procedural information ((c) on the diagram) rather than a linguistically-justified distinction between truth-conditional and non-truth-conditional information (where "truth-conditional" is restricted to the truth-conditions of the proposition explicitly expressed by the utterance).

As pointed out above, the hearer's task in the inferential stage of utterance-interpretation can be seen as consisting of at least two sub-tasks: first, starting from the incomplete logical form recovered by decoding, he has to recover the propositional form of the utterance. Second, he has to use this propositional form together with contextual assumptions to work out the implicatures of the utterance. Thus, the hearer's task can be seen as consisting of both the recovery and the manipulation of conceptual information. Wilson and Sperber's claim is that linguistically-encoded information might tell the hearer not just which conceptual representations to construct but also how to manipulate them. As Wilson and Sperber put it:

Inferential comprehension involves the construction and manipulation of conceptual representations; linguistic decoding feeds inferential comprehension; an utterance might therefore be expected to encode two basic types of information: conceptual representations on the one hand, and information about how to manipulate them on the other. (Wilson and Sperber 1990: 101)

As we will see below, recognising that utterances encode not only conceptual representations but also information about how to manipulate them suggests answers to many questions which have troubled linguistic semanticists, not least the problem of how to analyse the syntactic structures which are the main subject of this thesis. I believe that one of the main virtues of Sperber and Wilson's approach to these questions is that their division of the task of utterance-interpretation into two phases - decoding and inference - not only accommodates, but actually leads to the expectation of, such a division of labour in linguistic encoding. There are various terms which one could use to describe the two kinds of encoded

information: conceptual and procedural, descriptive and procedural, representational and computational. To avoid confusion, I will use only the first of these and refer to the distinction between those linguistic expressions which encode conceptual information and those which encode procedural information (which tells the hearer how to manipulate the conceptual representations). (For further discussion of the conceptual-procedural distinction, see Blakemore 1987, 1988; Blass 1990; Gutt forthcoming; Luscher 1989; Moeschler 1989a, 1989b. For survey and discussion of a related, though distinct, distinction between "describing" and "indicating" see Recanati 1987). In the rest of this section, I want to go through figure 2 looking at the various kinds of information which linguistic forms might encode. My aim is to show how the constructions which are the concern of this thesis fit in to this framework.

First, conceptual information (following the path through (b) on the diagram). Logically, this could be divided into two types: contributions to explicit content ((d) on the diagram) and contributions to implicatures ((e) on the diagram). However, it is not clear that there exist examples of linguistic expressions which contribute conceptual information directly to implicatures. [Fn.6]

Contributions to explicit content come in two varieties: contributions to the proposition expressed ((h) on the diagram) and contributions to higher-level explicatures ((i) on the diagram). Consider (25):

(25) John passed his driving test.

The logical form encoded by (25) contains the information only that some person referred to by the term John passed his driving test at some time. As discussed above, the hearer will

have to work out the full propositional form of the utterance via inferential processes governed by considerations of relevance. Thus, linguistic forms encode only part of the proposition explicitly expressed by an utterance. However, even when the hearer has recovered the full propositional form of the utterance, his inferential task is not complete. Let us assume the propositional form of (25) is (26):

(26) John Smith passed his driving test on 20 July 1990.

This propositional form alone will not enable the hearer to derive adequate contextual effects. In order to achieve this, the hearer has to know how this propositional form is considered relevant by the speaker: she may believe it to be true, doubt it, desire it, attribute the thought to someone else, and so on through many possibilities. As discussed above, any communicated assumption in which the propositional form of the utterance is embedded under a description like this, such as those given in (27), is termed a "higher-level explicature" by Wilson and Sperber.

- (27) a. The speaker believes that John Smith passed his driving test on 20 July 1990.
- b. The speaker hopes that John Smith passed his driving test on 20 July 1990.
- c. The speaker wonders whether John Smith passed his driving test on 20 July 1990.

Crucial among the higher-level explicatures of an utterance are assumptions relating to the speaker's propositional attitude. These are central to this thesis and are discussed in more detail below.

There are linguistic expressions which contribute conceptual information directly to higher-level explicatures. Wilson and Sperber give examples such as those in (28):

- (28) a. Seriously, John passed his driving test.
b. Frankly, John passed his driving test.
c. Confidentially, John passed his driving test.

Wilson and Sperber suggest that the sentence adverbs above contribute conceptual information to higher-level explicatures of the utterances in which they appear. Some possible explicatures to which these expressions might contribute are represented in (29):

- (29) a. I am telling you seriously that John passed his driving test.
b. I am telling you frankly that John passed his driving test.
c. I am telling you confidentially that John passed his driving test.

These expressions, then, are not truth-conditional in the sense that they do not affect the truth-conditions of the propositional form explicitly expressed. They are truth-conditional in the sense that the higher-level explicatures to which they contribute (the propositions in (29)) are fully propositional and have all the logical properties of any conceptual representation.

On the procedural side, there are constraints both on explicit content ((f) on the diagram) and on implicatures ((g) on the diagram). The latter, constraints on implicatures, were first discussed in the framework of relevance theory by Blakemore (1987 and Brockway 1981).

- (30) a. Peter's not stupid. He can find his own way home.
b. Peter's not stupid. So he can find his own way home.
c. Peter's not stupid. After all, he can find his own way home.

In (30a) the relationship between the two propositions expressed is left wholly implicit. In (30b-c), by contrast, the speaker has given the hearer a clue as to how to relate them. In (30b) Peter's not being stupid is a reason for thinking that he can find his own way home. In (30c) Peter's being able to find his own way home is a reason for thinking that he is not stupid. In (30a) the hearer is assumed to be able to work out the relationship the hearer intended to communicate purely on the basis of contextual assumptions (together with considerations of relevance). Thus, so and after all are expressions which communicate procedural information about which inferences the hearer should draw on the basis of the propositions expressed.

Procedural constraints on explicit content can affect both the proposition expressed ((j) on the diagram) and higher-level explicatures ((k) on the diagram). Pronouns, for example, encode procedural constraints on the proposition expressed. Wilson and Sperber discuss (31):

(31) I do not exist.

They suggest, following Kaplan (1989), that the pronoun I encodes a procedural instruction to the hearer to look for a referent by first identifying the speaker. Kempson (forthcoming) explores this possibility in more detail. On this view, I, and all other pronouns, encode procedural instructions which help the hearer to recover the propositional form of the utterance.

Finally, and most importantly from the point of view of this thesis, Wilson and Sperber suggest that various syntactic structures encode constraints on higher-level explicatures. This thesis is mainly concerned with what is encoded by these structures. The next section contains a brief outline of the proposal made by Wilson and Sperber, which is explored in more detail in later chapters.

1.6 "Sentence-types" and propositional attitudes

As noted above, utterances like (32a-c) share the same propositional content:

- (32) a. (John) you are calm.
b. (John) be calm!
c. (John) are you calm?

This has been assumed by many theorists (see, for example, Hare 1970; Katz 1977; Searle 1969, 1975; Searle and Vanderveken 1985). However, these sentences also clearly differ in linguistically- encoded meaning. It might be claimed that they differ in illocutionary force or in illocutionary force potential or in semantic mood. Attempts to account for the differences in such terms will be discussed in more detail in chapter four. Wilson and Sperber, on the other hand, claim that they differ in the procedural information that they encode. In particular, it is claimed that they encode different procedural information about the higher-level explicatures which the speaker intends to communicate. In the rest of this thesis, I will attempt to extend this analysis to a wider range of linguistic expressions. In this section I want to give a brief account of the nature of the constraints which Wilson and Sperber claim to be encoded by declaratives, imperatives and interrogatives.

In Relevance, Sperber and Wilson suggested that:

...illocutionary force indicators such as declarative or imperative mood, or interrogative word order, make manifest a rather abstract property of the speaker's informative intention: the direction in which relevance is to be sought. (Sperber and Wilson 1986: 254)

They are agnostic about the existence of a well-defined range of syntactically-defined sentence-types:

the claim that there is a well-defined range of mutually exclusive syntactic sentence types is open to question ... What undeniably exists is not a well-defined range of syntactic sentence types but a variety of overt linguistic devices - e.g. indicative, imperative or subjunctive mood, rising or falling intonation, inverted or uninverted word order, the presence or absence of Wh-words, or of markers such as let's or please - which can guide the interpretation process in various ways. (Sperber and Wilson 1986: 247)

I share Sperber and Wilson's agnosticism and the contribution of some of these devices is examined in more detail below. I will argue that looking at the linguistic devices which contribute to the overall semantic representation of the "sentence-types" sheds more light on the actual meaning and interpretation of the various structures than simply assuming the existence of holistic meanings associated with syntactically defined "sentence-types". I will also follow Sperber and Wilson in using terms like "declarative", "imperative", "interrogative" as shorthand for the combined effects of several such devices.

In "Mood and the analysis of non-declarative sentences" (Wilson and Sperber 1988a) the approach suggested in Relevance (Sperber and Wilson 1986) is developed in more detail. The kinds of higher-level explicatures which the various syntactic structures are assumed to constrain are those which contain information about propositional attitudes. As we will see below, assumptions about propositional attitudes may be embedded in other assumptions about propositional attitudes. There is no principled limit to the number of such "nestings" which

might occur. However, the information encoded by the various syntactic structures always refers to the "lowest" attitude under which the propositional form of the utterance is embedded, i.e. the one which contains as a sub-part only the propositional form of the utterance.

As noted above, one of the hearer's tasks in interpreting any utterance is to recover the propositional form explicitly expressed. This is achieved partly through decoding and partly through contextual inference. The propositional form of all the utterances in (32) might be (33) (ignoring, for the moment, the time references necessary for full propositionality).

(33) John Smith has the property of being calm.

However, recovering this propositional form alone will not enable the hearer to see how the utterance as a whole is intended to be relevant. There are still many different higher-level explicatures which the speaker might be intending to communicate. Some conceivable candidates are:

- (34) a. The speaker believes that John Smith has the property of being calm.
b. Fred Brown believes that John Smith has the property of being calm.
c. The speaker is attributing to John Smith the belief that John Smith is calm.

(34a) is perhaps the most straightforward. This would be a higher-level explicature if the utterance is descriptively used to represent a belief of the speaker. (34b) might be a higher-level explicature if the utterance is a reply to a question concerning Fred's opinion of John. (34c) might be a higher-level explicature if the utterance is used ironically, e.g. when John Smith is claiming to be calm but is acting in a manner which is manifestly hysterical. Clearly,

these assumptions are not compatible with each other and would give rise to markedly different overall interpretations of the utterance.

It is often the case that hearers have to recover such higher-level explicatures purely on the basis of contextual assumptions and inference. Wilson and Sperber claim that there are linguistic means of guiding the hearer towards certain kinds of higher-level explicature and not others. In particular, they claim that the various syntactic structures encode procedural information about propositional attitudes. They suggest that:

what is encoded [by the various syntactic structures] is not a conceptual representation but a set of hints for constructing one. (Wilson and Sperber 1990: 108).

They also point out that procedural information is not directly accessible to consciousness:

Conceptual representations can be brought to consciousness, procedures can not. We have direct access neither to grammatical computations nor to the inferential computations used in comprehension. (Wilson and Sperber 1990: 104)

Because of this, such procedural constraints can not be stated simply, and statements of the proposed semantic analyses are rather complex. The proposed semantic analyses of declaratives, imperatives and interrogatives are stated in (35):

- (35) a. A **declarative** with propositional content *P* communicates that *P* represents a thought entertained as a description of an actual or possible state of affairs.

- b. An **imperative** with propositional content *P* communicates that *P* represents a thought entertained as a description of a potential and desirable state of affairs.
- c. A **wh-interrogative** with propositional content *wh-P* communicates that *wh-P* represents a thought entertained as an interpretation of a desirable (i.e. relevant) thought (some completion of *wh-P* into a fully propositional thought would be relevant).
- d. A **yes-no interrogative** with propositional content *P* communicates that *P* represents a thought entertained as an interpretation of a desirable (i.e. relevant) thought (*P* or *not-P* would be relevant).

In brief, this means that declaratives involve the representation of actual or possible states of affairs, imperatives involve the representation of potential and desirable states of affairs, and interrogatives involve the representation of desirable thoughts. There are many indeterminacies in these semantic analyses which must be resolved by the hearer on particular occasions of utterance. Consider the declarative in (32a) with the assumed propositional form in (33).

(32) a. John, you are calm.

(33) John Smith has the property of being calm.

On the basis of the semantic analysis in (35), all that the hearer is entitled to assume about the higher-level explicatures of this utterance is (36):

(36) The proposition that John Smith has the property of being calm represents a thought entertained as a description of an actual or possible state of affairs.

There are at least three questions which the hearer will have to answer in order to fully understand the utterance:

- (37) a. Who is entertaining the thought?
b. How closely does the proposition resemble the thought it represents?
c. Is the state of affairs actual or possible?

(The term "possible" here refers to states of affairs which are conceivable, as in possible world semantics, and not necessarily to those which are also compatible with the actual world, as in everyday conversation).

Different assumptions the hearer makes about (37)a. account for the difference between echoic uses (including irony) and non-echoic uses. Thus, if I have just asked you what Fred said, I might assume that your utterance of (32a) is intended to communicate that Fred said that John Smith is calm. If John Smith has just been seen yelling hysterically and waving his arms about, I might assume that you are being ironical and hence wish to dissociate yourself from the thought that John Smith is calm. (Different intonation contours will clearly affect the likelihood of various interpretations. I will ignore this question at the moment, though I will make some remarks on intonation in chapter three). Different assumptions about (36b) account for the difference between literal and less-than-literal or metaphorical declaratives. Consider (2c), repeated here as (38):

- (38) John was a martyr.

If I assume that you mean this literally, i.e. that the propositional forms of your thought and of this utterance are identical, then I might assume that John has suffered for his beliefs, and

perhaps even that he has died for them. If I think that the resemblance is less close, then I need not assume that you intend to commit yourself to the truth of all the analytic and contextual implications of this proposition. Those which you do intend to communicate might include that John has suffered a great deal, that he had little concern for his own well-being, and so on. (For further discussion of loose talk and metaphor see Sperber and Wilson 1985, 1986; Wilson and Sperber 1988b).

Different assumptions about (37c) explain cases such as those in (39):

- (39) a. John is eager to please.
b. I am dying, Egypt, dying.
c. Sherlock Holmes lived at 221b Baker Street.
d. Two racehorses were having a chat in a bar...

All of these could be interpreted as expressions of the speaker's beliefs about the actual world. However, there are various other possibilities. (39a) might be used as an example to illustrate a linguistic point, (39b) might be recited by an actor playing the part of Antony on a stage, (39c) describes a fictional state of affairs, (39d) might be the beginning of a joke. In each case, the speaker does not intend to communicate that the state of affairs described is true in the actual world.

This proposal, combining a very general semantic analysis with a strong pragmatic theory, seems able to account for the full range of declarative utterances. In subsequent chapters I will look more closely at imperatives and interrogatives. I will show that the analyses of imperatives and interrogatives in (35) can account for a wide range of cases, and not just the most straightforward types where, for example, the speaker of (32b) expresses her

desire that John be calm, and the speaker of (32c) expresses her desire to know whether John is calm.

As mentioned above, higher-level explicatures contain the propositional form of the utterance as a sub-part. Higher-level explicatures might also contain other higher-level explicatures as sub-parts. Thus, just as we may entertain thoughts ranging from the relatively simple (40a) to the relatively complex (40b):

- (40) a. John is calm.
b. Alan can't believe that Mary said that Fred thinks that John is calm.

we might also communicate relatively complex explicatures. For example, (40a) might explicate (40d) if it is uttered in reply to (41):

- (41) What can't Alan believe that Mary said that Fred thinks?

There is also no obvious limit to how complicated explicatures can be. (40a) might, for example, be uttered ironically in reply to (41) in which case all of (40d) would be embedded in yet another explicature.

In the semantic analyses of the constructions which I will discuss below, the procedural information always refers to the explicature which includes the propositional form of the utterance and no other explicature. For example, if (40a) is uttered ironically as a reply to (41) it communicates (42):

- (42) The speaker rejects the assumption that Alan can't believe that Mary said that Fred thinks that John is calm.

Then a sub-part of the explicature in (42) is the proposition that Fred thinks that John is calm, given more formally in (43):

- (43) Fred is entertaining the thought that John is calm as a description of an actual state of affairs.

It is this explicature which is partially encoded by the declarative syntax. In other words, the fact that (43) is embedded in a schema of the form (44):

- (44) The speaker rejects the assumption that Alan can't believe that Mary said that —.

is recovered wholly by contextual inference.

So the picture which I have attempted to present in this chapter is of a division of labour between two kinds of semantic theory and a pragmatic theory bridging the gap between the two. Various kinds of assumption can be communicated by utterances. These can be subdivided into explicatures and implicatures. Explicatures are developments of the logical form of the utterance, which may include the propositional form of the utterance itself as well as higher-level explicatures which contain that propositional form as a sub-part. Propositional attitudes which may be communicated can be of various kinds, descriptive and interpretive. In subsequent chapters, we will look at some of the possibilities more closely.

There are many kinds of linguistic encoding. Linguistic forms can encode either conceptual or procedural information and this information might concern the proposition expressed, higher-level explicatures or implicatures. Wilson and Sperber claim that syntactic structures encode procedural information about higher-level explicatures, in particular about the lowest-level attitude under which the propositional form of the utterance is embedded. This last claim is the main concern of this thesis. In the next two chapters I will attempt to

extend this proposal to a wider range of constructions than those explicitly discussed by Wilson and Sperber. In chapter four I will compare it with other, less successful, approaches.

CHAPTER TWO: IMPERATIVES AND IMPERATIVE-LIKE CONSTRUCTIONS

2.1 The Semantics of Imperatives

In this chapter, I want to look in more detail at the semantic analysis of imperatives outlined in chapter one and to show how it can be extended to constructions other than the wide range already discussed by Wilson and Sperber (1988a). In this section I will outline the semantic analysis of imperatives which Wilson and Sperber have proposed, showing how it accounts for a broad range of examples. In section 2.2 I consider the analysis of some "pseudo-imperatives": conjunctions of an imperative and a declarative clause which have often been analysed as conditionals. I propose an analysis which treats the imperative as a straightforward imperative and the declarative as a straightforward declarative. I also discuss a small range of examples which do seem to be semantically distinct from imperatives. In section 2.3 I show how Wilson and Sperber's approach can be extended to "let- constructions": utterances containing let which seem to have the force of imperatives. Finally, in section 2.4, I consider briefly the analysis of infinitives. Several theorists (e.g. Bolinger 1967, Huntley 1984) have claimed that imperatives and infinitives are semantically indistinguishable. However, the typical force of an infinitive utterance is not the same as that of an imperative: thus, infinitives in English are seldom, if ever, used to make requests (though they may be used with requestive force in certain varieties of French). Accordingly, I propose a distinct semantic analysis for infinitives. [Fn.1] I turn now to the semantic analysis of imperatives proposed by Wilson and Sperber.

Wilson and Sperber (1988a; Sperber and Wilson 1986: 243-255) analyse imperatives as descriptions of states of affairs in potential and desirable worlds:

to utter an imperative with propositional content *P* is to communicate that *P* represents a thought entertained as a description of a state of affairs in a potential and desirable world.

In each case the hearer has to make some assumption about how desirable the state of affairs is thought to be and from whose point of view it is thought to be desirable; in making these assumptions he is guided by contextual factors and considerations of optimal relevance. In this section I want to look more closely at this semantic analysis, showing how it accounts for a wide range of imperative utterances. I will begin by making some observations about the notions of a potential and a desirable world which are referred to in the semantic analysis.

The distinction between the actual world and other possible worlds is already familiar from the work of Montague (1974), Lewis (1983), Kripke (1972) and others. Wilson and Sperber's framework relates these notions to the notion of a propositional attitude. For example, as mentioned above, they distinguish two types of attitude which the utterance of a declarative sentence might express: a belief that the proposition it expresses is true in the actual world or a belief that the proposition it expresses is true in some other possible world (in addition to or instead of the actual world). [Fn.2]

As well as the actual world and other possible worlds, Sperber and Wilson introduce two new notions which they claim are needed for the semantic analysis of various linguistic constructions and for the semantics of propositional attitudes: these are the notions of a potential world and a desirable world.

A potential world (for a given individual) is a possible world which is compatible with everything that is known (by that individual) about the actual world. The distinction between possible and potential worlds is one which does seem to be exploited in certain non-imperative constructions. Compare, for example, (1a) and (1b):

- (1) a. I want to have been born in France.
b. I wish I had been born in France.

(1a) is an acceptable utterance only under certain, rather unusual, conditions, namely if the speaker does not know where she was born. As Sperber and Wilson (1984; Wilson and Sperber 1988a) point out, while you can wish for things which you know can't actually happen, you can only want things you believe can actually happen. In other words, wishing involves regarding a certain state of affairs as desirable (whether or not it is potential) while wanting involves regarding a certain state of affairs as both desirable and potential. Thus it is possible for me to wish that I had been born in France but not to want to have been born in France, unless I believe that it is possible for my desire to have been born in France to be realised.

A similar distinction seems to be necessary in order to distinguish (2a) from (2b):

- (2) a. May you have found happiness.
b. Would that you had found happiness.

(2a) suggests that it is compatible with all the speaker knows that the addressee has found happiness, whereas (2b) implies that it is not compatible with all the speaker knows that the addressee has found happiness. In other words, (2a) represents the state

of affairs as both potential and desirable while (2b) represents it as possible, but not potential, and desirable.

The notion of a desirable world is unusual in that desirability is a matter of degree: all worlds that are desirable are desirable to a greater or lesser extent. Thus, to say that the speaker of an imperative utterance communicates that the state of affairs described is desirable is rather a loose use; what is really meant is that the speaker communicates that she believes that the state of affairs described is desirable enough for it to be relevant to say so (or desirable in such a way that it would be relevant to say so).

The notion of a desirable world is independently needed for the analysis of examples like (1)-(2), all of which involve the representation of desirable states of affairs, as well as for examples which make explicit reference to the notion, such as (3):

(3) It is desirable that John leave.

That the notions of potentiality and desirability are needed for the semantics of imperatives becomes evident when we look at attempts to analyse imperatives which restrict themselves to the notions of actual and possible worlds. Huntley (1984), in an analysis which is very similar to that of Bolinger (1967), claims that imperatives and infinitival clauses alike represent states of affairs in possible, rather than actual, worlds. The problem with this approach is that it is not strong enough. As Wilson and Sperber (1988a) point out, it is difficult on the basis of this semantic analysis to explain why utterances of imperative sentences can have the illocutionary forces they do. Why should the information that a state of affairs is possible sometimes cause you to want to make

it become actual? Moreover, it is clear that the pairs of strings in (4) and (5) are neither synonymous nor even likely to be interpreted in the same way when uttered:

- (4) a. Open the door.
- b. To open the door.
- (5) a. Think that John is a thief.
- b. To think that John is a thief.

Evidently, an adequate semantic analysis of imperatives will have to exploit some notions which are stronger than that of mere possibility.

Davies (1986) proposes that imperative sentences are used to "present" propositions rather than to assert them, i.e. that they represent potential states of affairs.

She claims that:

the contrast between the assertive and presentative propositional types can be related to that between actuality and potentiality. While a declarative can be said to assert a proposition which may or may not be true, an imperative can best be described as presenting a proposition which may or not become true. (Davies 1986: 48)

The introduction of the notion of potentiality is a step in the right direction. Imperatives do seem to describe states of affairs which are not merely possible, but potential. Thus, a (non-ironical and literal) utterance of (6) implies that the speaker believes that the hearer has a car and that nothing prevents him from lending it:

- (6) Lend me your car.

Similarly, as Sperber and Wilson point out, imperatives which express unrealisable states of affairs are unacceptable in normal circumstances:

- (7) a. Have been born a man.
- b. Travel on Mars.
- c. Turn into an earwig.

(Sperber and Wilson 1984: 34)

So imperatives, like examples (1a) and (2a), may not be used to describe non-potential states of affairs.

Notice, however, that this does not mean that an utterance of (8) can only describe a future state of affairs:

- (8) Be happy in France.

According to Wilson and Sperber, this utterance will only be acceptable if the state of affairs described is potential. However, as mentioned above, the relevant notion of potentiality here is potentiality for an individual. A state of affairs is potential for an individual if it is compatible with everything that is known by that individual about the actual world. Thus, (8) will be an acceptable description of a present state of affairs so long as the speaker knows nothing that would rule it out. The speaker in such a situation will be understood to be expressing her desire that the hearer belong to the set of individuals who are happy in France. Such a desire may be expressed even if the events which determine the relevant facts have already taken place. (Some related examples are discussed in (17) below).

However, Davies realises that the notion of potentiality alone is still not strong enough to explain the fact that imperatives sometimes persuade their hearers to perform actions. Suppose you tell me that it is compatible with everything that is known about the actual world that a door gets opened. This is hardly likely to be enough on its own to persuade me that I should open one. In order to make up for this weakness Davies proposes a Gricean convention governing the use of imperatives, similar to the convention of truthfulness which many theorists (but not Sperber and Wilson) believe to govern the use of declaratives. This convention is that:

the speaker who utters an imperative which presents a proposition *P* is conventionally assumed to accept *P*'s being made true. (Davies 1986: 51)

This raises some difficult questions about the relationship between pragmatic principles and linguistic knowledge. The distinction between semantics and pragmatics depends upon the distinction between linguistic and non-linguistic knowledge. In the framework I am adopting, pragmatic processes are not linguistic. In Sperber and Wilson's terms (following Fodor 1983) linguistic knowledge is modular and informationally encapsulated while the pragmatic phase of utterance-interpretation is a global process performed by the central cognitive system. If this is right, any pragmatic principles governing utterance-interpretation must be general and language-independent. A speaker of more than one language must apply the same pragmatic principles to utterances regardless of the language in which they are uttered. And in this framework, it does not make sense to claim that pragmatic principles might apply only to particular linguistic constructions.

Apart from this general worry, there are important reasons why Davies's proposal cannot be right. First, there are clear counterexamples to the claim that imperatives are uttered by individuals who accept the realisation of the states of affairs which their utterance describes. The states of affairs described in the imperative clauses in (9a) and in (9b) when uttered as a threat are certainly not ones whose realisation the speaker is willing to accept.

- (9) a. Come one step closer and I'll shoot.
b. Go on! Try it!

Davies proposes that her convention of acceptance is lifted in examples like (9a). She suggests that the convention of truthfulness postulated by many pragmatic theorists is lifted when declaratives are embedded into larger structures and that this also applies to the convention of acceptance associated with imperatives. This raises even more questions than the postulation of a convention of acceptance in the first place. It is suggested that pragmatic principles are specialised for particular syntactic structures but lifted when these structures are embedded. When this is the case, what pragmatic principles govern the utterance?

Even worse for Davies's proposal is the fact that conjunctions with and do not suspend the maxim of truthfulness. There is no non-contextual reason to assume that a speaker who utters (10) is not telling the truth:

- (10) I don't like pasta and I'm not hungry.

If a hearer of such an utterance did decide that the speaker was not telling the truth, it would not be because the two declaratives are conjoined. If such conjunctions do not

suspend the maxim of truthfulness, why should they suspend its imperative counterpart, as in (9a)? It is extremely doubtful that Davies could define the notion of embeddedness in such a way that her proposal could predict accurately when speakers who utter declarative strings are taken to be telling the truth and when speakers who utter imperative strings are taken to accept the realisation of the states of affairs they describe, while simultaneously making the correct, and distinct, predictions about conjunctions of both "genuine" imperatives and "pseudo-imperatives". I hope to show below that Wilson and Sperber's analysis can account for "pseudo-imperatives" without the need for any additional assumptions such as Davies's suspending of conventions.

Even if we were to accept that hearers know enough to abandon the pragmatic principles proposed when the particular construction is embedded, how do we explain the lifting of the convention in unembedded imperatives like (9b)?

(9) b. Go on! Try it!

Presumably, Davies would have to suggest that there are non-linguistic as well as linguistic contexts which cause pragmatic principles to be abandoned. If so, what pragmatic principle, or principles, govern the hearer's decision about whether to apply pragmatic principles in a particular context or not?

Of course, it is absurd to imagine that pragmatic principles could tell hearers when to employ and when to disregard other pragmatic principles. Relevance theory assumes that hearers have a criterion by which to evaluate competing interpretations and that this general criterion governs all aspects of utterance-interpretation. I believe that relevance-theoretic assumptions about utterance-interpretation, together with the semantic

analysis of imperatives proposed by Wilson and Sperber (1988a), permit a less baroque explanation of the examples in (9).

Even if we disregard these problems and consider only utterances of imperatives used to make requests, Davies's proposal is not strong enough. If you tell me that you have no objection to a certain state of affairs, it does not necessarily follow that I will feel any more inclined to make that state of affairs a reality. To assume this would be to predict that the utterances in (11), while not semantically synonymous, would at least be interpreted in the same way in the same context:

- (11) a. I don't mind if you open the door.
b. Open the door!

So the notion of describing a state of affairs as potential, even when it is assumed that the speaker accepts its realisation, is not likely to explain why hearers are sometimes persuaded to attempt to bring about the states of affairs described.

It is only when we introduce something like the notion of desirability that we begin to approach an explanatory account. If you tell me that a state of affairs is not only potential but also desirable then, given appropriate contextual assumptions, I may well see many reasons why I should try to make that state of affairs actual.

So Wilson and Sperber claim that imperatives describe states of affairs in potential and desirable worlds. Different assumptions about from whose point of view the state of affairs is regarded as being desirable account for the difference between, for example, requests and advice:

(12) Pass the salt.

(13) A: How do I get to the station?

B: Go to the traffic lights and turn right.

(Sperber and Wilson 1986: 250)

In most contexts the speaker of (12) communicates that a state of affairs in which the hearer passes her the salt is desirable from her own point of view; provided the hearer is manifestly in a position to bring about the state of affairs, this utterance will have the force of a request. In (13), however, there is no reason to assume that the state of affairs described in B's utterance is regarded as desirable from B's own point of view. There is no obvious way in which such a state of affairs would benefit B and no reason to assume that B cares whether A realises the state of affairs or not. What does seem to be a natural assumption is that B believes it is desirable from A's point of view, given that A wants to get to the station. In other words, B is advising A to go to the station and turn right.

Different assumptions about the degree of desirability (perhaps interacting with other contextual assumptions) account for the difference between weak or strong orders and advice (e.g. pleas, entreaties, hints, mild suggestions).

Different assumptions about who the speaker regards as entertaining the thought represented by *P* account for the difference between echoic and non-echoic imperative utterances; as discussed above, this distinction can be accounted for in terms of the distinction between descriptive and interpretive representation:

(14) Vote for them and you'll all be rich and happy.

(15) Go ahead and ruin the carpet!

(Sperber and Wilson 1986: 247)

Thus, if (14) is uttered in reply to a question about the contents of a political manifesto, the hearer might interpret it echoically, i.e. he might assume that the speaker is attributing to the authors of the manifesto the thought that it is desirable to vote for them and that doing so will make him rich and happy.

If (15) is uttered by a host to a guest who has just spilled a glass of wine, it might be interpreted ironically. In this case, the speaker attributes to the hearer the thought that it is desirable to ruin her carpet, a thought which is manifestly ridiculous (cf. example (21) in the previous chapter).

As with all utterances, metaphorical interpretations can be accounted for in terms of the relationship of resemblance which exists between the propositional forms of the utterance and of the speaker's thought:

(16) Build your own road through life.

(Wilson and Sperber 1988a: 89)

Thus, the speaker of (16) commits herself only to a subset of the analytic and contextual implications of the utterance, e.g. that the hearer should be responsible for her own destiny and that she should not count on help from others. She is not committing herself to certain other implications, e.g. that she should use a bulldozer and tarmacadam. Considerations of relevance help the hearer to decide which of the implications are those that the speaker wishes to communicate.

This analysis also accounts for examples like those in (17) which are problematic for other approaches:

- (17) a. Have a nice day!
b. Please be out!
c. (to a bus) Please don't be late!

(Schmerling 1982: 202-218)

The hearer of (17a) cannot decide whether or not to have a nice day so this is problematic for approaches which treat imperatives as requests for action (e.g. Searle 1979). How can the speaker request someone to do something which is manifestly outside his control? On the approach I am proposing, the speaker is merely communicating that it is potential and desirable that the hearer have a nice day. Thus, good wishes present no problem.

(17b) might be uttered when it has already been determined whether or not the state of affairs described will take place. For example, I might utter it on the doorstep of my neighbour's house when I am visiting them to make a reluctant apology. In the circumstances, I cannot be attempting to make the state of affairs true. On the current approach I am merely expressing my thought that this state of affairs is both potential (as far as I know it could be true or not) and desirable.

The utterance in (17c) is directed at an inanimate object, so it is hard to see how it could be taken as an attempt to make the hearer bring about the state of affairs described. However, there is no reason why the speaker might not think that it is both potential and desirable that the bus arrive on time.

Thus, this approach accounts for a wide range of imperative utterances. In the next section, I will argue that it can also account for what have previously been called "pseudo-imperatives". In section 2.3 I will argue for a similar analysis of "let-constructions".

2.2 "Pseudo-Imperatives"

The semantic analysis of imperatives outlined above works for all standard imperative constructions, including many examples which have been problematic for previous theories. Wilson and Sperber (1988a: 84) claim that their semantic analysis "can interact with additional contextual assumptions and general pragmatic principles to yield an explanatory account of the full range of imperative utterances". They mention a range of examples, including "pseudo-imperatives", which they hope that their analysis will be able to account for [Fn.3]. In this section I consider whether their optimism is justified with regard to a range of constructions illustrated in (18)-(21):

(18) Come closer and I'll give you five pounds.

(19) Be off or I'll push you downstairs.

(20) Come one step closer and I'll shoot.

(21) Open the Guardian and you'll find three misprints on every page.

I want to suggest that the main reason examples like these have been called "pseudo-imperatives" is not because they are really not imperatives but rather because they cannot be handled as imperatives by most semantic theories. I hope to show that they are ordinary imperatives and that their behaviour can be explained without the need

for any *ad hoc* syntactic or semantic assumptions. In particular, I hope to show that Wilson and Sperber's analysis, together with relevance-theoretic assumptions about utterance-interpretation, will make it possible to account for the behaviour of all these examples without having to complicate our semantic theory unnecessarily.

As is true of most, if not all, utterances, an utterance of any of (18)-(21) is open to a wide range of interpretations. One particularly interesting way in which the interpretation of the constructions illustrated in (18)-(21), and of imperatives in general, can vary is with regard to the speaker's attitude towards the state of affairs described in the imperative clause: does the speaker actually want the state of affairs to be realised or not? There are three logical possibilities: the speaker wants the state of affairs to be realised, doesn't want it to be realised, or doesn't care whether it is realised or not. The conjunctions in (18), (20) and (21) are open to any of the three interpretations, although the information given in the declarative clause should encourage readers with no other contextual information to prefer one particular interpretation. In (18) the favoured interpretation is that the speaker wants the hearer to come closer. In (20) (provided we assume the speaker is holding a gun rather than a camera) the favoured interpretation is that the speaker does not want the hearer to come closer. In (21) the favoured interpretation is that the speaker doesn't care whether the hearer actually opens the Guardian or not. In disjunctions like (19) the only possibility is that the speaker actually wants the hearer to leave.

Henceforth I will refer to interpretations where the speaker is taken actually to want the state of affairs described to be realised as "positive" interpretations, those

where she does not want the state of affairs to be realised as "negative" interpretations, and those where she is indifferent as "neutral" interpretations.

I will not consider the syntactic analysis of these constructions in detail; I will simply assume that the initial clauses in each case do not differ syntactically from other imperatives. Schmerling (1980) suggests certain distinguishing features of imperatives, most of which seem to be shared by the constructions under consideration here. There are three features in particular which are uncontroversially typical of imperatives and which seem to be shared by these constructions. First, there are restrictions on the kind of subjects which can occur in imperative constructions: only second-person ("understood" or overt) subjects or third-person indefinite subjects are allowed. (As Davies (1986) points out, the possible range of subjects allowed in let-constructions (discussed in section 2.3) are precisely those which are ruled out in imperatives.) Second, imperatives have no inflection on their main verbs. As Schmerling puts it, "in all cases where we can distinguish present-tense forms from bare stems it is precisely the latter that are permitted in imperatives" (Schmerling 1980: 5). Finally, negative imperatives have a special form requiring don't or do not rather than not. Clearly, all of (18)-(21) conform to these observations. [Fn.4]

Assuming that these constructions have the same syntax as other imperatives, it would clearly be highly desirable to find a semantic analysis of imperatives which can be generalised to account for these constructions. In the rest of this section I will consider whether Wilson and Sperber's analysis can be extended to cover these "pseudo-imperatives". First, I propose to show how this semantic analysis can account

for the "positive", "negative" and "neutral" interpretations exemplified in (18)-(21). Finally I will discuss a small range of examples for which the analysis does not seem to work. I will argue that these examples constitute a separate class of non-imperative constructions.

2.2.1 Positive Interpretations

Positive interpretations of "pseudo-imperatives" are available for both conjunctions and disjunctions. I will look at positive conjunctions and positive disjunctions in turn and attempt to show how Wilson and Sperber's approach allows us to explain their behaviour without introducing conditionality in the semantic analysis. I hope to show that it is possible to treat the imperative clause in each case as an ordinary imperative and the declarative clause as an ordinary declarative and still make the right predictions about the interpretation of such utterances.

At first glance examples like (18) do not seem to pose any special problems:

(18) Come closer and I'll give you five pounds.

The imperative has the force of a request, which is the force traditionally associated with imperative constructions. Most theories would have no trouble in accounting for such a construction: speech act theorists might claim that the speaker is attempting to get the hearer to bring about the state of affairs described by performing a directive speech act; Wilson and Sperber would claim that the speaker is communicating that she regards the state of affairs described as desirable from her own point of view. In fact, I know of no proposal for the semantic analysis of imperatives for which the imperative clause in (18) would count as a counterexample.

However, there is some sort of special relationship between the imperative and the declarative clause which needs to be explained: there is a sense in which the declarative "strengthens" the force of the imperative by giving a reason for complying with it. The question I am concerned with here is whether we can account for this relationship without employing a semantic analysis based on conditionality. I believe that this is possible simply by adopting Wilson and Sperber's semantic analysis and working through the process of utterance-interpretation following standard relevance-theoretic assumptions.

We have already seen how the interpretation of the imperative clause comes out: the speaker communicates that she regards the state of affairs described as desirable from her own point of view. Of crucial importance here is the contribution of the declarative clause.

According to Wilson and Sperber:

the utterance of a declarative sentence with propositional content *P* communicates that *P* represents a thought entertained as a description of an actual state of affairs.

Assuming that the utterance is descriptive, the hearer will interpret the utterance as communicating that the speaker believes that the speaker will give the hearer five pounds. Of course, to recover this much is not to recover a complete propositional form. According to relevance theory the output of linguistic semantic translation rules is a logical form which is an incomplete expression in the language of thought. In order to recover a complete language of thought expression, pragmatic enrichment must take

place. Part of this process of pragmatic enrichment will involve the hearer making some assumption about the time at which the event described will take place. To see that such an assumption is standardly made, compare the sentences in (22):

- (22) a. I will have cornflakes for breakfast.
b. I will tell my grandchildren about this.

The relevance of (22a) would normally depend on the hearer assuming that the speaker intends to have cornflakes within a relatively short space of time: this morning, within the next few hours, etc. On the other hand, if the speaker is young enough, the information that the event described in (22b) is going to occur at some time or other in the future is probably relevant enough on its own (i.e. it probably allows the hearer to derive an adequate amount of contextual effects) although the hearer will probably derive some representation of a time in the distant future. Such assumptions about time are a standard part of the interpretation process and are, of course, always constrained by the criterion of consistency with the principle of relevance. [Fn.5]

In the case of (18) a highly accessible interpretation would be "the speaker will give me five pounds when I come closer". Also, this interpretation is clearly consistent with the principle of relevance: it provides adequate contextual effects for no unjustifiable processing effort. That the processing effort involved is not unjustifiable is obvious; given the context, part of which is the information in the preceding clause, this is extremely likely to be the first, if not the only, interpretation that comes to mind. Among the contextual effects which the hearer can derive from such an interpretation, the following two seem crucial: it indicates how desirable the speaker considers the state

of affairs described to be (she is prepared to give the hearer five pounds if it is realised) and it provides a reason for the hearer to believe that it is desirable from his own point of view. In short, the declarative clause provides the hearer with a reason to come closer. This is the interpretation which seems most natural and we have arrived at it without having to introduce any *ad hoc* semantic or pragmatic machinery.

It is obviously a goal of any theory of verbal communication to explain how the utterance of an imperative can persuade a hearer to perform a certain action (and, more generally, how utterances can affect thoughts and behaviour). This account suggests that to utter an imperative is to provide some evidence for the desirability (ultimately desirability to the hearer) of the state of affairs which it describes. This seems a fairly sensible way to attempt to persuade someone to bring about that state of affairs. However, the fact that the speaker finds a certain state of affairs desirable will not be enough to make the hearer act unless the hearer is persuaded by this that the state of affairs is desirable from his own point of view and preferable to any other course of action. If the speaker feels that uttering an imperative will not be a great enough incentive to persuade the hearer to bring about the appropriate state of affairs, she can strengthen her case by uttering a declarative which provides more evidence of the desirability to the hearer of the state of affairs. This is what seems to be happening in (18).

It is interesting to compare (18) with examples like (23) where there is an intervening pause between the imperative and the declarative clause:

(23) Come closer. (*pause*) I'll give you five pounds.

Here the speaker believes at first that the utterance of the imperative will be enough on its own to persuade the hearer to come closer. When she sees that the hearer is not moving, she realises that she needs to provide a further incentive and for this reason she adds the declarative. (18) works in just the same way except that the speaker assumes beforehand that the imperative alone will not be enough to persuade the hearer. On the basis of this assumption, she decides to conjoin the imperative with a declarative clause which she believes will provide the extra incentive needed to persuade the hearer to act.

To sum up, in uttering a positive conjunction like (18) the speaker communicates her belief that the state of affairs described in the imperative clause is potential and desirable to herself and therefore to the hearer, and the declarative clause provides further evidence of the desirability to the hearer of the state of affairs by indicating that something manifestly desirable will occur when the hearer brings about the state of affairs. Thus we can explain the relationship between the two clauses and the fact that the declarative clause seems somehow to "strengthen" the imperative clause.

What about disjunctions with positive interpretations such as (19)?

(19) Be off or I'll push you downstairs.

As with positive conjunctions, the imperative clause here seems to pose no special problems, since the speaker seems to be attempting to bring about the state of affairs described. Claims that examples like (19) are pseudo-imperatives seem to rest on no more than their apparent similarity to examples like (18), (20) and (21). As with (18) there seems to be a special relationship between the two clauses; again it seems that the declarative clause somehow strengthens the force of the imperative. There is an obvious

difference in that the declarative has this effect by providing evidence of the undesirability of any alternative state of affairs to that described in the imperative clause, rather than by providing evidence of its desirability. Again the problem is how to account for this perceived relationship without introducing any notion of conditionality into the semantic analysis. In particular, I want to reject Fraser's (1969) suggestion that (19) is synonymous with, or at least derivable from the same underlying structure as, (24):

(24) If you don't leave I'll push you downstairs.

I believe that such proposals are due to the "blinding" effects of the favoured interpretation which automatically convinces some semanticists that the structure can not be an imperative one; having made the assumption that (19) can not be an imperative, a search is begun for evidence which will allow an alternative syntactic analysis. I believe that assuming relevance theory and the semantic analysis proposed by Wilson and Sperber, and assuming that, as the syntax suggests, the first clause in (19) is an imperative, a satisfactory account of the interpretation process is possible. The account I will propose also depends on the recognition of some especially interesting features which, I will claim, are associated with disjunction in general rather than with constructions like (19) in particular.

As far as I can see, the imperative in these examples is always descriptively used: the hearer always assumes that the speaker believes that the hearer's leaving is potential, and desirable either to herself, as in (19), or to the hearer, as in (25):

(25) Sit down or you'll get tired.

The imperative clause in (25) clearly has the force of advice and thus fits the analysis proposed for (13) above:

(13) A: How do I get to the station?

B: Go to the traffic lights and turn right.

A reason for the non-existence of negatively interpreted disjunctions like this will be outlined below.

I will argue below that "negative" and "neutral" interpretations of "pseudo-imperatives" arise when the speaker uses the imperative clause interpretively. So, on this account, to say that the disjunctions are only open to "positive" interpretations is just to say that they are always descriptively used. Given that the speaker of a disjunction like (19) always wants to see the state of affairs described become reality, it is inconceivable that she could attribute to the hearer or to anyone else the thought that this state of affairs is desirable without making it manifest that she shares this thought. The only examples like this where the imperative is interpretive occur when the whole utterance is interpretive, e.g. in echoic utterances such as B's use of free indirect speech in (26):

(26) A: What did John say?

B: Be off or he'll push you downstairs.

Let us assume, then, that the context is such that the first interpretation of (19) consistent with the principle of relevance is that the speaker believes that the hearer's leaving is desirable from her own point of view. The interpretation of the imperative clause, stated informally, is "it is potential and desirable to me that you leave".

As I remarked above, one requirement of an explanatory account of these constructions is to show how the utterance of an imperative can result in action on the part of the hearer. On certain occasions of utterance, the information that the speaker believes that the hearer's leaving is desirable will be enough to persuade the hearer that it is also desirable from his own point of view. When the speaker feels that this alone will not be enough to persuade the hearer to act, there are various ways in which she can attempt to be more persuasive. We have already considered one possible option when we looked at example (18): the conjunction of the imperative clause with a declarative clause which provides evidence for the desirability of the state of affairs to the hearer. It seems that (19) is an example of another kind of strategy speakers can use in their attempt to influence the thoughts and actions of others. To find out whether this is so, we need to look more closely at the interpretation of the declarative clause.

Assuming that the declarative is descriptively used, the hearer will assume that the speaker is communicating that she believes that she will push the hearer downstairs. Again a process of pragmatic enrichment will involve an assumption about the time at which this event will occur. In this case the interpretation which seems highly accessible and to provide adequate contextual effects is that the speaker will push the hearer downstairs "very soon" or "as soon as it becomes apparent that the hearer is not going to leave". So the overall interpretation of the whole utterance is something like "it is potential and desirable that you leave or it is actual that I will push you downstairs in a few moments".

I believe there is a straightforward explanation for the conditional interpretation which is usually assigned to utterances of (19) and which seems to have persuaded Fraser that it is synonymous with (24). There is a straightforward inferential process which takes as input a premise of the form " $P \vee Q$ " and gives as output a conclusion of the form " $\neg P \rightarrow Q$ ". Thus, we would expect that an utterance of (19) would cause the hearer to infer that if he doesn't leave he will be pushed down the stairs.

In fact, this account is too simple. If it worked in the way I have just outlined, and if the semantic analysis gave rise to the interpretation I have suggested, then hearers should derive the following interpretation: "if it is not potential and desirable that you leave then I will actually push you downstairs in a few moments". In other words, the clause within the scope of the "if" should be a description not of the actual world but of a potential and desirable one. However, hearers seem to understand something stronger. The natural interpretation seems to be: "if you do not actually leave, then I will actually push you downstairs in a few moments". That is, the reference to potentiality and desirability in the imperative clause seems to be replaced by a reference to actuality in its conditional paraphrase. I believe that there is an interesting explanation for this.

First, notice that this unusual property is not unique to disjunctions involving imperatives.

- (27)
- a. You should finish your medicine or you'll have a relapse.
 - b. I want you to be quiet or I'll put you outside.
 - c. You must return that by Thursday or I'll charge you double.

In (27a) the conditional derived as a result of interpreting the disjunction seems to be "if you don't finish your medicine then you will have a relapse", in (27b) "if you are not quiet then I will put you outside", in (27c) "if you don't return that by Thursday I'll charge you double". However, the conditionals which we would expect on the basis of the semantic content and the "or" to "if" conversion rule are "if you shouldn't finish your medicine then you will have a relapse", "if I don't want you to be quiet then I will put you outside" and "if you mustn't return that by Thursday then I'll charge you double". In each case the antecedent actually derived is not a proposition which one would expect the hearer to derive on the basis of the content and the "or" to "if" conversion rule. Rather it seems to be something that is less directly related to what the speaker actually said.

It seems that the hearer processes the utterance in the same way as he would have if the speaker had uttered two sentences, with otherwise beginning the second sentence:

- (28) a. You should finish your medicine. Otherwise, you'll have a relapse.
- b. I want you to be quiet. Otherwise, I'll put you outside.
- c. You must return that by Thursday. Otherwise, I'll charge you double.

Otherwise, in (28a), conveys "if you don't" rather than "if you shouldn't", and so on for (28b) and (28c). This would be explained on the assumption that otherwise invites the hearer to supply by pragmatic inferencing some appropriate proposition which will fill

the slot occupied by "P" in the conditional logical form " $\neg P \rightarrow Q$ ". On this account, (28a) would encode something of the form "You should finish your medicine. If not ___ then you will have a relapse." where the blank must be filled by pragmatic inferencing. This would provide a basis for explaining why (28a) conveys "if you don't finish your medicine you'll have a relapse" rather than "if you shouldn't finish your medicine you'll have a relapse".

There also seems to be a similarity with cases where the two sentences are uttered without otherwise and with a pause between (i.e. where the relationship between the two sentences is left completely implicit):

- (29) a. You should finish your medicine. (*pause*) You'll have a relapse.
b. I want you to be quiet. (*pause*) I'll put you outside.
c. You must return that by Thursday. (*pause*) I'll charge you double.

There is a straightforward pragmatic explanation for the interpretation of the second part of the utterances in (29a-c). On hearing the second sentence in (29a), the hearer will not simply take the speaker to be communicating her belief that the hearer will have a relapse at some time in the future. As discussed above, in order to find an optimally relevant interpretation, the hearer will have to make some assumption about when, or, more generally under what circumstances, the relapse will take place. The hearer has to work out how the proposition expressed is intended to be relevant and, as always, will be guided by considerations of relevance. Given that the speaker has just expressed her belief that the hearer should finish his medicine, and given certain common assumptions about medicine-taking, the assumption that the relapse would be a consequence of not

taking the medicine should be highly accessible. This interpretation also provides adequate contextual effects, the most important being that more evidence for the desirability of finishing the medicine is provided.

On the other hand, it is very hard to think of an alternative interpretation which a rational communicator could have expected to be optimally relevant. To assume that the relapse is a consequence of it not being true that the hearer should take the medicine would be irrational: states of affairs are not directly caused by attitudes individuals have to propositions describing them. Rather, we expect that our attitudes to propositions are caused by events connected with the states of affairs they represent. It makes sense to think that your attitude to medicine-taking can be influenced by the relapses of those who do not finish their medicine. It would be absurd to think that whether or not I have a relapse depends on what you believe about medicine-taking. In fact, it is hard to imagine a context in which any interpretation other than that outlined above would be consistent with the principle of relevance.

Examples like this have a lot in common with examples like (23) mentioned above:

(23) Come closer. (*pause*) I'll give you five pounds.

In (23) there is a highly accessible interpretation where the speaker is drawing attention to the manifestly desirable consequences of an action on the part of the hearer. In (29a-c) the speaker is taken to be drawing attention to the manifestly undesirable consequences of the hearer's not following a particular course of action. The degree of accessibility of the various interpretations is affected by the content of the preceding

sentence and various aspects of encyclopaedic knowledge (i.e. it depends on the set of contextual assumptions selected by the hearer as part of the interpretation process). [Fn.6] In (23) the speaker adds the declarative after realising that the hearer is not persuaded to act on the basis of the imperative alone. In (29a-c) it seems that the speaker adds the second declarative when she begins to think that the hearer is not taking the advice or injunction in the first declarative seriously enough.

Examples (28a-c) are just like (29a-c) except that the presence of otherwise functions as an explicit indicator of the consequential relationship between the two propositions.

Another linguistic form which seems to have a similar function is the particle else:

- (30) a. You should finish your medicine or else you'll have a relapse.
b. I want you to be quiet or else I'll put you outside.
c. You must return that by Thursday or else I'll charge you double.

Like otherwise, else seems to introduce an implicit conditional of the form "if not ___ then *Q*". As with otherwise, an element of pragmatic inferencing is often needed to supply the missing antecedent: (30b) conveys not "if I don't want you to be quiet, I'll put you outside" but "if you are not quiet, I'll put you outside", and so on. But how, on this analysis, can we explain the presence of or? Notice that, by the "or" to "if" conversion rule mentioned above, "if $\rightarrow P$ then *Q*" is equivalent to "*P* or *Q*". We might explain the presence of or, then, by assuming that what or else encodes is not a conditional but a disjunction, the first disjunct of which is to be supplied by pragmatic

inferencing. Thus (30a) would convey: "You should finish your medicine. You will finish your medicine or you will have a relapse."

I believe that the sort of interpretation process explicitly required for utterances containing else or otherwise is implicitly required for utterances such as (19) and (29a):

(19) Be off or I'll push you downstairs.

(29) a. You should finish your medicine. (*pause*) You'll have a relapse.

Notice, for example, that the cases I have been discussing have corresponding imperative disjunctions similar to (19):

(31) a. Finish your medicine or you'll have a relapse.

b. Be quiet or I'll put you outside.

c. Return that by Thursday or I'll charge you double.

Clearly the relationship between the two clauses in the examples in (31) and (27) is the same as that between the pairs of sentences in examples (28)-(30). What this suggests is that or can sometimes be interpreted as meaning "or else". This can happen when the speaker of the disjunction is attempting to influence the behaviour of the hearer in some way, as in the examples we are considering. When this happens the hearer has to look for some proposition related to the one which is explicitly expressed by the first clause of the utterance and use it to construct a disjunction whose second disjunct the proposition expressed by the second clause. [Fn.7]

So I am claiming that the apparently unusual inferential processes involved in interpreting (19) are a feature of a more general possibility for the interpretation of

disjunction and not of this particular construction. They are involved in interpreting utterances of examples such as those in (27) as well as utterances of examples like (19):

- (27) a. You should finish your medicine or you'll have a relapse.
b. I want you to be quiet or I'll put you outside.
c. You must return that by Thursday or I'll charge you double.
- (19) Be off or I'll push you downstairs.

Hence, there is no evidence for the view that the initial clause in (19) is not an imperative, nor that the whole sentence is some form of conditional.

What I am suggesting is that utterances such as (19) and (27) communicate not "*P* or *Q*" but something more like the following: "*P*. ___ or *Q*" where the blank is a variable slot to be filled by some proposition which is pragmatically inferred from *P*. So what the hearer of (19) recovers is something like "It is potential and desirable that you leave. ___ or I will push you downstairs". It is clear that the blank is filled by "you will leave" in this case. So the overall interpretation of this utterance in context will be something like "It is potential and desirable that you leave. You will leave or I will push you downstairs".

So what are the effects of disjoining the imperative with the declarative clause? There are two which seem to be particularly crucial: evidence is provided about the degree of desirability accorded by the speaker to the state of affairs described and some strong evidence is provided for the hearer to share the view that the state of affairs described is desirable.

The fact that the speaker is prepared to do something rather drastic if the hearer does not leave is evidence that she sees the hearer's leaving as highly desirable. This in itself is one reason for the hearer to raise the degree of desirability which he accords to the state of affairs described.

As Sperber and Wilson point out (1986: 155), when one individual requests another to perform something it is usually automatically manifest that the communicator believes that it is in the addressee's interests to comply; if not, why should the communicator expect the request to have any effect? A more pressing reason for the hearer to view the state of affairs as desirable is the result of a straightforward process of inference. The speaker has communicated her belief that one of two possibilities is true: the hearer will leave, or the speaker will push the hearer downstairs. Except in extraordinary circumstances the hearer will prefer the former to be true; he will prefer to leave than to be pushed downstairs. Therefore the effect of disjoining the imperative with this kind of declarative is to provide very strong evidence for the hearer to believe that it is desirable that he leave. The amount of desirability that the hearer accords to this state of affairs should rise to a very high level: high enough to persuade him to leave very quickly if he trusts the speaker enough.

This account extends quite naturally to utterances consisting of just an imperative clause and either otherwise or or else:

- (32) a. Be quiet! Otherwise...
b. Be quiet or else!

In both cases, the speaker communicates the desirability of the hearer being quiet. In order to make the request more persuasive, the speaker makes manifest that consequences which are undesirable to the hearer will follow if he is not quiet. In both cases the actual, undesirable consequences which will follow are not explicitly expressed. It is up to the hearer to imagine what these consequences might be. Such examples have something in common with examples like (33) which was mentioned above and which I will return to in the next section:

(33) Go on! Try it!

In conclusion, it seems that examples like (19) do not pose any special problems for Wilson and Sperber's proposal. We can treat the imperative clause as an ordinary imperative and the declarative clause as an ordinary declarative and still explain how the intuitive interpretation is worked out. The disjunction of the two clauses, like the conjunction in (18), is an example of the kind of strategy which speakers use in their attempts to influence the thoughts and behaviour of others. [Fn.8] As with example (18) it is possible to explain how this takes place without the need for any *ad hoc* semantic assumptions about conditionality.

2.2.2 Negative Interpretations

(20) Come one step closer and I'll shoot.

Examples like (20) have been problematic for theories which see imperatives as attempts to bring about the state of affairs described, because it seems that the speaker is attempting to bring about the opposite state of affairs or not to bring about the state of affairs described. This is perhaps one reason behind Searle's (1979) weakened speech

act claim that imperatives (or rather directive speech acts, performed by uttering imperatives) are attempts to bring about some state of affairs, and not necessarily the one described in the imperative sentence. Of course, this approach brings a new problem: how does the hearer know which state of affairs the speaker wants him to bring about?

Assuming Wilson and Sperber's proposal, this example can be explained without any extra theoretical apparatus. There are two main ways in which such examples differ from examples like (18): the imperative is used interpretively (i.e. echoically) and the declarative provides evidence of the undesirability (rather than desirability) to the hearer of the state of affairs described in the imperative clause.

The interpretive imperative communicates that the speaker is attributing to the hearer the thought (or the potential thought) that the hearer's coming closer is potential and desirable; informally the interpretation of this clause is something like "you want to come closer and think you can" or "you might be considering coming closer". (Put slightly more formally, "the speaker regards the hearer as entertaining the thought, or potentially entertaining the thought, that the state of affairs in which the hearer comes closer to the speaker is both potential and desirable"). This interpretation is the only one consistent with the principle of relevance; that is, it is the only interpretation which provides adequate contextual effects for no unjustifiable processing effort.

This interpretation clearly provides adequate contextual effects as it is the only interpretation which the hearer can use to derive a relevant interpretation of the conjunction as a whole. It clearly involves very little processing effort since any rational

individual's first thoughts when facing an armed gunman are almost certain to include speculation about possible means of escape. One natural line of thought would involve the possibility of disarming the gunman. So the thought that the hearer might want to approach the speaker might even be mutually manifest to speaker and hearer prior to the utterance. The interpretation of the declarative clause is parallel to that of the imperative clause in (18). The hearer interprets the utterance as communicating that the speaker believes that the speaker will shoot the hearer. Again the hearer has to make some assumption about the time at which the event described will occur. A highly accessible interpretation (and, partly as a consequence, the only interpretation consistent with the principle of relevance) is that the speaker will shoot the hearer when/if he comes one step closer. An interpretation along the lines of "you are considering (or might be considering) coming closer and I will shoot you when/if you do" is the end result of the interpretation process.

So the effect of the declarative clause is to provide evidence for the undesirability to the hearer of the state of affairs described in the imperative clause. The overall force of the utterance is that it is an attempt to dissuade the hearer from coming closer; the speaker attributes to the hearer the thought that coming closer is desirable and communicates her intention to shoot the hearer should he do so. This is in line with our intuitions and falls out without the need for any additional semantic assumptions; there is a form of conditionality in the proposition derived as a result of the interpretation process but not in the semantic analysis of the construction.

This analysis extends quite naturally to threats and dares like (34), which was mentioned above:

(34) Go on! Try it!

Wilson and Sperber (1988a: p.5) point out that when an utterance like (34) is uttered threateningly there is no sense in which the speaker is attempting to get the hearer to try to bring about the state of affairs described. A more natural assumption, and the interpretation which is consistent with the principle of relevance, is that the imperative clause is being interpretively used: the speaker is attributing to the hearer the thought that the state of affairs described is potential and desirable. Usually, an utterance like (34) would be used when the hearer's behaviour is manifestly consistent with this assumption. So the interpretation of the imperative is just like the interpretation of the imperative in (19). What is different is that the speaker does not explicitly represent, but merely implicates, the undesirable consequences of the realisation of the state of affairs described.

There is an obvious similarity between the interpretation of (34) and the interpretation of the ironical imperative (35), which was also discussed above:

(35) Go ahead and ruin the carpet!

In both cases the speaker is communicating that the hearer's behaviour is consistent with his representing a particular state of affairs as desirable. In (35) the crucial information that is left implicit is that such a thought is ridiculous; in (34) the crucial implicit information is that the realisation of the envisaged state of affairs would have unpleasant consequences for the hearer.

One important question to which I am now in a position to suggest an answer is this: why can't a disjunction of an imperative and a declarative clause be given a "negative" interpretation? I believe that this fact follows from the second clause of the definition of optimal relevance: no unjustifiable effort should be involved in deriving the contextual effects of the utterance. [Fn.9] This account is similar to that outlined in chapter one for the fact that, in normal circumstances, an utterance of (36) will not be taken to communicate that there is a tiger on the roof:

(36) There's a cat on the roof.

Recall that this explanation hinged on the availability of an alternative utterance which would put the hearer to less effort and give rise to less risk of misunderstanding, namely (37):

(37) There's a tiger on the roof.

Now consider the following utterance which might be an attempt at a "negative" disjunction of an imperative and a declarative:

(38) Leave now or I'll make you a nice dinner.

If this were interpreted negatively it would be intended to persuade the hearer to stay and to make the persuasion more effective with the promise of a nice dinner. Combining the analyses of positive disjunctions and negative conjunctions which I have outlined above, the gist of this interpretation would be "you are thinking of leaving now and I will make you a nice dinner if you don't".

There is nothing in the semantic analysis proposed here which would rule out such an interpretation. However, there are alternative utterances which would give rise to essentially the same interpretation and which are less complex. For example:

(39) Stay and I'll make you a nice dinner.

This is interpreted in the same way as (40) which I discussed above:

(40) Come closer and I'll give you five pounds.

Recall that this interpretation involved no more than a straightforward interpretation of the descriptively used imperative and a straightforward interpretation of the descriptively used declarative, coupled with some straightforward pragmatic enrichment processes.

However, a negative interpretation of (38) would involve both interpretive use and the complex kind of inference process which I have suggested is involved in other disjunctions consisting of an imperative and a declarative clause. Hence, the speaker would be putting the hearer to unjustifiable processing effort were she to expect him to interpret an utterance like (38), when the same effects could have been more economically achieved.

There is perhaps an even stronger reason for the nonexistence of negative interpretations of examples like (38). Not only are there less effortful utterances which would convey essentially the same information, there is also (at least one) less effortful interpretation of the same utterance. Further, this interpretation is itself consistent with the first part of the principle of relevance, i.e. it is an interpretation which a rational communicator could have expected to be consistent with the principle of relevance.

For example, the hearer might assume that the whole utterance is interpretive. Thus, the interpretation of the utterance would be exactly like that of (41), which I discussed above, except that the whole string would be interpretively used:

(41) Be off or I'll push you downstairs.

The gist of the interpretation would be that the speaker dissociates herself from the thought that it is desirable that you leave now and if you don't leave now the speaker will make you a nice dinner. This might achieve relevance by implicating that your behaviour is consistent with the thought that having a nice dinner made for you is undesirable, that you would like to avoid it, that the speaker would like you to leave, and that you both know that the preceding thoughts are ridiculous. Thus, it would give rise to the assumptions of friendliness and intimacy associated with irony in general.

In discussing (36) in chapter one, I suggested, following Sperber and Wilson, that the effort involved in accessing two interpretations, both individually acceptable, and having to choose between them, would be unjustifiable. These arguments carry over directly to the present discussion. Thus, negative interpretations of disjunctions like (38) and (41) are not ruled out by the semantic analysis:

(38) Leave or I'll make you a nice dinner.

(41) Be off or I'll push you downstairs.

However, there are pragmatic reasons for their unacceptability.

2.2.3 Neutral Interpretations

(21) Open the Guardian and you'll find three misprints on every page.

Examples like (21) cause problems for many semantic theories; the speaker does not seem to be attempting to bring about any state of affairs. In fact, the overall import of the utterance seems to be equivalent to that of an assertion or an offer of information. Examples like these are most commonly cited as evidence for the claim that it is necessary to assign conditional semantic analyses to certain imperative (or "imperative-like") constructions. Since the speaker does not seem to be communicating a belief that anyone sees anything as desirable, the problem for the analysis I am defending seems to be how to involve the notion of desirability without encoding the notion of conditionality in the semantic analysis. (i.e. can we resist the temptation to suggest that the imperative encodes "if you think it is desirable that...")

I want to claim that the imperative is used here to attribute a potential thought: the speaker attributes to the hearer the potential thought that opening the Guardian is potential and desirable. This is similar, then, to (42), which was discussed in chapter one:

(42) (*on a rainy day*) What a lovely day!

The speaker of (42) is commenting ironically on a thought which she might have had or might have hoped to have. I am claiming that the imperative clause in (21) is used to represent a thought which the speaker thinks the hearer might have at some future time. Informally the interpretation of the imperative clause is something like "you might (at some time) think that it is potential and desirable that you open the Guardian".

The interpretation of the declarative clause parallels that of the declarative clauses in (18) and (19). The output of the linguistic semantic translation rules is "you will find three misprints on every page". Pragmatic enrichment, taking into account contextual factors and constrained by the principle of relevance, yields the interpretation "you will find three misprints on every page when you open the Guardian".

Thus the overall interpretation of the utterance in context amounts to "you might want to open the Guardian and you will find three misprints on every page if you do". The conditionality in the eventual pragmatic interpretation is a consequence of the fact that the interpretation which is consistent with the principle of relevance is one where the opening of the Guardian takes place in a potential, rather than the actual, world. Thus we can account for our intuition that (21) is essentially an offer of information and for the highly-favoured conditional interpretation without making reference to conditionality in the semantic analysis.

It is important to notice that (21) is only "neutral" provided that the context does not suggest that the speaker has any view as to the desirability or otherwise of the state of affairs described in the imperative clause. Should the hearer assume that the speaker considers the state of affairs described as desirable to herself then the example is "positive"; should the hearer assume that the speaker believes the state of affairs is undesirable to herself or to the hearer then the example is "negative". This is to say that attributed potential thoughts can occur equally in examples with positive, negative or neutral interpretations.

All three conjunctive examples are open to a variety of interpretations, and resolving the indeterminacy depends on the assumption the hearer makes about the speaker's attitude to the state of affairs described in the imperative clause; contextual factors and considerations of relevance will, of course, combine to make this clear. In each case, the speaker's attitude to the desirability or otherwise of the state of affairs described in the imperative clause and that described in the declarative clause are identical. Thus what the context suggests about the speaker's attitude to the state of affairs described in the declarative clause will often be a crucial part of the context needed to establish whether she feels that the state of affairs described in the imperative clause is particularly desirable, undesirable or neither. As a result of this, the difference between the three types of example can be economically described thus: if the context suggests that the speaker believes that the state of affairs described in the declarative clause is desirable to herself then the utterance is positive; if the state of affairs described in the declarative clause is considered undesirable to herself or to the hearer then the utterance is negative; if the speaker is uncommitted as to the desirability or otherwise of the state of affairs described then the utterance is neutral. I turn now to a small range of examples which do not seem to fit the semantic analysis proposed by Wilson and Sperber.

2.2.4 Genuine Pseudo-Imperatives

So far Wilson and Sperber's analysis seems well able to handle the conjoined and disjoined imperative constructions which I have considered. I have suggested an account of the semantics of the four varieties of "pseudo-imperative" which treats the

initial clause in each case as an ordinary imperative and the second clause as an ordinary declarative and which provides an adequate account of their interpretation. However, there is a range of examples which also seem to consist of a conjoined imperative and declarative clause but which do not seem to share the semantic analysis of imperatives I am assuming. These are illustrated in (43):

- (43) a. Catch the flu and you can be ill for weeks.
b. Life was hard in those days. Say one word out of turn and they'd dock you a week's wages.
c. Miss this train and we'll never get there on time. [Fn.10]

The problem with the examples in (43) is that there is no way in which the speaker can be claimed to be making any reference to the notion of desirability. Clearly the speaker of (43a) is not attributing to herself or to the hearer the belief that it is desirable that the hearer catches the flu. Nor can we say that the speaker is attributing to the hearer the potential thought that it is desirable that he catch the flu. (What reason could the hearer ever have for believing that a state of affairs which is manifestly undesirable to him is desirable?) There seems to be no conceivable interpretation of any of (43) which would justify including the notion of desirability in the semantic analysis.

There are two questions which I want to consider here. First, can strings like the initial clauses of (43) ever occur in genuine imperatives? Second, can these strings ever be instances of genuine imperatives in (at least some interpretations of) utterances of the examples in (43)?

Taking the first question, it appears that strings like this occur in genuine imperative clauses in examples like those illustrated in (44):

- (44) a. Play outside and catch the flu if you want to.
b. Miss the train and see if I care.
c. Go ahead and ruin your life. See if I care.

Despite the fact that the states of affairs described are not ones which one would expect to be desirable, these seem to be genuine imperatives and they can be handled by Wilson and Sperber's analysis. Although the states of affairs might not be directly desired by the hearer, they may be perceived by the speaker as consequences of genuinely desired and intended states. Thus, these are wholly interpretive uses and would be accounted for in the same way as (45) which was discussed above:

- (45) Go ahead and ruin my new carpet.

Thus, the speaker of (44a) attributes to the hearer the thought that it is desirable to play outside and to catch the flu. The speaker thus conveys her belief that the speaker is acting in a way which is consistent with a desire to catch the flu. Therefore, examples like those in (44) can be handled by Wilson and Sperber's semantic analysis; they are simply more complicated because of the nature of the interpretive use involved.

I turn now to the second question: are these strings imperatives in (43)?

- (43) a. Catch the flu and you can be ill for weeks.
b. Life was hard in those days. Say one word out of turn and they'd dock you a week's wages.
c. Miss this train and we'll never get there on time.

I believe that they are not. Not only do they fail to fit the semantic analysis proposed by Wilson and Sperber, they also exhibit a range of features which strongly suggest that they are not imperatives.

First, examples like this tend to have generic (understood) subjects as opposed to the second person or third person indefinite subjects of imperatives. Thus, the understood subject of (43a) is not necessarily the hearer but may simply be people in general. Clearly, the understood subject of (43b) is also people in general rather than any particular person.

Second, these constructions can take a first person understood subject as in (43c). This strongly suggests that the construction is not an imperative.

Third, when an overt you occurs in examples like (43) it is the weak, unstressed form /jə/ rather than the strong, stressed form /ju/ which we find in imperatives:

- (46) a. You (/jə/) catch the flu and you can be ill for weeks.
b. You (/ju/) come one step closer and I'll scream.

Fourth, these constructions can be taken to refer to past events as in (43b). The closest ordinary imperatives come to referring to the past are examples such as those illustrated in (47) which are discussed by Bolinger (1967, 1977) and Schmerling (1982):

- (47) a. Don't have finished the whisky before I arrive.
b. Please don't have said anything rude!

(47a) actually refers to a future event like most imperatives. (47b) may genuinely refer to an event in the past, but only if the speaker does not know whether it has actually

taken place or not. In (43b), however, there is no doubt in the speaker's mind: she is expressing a belief about the way the world was at a certain time in the past.

Finally, and perhaps most significantly, these constructions form negatives with not rather than with do not or don't:

- (48) a. John was a big part of my life. Not see him again and I knew I'd never forgive yourself.
- b. My lecturer is a real tyrant. Not show up on time and he'll throw you off the course.
- c. The safety drill is important. Not listen and it'll be your own fault if you get into trouble.

This is strong evidence for the view that these constructions are not imperatives. Bolinger (1967, 1977) claimed that imperatives and infinitives formed a single class of sentence-types (a view I would reject for reasons given above in section 2.1 and below in 2.4), but one difference he would allow between the two classes was precisely this one: infinitives form negatives with not and imperatives with do not or don't (see Bolinger 1977: 189).

Bolinger also noticed the range of constructions illustrated in (43) and claimed that they arose due to:

a confluence of two streams: one from aphesis of subject (and possibly if) from non-third-singular verbs, the other from the imperative. (Bolinger 1977: 161)

Certainly, they seem to have some features in common with imperatives and some with conditionals. I have given reasons for my belief that they are not imperatives. I would also like to reject the idea that they are conditionals.

Evidence against taking these constructions to be conditionals comes from the fact that there are certain functions which can be performed by uttering a conditional but not by uttering a construction like those in (43). Consider the examples in (48):

- (49) a. If you miss the train, there's a waiting-room on platform one.
b. * Miss the train and there's a waiting-room on platform one.

The example in (49a) involves an untypical use of the indicative conditional. However, (49b) shows that such a use is unavailable for the examples in (43). This difference between (49a) and (49b) is inexplicable if they are semantically equivalent. Their semantic analyses must be different, although they may be very similar. Perhaps they are truth-conditionally equivalent but give rise to different inferential processes. An explanation consistent with these data would be that in both cases the states of affairs described in the initial clause are descriptions of potential states of affairs but that they differ in what the hearer infers about the state of affairs described in the following declarative. One explanation might be that in examples like (49b) the state of affairs described in the declarative clause is to be understood as obtaining only in a world where the potential state of affairs described in the initial clause has become actual. It is true that there is a waiting-room on platform one only in a world where it is true that you miss the train. In (49a) the state of affairs described in the declarative clause might be true in a world other than that in which the potential state of affairs described in the

initial clause has become actual. There might be a waiting-room on platform one even if you do not miss the train. Thus, the oddity of (49b) is due to the implication that the existence or nonexistence of a waiting-room on platform one might depend on whether an individual misses a train or not. This implication is not communicated by utterances of (49a). The relationship between the two propositions in (49b) seems to correspond to the predicate calculus biconditional represented by the double arrow " \leftrightarrow " rather than the simple conditional single arrow " \rightarrow ". Surprisingly, perhaps, the relationship between the two clauses in (49b) seems to involve a stricter conditional than in (49a).

However, it cannot be the case that (49b) encodes the biconditional proposition. If this were so, such a biconditional would also be encoded by the examples in (43):

- (43) a. Catch the flu and you can be ill for weeks.
b. Life was hard in those days. Say one word out of turn and they'd dock you a week's wages.
c. Miss this train and we'll never get there on time.

Clearly, an utterance of (43a) is not false if it turns out that you are ill for weeks but you don't catch the flu.

I believe that the difference between (49a) and (49b) is to be found in the pragmatic enrichment processes which the hearer performs in interpreting the utterance. Consider the interpretation of (49a):

- (49) a. If you miss the train, there's a waiting-room on platform one.

In order to understand an utterance of (49a), the hearer must perform significant pragmatic enrichment at the level of explicature, along the lines discussed by Carston

(1988). The significant extra information which must be inferred relates to the relevance of the second clause. The hearer must recover an explicature of the form "if you miss the train, it might be relevant to you to know that there's a waiting-room on platform one", where the underlined material is contextually inferred.

Such inferential enrichment seems to be blocked in (49b):

(49) b. *Miss the train and there's a waiting-room on platform one.

Assume that the logical form of (49b) is something like "in a potential world where you miss the train there is a waiting-room on platform one". The explicature which the hearer is not allowed to infer contextually is something like "in a potential world where you miss the train it might be relevant to you to know that there is a waiting-room on platform one". The speaker of (49a) is informing the hearer of the existence of the waiting-room, which might be relevant if the hearer misses the train. The speaker of (49b), on the other hand, is understood to be telling the hearer something about the potential world in which he misses the train. It would be strange if the waiting-room was only there on condition that the hearer miss his train. It would also be strange to use an utterance which encodes information about that potential world (such as (49b)) when there is an alternative which encodes information which might become relevant in the future. Informally, (49a) tells you about the waiting-room with the proviso that it is only relevant in certain conditions, while (49b) purports to report something which holds under certain conditions.

The important point for the present discussion is that the semantic analysis of examples like (43) is not to be equated with that of conditionals. I do not want to

suggest that they may not give rise to conditional interpretations. In fact, it is easy to see that they do. The positive conjunctions and disjunctions discussed above give rise to conditional interpretations as part of the pragmatic enrichment processes involved in interpreting the second conjunct. A similar explanation is available here. Thus, the hearer of (43a) has to make some assumption about when, or more generally in what circumstances, he will be ill for weeks:

(43) a. Catch the flu and you can be ill for weeks.

It is obvious that the interpretation on which illness occurs when he has the flu is both highly accessible and consistent with the criterion of consistency with the principle of relevance.

So I am arguing that the examples in (43) are neither imperatives nor conditionals but a distinct class which has elements in common with both. The initial clauses of these examples involve descriptions of potential, or merely possible, states of affairs. This explains why they have much in common with both imperatives and conditionals, although they are synonymous with neither. What is important here is that they are not a problem for Wilson and Sperber's analysis of imperatives because they are not imperatives. Nor do they force us to complicate the analysis of conditionals by claiming that they are conditional. They form a distinct class of constructions with a separate, though similar, semantic analysis.

To conclude, the only cases we have considered for which Wilson and Sperber's semantic analysis of imperatives does not work turn out not to be imperatives at all. This analysis does, however, handle all the other "pseudo-imperatives" under

consideration. The strong tendency to assign a conditional interpretation to constructions like this is due to the fact that they refer to potential or possible worlds, a feature shared by genuinely conditional constructions. In the next section I will look at some further constructions which seem to have a semantic analysis very similar to that of imperatives: let-constructions.

2.3 Let-constructions

So far in this chapter we have seen that Wilson and Sperber's proposed semantic analysis of imperatives can account for the interpretation of a wide range of imperative utterances, whether standing alone or appearing in coordinate structures. We have also looked at a range of constructions which are similar in some ways to imperatives but form a distinct class. Now I want to look at some constructions which also seem to have a great deal in common with imperatives, but which I also believe to be distinct. These are the "let-constructions" exemplified in (50):

- (50) a. Let him say what he likes.
b. Let us be quite clear about this.
c. Let's get some ice-cream.

Such constructions are discussed in some detail by Davies (1986). After a comprehensive and insightful discussion, Davies concludes that all the previous approaches she considers are unsatisfactory. An alternative analysis is suggested which, she claims, can account for the full range of interpretations which let-constructions can

have. This analysis also suggests an explanation for the unusual properties of let-constructions which have caused difficulties for previous approaches.

The semantic analysis which Davies proposes is very similar to the one that she proposed for imperatives (discussed above in section 2.1). I believe that her analysis of imperatives is inadequate and my reservations carry over to her analysis of let-constructions. Apart from this, the analysis of let-constructions which I will propose is in many ways similar to that proposed by Davies. The main difference is that my proposal is intended to fit into the framework proposed by Wilson and Sperber (1988a). I will argue that what is communicated by the let-constructions in (50) is procedural information about the higher-level explicatures of the utterance. I want to begin this section by looking at what Davies has to say about let-constructions.

2.3.1 Davies on Let-Constructions

One question raised by examples like those in (50) is whether they really do illustrate a separate construction at all. The possibility exists that they are simply imperatives in which the main verb happens to be let. If they are imperatives, then the examples in (51) would be reasonable paraphrases of the examples in (50):

- (51) a. Allow him to say what he likes.
b. Allow us to be quite clear about this.
c. Allow us to get some ice-cream.

It is true that in some contexts (51a) would be a reasonable paraphrase of (50a). However, (51b) is pragmatically odd. It makes sense in contexts where it is within the hearer's power to grant us permission to be clear about something. There is one

interpretation of (50b) for which (51b) does seem to be a paraphrase, but the more likely interpretation is not one in which the speaker is asking the hearer for permission. (51c), while a perfectly reasonable utterance, does not mean the same thing as (50c). The speaker of (50c) is not asking the hearer's permission to get some ice-cream. These differences are clearly not explicable simply in terms of a difference between let and allow.

Despite this, some theorists (e.g. Costa 1972, Ukaji 1978) have claimed that the let-constructions in (50) are simply imperatives with let as their main verb. Davies presents several convincing arguments against such a proposal. First, there is initial plausibility in the claim that these constitute a separate imperative-like construction used to perform functions similar to those performed by imperatives (for Wilson and Sperber the representation of potential and desirable states of affairs, for Davies the presentation of potentialities). The difference between the two is that the states of affairs are represented in each case by expressions with different subjects. The let-construction represents states of affairs with 1st person or 3rd person definite subjects. Imperatives represent states of affairs with 2nd person subjects.

In fact, Davies (1986: 6) suggests that imperatives also take 3rd person indefinite subjects. However, imperatives with 3rd person "subjects" take tag questions with you:

- (52) a. Someone stand up, will you?
 b. Stand up, someone, will you?

Further, as Davies herself points out (1986: 241), while someone can appear in both constructions, it is understood differently in the two cases:

- (53) a. Someone try explaining that to them.
b. Let someone try explaining that to them.

In (53a) someone will be understood as ranging over the speaker's addressees while in (53b) someone may range over people who are not even present at the time of utterance. Thus, the form someone in the imperatives in (52) and (53a) looks more like a vocative or an NP in apposition than a true subject.

However, the issue is not crucial here. What is important is that there exists some complementarity between let-constructions and imperatives, as is exemplified by the relative acceptability of pronominal subjects in (54):

- (54) a. You be more confident.
b. *Me/us/him/them be more confident.
c. *Let you be more confident.
d. Let me/us/him/them be more confident. [Fn.11]

(Davies 1986: 241)

If we take the NP following let in the examples in (50) and in (54c-d) to be the subject of the proposition expressed, it appears that the pronominal subjects which are permissible with the let-construction are precisely those which are disallowed in imperatives, and vice versa.

Further, "the let-construction can also be used to present a proposition in which the subject does not represent an agent at all" (Davies 1986: 241) as in (55):

- (55) a. Let it be understood that no more changes will be ~~made~~
b. Let there be no more complaints of this type.

This suggests that the let-construction is complementary to the imperative, rather than an instantiation of it.

The examples in (56) also provide evidence for distinguishing let-constructions from imperatives with let:

- (56) a. Let us have a drink together.
b. Let's have a drink together.
c. Let us borrow your car for the weekend.
d. ?Let's borrow your car for the weekend.

(56a) is open to two types of interpretation. The first is where the speaker is asking the hearer to grant permission to a group of people other than himself to have a drink together, i.e. the hearer is not included in the group assumed to be the referent of us. The latter is where the speaker is expressing her desire that the speaker and hearer have a drink together, i.e. the hearer is included in the group of people assumed to be the referent of us. The former is the interpretation which we would arrive at if we assume that this is an imperative with let as main verb, the latter follows from the semantic analysis of let-constructions proposed by Davies and discussed below. In (56b) only the latter interpretation is possible, i.e. the hearer must be taken to be included in the group referent of us. So the claim is that let us is interpretable either as a normal imperative or as the let-construction, while let's can only appear in the let-construction.

This explains why (56d) would be odd in many contexts: due to what we know about the concept of borrowing. If (56c) is interpreted as the let-construction, the hearer is a member of the group identified as the referent of us. If the utterance is interpreted

as an imperative, the hearer is not included in the referent of us. On the former interpretation the speaker would be suggesting that the hearer borrow his own car (assuming that the connection expressed by your is taken to be one of ownership). People do not usually borrow things they already own, so the utterance would be perceived as odd. On the imperative interpretation it is perfectly reasonable. The speaker is requesting the hearer's permission for a group excluding the hearer to borrow the hearer's car. (56d) can only be the let-construction, so the utterance is likely to seem odd: why is the speaker suggesting that the hearer and herself borrow a car which the hearer already owns? Of course, there are contexts where (56d) would be acceptable: firstly, those where it makes sense for the hearer to borrow his own car and secondly, those where the relationship expressed by your does not involve ownership (e.g. if your car means something like "the car you like", "the car you spoke about earlier", "the car your friend often lends you").

Further evidence comes from the possible scope of negation in examples like (57)-(58):

- (57) a. He let us not pay.
- b. He didn't let us pay.
- (58) a. Let's not pay.
- b. Don't let's pay.

In (57a) the scope of the negation is narrower than in (57b). The negation in (57a) affects the subordinate infinitive clause (the thing he allowed us to do was not to pay). The negation in (57b) affects the superordinate clause (the thing he didn't allow us to

do was to pay). By contrast, the scope of the negation in (57a-b) appears to be the same: in both cases the speaker thinks that it is desirable for us not to pay.

The two postulated constructions differ in the tag questions which can appear with them:

- (59) a. Let us have a look, {shall we}?
 {will you}?
 b. Let's have a look, {shall we}?
 {*will you}?

(59a) is perhaps more likely to take a second-person tag than a first-person, though both are possible. (59b) can only take a first-person tag. This is to be expected if we assume that first-person tags appear with the let-construction while second-person tags appear with imperatives. (59a) is interpretable either as a let-construction or as an imperative so it can take either, while (59b) can only be the let-construction so it can only take a first-person tag.

All of these examples provide evidence for the existence of two distinct construction-types: imperatives and let-constructions. The latter consist of let or let's plus an infinitive clause. The form with let is superficially indistinguishable from an imperative with let as main verb, so that utterances of this form are ambiguous.

Not all theorists who have ignored the differences above and failed to differentiate let-constructions from the corresponding imperatives have claimed that let-constructions are simply imperatives with let as their main verb. Some (e.g. Seppanen 1977, Tregidgo 1982) claim that none of the examples we have been discussing are imperatives, i.e. they claim that there are no imperatives with let as their main verb.

Seppanen, for example, claims that the let in the examples illustrated in (50) is a modal. Davies looks at specific arguments for this view in some detail and shows that they are unconvincing at best. However, the main reason she presents for rejecting this view is the more general one that:

it makes the similarity between the let-construction and imperatives appear to be the purely fortuitous result of...highly idiosyncratic properties" [of the verb let] (Davies 1986: 236)

That is to say, there are properties of the let-construction which are shared by imperatives but not by modals like must, may and can: let requires do with negation and pronouns appearing in let-constructions must be in object form. If we follow Seppanen's approach, these properties have to be treated as purely accidental.

Thus, the evidence seems to go against equating the let-constructions in (50) with imperatives, whether one wants to claim that all such constructions are imperatives or that none of them are.

Davies also rejects the idea, suggested by Fries (1952) and Quirk et al. (1972), that the let in these constructions is not a verb at all but some sort of marker or function word. Thus, Quirk et al. claim that the let in let's is an "introductory marker" while Fries claims that let's is not a contracted form of let us but rather a single morpheme which "operates as a device which makes a request sentence into a request or proposal that includes the speaker" (Fries 1952: 103). The first objection Davies makes to this is that it would suggest that there is no connection between let us and let's at all, which she finds counter-intuitive. Her second objection applies even if we resolve the first one

by assuming that the let in let us and the let in let's are the same particle. We could claim that let functions as an introductory marker in both cases with the subject of the clause it modifies represented in one case by us and in the other by the contracted form 's. Davies points out that this approach would not explain:

why it resembles a verb in being preceded by do with negation or emphasis. Quirk et al (1972) might avoid this difficulty, since they assume the do and don't of imperatives to be particles as well...but this in turn involves the even more counter-intuitive assumption that these particles do, don't and let('s) just happen to co-occur in the same order and the same type of environment as the corresponding verbs do. So again some aspects of the let-construction are made to seem merely accidentally similar to other constructions. (Davies 1986: 239)

Davies proposes an alternative analysis of let-constructions which, she claims, avoids all the problems faced by her predecessors. First, she distinguishes the let-construction from imperatives which have let as their main verb. The option of contracting let us to let's is available for let-constructions but not for imperatives. Thus, (60a) is ambiguous - it might be an imperative or a let-construction - while (60b) could only be an example of the let-construction:

- (60) a. Let us order a pizza.
b. Let's order a pizza.

We know what the imperative in (60a) communicates: for Davies it presents the potentiality that the hearer (assuming the hearer is identified as the subject) allow us to

order a pizza. Moreover, according to Davies, there is a Gricean convention associated with imperatives which states that the speaker is willing to accept the realisation of this potentiality. For Wilson and Sperber, (60a) communicates that someone entertains the thought that the state of affairs in which the hearer (again, assuming that the hearer is identified as the subject) allows us to order a pizza is both potential and desirable.

Davies suggests that let-constructions also represent potentiality but that the proposition which represents the potentiality is different from that in the imperative. She claims that when (60a) is interpreted as the let-construction it represents as potential not that the hearer allow us to order a pizza, but simply that we order a pizza. The same analysis, of course, will apply to (60b). This means that what the let-construction tells us about the proposition expressed is exactly what imperative syntax tells us about the proposition expressed in imperatives. The difference between the two is that they express different propositions. Let contributes to the proposition expressed when the utterance is interpreted as an imperative, but not when it is interpreted as a let-construction. As Davies puts it:

The point is that the initial let does not seem to constitute part of the proposition presented...rather, it is the sentence embedded below let which expresses the possibility that is being put forward. (Davies 1986: 240)

Of course, this analysis would support the notion that let is a marker of some sort, as proposed by Quirk et al. (1972), rather than a true verb. As suggested above, this means that the let-construction can be seen as complementing imperatives in that it allows the

presentation of propositions with subjects other than those allowed in imperatives. Imperatives present potentialities with 2nd person subjects; let-constructions present potentialities with 1st person or 3rd person definite subjects.

An interesting observation Davies makes about the conjunctive "pseudo-imperatives" discussed above is that the let-construction can be seen as complementing the imperative here as well. That is, in such constructions the let-construction is used in preference to an imperative clause where it is necessary to specify a first or third person subject. Thus, (61a) establishes that the subject is a female third person, which is unlikely to be inferred on the basis of (61b):

- (61) a. Let her make them an offer and they won't refuse.
b. Make them an offer and they won't refuse.

(Davies 1986: 242)

All of this suggests that it is a mistake to assume that the let in let-constructions is simply the main verb of an imperative with the addressee understood as the subject. Rather, the subject of the embedded sentence is to be seen as parallel to the subject of an imperative. Davies suggests that:

Let, rather than being understood as part of the content of the proposition presented, functions simply as an introductory marker [though not syntactically], which serves to indicate that the sentence it introduces constitutes the presentation of a proposition. (Davies 1986: 242)

On this basis, we can account for the interpretation of utterances containing let-constructions. Imperatives and let-constructions are thus seen as conveying the same information about the propositions they represent, while:

Differences between the illocutionary force potential of let-constructions and that of ordinary imperatives can be explained in terms of differences between the types of proposition each can present. (Davies 1986: 242)

However, although Davies argues that the let in let-constructions "functions as an introductory marker", she does not conclude that it should be treated syntactically as such. Rather, she claims (p.247) that let-constructions, although semantically distinct, remain syntactically identical to the corresponding imperatives:

The let-construction thus exhibits a certain lack of fit between form and interpretation. (Davies 1986: 247)

The claim is that two distinct semantic analyses are associated with the same surface syntactic structure. Clearly, the let-construction has developed from imperatives with let as main verb. The claim is that the new meaning associated with let-constructions has developed alongside the old meaning associated with imperatives, while the syntactic structure has not changed at all. Thus the bifurcation in the semantics has not been mirrored in the syntax. The availability of two semantic analyses for one syntactic structure has arisen because "syntactic change has not kept up with semantic change" (Davies 1986: 247).

Thus, whether it is interpreted as an imperative or as the let-construction, (60a) is seen as presenting a potentiality:

(60) a. Let us order some pizza.

If it is an imperative, the potentiality presented is that we are allowed to order some pizza. If it is a let-construction, the potentiality presented is that we order some pizza.

(60b) is only interpretable as a let-construction:

(60) b. Let's order some pizza.

There is an anomaly here. If let-constructions and imperatives are syntactically indistinguishable, why can (60b) not be interpreted as an imperative? Davies says:

The distinction [between let-constructions and imperatives] has syntactic correlates. Only in the let-construction can the pronoun us occur in a contracted form. (Davies 1986: 230)

So imperatives and the let-construction are syntactically identical except that this contraction is possible in let-constructions but not in imperatives.

After looking at related constructions in other languages (in German there is no syntactic difference between let-constructions and imperatives, in Dutch the two are syntactically as well as semantically distinct, in American English there is more syntactic difference than in British English but less than in Dutch), Davies remarks upon some further differences between let's and let us which suggest that let's may be developing into "something more like an indivisible marker serving to specify the clause it introduces as a proposal that the speaker and addressee do something" (Davies 1986: 248).

First, the addressee must always be included in the group referred to by the us in let's.

- (62) a. Let us not be disappointed.
b. Let's not be disappointed.

(62a) might be understood as an appeal to a third party that the speaker and someone else not be disappointed, while the hearer must be included in those not to be disappointed in (60b).

Second, further explicit subjects can be introduced alongside the 's in let's but not alongside the us in let us:

- (63) a. Let's you and me have a go.
b. ?Let us you and me have a go.
c. Let's us have a go.
d. ?Let us us have a go.

(63b) and (63d) sound odd, which suggests that the us there is still perceived as a pronoun while the 's in (63a) and (63c) is not. [Fn.12]

Third, let's cannot appear in forms like the "pseudo- imperatives" discussed above, while let us can:

- (64) a. ?Let's make the tiniest mistake and he used to get mad at us.
b. Let us make the tiniest mistake and he used to get mad at us.

(Davies 1986: 249)

As discussed above, Davies claims that the Gricean convention associated with imperatives - which states that the speaker accepts the realisation of the potentiality presented - is suspended in "pseudo-imperatives". She suggests that:

The oddity of let's in these examples seems to be due to the fact that it imposes this interpretation, seeming to indicate the speaker's favourable attitude towards the possibility. This suggests that the notion of speaker's acceptance which, we have argued, is not specified as part of the imperative, has however become part of the meaning of let's. We can conclude that there are certain peculiarities in the interpretation of let's which correlate with its unique form. (Davies 1986: 249-250)

So Davies claims that let-constructions are syntactically identical to imperatives except for two things: first, they allow the option of contracting let us to let's, and second, the form with let's exhibits some peculiarities which suggest that it may be developing into a separate introductory marker. If this development continues, English will have three distinguishable constructions used to present potentialities: imperatives, let-constructions with let, and let-constructions with let's. I believe that this is already the case. In the next section, I consider how let-constructions can be dealt with within the framework proposed by Wilson and Sperber (1988a). I will argue that there are three semantically distinct linguistic forms which have to be recognised: imperatives with let as their main verb, let, which functions as a marker of potentiality and desirability, and let's, which functions as a marker of potentiality and desirability from the speaker's point of view and with a 3rd person inclusive subject.

2.3.2 A Relevance-Theoretic Account

Davies suggests that let-constructions are syntactically identical to imperatives and that both are used to present potentialities. The semantic difference between the two

constructions is that let contributes to the proposition presented only in imperatives. Intuitively, this analysis works extremely well and seems to account for the interpretation of a wide range of utterances containing the let-construction. However, I would now like to propose some modifications. The most important of these is that I want to discuss let-constructions in terms of the overall approach proposed by Wilson and Sperber, i.e. I want to see how such constructions fit into a relevance-theoretic account of linguistic semantics.

I will assume that let-constructions, like imperatives, encode procedural information about propositional attitudes. I agree with Davies that what is encoded by let-constructions is similar to what is encoded by imperatives, but I believe that Davies's analysis of imperatives is inadequate. The difference between my analysis and Davies's analysis of let-constructions will parallel the difference between Wilson and Sperber's and Davies's analysis of imperatives. I agree with Davies that the difference between what is encoded by let-constructions and what is encoded by imperatives concerns the proposition presented rather than what it is presented as. But I will go further than Davies in differentiating let us from let's. I believe that the two constructions are both syntactically and semantically distinct. Thus, I will differentiate two types of let-construction and propose different semantic analyses for them. My analysis avoids some problems raised by Davies's account concerning the relationship between pragmatic principles and semantic encoding.

Before looking in more detail at the semantic analysis of let-constructions which I want to propose, I want to consider what our account would look like if we modified

Davies's analysis by making the following assumptions: that what is encoded by let-constructions is procedural information about propositional attitudes, and that the appropriate analysis to carry over from the analysis of imperatives is that proposed by Wilson and Sperber (1988a). Recall Davies's analysis of examples such as those in (60):

- (60) a. Let us order some pizza.
b. Let's order some pizza.

(60a) is ambiguous: it may be interpreted as an imperative or as a let-construction. In Davies' terms, when (60a) is an imperative it presents the proposition that the hearer allow us to order some pizza, and when it is a let-construction it presents the proposition that we order some pizza. In both cases, the particular proposition is presented as a potentiality. Further, there is a Gricean convention governing the use of imperatives and let-constructions which says that the speaker will accept the realisation of the state of affairs described. (60b) can only be interpreted as an instance of the let-construction.

This proposal shares the two flaws which I discussed above in connection with straightforward imperatives (section 2.1): it is not strong enough to explain why such utterances can persuade hearers to attempt to bring about the state of affairs described, and it is odd to suggest that pragmatic principles - which are assumed to be general and independent of linguistic knowledge - can be associated with particular linguistic constructions. If we adjust the semantic analysis so that it parallels the one which

Wilson and Sperber have proposed for imperatives, and adopt relevance-theoretic assumptions about linguistic semantics, these problems no longer arise.

When (60a) is an imperative, the logical form of the utterance represents a state of affairs in which someone allows some people to order some pizza. This much is conceptually encoded. The propositional form derived might represent the state of affairs in which John allows Peter and Mary to order some pizza. The imperative syntax encodes some procedural information about someone's attitude to that proposition. Specifically, it communicates that this proposition is a (more or less literal) representation of a thought entertained (by someone) as a description of a potential and desirable state of affairs. Thus, it might communicate that someone thinks it is potential and desirable that John allow Peter and Mary to order some pizza. If uttered by Peter, it might amount to a request to John to allow Peter and Mary to order some pizza.

When (60a) is a let-construction, let does not contribute to the logical form of the utterance, i.e. let has no conceptual content. The logical form represents a state of affairs in which some people order some pizza. The propositional form derived might represent the state of affairs in which Peter and Mary order some pizza. The let (or, perhaps more accurately, the let plus imperative syntax) encodes exactly the same procedural information as imperative syntax: that this proposition is a (more or less literal) representation of a thought entertained (by someone) as a description of a potential and desirable state of affairs. Thus, it might communicate that someone thinks it is potential and desirable that Peter and Mary order some pizza. If uttered by Peter

to Mary, it might amount to a suggestion that Peter and Mary order some pizza. (60b) can only be interpreted as the let-construction.

Thus, if we adopt Davies's view that the semantic analysis of let in let-constructions is identical to the semantic analysis of imperative syntax and assume Wilson and Sperber's analysis of imperatives, then the semantic analysis of let-constructions is (65):

- (65) To utter a let-construction with propositional content *P* is to communicate that *P* represents a thought entertained as a description of a potential and desirable state of affairs.

According to Davies, there are two construction-types which must be distinguished: imperatives and let-constructions. They share the same syntactic structure but differ semantically. However, there is one instantiation of this syntactic structure - namely, that with us contracted to 's - which can only be associated with one of the semantic analyses.

From this it follows that the form let is ambiguous, corresponding to two distinct lexical items. One of these (the one which occurs in imperatives) encodes a concept, while the other (the one which occurs in let-constructions) encodes a constraint on higher-level explicatures (as does imperative syntax).

I want to make one more significant adjustment to this overall account. I agree with Davies that a distinction must be made between the let-construction and imperatives containing let as main verb. But I would also like to argue for a distinction between those let-constructions which contain let and those which contain let's. I believe that

these are both syntactically and semantically distinguishable. From now on I will refer to the former as "let-constructions" and the latter as "let's-constructions". The semantic analysis I propose for let's-constructions is (66):

- (66) To utter a let's-construction with propositional content *P* is to communicate that *P* represents a thought entertained as a description of a state of affairs which is potential, and desirable from the speaker's point of view. [Fn.13]

I will also suggest some differences between let-constructions and let's-constructions concerning the possible subjects of the propositions they express.

Notice that let and let's are the first cases we have come across of lexical items which encode procedural information about higher-level explicatures. Previously, we have come across syntactic structures which encode procedural information (e.g. declaratives and imperatives) and lexical items which encode conceptual information (e.g. seriously and frankly) about higher-level explicatures. In chapter three I will discuss further candidate examples of lexical items which encode procedural information, such as the exclamatory particles wow and boy.

There are several reasons for differentiating let-constructions from let's-constructions, and for formulating the semantic analyses in this way. The first is the convincing evidence presented by Davies herself for this view. As mentioned above, Davies takes the differences she presents between let and let's to suggest:

that the form let's may be developing into something more like an indivisible marker serving to specify the clause it introduces as a proposal that the speaker and addressee do something. (Davies 1986: 248)

My view differs from Davies in that I believe this development has already occurred.

Davies says that the difference between let-constructions and imperatives has "syntactic correlates" (Davies 1986: 230), namely that contraction to let's is only possible with the former. She also points out that there are differences in meaning between let us and let's and says that "there are certain peculiarities in the interpretation of let's which correlate with its unique form" (p. 250). However, she still wants to claim that (60a-b) are syntactically identical and that, when (60a) is interpreted as a let-construction, they are semantically identical:

- (60) a. Let us order a pizza.
b. Let's order a pizza.

I believe that the account of these constructions is greatly simplified if we accept that the two constructions are already distinct. The complexity in this position is no more serious than that associated with lexical ambiguity: in the same way as the form bat is associated with more than one conceptual representation, the surface form in (60a) is associated with more than one semantic analysis. (60b) is both syntactically and semantically distinct from both versions of (60a).

Davies' reluctance to differentiate let-constructions from let's-constructions seems to be due to her belief that it is "somewhat counter-intuitive to maintain...that the form let's is not related to let us at all" (pp. 238-239). However, the two forms are clearly

related historically. The connection between let us and let's which Davies is reluctant to obscure is a historical one. In a synchronic study of English linguistic semantics, our only concern is with what the two forms encode now. If they encode different things, then they are semantically distinct. Davies has presented convincing evidence that they do.

First, recall the difference exemplified in (67):

- (67) a. ?Let's make the tiniest mistake and he used to get mad at us.
b. Let us make the tiniest mistake and he used to get mad at us.

(67b) might seem marginal to some speakers. This might be due to the existence of a simpler alternative with a similar interpretation, namely (68):

- (68) Make the tiniest mistake and he used to get mad at us.

This is, of course, an example of the type discussed in section 2.2.4 above. Examples with 3rd person subjects are more acceptable:

- (68) a. Let one drop of rain fall and the umpire used to call off the match.
b. Let anyone say a word out of turn and they'd sack him on the spot.

The point is that constructions with let, and perhaps let us, are possible here while constructions with let's are not.

Davies's explanation of this difference actually presumes that there is a semantic difference between let us and let's, i.e. that they encode different things. She says:

When used to express conditions...imperatives...are not governed by the conventions of utterance, and are therefore not understood to express the speaker's acceptance of the possibility's being realised. The oddity of let's in these examples seems to be due to the fact that it imposes this interpretation, seeming to indicate the speaker's favourable attitude towards the possibility. This suggests that the notion of speaker's acceptance, which, we have argued, is not specified as part of the imperative, has however become part of the meaning of let's. We can conclude that there are certain peculiarities in the interpretation of let's which correlate with its unique form. (Davies 1986: 249-250)

Thus, the impossibility of (67a) is to be explained by the imposition of Davies's postulated convention of acceptance. This is very strange. Not only are Gricean conventions to be associated with particular linguistic strings and then lifted in certain linguistic contexts, but they are now to be re-imposed by one version of the let-construction and not the other. Davies is claiming that a particular Gricean convention is associated with imperatives and let-constructions, except when they are conjoined with declaratives, unless the let-construction involves a let us which has been contracted to let's, in which case the Gricean convention is encoded. Whatever the precise explanation, it is clear that the difference between (67a) and (67b) is due to what they semantically encode. Thus, let-constructions and let's-constructions are semantically as well as syntactically distinct. I believe that Wilson and Sperber's approach, together with

the analysis of let's-constructions in (66), suggests a more straightforward analysis and a way of avoiding these puzzling questions about Gricean conventions.

The fact that (67a) is impossible follows straightforwardly from the semantic analysis in (66). I have suggested that let's-constructions encode that the state of affairs described is viewed as potential and desirable from the speaker's point of view. Thus, the speaker of the initial clause in (67a) communicates that it is desirable from her own point of view that the hearer and herself make a mistake. It is hard to see how this could be combined with the information that someone used to get mad at them in such a way that the conjunction as a whole could be consistent with the principle of relevance.

[Fn.14]

The examples in (67) are, of course, very similar to the "pseudo-imperatives" discussed above. (67b) is particularly interesting. It looks like one of the examples discussed in section 2.2.4:

(69) Say one word out of turn and they'd dock you a week's wages.

I argued that the initial clause of (69) was not an imperative but a separate construction with a very similar semantic analysis. (67b) suggests that there also exist constructions similarly related to let-constructions which occur in similar environments. It is not surprising that there exist constructions with the same relationship to let-constructions as examples like (69) bear to imperatives. Let-constructions are semantically similar to imperatives; in fact, one could argue that let-constructions function as "1st and 3rd person imperatives". Presumably, constructions like (69) are a historical development from ordinary imperatives and a similar development occurred with let-constructions.

In fact, it looks as if let-constructions are related historically to imperatives with let as their main verb, let's-constructions are a development from let-constructions, and both imperatives and let-constructions are the ancestors of constructions such as those illustrated in (69) and (67b):

(69) Say one word out of turn and they'd dock you a week's wages.

(67) b. Let us make the tiniest mistake and he used to get mad at us.

Davies provides further evidence for a difference between let-constructions and let's-constructions. In arguing against the possibility that the let in let-constructions is the main verb in an imperative clause and that this imposes some sort of directive on addressees, Davies points out that there are many uses of let where it is clear that the addressee is not intended to have anything to do with bringing about the state of affairs described, such as those illustrated in (70):

(70) a. Let those who think I have an easy time try living on my salary for a month!

b. Let him write a letter of complaint, if he feels so strongly about the matter.

c. If anyone thinks he can do better, let him take over the organisation himself.

(Davies 1986: 243)

However, she points out that such examples do not seem to occur with let's-constructions. This she attributes to the fact that:

In examples with let's...the possibility presented will always be one whose realisation depends partly on the addressee. (Davies 1986: 243)

If the explanation for this depends on the subject of the proposition presented in let's-constructions being a contracted us, then the same should apply to let-constructions with let us. It should also follow that the realisation of the potentiality presented by examples with let us depends partly on the addressee. However, this is not so, as demonstrated by examples like (71) which we discussed above:

(71) Let us not be disappointed.

As Davies points out, it is possible to imagine the speaker of (71) addressing a plea to a third party that herself and some other person not be disappointed. However, it is also possible to conceive of this as an expression of a hope where the realisation of the state of affairs is not within anyone's obvious control. Such examples are similar to the imperatives in (72) discussed in section 2.1 above:

- (72) a. Please be out!
b. (to a bus) Please don't be late!
c. Have a nice day.

In each of these cases, the speaker merely communicates her desire that the state of affairs described be realised without suggesting that any addressee should, or could, decide to make them happen. Clearly, no such interpretation is available for (73):

(73) Let's not be disappointed.

Thus, the realisation of the state of affairs presented depends partly on the addressee in all let's-constructions but in only certain let us constructions. In this respect, let-constructions are just like imperatives while let's-constructions are not.

A further difference between let us and let's pointed out by Davies is that further explicit subjects may only be introduced with the latter:

- (74) a. Let's you and me have a go.
b. ?Let us you and me have a go.
c. Let's us have a go.
d. ?Let us us have a go.

Davies takes the fact that (74b) and (74d) sound odd to suggest that the us there is still perceived as a pronoun while the 's in (74a) and (74c) is not. In reality, the facts here are less clear.

First, notice that utterances of the let-construction where subjects appear in apposition are perfectly acceptable:

- (75) Let us {both of us} try our hardest.
 {all }

Given this, one would expect (74b) to be interpretable along similar lines. Second, many English speakers would consider (74c) odd, or at least marginal.

Suppose that let's encodes one more piece of information which is not encoded by let, namely that the subject is first person plural. If this is right, then one would expect that the only time explicit mention of the subject would be acceptable would be when it is in apposition. In this case (74c) is acceptable when it would be reasonable to spell out that the subject is "us". This might be the case, for example, when two groups

of people might want to "have a go" and the speaker intends to suggest that the group including herself should be favoured, i.e. us is used contrastively. In other words, unless there is a special reason for uttering the us, the utterance will appear irrational because of the pointlessness of repeating an identical subject. This would explain why (74c) is not always acceptable.

Now suppose that let must take either a first or third person subject, but that it must be explicit. Then, again, one would expect two subjects only when there is a special reason which would justify it. In this case, (74b) might be acceptable if it makes clear that the "us" referred to is a group consisting of the speaker and the hearer, when another group might otherwise have been assumed to be the referent of us. Again, there is an element of contrastiveness about the utterance when it is acceptable.

Thus I am suggesting that all the examples in (74) are acceptable, given certain contextual assumptions. The difference in the likelihood of their being judged acceptable as abstract examples falls out from other differences between let and let's, and pragmatic factors.

So I am suggesting that let and let's are markers of potentiality and desirability, providing another way of communicating propositional attitude information very similar to that encoded by imperatives. If you utter an infinitive clause preceded with let or let's the effect is similar to that of an imperative, except that the let or the let's do not contribute to the proposition explicitly expressed. Rather they contribute procedural information about the higher-level explicatures of the utterance. I am also proposing that let's-constructions are semantically "stronger" than let-constructions in that they encode

the information that the state of affairs described is desirable from the speaker's own point of view and that the subject of the proposition expressed is first person plural.

From the point of view of the linguistic semanticist, it makes no difference whether let and let's are syntactically defined as markers or as main verbs. What is important is that they encode procedural rather than conceptual information and that they contribute not to the proposition expressed but to the higher-level explicatures of the utterance. There is also no need to worry about not making a connection between let us and let's. Historically, they are linked and while it is interesting that they are still semantically close to the constructions from which they developed (the contexts in which one might want to be allowed to order pizza and those in which one might want to order pizza are likely to overlap) this is not strictly relevant to a synchronic study of the linguistic semantics of English.

I am arguing, then, that there exist three distinct types of construction. First, there are imperatives which happen to have let as their main verb, such as (76):

(76) Let them go to the beach.

The logical form of this utterance represents a state of affairs in which someone allows some people (or other entities) to go to the beach. The imperative syntax tells us that the subject, understood or explicit, must be 2nd person and that the proposition expressed (i.e. the proposition recovered by developing this logical form) represents (more or less closely) a thought entertained (by someone) as a description of a potential and desirable state of affairs. Like let-constructions, and unlike let's-constructions, the state of affairs described might be desirable from the point of view of the speaker, or

the hearer, or someone else. It might be used to communicate that the speaker wants the hearer to allow certain other people to go the beach.

Second, there are let-constructions which look on the surface just like imperatives. Thus, (76) might be interpreted as a let-construction. If so, let does not contribute to the proposition expressed. The logical form of the utterance represents a state of affairs in which some people (or other entities) go to the beach. The let plus imperative syntax tells us that the subject, which has to be explicitly mentioned, must be either 1st person or 3rd person and that the proposition expressed represents (more or less closely) a thought entertained (by someone) as a description of a potential and desirable state of affairs. Like imperatives, and unlike let's-constructions, the state of affairs described might be desirable from the point of view of the speaker, or the hearer, or someone else. It might be used to communicate that the speaker wants certain other people to go the beach. [Fn.15]

Third, there are let's-constructions like (77):

(77) Let's go to the beach.

Here let's, like let, does not contribute to the proposition expressed. The logical form of the utterance represents a state of affairs in which some people go to the beach. The let's plus imperative syntax tells us that the subject, understood or explicit, must be 3rd person plural and that the proposition expressed is entertained as a description of a state of affairs which is potential and which is desirable from the speaker's point of view. It might be used to communicate that the speaker wants herself and the hearer to go to the beach.

One consequence of the respective restrictions on subjects is that, while all let-constructions are ambiguous and may be interpreted as imperatives, not all imperatives can be interpreted as let-constructions. Thus, the examples in (78) with explicit subjects are unambiguously imperatives, i.e. they are not interpretable as let-constructions:

- (78) a. You let him go to the beach.
b. Someone let them know what the answer is. [Fn.16]

Finally, notice that there is one class of cases where the speaker of a let's-construction will not be taken to be entertaining the thought that the state of affairs described is potential and desirable: cases of reported speech or irony. In Sperber and Wilson's terms, both reported speech and irony involve "interpretive use". These are exemplified in (79)-(80):

- (79) A: What was John thinking?
B: Let's have some ice-cream.
- (80) A: Can I invite John to the party.
B: Yes! Let's invite everyone who hates me!

It is possible that B's utterance in (79) is descriptively used to represent a thought B is entertaining, i.e. it might communicate that B wants A and B to order some ice-cream. Another possibility is that B is reporting John's desire that John and someone else have some ice-cream. In the latter case, the utterance is interpretively used and the thought that it was desirable for John and his friend to have ice-cream is attributed to John. B is not assumed to be entertaining this thought.

Similarly, while B's utterance in (80) might be a descriptive use intended to communicate her desire that everyone who hates her attend the party, it may also be interpreted as an example of verbal irony. In Sperber and Wilson's terms, B interpretively represents a thought which she attributes to A and which she wants to dissociate herself from. By attributing to A the thought that it is desirable to invite everyone who hates B to the party, B makes it clear that she thinks A's suggestion is compatible with such a thought and that she wants to reject it. Clearly, B herself is not entertaining this thought.

(79) and (80) are not counterexamples to the semantic analysis proposed in (66). As discussed in chapter one, utterances may have many explicatures and some of these may contain other explicatures as sub-parts. Thus the explicatures of (79) might include those in (81):

- (81) a. John was thinking that it was desirable that John and A have some ice-cream.
- b. B is saying that John was thinking that it was desirable that John and A have some ice-cream.

The explicature to which the procedural information encoded by the let-construction directly contributes is (81a). B does not communicate her own belief that having ice-cream is desirable because this thought is embedded in (81b). The explicature to which procedural information encoded by let-constructions directly contributes is the "lowest" higher-level explicature in the following sense: the only explicature which it contains as a sub-part is the propositional form of the utterance itself.

This analysis accounts for the interpretation of a wide range of let-constructions and let's-constructions. These examples are significant because they suggest that the group of linguistic constructions which encode procedural information about higher-level explicatures does not consist solely of syntactically-defined structures like declaratives and imperatives but also includes certain lexical items like let and let's.

Wilson and Sperber (1990) suggest that certain particles, including the particle re in Sissala (as discussed by Blass 1990), should be treated as encoding constraints on explicatures. The analysis I have proposed here suggests that let and let's are instances of such particles.

It is possible that an analysis like the one I have suggested for let will account for may in utterances like (82):

- (82) a. May all your troubles be little ones.
b. May you live long and prosper.

May might be analysed as a particle which encodes potentiality and desirability. The essential difference between may and let would be that may imposes no restrictions on the subjects which it allows:

- (83) May I/you/he/we/they have a happy life.

An analysis which treats may as encoding potentiality and desirability would provide a natural explanation for the use of may in interrogatives which seek permission. Permission is related to potentiality. As Wilson and Sperber (1988a: 86) point out, seeking permission involves enquiring about the potentiality of a desirable state of affairs. Thus, imperative utterances can be used to grant permission:

(84) A: Can I open the window?

B: Oh, open it then.

A enquires about the potentiality of a state of affairs which is considered desirable to A. The main relevance of B's utterance lies in the fact that it establishes that the state of affairs is potential, while simultaneously it concedes the desirability (to A) of that state of affairs.

Let-constructions can be used in a similar way:

(85) A: Do you mind if John invites all his friends to your party?

B: Let him do what he wants.

The let-construction here does not function in exactly the same way as the imperative in (84). However, it is similar in that B's utterance is relevant by establishing the potentiality of John inviting all his friends, while incidentally granting its desirability (to John).

So (82a) can be seen as expressing that it is potential and desirable that all your troubles are little ones:

(82) a. May all your troubles be little ones.

(86) might be analysed as expressing the potentiality of your leaving the room:

(86) You may leave the room.

(87) might be analysed as enquiring about the potentiality of the speaker's leaving the room:

(87) May I leave the room?

In each case, desirability seems to be encoded as well. It seems, further, that the desirability of the state of affairs is always from the point of view of the subject in examples like (86)-(87), though not in the examples illustrated in (82). Thus, may seems to be a particle different in minor respects from let.

A slightly different analysis might be proposed for examples such as those in (88):

- (88) a. Would that he could be happy!
 b. Oh that he could be happy!

These share with let-constructions and may-constructions the notion of desirability. They are different in that they represent non-potential states of affairs. Thus, Wilson and Sperber's analysis also looks as if it might enable us to draw a principled distinction between two previously vague terms: "hortatives" and "optatives". We could define hortatives as constructions which encode potentiality and desirability; this class would then include let-constructions and may-constructions. We could define optatives as constructions which encode merely desirability; this class would include examples like those in (88).

To conclude, we have seen that the approach proposed by Wilson and Sperber is fruitful in that it sheds light on the nature of the let-constructions and let's-constructions which I have discussed. Further, it suggests a way of approaching the analysis of related constructions such as those illustrated in (82) and (88):

- (82) a. May all your troubles be little ones.
 b. May you live long and prosper.

- (88) a. Would that he could be happy!
b. Oh that he could be happy!

In the next section, I will briefly discuss a construction which has often been equated with the imperative, but which is, in fact, semantically distinct: the infinitive.

2.4 Infinitives

So far I have discussed the semantics of ordinary imperatives and some related constructions: conjoined and disjoined imperatives, a small class of examples which genuinely seem to be "pseudo-imperatives", and let-constructions. Now I want to look briefly at a construction which is much less closely related to the imperative: the infinitive as illustrated in (89):

- (89) a. I want to study French.
b. To live forever! What a thought!

Both Huntley (1984) and Bolinger (1967, 1977) suggest that infinitives belong to the same semantic class as imperatives. Both suggest that infinitives and imperatives are used to represent states of affairs without suggesting anything about whether that state of affairs holds in this, or any other, world.

Bolinger claims that infinitives and imperatives both belong to a class of "hypotheticals":

The infinitive, in this perspective, is a general hypothetical that includes the imperative as its most frequent manifestation. (Bolinger 1977: 178)

Huntley suggests that infinitives and imperatives are non-indicatives which, he claims:

represent [a situation] as being merely envisaged as a possibility, with no commitment as to whether it obtains, in past, present or future, in the actual world. (Huntley 1984: 109)

Thus, both Bolinger and Huntley want to assimilate imperatives and infinitives to one class, a class of constructions which represent states of affairs regardless of whether they are actual, potential, or merely possible.

Wilson and Sperber (1988a) are happy with something like this as an analysis of infinitives but, as mentioned above, they point out that such an analysis will not work for imperatives:

It is hard to see why a hearer should conclude, from the mere fact that the speaker is envisaging a certain situation as a possibility, that he is being requested, advised, permitted, etc., to bring it about...infinitival clauses in general can be seriously and literally uttered without imperatival force: that is, without being intended or understood as orders, requests, advice, permission, good wishes, or any of the other speech acts standardly performed by imperatives. By the same token, Huntley's analysis predicts that imperatives can be seriously and literally uttered without imperatival force. But of course, they can't. We conclude that imperatives and infinitival clauses cannot be treated as semantically equivalent. (Wilson and Sperber 1988a: 84)

Thus, it is hard to see why an analysis of imperatives which treated them as merely envisaging possible states of affairs could explain the interpretation of utterances of

imperatives. Why, on this view, would an utterance like (90) ever result in the hearer sitting down and finishing his dinner?

(90) Sit down and finish your dinner!

Even a pragmatic theory as powerful as relevance theory could not explain why an utterance with such a weak semantic analysis could ever affect the actions of hearers.

I want to conclude this chapter by demonstrating that, as Wilson and Sperber suggest, the sort of analysis proposed by Bolinger and Huntley is an acceptable semantic analysis for infinitives, and to look at how utterances like those in (89) are interpreted.

The suggestion is that infinitives like those in (89) are used merely to envisage conceivable states of affairs. Let me make this more precise, and more in the spirit of Wilson and Sperber's proposal, by proposing the following semantic analysis:

(91) An infinitive clause with propositional content *P* communicates that the thought represented by *P* describes a possible state of affairs (i.e. without encoding anything about whether that state of affairs is potential or desirable).

This is not to suggest that infinitival utterances never communicate a propositional attitude that goes beyond mere possibility. What I am claiming is merely that this particular linguistic form does not encode any such information.

The information which enables the hearer to infer the speaker's attitude to the proposition expressed may be linguistically encoded or wholly dependent on contextual assumptions. The two possibilities are illustrated in (92):

(92) a. I want to study French.

b. To live forever! What a thought!

(92a) is an example where the linguistic context is crucial while (92b) depends on contextual assumptions which are not linguistically encoded. In (92a) the linguistic context, i.e. the fact that the speaker has explicitly stated that he wants it, is what enables the hearer to recognise the speaker's attitude to the proposition. The fact that the speaker views her studying French as both potential and desirable is linguistically encoded.

In (92b) the hearer has to infer the speaker's attitude to living forever, i.e. that she finds the thought amazing or overwhelming. There is nothing in the linguistic context which could help, although the following exclamative clause should ensure that no serious misunderstanding arises. In an utterance like (93) the following clause would support a different interpretation:

(93) To live forever! Wouldn't it be wonderful!

So infinitives simply present states of affairs and encourage the hearer to work out what the speaker's attitude to that state of affairs is. Sometimes the speaker might also provide some linguistically-encoded clue which will assist the hearer in arriving at the intended interpretation. Although the sort of analysis of infinitives and imperatives proposed by Bolinger and Huntley is too weak to account for the interpretation of infinitives, it is possible for a pragmatic theory like relevance theory to interact with such an analysis to account for the interpretation of infinitives.

In conclusion, this chapter has shown first that Wilson and Sperber's analysis can account for a wide range of imperative constructions, second that it can account for

imperatives in conjunctions or disjunctions which seem to have unusual interpretations (the so-called "pseudo-imperatives"), and third that there exists a range of examples which really are distinct from imperatives and, it was argued, from conditionals. A semantic analysis similar to that of imperatives was proposed for let-constructions and let's-constructions. Finally, I looked briefly at infinitives which, despite proposals such as that of Bolinger (1967, 1977) and Huntley (1984) are clearly semantically distinct from imperatives. Perhaps the most significant point which has emerged from this chapter is that the linguistic forms which encode procedural information about propositional attitudes consist not only of syntactic structures such as those which have been treated as "sentence-types". We also need to identify markers such as let and let's which convey similar procedural information.

In the next chapter, I will look at the semantic analysis of some further "sentence-types": interrogatives and exclamatives.

CHAPTER THREE: INTERROGATIVES AND EXCLAMATIVES

3.1 The Semantics of Interrogatives

In this chapter, I discuss the semantic analyses of interrogatives and exclamatives. According to Wilson and Sperber (1988a, 1988b; Sperber and Wilson 1986), interrogatives and exclamatives are both syntactically and semantically similar. They claim that both interrogatives and exclamatives are specialised for interpretive use: the propositions they express represent thoughts which are themselves interpretations of other thoughts. The semantic analyses proposed in Relevance (Sperber and Wilson 1986: 243-254) account for a wide range of interrogative and exclamative utterances and suggest an explanation for the cross-linguistic syntactic similarities between the two (see Sadock and Zwicky 1985). In "Mood and the analysis of non-declarative sentences" (Wilson and Sperber 1988a) a slightly modified version of the analysis of interrogatives is proposed, and it seems that the analysis of exclamatives will have to be similarly modified. One effect of this change is to emphasise even more strongly the similarities between interrogatives and exclamatives.

In this section I discuss the semantic analysis of interrogatives and in section 3.2 I discuss the semantic analysis of exclamatives. In section 3.3 I consider a range of examples which McCawley (1973) termed "exclamatory-inversion sentences". These constructions are like interrogatives in some ways and like exclamatives in others. I will propose an analysis which further emphasises the similarity between interrogatives and exclamatives. This analysis involves looking not only at what is encoded by the syntactic structures associated with interrogatives and exclamatives but also at certain lexical items such as the particles boy, wow, so and then. I will also make some

suggestions about how intonational structure contributes to utterance-interpretation. I will suggest that procedural information about propositional attitudes can be encoded not only by syntactic structures and certain lexical items but also by intonation, and that the procedural clues carried by different parts of an utterance need not always point in the same direction. This casts further doubt on the appropriateness of the notion of "sentence-types" as the basic units of linguistic semantic theory. In section 3.4 I suggest how this approach might be extended to the analysis of negative "exclamatory-inversions" and tag questions.

According to Wilson and Sperber (1988a, 1988b; Sperber and Wilson 1986) both interrogatives and exclamatives are linguistic constructions specialised for interpretive use: the thoughts which they (interpretively) represent are themselves interpretations. Rather than involving the description of a state of affairs which might be true or false, they represent other thoughts which they resemble to a greater or lesser degree. In this section I consider the semantic analysis of interrogatives. In the next section I consider the semantic analysis of exclamatives and the similarities between the semantic analyses of the two constructions.

Wilson and Sperber (1988a) analyse interrogatives as interpretations of desirable thoughts. It is suggested that interrogatives are the interpretive counterpart of imperatives: imperatives involve description of desirable states of affairs, while interrogatives involve interpretation of desirable thoughts. If the semantic analysis of interrogatives is just like that of imperatives except that interrogatives are interpretive

where imperatives are descriptive, then the semantic analysis of interrogatives should look like this:

to utter an interrogative with propositional content *P* is to communicate that *P* represents a thought entertained as an interpretation of a potential and desirable thought.

This is essentially what Wilson and Sperber propose. However, for purposes of exposition, the analysis can be simplified in three ways. First, all thoughts which we are capable of representing must be potential so that, in a sense, the reference to potentiality in this analysis is redundant. From now on I will take for granted that all the thoughts represented by interrogatives are potential. Further, there are two kinds of indeterminacy which arise for interrogatives, imperatives and all other utterances which I have already discussed and which I will say no more about at the moment: those relating to how closely *P* resembles the thought it represents and those relating to who is entertaining the thought. As mentioned above, metaphor and loose talk can be accounted for in terms of the degree of similarity between *P* and the thought represented while irony and other echoic uses can be accounted for in terms of who is taken to be entertaining the thought represented (see Sperber and Wilson 1986; Wilson and Sperber 1988b). As I will have no more to say on any of these three points, the semantic analysis of interrogatives can be more simply stated as:

to utter an interrogative with propositional content *P* is to communicate that *P* is an interpretation of a desirable thought.

Within relevance theory, a thought can only be desirable if it is relevant (i.e. if it gives rise to contextual effects). Thus, interrogatives are interpretations of thoughts which would be considered relevant. In Relevance, Sperber and Wilson suggest that interrogatives interpretively represent thoughts which would be considered relevant if true. In fact, this suggestion is too strong, and the proposal in "Mood and the analysis of non-declarative sentences" is weaker. The problem with the stronger version is discussed below but I will ignore it for the moment. So let us assume that:

to utter an interrogative with propositional content *P* is to communicate that *P* is an interpretation of a thought which would be relevant if true.

There is an interesting difference between wh-interrogatives and yes-no interrogatives: wh-interrogatives, because of the presence of the wh-word, are incapable of expressing a semantically complete propositional form (one which is capable of being true or false). The propositional form of (1a) might be (1b):

- (1) a. Did John drink the whisky?
b. John Smith drank the whisky.

The logical form of (2a), on the other hand, is necessarily incomplete because of the gap marked by the wh-word:

- (2) a. Who drank the whisky?
b. ___ drank the whisky.

(As usual, I am ignoring certain aspects of the interpretation process, such as the assignment of a time reference and the identification of the whisky to which the speaker

is referring. Partly because of this, the sentence in (1b) does not really express a complete proposition.) Recognising this difference, Sperber and Wilson distinguish:

between yes-no questions, which have not only a logical but also a fully propositional form, and wh-questions, which have a logical form but no fully propositional form. (Sperber and Wilson 1986: 252)

This difference is reflected in the semantic analyses of the two types of interrogative proposed in Relevance where it is suggested that the utterance of a yes-no interrogative with the propositional form *P* communicates "that the thought interpreted by *P* would be relevant if true", while the utterance of a wh-interrogative with the less-than-propositional logical form *P* communicates "that there is some completion of the thought interpreted by *P* into a fully propositional thought which would be relevant if true" (Sperber and Wilson 1986: 252).

In each case the hearer has to make some assumptions about who the thought interpreted would be relevant to and who is likely to entertain the relevant thought. In making these assumptions he is guided by contextual factors and the criterion of consistency with the principle of relevance.

Different assumptions about from whose point of view the speaker regards the thought as relevant, and who the speaker regards as capable of entertaining the relevant completion, explain the difference between different kinds of question. Thus, the speaker of each of the (a) forms in (3)-(6) communicates that there is a completion of the corresponding (b) forms which would be relevant if true:

- (3) a. Who drank the whisky?

- b. ___ drank the whisky.
- (4) a. What do you say before you leave the table?
 - b. You say ___ before you leave the table.
- (5) a. What are the binding principles?
 - b. The binding principles are ___.
- (6) a. Which hand is it in?
 - b. It is in ___ hand.

Suppose that my flatmate has just returned from work, reaches for the whisky bottle, finds it is empty and utters (3a). In such a situation, I might assume that she would find a completion of (3b) relevant to herself, does not know what the true completion would be and thinks that I do know. Thus, by uttering the interrogative in (3a), the speaker makes it manifest that she would like to know who drank the whisky and thinks that the hearer will be able to tell her. In this case, (3a) is a genuine request for information.

(4a) might be uttered by a parent to a child who is leaving the dinner table without speaking. In such a situation, the hearer might assume that the speaker believes both that the true completion of (4b) would be relevant to the hearer and that the hearer is aware of the true completion. In other words, the speaker both knows and assumes that the hearer knows what you say before you leave the table. By uttering (4a) the speaker makes it manifest that she believes that the completion of (4b) would be relevant to the hearer. Thus, the speaker implies that the hearer's behaviour is consistent with the assumption that he has forgotten what you say before you leave the table. In this case, (4a) is a rhetorical question and functions very much like a reminder.

(5) and (6) are similar. (5) might appear in an exam paper. If so, it is clearly not a request for information. It is not normally assumed that those who are sitting an exam know more about the subject than those who are setting it. It is more likely that the speaker knows what the completion which she considers relevant would be. The hearer may or may not be aware of the relevant thought and, of course, the speaker's purpose in asking the question is to find out whether or not the hearer does know the answer.

If a parent holds a sweet behind her back and says (6) to her child, then this too is not a request for information. Clearly, the speaker is aware of the relevant completion while the hearer is not. In this case, (6) is an encouragement to guess. The speaker's purpose in asking the question is not to find out whether the hearer already knows the answer or not, but rather to find out whether he is capable of guessing accurately and willing to co-operate in a guessing game.

The two cases have very much in common. In both cases the speaker already knows the relevant completion while the hearer may not. In both cases the relevance of the expected response will lie in the evidence it provides about the nature of the hearer's knowledge. The relevance of a response to (5a) lies in the evidence it provides about the nature of the examinee's knowledge. The relevance of a response to (6a) lies in the evidence it provides about the child's ability to guess where the sweet is hidden. Wilson and Sperber's proposal allows for more than one explanation of exam questions and guess questions. Some of the candidates will be discussed in more detail below.

Wilson and Sperber (1988a) point out that their analysis offers an explanation for the differences between positive yes-no questions, negative yes-no questions and full alternative questions (for discussion see Bolinger 1957, 1978; Hudson 1975).

(7) Did you see Susan?

(8) Didn't you see Susan?

(9) Did you or did you not see Susan?

(7)-(9) are not synonymous. There are occasions where it would be appropriate to utter one of them but not another. For example, if you utter (10) (and provided (10) is not an example of verbal irony):

(10) If only I hadn't seen Susan, I would have enjoyed the party so much more.

it would make sense for me to utter (7) but not (8). This suggests that (7) is consistent with the assumption that you saw Susan while (8) is not. On the other hand, if you utter (11):

(11) If only I'd seen Susan, I would have told her about the party tonight.

then (8) would be more appropriate than (7). This suggests that (8) is consistent with the assumption that you didn't see Susan while (7) is not.

(9) seems not to be "biased" either way, although it is often taken to carry overtones of impatience which are lacking in (7) or (8).

The reason for these differences is not obvious, as a true response to one of them would be a true response to all the others. But Wilson and Sperber's proposal suggests a natural explanation.

(7) expresses a positive proposition, (8) expresses a negative proposition and (9) expresses both a positive and a negative proposition. Each of these propositions is an interpretation of a desirable thought, a thought which would be relevant if true, according to the account in Relevance. The true answer to any of (7)-(9) is either that you did see Susan or that you did not. While a true answer to one constitutes a true answer to all the others, the decision to represent this answer with a particular propositional form rather than another has important consequences. The propositional forms of (7)-(9) might be (7)'-(9)' respectively:

(7)' John Smith saw Susan Jones on the evening of 3rd September 1990.

(8)' John Smith did not see Susan Jones on the evening of 3rd September 1990.

(9)' John Smith saw Susan Jones on the evening of 3rd September 1990 or John Smith did not see Susan Jones on the evening of 3rd September 1990.

The utterance of (7) communicates that (7)' represents a thought entertained as an interpretation of a desirable thought, or that (7)' represents a thought which would be relevant if true. The utterance of (8) communicates that (8)' represents a thought which would be relevant if true. The utterance of (9) communicates that each disjunct in (9)' represents a thought which would be relevant if true. (9)' is more complex than (8)' and so involves greater processing effort. (8)' is more complex than (7)' and so involves greater processing effort.

If (7)' is true, i.e. if John did see Susan, then the speakers of (7), (8) and (9) would all consider (7)' relevant. If (8)' is true, then the speakers of (7), (8) and (9) would all consider (8)' relevant. (9)', if interpreted as representing a proposition of the form "*P* or not *P*", can only be true, i.e. it must be true either that John did see Susan or that he did not. However, the hearer will not assume that the speaker would consider (9)' relevant on this interpretation as this would not be consistent with the principle of relevance. A rational communicator would not consider a thought of the form "*P* or not *P*" relevant, as this is necessarily true and could not give rise to new contextual effects. So the hearer of (9) must assume that it interpretively represents two distinct thoughts "*P*" and "not *P*" and hence that the speaker would consider either (7)' or (8)' relevant, depending on which one corresponds to the way the world is. Thus, whatever would be a relevant and true answer to any of (7)- (9) would also be a relevant and true answer to all the others. [Fn.1]

In each case the speaker communicates that "*P*" would be relevant if it is true and that "not *P*" would be relevant if it is true. But in each case the speaker communicates this in a different way: (7) communicates that "*P*" would be relevant if true, (8) communicates that "not *P*" would be relevant if true and (9) communicates both that "*P*" would be relevant if true and that "not *P*" would be relevant if true.

Other things being equal, it follows from the fact that the speaker of (7) has chosen an utterance which expresses a positive proposition that she would consider the thought that you saw Susan, if anything, more relevant than the thought that you did not. It follows from the fact that the speaker of (8) has chosen an utterance which expresses

a negative proposition that she would consider the thought that you did not see Susan, if anything, more relevant than the thought that you did. It follows from the fact that the speaker of (9) has chosen an utterance which expresses a disjunction of a positive and a negative proposition that she would consider both answers equally relevant (or, at least, that she has no reason for assuming that one would be any more relevant than the other).

When might the speaker feel that a positive answer would be more relevant than a negative one? One such case would be where the speaker had previously assumed that the negative proposition was true. A positive answer would contradict and lead to the elimination of the previous assumption; this would be more relevant than a negative answer which would merely confirm an already existing assumption. If I had been under the impression that you hadn't seen Susan, and now begin to suspect that you have in fact seen her, then it would be natural for me to decide that confirmation of my new suspicion would be highly relevant. (Of course, if you haven't seen Susan, then the negative proposition is the relevant one, but it is less relevant than the positive one would be if true.) In such circumstances, it would be appropriate to utter (7). This explains why (7) would be more appropriate in the context of (10) than (8).

Similarly, a negative proposition might seem more relevant than a positive one where the speaker had previously assumed that the positive proposition was true. Thus, if I have been thinking that you have seen Susan and now begin to suspect that you have not, confirmation of this new suspicion would be highly relevant. It would contradict and lead to the elimination of an existing assumption together with all of its

implications. (Again, if you have seen Susan then the positive proposition is the relevant one, but it is less relevant than the negative one would be if true.) In such circumstances, it would be appropriate to utter (8). This explains why (8) is more appropriate in the context of (11) than (7). [Fn.2]

The speaker of (9) communicates that either a positive proposition or a negative proposition would be relevant. However, the speaker who has no expectations about whether you have seen Susan or not, and therefore no assumptions about which answer would be more relevant, does not have to utter (9). She may, instead, save the hearer the effort of entertaining the disjunction by uttering (7) and trusting the hearer to infer that she would find either answer equally relevant. Thus, on many occasions, a positive yes-no question can be uttered without giving rise to the suggestion that a positive answer would be more relevant than a negative one.

Notice that (8) would never be used in this way, despite the fact that a negative proposition requires less processing effort than a disjunction of positive and negative. A speaker with no preconceptions about which of the two possible answers is more relevant, and who wants to use a shorter form than (9), would always prefer (7) to (8). The hearer of an utterance of (7) might assume that the speaker is using it as shorthand for (9) and infer that either answer would be equally relevant. The hearer of an utterance of (8) could not arrive at such an interpretation because the extra effort involved in processing a negative rather than a positive proposition would be unjustified. (8) can never be used as shorthand for (9) because of the existence of an even shorter

alternative, namely (7). Thus, negative yes-no questions are always "biased" in the sense that they suggest a negative answer would be more relevant than a positive one.

There are two kinds of context in which (9) might be used. One is where the speaker would consider either answer equally relevant but cannot trust the hearer to infer that purely on the basis of (7), i.e. uttering (7) might lead the hearer to assume that the positive answer would be more relevant. The other is where the hearer wants to implicate more than just that either answer would be relevant, e.g. when the speaker wants to make manifest her impatience with the hearer. It will never be assumed that the extra effort involved in processing (9) rather than (7) is gratuitous. One possible justification for the extra effort is an increase in clarity. Another possible justification is that the speaker wishes to communicate impatience or annoyance. Suppose that I have asked you many times whether you saw Susan by uttering (7) and still have not received a clear answer. One way in which I might communicate my annoyance is by repeating (7) more loudly. Another option is to utter (9). (Another option is to utter (9) and simultaneously to raise my voice). Thus, utterances of full alternative questions like (9) often carry overtones of impatience or anger.

So this account explains the differences between positive yes-no questions, negative yes-no questions and full alternative questions in terms of the hearer's search for an interpretation consistent with the principle of relevance without denying the similarity between the three forms, and the fact that a true response to one of them is a true response to them all.

In "Mood and the analysis of non-declarative sentences" Wilson and Sperber propose a slightly different semantic analysis for interrogatives. Interrogatives no longer represent answers which would be relevant if true. They now simply represent answers which the speaker regards as relevant. In other words, the analysis no longer makes reference to the notion of truth.

The reason for this change is quite simply that there are clear counterexamples to the claim that the most relevant answer to a question is always a true one:

- (12) a. Who is a rat?
- b. John.
- (13) a. How far is Aberdeen from London?
- b. 500 miles.

The answer in (12b) expresses the proposition that John is a rat. If we assume that John is a human being, then this proposition is clearly false. However, it is easy to imagine contexts in which this answer would be relevant. Hence, the relevant completion of the logical form of the question is not necessarily a true one.

If Aberdeen is actually 522 miles from London, then the answer in (13b) is also strictly false. Yet it is intuitively clear that (13b) might be a perfectly adequate and relevant response. Thus, again, the relevant answer to the question is not necessarily a true one. So, in metaphorical questions like (12a) and questions whose answers involve loose talk, such as (13a), it is not the case that the propositional content of the utterance represents answers which the speaker would regard as relevant if true. Rather, the

incomplete proposition simply represents answers which the speaker would regard as relevant.

This does not mean that the relevant answer cannot be a true one: indeed, an utterance cannot achieve relevance without strengthening or weakening the hearer's existing assumptions; but it does mean that when the desired response is a strictly true one, this fact is recognised by the hearer on the basis of pragmatic inferential processes and considerations of relevance rather than by simple linguistic decoding.

Before discussing the semantics of exclamatives, I want to end this section by considering some alternative accounts of exam questions like (5) and guess questions like (6) which might be proposed within this framework:

- (5) a. What are the binding principles?
- b. The binding principles are ____.
- (6) a. Which hand is it in?
- b. The chocolate bar is in ____ hand.

This is what Wilson and Sperber (1988a p.23) say about examples like (5) and (6):

suppose that Mary manifestly expects Peter to answer her question; but suppose moreover, that she is manifestly in a better position than he is to know the answer...Then [my (6a)] would have the force of a request for an answer, but not a request for information. How can this be? Peter's answer..., like any utterance, expresses both a proposition and an attitude, and may be relevant in either of two ways: by providing evidence about the state of affairs it describes, or by providing evidence about Peter's

beliefs about this state of affairs. If Mary's utterance had been a request for information, Peter's response would have been relevant in the first of these two ways; if, as we are imagining, Mary's utterance is a guess-question, Peter's utterance might be relevant in the second: by providing information about Peter's beliefs, his ability to predict Mary's actions, his willingness to co-operate with her, and so on. Exam questions might be dealt with along similar lines. (Wilson and Sperber 1988a: 97)

In a footnote, Wilson and Sperber suggest that:

This is not the only way to deal with exam-questions and guess-questions within our framework, but it is the simplest. When the full range of data is taken into account, a more complex treatment, involving triply interpretive use, may be needed. (Wilson and Sperber 1988a: 291)

Thus, Wilson and Sperber suggest two ways of dealing with exam questions and guess questions. One view suggests that they are just like requests for information except that the relevance of the thought interpreted lies not in evidence it provides about states of affairs but rather in evidence it provides about the hearer's attitude to (more specifically, his beliefs about) those states of affairs. Another view involves the notion of "triply interpretive use".

In fact, there also exists a third possibility: that the propositional forms of (5a) and (6a) are interpretations not of desirable thoughts but of desirable utterances. To conclude this section, I want to look at all three of these possibilities in more detail. I

will argue that they all involve an increase in the complexity of the overall account and that the first approach is the most attractive of the three.

The first suggestion I want to consider is that proposed by Wilson and Sperber in the text of "Mood and the analysis of non-declarative sentences". In this account, Wilson and Sperber focus on the relevance of the actual response uttered by the hearer. Thus, if Peter utters (14a) with the propositional form (14b):

- (14) a. Your left hand.
- b. The chocolate bar is in Mary's left hand.

this utterance provides evidence both about the state of affairs which exists in the world and about Peter's beliefs about that state of affairs. In fact, any evidence which an utterance provides about states of affairs in the world usually depends on evidence provided about the speaker's beliefs, rather than the other way round. Suppose I say (15):

- (15) There's a strike on the underground today.

One of the hearer's tasks in interpreting any utterance is to integrate the propositional form of the utterance into higher-level explicatures: crucially the hearer must decide how the speaker thinks the propositional form is relevant. One of the higher-level explicatures of my utterance might be (16):

- (16) Billy believes that there is a strike on the underground today.

If you trust me enough, then you might come to share this belief. That is, by making manifest my belief that there is a strike I provide evidence that the strike is actually taking place. This is a fairly common way for utterances to achieve relevance.

Peter's utterance in (14a) does not achieve relevance in this way. In the context envisaged for an utterance of (14a) (one in which Mary has just uttered (5a)) the assumption in (17) will be highly accessible:

(17) Peter believes that the chocolate bar is in Mary's left hand.

However, this is not going to have any effect on Mary's beliefs about the location of the chocolate. She already has much stronger evidence about this than could be provided by anything Peter says. In this case, the intended relevance of Peter's utterance must depend not on evidence about where the chocolate is but on (17) itself, i.e. what Mary wants to know is where Peter thinks the chocolate is.

Wilson and Sperber suggest that responses to requests for information are relevant because of evidence they provide about the state of affairs described. (15) achieves this by first making manifest (16). Responses to guess questions and exam questions are relevant because of evidence they provide about the speaker's beliefs. (5a) achieves this by making manifest (17).

So far, I have said nothing about how Peter realises that a verbal response is expected from him at all. This is certainly not encoded by interrogative syntax as certain other interrogatives, such as those in (18), do not expect a verbal response from the hearer:

- (18) a. Why did the King decide to abdicate? First, because...
b. Is it my fault if syntax is so difficult?
c. Why does bread always land butter side down?

The interrogative in (18a), uttered and answered by the same person, is an expository device which does not expect a response from the hearer. The rhetorical question in (18b) is intended to remind the hearer of something; the hearer may utter a verbal response but this is not expected. It is probable that no-one knows the answer to the speculative question in (18c). The function of such an utterance is not to elicit a response but rather to communicate the speaker's exasperation or bewilderment. Given that the utterance of an interrogative only sometimes expects a verbal response, the hearer's recognition that a response is required must involve inference and not mere decoding. How does the hearer work out that a response is required when he hears (5a)? On this account, the desirable thought of which the logical form (5b) is an interpretation is (17). The hearer recognises that this is the form of the thought that the speaker would consider relevant. He also recognises that the thought is considered relevant from the speaker's point of view, i.e. the speaker would like to be in a position to think something like (17). It is manifest that the hearer can provide evidence for such a thought by uttering something like (14a). Thus, just as with imperatives used to request action, the hearer's behaviour is due to the speaker's making manifest a desire which it is manifest that the hearer can realise. This utterance, then, functions just like a request for information except that the information requested concerns the hearer's beliefs rather than states of affairs in the actual world.

The account of interrogatives is slightly more complicated than we have been assuming so far in that the thought which the logical form of the utterance resembles may be one in which the logical form is embedded under a representation of the hearer's

attitude. The relevant completion of the logical form of the utterance is actually a development of that logical form comprising a clause relating to propositional attitude and an embedded proposition. This proposition is itself a development of the logical form.

Given that this analysis is slightly more complicated than we have so far assumed, it might be tempting to look for an explanation which avoids this. Wilson and Sperber suggest one possible alternative: an account in terms of "triple interpretive use".

What would an account in terms of "triple interpretive use" look like? Wilson and Sperber (1988a) give an example of an utterance which is triple interpretive:

(19) John sighed. Would she never speak?

They say that the interrogative in (19):

is an example of free indirect speech. As such, it is triple interpretive: it is a more or less literal interpretation of the thought of the speaker or the writer, which is itself an echoic interpretation of a thought attributed to John, which is in turn an interpretation of a desirable thought, namely the answer to the question. Of these facts, only the last is linguistically encoded, and as this example makes clear, the encoding is indeterminate in two respects: as to who regards the answer as desirable, and to whom.

(Wilson and Sperber 1988a: 100)

Interrogatives are doubly interpretive in that they involve interpretive use. This interrogative is triple interpretive because it is itself interpretively used. Wilson and Sperber point out that this question "expresses not a single propositional attitude but a

stack of attitudes, each embedding or being embedded in another" (Wilson and Sperber 1988a: 101). The propositional form of the interrogative in (19) is an interpretation of a thought of the speaker which is in turn an interpretation of a thought of John's which is in turn an interpretation of a desirable thought.

In the previously-mentioned footnote, Wilson and Sperber suggest that exam questions and guess questions may also be triply interpretive. In fact, there are many ways in which an utterance might be triply interpretive and there are two, significantly different, ways in which an interrogative might be triply interpretive. First, the interrogative might be interpretively used, as in (19). Second, the desirable thought of which the interrogative is an interpretation might itself be interpretive. So there are two possible types of explanation of exam and guess questions in terms of triply interpretive use. First, I want to consider the account which treats the exam question in (5a) and the guess question in (6a) as interpretively-used interrogatives:

- (5) a. What are the binding principles?
- b. The binding principles are ____.
- (6) a. Which hand is it in?
- b. It is in ____ hand.

On this account, the speaker of (5a) is using the interrogative interpretively, i.e. she is attributing the thought that (5b) is an interpretation of a desirable thought to someone other than herself at the time of utterance. We might argue, then, that (5a) represents a potential attributed thought. In this case, it would have a lot in common with the initial clause of the "pseudo-imperative" in (20) which was discussed in chapter two:

(20) Open the Guardian and you'll find three misprints on every page.

The initial clause of (20) is an interpretation of a thought which the hearer, or someone else, might have at some future time. This imperative communicates something like "you might think that it is potential and desirable that you open the Guardian..." Similarly, the interrogative in (5) might be seen as representing a thought which someone might have at some time. Exam questions, then, are seen as representing thoughts which someone might think. More specifically, they represent questions which someone might ask. So the examiner is saying to the examinee "this is the kind of question someone might ask".

Two problems are immediately raised by this account. First, it does not explain why examinees answer exam questions. Second, it does not extend straightforwardly to guess questions. As regards the first point, if you tell me that (5a) is the kind of question somebody might consider relevant at some time, I might find that a useful piece of information, but I am hardly likely to be persuaded to produce an answer to the question by this alone. Hearers can only be expected to respond to questions verbally if they believe that someone wants them to. This point also applies to imperatives: the hearer of (20) is extremely unlikely to open the Guardian as a direct result of hearing that utterance.

We could strengthen this analysis by appealing to social factors. The hearer knows that he is sitting an exam and that examinees are expected to answer questions. This is plausible. If we pursue this analysis, however, what causes hearers to respond to exam questions is a feature of examinations and is irrelevant to the study of verbal

communication. In this way, it would be analogous to the speech act of bidding two no trumps at bridge which Sperber and Wilson suggest is "part of the study of bridge, not of verbal communication" (Sperber and Wilson 1986: 245). While social factors clearly play a role in verbal communication, I believe that it is a good research strategy to keep their influence to a minimum. In particular, the existence of the alternative analysis discussed above, where the hearer's desire to respond falls out of the semantic analysis proposed together with considerations of relevance, is preferable in that it avoids the appeal to social conventions which one might be tempted to introduce arbitrarily whenever the semantic analysis proposed does not seem to be doing the job required on its own.

The second problem with this proposal is that it does not extend naturally to guess questions like (6a):

- (6) a. Which hand is it in?
- b. It is in ___ hand.

Intuitively, it does not make sense to say that a parent hiding a sweet behind her back and uttering (6a) is saying to the child that (6b) represents the kind of thought which somebody might consider relevant. First, this is likely to be manifest already as the child himself is likely to be thinking about the location of the chocolate. Second, this does not provide any explanation as to why the child would bother to answer the question. We could again appeal to social conventions, but this seems less plausible as guess questions are not associated with any particular social institution in the same way as exams are associated with schools and other educational establishments.

A more plausible hypothesis is that the speaker is attributing to the child the thought that (6b) represents a desirable thought. If so, (6a) resembles the initial clause of the "pseudo-imperative" in (21) which was discussed in chapter two:

(21) Come one step closer and I'll shoot.

The speaker of (21) attributes to the hearer the thought that it is potential and desirable that he, the hearer, come closer. The speaker of (6a) might be attributing to the hearer the thought that it would be relevant to know which hand the chocolate is in. This is much more plausible, but still unsatisfactory for two reasons: first, it still does not explain why the hearer responds to the question and second, (5) and (6) are now treated differently despite their obvious similarities.

On the whole, the first proposed analysis we looked at seems preferable, given its relative simplicity, its straightforward account of why hearers respond to (5a) and (6a) and the fact that (5a) and (6a) are treated in the same way which accords with our intuitions that they are similar.

Another possible account in terms of triply interpretive use would be to treat the thought which is represented as desirable as itself an interpretation. On this account the speaker of (5a) might be seen as communicating that she regards the thought represented by (5a) as desirable from the hearer's point of view, this thought itself being an interpretation of a thought of the speaker's. Thus, the speaker of (5a) communicates something like that "it is desirable for you (the hearer) to think a thought represented by (5b) which is itself an interpretation of a thought I am entertaining that the binding principles are ___.

On this account, guess questions are treated in the same way. The speaker of (6a) communicates something like that "it is desirable for you (the hearer) to think a thought represented by (6b) which is itself an interpretation of a thought I am entertaining that the chocolate is in my ___ hand".

In both cases, the propositional form of the utterance is an interpretation of a thought of the speaker's which is in turn an interpretation of a desirable thought which is in turn an interpretation of a thought of the speaker's. This suggests that exam questions and guess questions are similar to rhetorical questions like (4a):

(4) What do you say before you leave the table?

with the exception that the hearer does not necessarily already know the answer.

This view has the advantage of treating both (5a) and (6a) in the same way. It has two disadvantages: first, it is rather baroque, which does not accord with our intuition that guess questions are rather straightforward utterances which children can interpret with relative ease. Second, it does not explain the hearer's utterance of a response.

One plausible explanation for the hearer's responding to these questions, on either of the accounts in terms of triply interpretive use, is that the hearer is seeking confirmation for the thought which he has arrived at on the speaker's prompting. That is, the hearer recognises that the propositional form of the utterance represents a thought which is desirable to himself, but cannot be sure that he has recovered the appropriate thought. Thus, he asks for confirmation. This does not explain why a response is invariably offered to utterances like (5a) and (6a). Even if I know what the binding

principles are, I will still demonstrate my knowledge by saying what they are. Even if I know which hand you put the chocolate in, I will still demonstrate my knowledge by saying where it is.

Overall, an account in terms of triply interpretive use is possible. But it is less straightforward than the first account we considered and raises more problematic questions. I conclude that we should prefer the analysis which simply introduces the notion that the thought of which (5b) or (6b) is an interpretation may contain a propositional attitude clause embedding the appropriate propositional form.

Now I want to consider one final possibility: that the logical form of an interrogative might represent not only a desirable thought but also a desirable utterance. This idea is much simpler than the account in terms of triply interpretive use. The notion of interpretive use is based on the idea that:

any natural or artificial phenomenon in the world can be used as a representation of some other phenomenon which it resembles in some respects.

and that:

utterances are also phenomena, and like all phenomena they can be used to represent something they resemble. (Sperber and Wilson 1986: 227)

Interpretation is seen as resemblance in virtue of logical properties. Thus, the propositional forms of utterances or thoughts may be used to represent other thoughts with which they share analytic or contextual implications. An utterance or thought so used is interpretively used.

Now, not only thoughts have propositional forms and hence logical properties. Utterances also have propositional forms. Thus, it might seem reasonable to argue that the propositional forms of certain thoughts or utterances might be used to interpretively represent not other thoughts but other utterances. If we assume this, we might be able to provide a straightforward account of exam questions and guess questions. On this view, the propositional form (5b) represents not a desirable thought but a desirable utterance: the utterance which will answer the question. The speaker is entertaining the thought that (5b) represents a desirable utterance of the hearer's. This utterance is desirable to the speaker because of the evidence it provides about the hearer's knowledge. This makes it also desirable to the hearer who wants the speaker's desire to be realised. On this view, (5b) is very like a request for information or a request for action.

The account of (6a) is identical. The speaker is seen as entertaining the thought that (6b) represents a desirable utterance of the hearer's. This utterance is desirable to the speaker because of evidence it provides about the hearer's knowledge or ability to guess. The utterance is desirable to the hearer who wants the speaker's desire to be realised.

It is an advantage that this account treats (5a) and (6a) in the same way and a disadvantage that it treats them differently from other interrogatives. However, there is one convincing reason for rejecting such an account: not all exam questions or guess questions are responded to verbally. Given that certain exam questions may be answered with diagrams or maps, and that a perfectly adequate response to (6a) may consist solely

of a gesture (e.g. pointing to one of the speaker's hands) it cannot be that hearers of these utterances assume that the logical forms are interpretations of desirable utterances. Pointings, diagrams and maps, it seems safe to assume, do not have propositional forms, and hence cannot be interpretively represented.

So, we have looked at three ways in which the analysis of interrogatives might be extended in order to handle exam questions and guess questions. The simplest and most attractive option is the one originally suggested by Wilson and Sperber: interrogatives are used as interpretations of desirable thoughts, but the thoughts they represent might be higher-level representations of the speaker's beliefs as well as lower-level representations of states of affairs in the world.

In this section I have shown how Wilson and Sperber's proposed semantic analysis handles a wide range of interrogatives ranging from relatively straightforward requests for information through to more complex cases such as exam questions and guess questions. In the next section I will look at the semantic analysis of exclamatives within this framework.

3.2 The Semantics of Exclamatives

As well as the account of the semantics of interrogatives proposed in Relevance, Sperber and Wilson propose an analysis of the semantics of exclamatives which suggests an explanation for the cross-linguistic syntactic similarities between the two forms:

(22) How tall is John?

(23) How tall John is!

(24) John is ___ tall.

The interrogative (22) and the corresponding exclamative (23) share the logical form in (24). According to the account of interrogatives in Relevance, the interrogative in (22) communicates that there is a completion of (24) which would be relevant if true. On the other hand, Sperber and Wilson claim that the exclamative in (23) communicates that there is a completion of the same proposition which would be true if relevant. The proposal is that the speaker of an interrogative with propositional content *P* guarantees the relevance of a true completion of *P*, while the speaker of an exclamative with propositional content *P* guarantees the truth of a relevant completion of *P*.

So the speaker of (22) is telling the hearer that if he finds a true completion of (24) the speaker will consider it relevant. The speaker of (23), on the other hand, is telling the hearer that if he finds a relevant completion of (24) the speaker considers it true. The presumption of optimal relevance should lead the hearer to entertain a relevant completion along the lines that John is tall enough for a mention of his height to be relevant, e.g. taller than the hearer would otherwise have thought.

This account of the semantics of exclamatives accounts for our intuitions about their meaning as well as suggesting an explanation for the similarity between the two forms. However, we have seen above that the analysis of interrogatives proposed in Relevance doesn't quite work. This analysis of exclamatives is unsatisfactory for the same reason: there are also exclamatives containing metaphorical expressions like (25):

(25) How I hate the rat who drank all the whisky!

Assuming that the drinker of the whisky is a human, then there is no true completion of the logical form of this utterance which would be relevant. The speaker cannot be guaranteeing the relevance of a true completion of the logical form of this utterance.

So the analysis of exclamatives has to be changed in just the same way as the analysis of interrogatives. Both constructions are now seen as simply representing thoughts which the speaker regards as relevant. This raises an interesting question: how do the semantic analyses of *wh*-interrogatives differ from the semantic analyses of the corresponding exclamatives?

Wilson (1986) has suggested that exclamatives, like interrogatives, are interpretations of desirable thoughts. However, she points out that they also encode two extra pieces of information: that the speaker already has the relevant completion of the propositional form in mind and that the completion is relevant to the speaker. Thus it is clear that the speaker of (25) is aware of just how much she hates the person who drank all the whisky and finds this information relevant. This is in accordance with the observation made by Elliot (1971, 1974) and Grimshaw (1979) that exclamatives are incompatible with a state of ignorance on the part of the speaker.

So exclamatives are now seen as almost identical semantically to interrogatives, differing only in that two features which are occasionally true of interrogatives (and pragmatically determined) are always true of exclamatives (and semantically encoded). Interestingly, interrogatives do not seem to occur with both of these features together, although we have already seen examples where they have one or the other alone (see (4)-(6) above).

One question which I have not yet answered is why speakers bother to utter exclamatives at all. If the effect of uttering an exclamative like (23) is simply to communicate that the speaker considers John tall to an extent which is relevant to herself, could the speaker not have communicated that simply by uttering a declarative such as (26)?

(26) John is tall.

If (26) is descriptively used, then this approach predicts that it communicates that the speaker is entertaining the propositional form of this utterance as a representation of an actual or possible state of affairs. Suppose the most accessible interpretation is that the speaker is expressing her own belief. As with all scalar adjectives, the hearer will not have recovered the complete propositional form of the utterance until he decides just how tall the speaker thinks John is. The presumption of optimal relevance predicts that the hearer will pick the least effortful interpretation that provides adequate contextual effects. This cannot be that John is around the same height as other people his age (unless it was already mutually manifest that the hearer thought he was less tall than most people his age). Such an interpretation might be adequate in terms of effort, i.e. it might be highly accessible. However, it cannot be adequate in terms of contextual effects as the hearer could have derived all its implications without hearing the utterance. In order to achieve optimal relevance, the speaker must be communicating that she believes John is taller than the hearer might have thought, and that this information is relevant to the hearer. The overall effect must be to communicate that the speaker thinks John is taller than the hearer would have otherwise supposed.

Notice that this interpretation is not the same as that of the exclamative (23):

(23) How tall John is!

The crucial difference between the two utterances is that the exclamative encodes the information that John's height is relevant from the speaker's point of view. Of course, it is not incompatible with the proposed semantic analysis of declaratives that the speaker of (26) also finds John's height relevant. This extra assumption might be contextually inferred as part of the interpretation. If the speaker wants the hearer to recover such an interpretation, however, there are other ways in which she might convey this information. She might convey it via intonation (intonational interpretation will be discussed in section 3.3 below), she might use a particle like so, wow or God as in (27), or both:

- (27) a. John is so tall!
b. Wow, John is tall!
c. God, John is tall!

So exclamatives differ from descriptively used declaratives in that an assumption which may be conveyed by the utterance of a declarative, that the speaker finds the thought represented relevant from her own point of view, is actually encoded by exclamatives.

(23) does not simply communicate that the speaker finds John's height great enough to be relevant to the hearer. Rather, it communicates that this thought is relevant to the speaker, and it is the fact that it is relevant to the speaker which may be relevant to the hearer. Such an utterance might be appropriate when the speaker has just found

out how tall John is and finds it surprising. On the other hand, the utterance of the declarative (23) might be uttered when the speaker has known for a long time how tall John is and no longer considers it particularly significant from her own point of view.

In order to see the relevance of (23), the hearer might go on to think about the speaker's feelings of surprise at John's height. Thus, exclamatives are more emotive than the corresponding descriptively-used declaratives. This accounts for our intuition that exclamatives are used to perform "expressive" speech acts.

On this account, exclamatives have something in common with the kinds of utterance discussed by Sperber and Wilson (1986: 217-224) which give rise to "stylistic effects", such as (28):

(28) My childhood days are gone, gone.

Sperber and Wilson discuss the reasons for the extra stylistic effects which (28) gives rise to when compared to (29):

(29) My childhood days are gone.

They say:

the repetition...cannot be accounted for by assuming that the speaker's childhood days are longer gone, or more definitely gone, than might otherwise have been assumed, so if the presumption of optimal relevance is to be confirmed, then the repetition of gone must be interpreted as an encouragement to expand the context...the hearer is encouraged to be imaginative and to take a large share of responsibility in imagining what

it may be for the speaker to be way past her youth. (Sperber and Wilson 1986: 221)

I believe that the difference between (23) and (26) is similar in some respects to the difference between (28) and (29). The hearer must go further in the search for contextual effects in interpreting the more effortful exclamative than the less effortful declarative. Also, the hearer is encouraged to "be imaginative" in thinking about the speaker's response to John's height. One important difference between the two cases is that the extra effects derived in interpreting (28) arise because of the extra effort involved in processing the repetition of gone, while the extra effects derived in interpreting (23) arise because of what is linguistically encoded by the form of the utterance.

(28) My childhood days are gone, gone.

(23) How tall John is!

Wilson and Sperber have suggested that interrogatives are the interpretive counterpart of imperatives; I am suggesting that there is a sense in which exclamatives are the expressive counterpart of declaratives. The states of affairs they represent are the same as those represented by the corresponding declaratives, but they are distinguished by the extra encoded information about the speaker's attitude to the proposition expressed. In the next section I want to show how this analysis can be extended to account for the range of examples which McCawley (1973) termed "exclamatory-inversion sentences".

3.3 Exclamatory-Inversions

In this section, I want to look at some constructions which McCawley (1973) called "exclamatory-inversion sentences". These exhibit a range of interesting properties which have prompted McCawley and others to claim that they constitute a distinct non-interrogative sentence-type used to make exclamations. I will propose an analysis based on Wilson and Sperber's analysis of exclamation which accounts for their interpretation and sheds some light on the interaction of syntactic structure, certain lexical items and intonation in the interpretation of utterances. The constructions in question are illustrated in (30):

- (30) a. (Boy) is syntax easy!
b. (Wow) am I hungry!
c. (My god) does he make delicious coffee!

Although widespread in American English, they are rather less so in British dialects (their negative counterparts, which are discussed in section 3.4, are more common in British English), where they are sometimes perceived as Americanisms and/or informal. There is no obvious reason to consider their syntactic structure different from that of yes-no interrogatives, and for now I will assume that, when the particle is absent, they are syntactically identical. Semantically, they appear similar to the constructions in (31) and (32):

- (31) a. Syntax is so easy!
b. I am so hungry!
c. He makes such delicious coffee!

- (32) a. How easy syntax is!
b. How hungry I am!
c. What delicious coffee he makes!

They usually involve a degree adjective but this is not always the case. McCawley (1973) offers the following as a possible exchange:

- (33) A: Does she have children?
B: Boy, does she have children!

B's utterance would lead A to wonder what it is about the third party's children that B finds relevant. It is more difficult (though not impossible) to imagine contexts where examples like (34) would be appropriate.

- (34) My God, is London the capital of England!

As Sperber and Wilson (1984) point out, exclamatives need not contain an explicit or implicit scalar predicate, though they are often interpreted in terms of a notion of degree. They discuss the following examples:

- (35) Who the murderer turned out to be! You wouldn't believe it!

Such examples are relatively rare. Sperber and Wilson suggest that there is a natural explanation for this in their framework:

When an exclamation contains a scalar predicate, it is relatively easy for the hearer to identify the relevant proposition...All he has to do is assume that the speaker is endorsing the claim that the property designated by the scalar predicate is present to a greater extent than he would otherwise have accepted....where there is no scalar predicate present, the [relevant]

proposition... cannot be identified in the same way. (Sperber and Wilson 1984: 68-69)

If the hearer of (35) already knows who the murderer turned out to be, then the content of the exclamation is unlikely to be relevant to him and he will have to assume that the utterance achieves relevance by conveying some higher-level explicature such as (36):

(36) The speaker knows who the murderer is and finds this knowledge relevant.

If the hearer does not already know who the murderer is, he will not be able to find out simply by hearing (35), so again some higher-level explicature will have to be recovered. Such an utterance might be used to tease the hearer when it is manifest that the hearer would like to know who the murderer was.

So Sperber and Wilson suggest that notions of degree are not essential in exclamative utterances, but that the nature of what they communicate makes utterances of exclamatives containing scalar predicates easier to comprehend.

Speakers can find the mere fact that something has taken place amazing, although they are not likely to express this with an exclamative. A typical utterance expressing surprise that something has taken place is (37):

(37) That it should come to this!

With an exclamative, the most natural interpretation is one where the speaker expresses surprise at the degree to which something has some property or the degree to which some proposition is relevant. In (30a) and (32a) the speaker finds the degree of syntax's easiness surprising, in (34) the speaker finds the degree to which it is relevant that

London is the capital of England surprising. Of course, London either is or is not the capital of England, and no degree is involved here. The notion of degree must apply to the relevance of this proposition: i.e. to the amount of evidence there is for it, or the number of implications it has. Encyclopaedic entries relating to the concept {CAPITAL CITY} might contain highly accessible propositions such as those in (38):

- (38) a. The capital of a country is its administrative centre.
b. The capital of a country has cultural precedence over other cities.
c. Capital cities are big.
d. Capital cities are noisy.
e. Capital cities are polluted.

The speaker of (34) must be expressing surprise at the degree to which such implications are true, or at the fact that many of them are true. Thus, the speaker of (34) is likely to be struck by the size, noise, dirt or cultural dominance of London rather than the fact that it is officially designated the capital of England.

Two further features which both McCawley (1973) and Elliot (1971) point out are particularly interesting. They observe first that exclamatory-inversions are typically pronounced with falling intonation while yes-no interrogatives are typically pronounced with rising intonation, and second that interjections like boy, wow, my and so on are permissible in exclamatives but not in interrogatives.

McCawley claims that both (39a) and (39b) are ill-formed, if pronounced with rising intonation:

- (39) a. *Boy, is syntax easy?

- b. *My, does he make delicious coffee?

The facts about the intonation are rather more complex than this. Any well-formed intonation pattern may be associated with these constructions; the relevant issue is whether the resulting utterances can be interpreted as questions or as exclamations. I will argue that the possibility of interpreting strings such as (39a-b) as questions or as exclamations depends on contextual assumptions, the presence of certain particles such as boy or wow and the effects of intonation. In other words, I believe that the only formal differences between exclamatory-inversions and yes-no interrogatives are due to the meanings of certain lexical items and intonation.

The interaction of these two factors will be discussed in more detail below. Briefly, the essential point which emerges from studying the intonational data is that the range of intonation patterns which can give rise to exclamatory interpretations is much wider in (40a) than in (40b):

- (40) a. Boy, is syntax easy!
b. Is syntax easy!

I want to consider now what the semantic content encoded by the purely linguistic form of exclamatory-inversions might be. So far I have discussed how Wilson and Sperber analyse yes-no interrogatives, wh-interrogatives and wh-exclamatives. Yes-no interrogatives differ from wh-interrogatives in that they have not only logical but also fully propositional forms. Wh-exclamatives differ from wh-interrogatives in that the speaker already has the relevant answer in mind and this completion is relevant to herself. All are interpretations of desirable, i.e. relevant, thoughts.

Given that *wh*-interrogatives have exclamative counterparts, one would perhaps expect to find an exclamative construction corresponding to *yes-no* interrogatives. I will argue that the constructions discussed by McCawley are the exclamative counterpart of *yes-no* interrogatives, filling out the matrix of predicted possibilities:

| | Wh | Yes-no |
|-----------------------|---------------------|-----------------------|
| Interrogative: | How easy is syntax? | Is syntax easy? |
| Exclamative: | How easy syntax is! | (Boy) is syntax easy! |

Examples like (41) do not expect either a positive or a negative response:

(41) Is syntax easy!

This does not mean, however, that it is absurd to refer to this string as a *yes-no* exclamative. We have already discussed some *bona fide* interrogatives which need not expect a response, e.g. the rhetorical questions in (42):

- (42) a. Is it my fault if syntax is difficult?
b. What do you say before you leave the table?

So what would we expect the exclamative counterpart of *yes-no* interrogatives to be like? In particular, what would they be like if the difference between the two was exactly parallel to the difference between *wh*-exclamatives and *wh*-interrogatives?

I have assumed that *wh*-exclamatives, just like *wh*-interrogatives, are interpretations of thoughts which the speaker would consider relevant to someone. *Wh*-exclamatives, unlike *wh*-interrogatives, always represent thoughts which the speaker already has in mind and considers relevant to herself. *Yes-no* interrogatives, such as (43), also represent desirable thoughts:

(43) Is syntax easy?

In this positive yes-no interrogative, the speaker communicates that the propositional form of the utterance interpretively represents a thought which is itself an interpretation of a desirable thought. The desirable thought may be the one which corresponds to the state of the world at the time of utterance, in which case (43) is a request for information. (43) might be used by a speaker who would consider a positive answer more relevant than a negative one, or she may believe that either answer would be relevant, without assuming that one is more relevant than the other. I believe that an adequate explanation of the interpretation of utterances like (41) is possible if we assume that exclamatory-inversions share this semantic representation, with the added assumptions encoded by wh-exclamatives: that the speaker already has the relevant proposition in mind and considers it relevant to herself.

This predicts, then, that the proposition that syntax is easy is entertained as an interpretation of a desirable (i.e. relevant) thought. Add to this the assumptions encoded by wh-exclamatives and the speaker will be taken to communicate that she is entertaining the thought of which this is an interpretation and finds it relevant to herself.

If (41) were simply a yes-no interrogative, this would predict that the information that syntax is easy would be relevant. With a question, there is always the possibility that the speaker is using the positive proposition as shorthand for a disjunction of the positive proposition and its negation, i.e. the speaker might utter a yes-no interrogative when she would consider the positive or the negative proposition equally relevant. This possibility is ruled out if (41) is an exclamation. Here, the speaker indicates that she

finds the thought of which (41) is an interpretation relevant to herself. The speaker is hardly likely to find it relevant that syntax either is or isn't easy, as this is true for all academic subjects. She cannot be entertaining the thought that syntax is not easy, as it would put the hearer to unnecessary effort if he had to recover that. The speaker has uttered something which expresses the proposition that syntax is easy. The hearer will not look for an alternative given the easy accessibility of this hypothesis and the fact that, as we will see, it leads to an interpretation consistent with the principle of relevance.

So this analysis predicts that the speaker communicates that she is entertaining the thought that syntax is easy and finds this thought relevant. In interpreting her utterance, the hearer must make an assumption about how easy the speaker thinks syntax is. The most natural assumption is that she thinks syntax is easy enough for the fact to be worth her attention, e.g. easier than she had previously thought, or easier than she would expect any academic subject to be. The hearer is encouraged to imagine just how easy syntax is on this assumption, and how the speaker feels in thinking about it. This accords with our intuitions about the meaning of (41) and of exclamation marks in general.

Consider also examples without degree adjectives, e.g. B's utterance in (44) which was mentioned above:

(44) A: Does she have children?

B: Boy, does she have children!

B's utterance would lead A to wonder what it is about the third party's children, or her having of children, that B finds so relevant. He may assume that she has many children,

or that some other aspect of her having children is extreme, e.g. they may be particularly naughty, noisy or troublesome.

So the speaker of (41) is communicating her surprise at the extent to which syntax is easy, and this follows from the simple assumption that exclamatory-inversions are the exclamative counterpart of yes-no interrogatives. Specifically, exclamatory-inversions are just like yes-no interrogatives with the added assumptions that the speaker is entertaining the thought of which the propositional form of her utterance is an interpretation and finds it relevant to herself. They are related both to yes-no interrogatives and to wh-exclamatives. They are related to yes-no interrogatives in the same way as wh-exclamatives are related to wh-interrogatives: they are interpretations of desirable thoughts with two extra assumptions encoded. They are related to wh-exclamatives in the same way as yes-no interrogatives are related to wh-interrogatives: they have complete propositional forms as well as logical forms.

Wh-interrogatives differ formally from yes-no interrogatives in the same way as wh-exclamatives differ from exclamatory-inversions: due to the presence of the wh-word. Wh-exclamatives differ from wh-interrogatives due to the uninverted word order. How do exclamatory-inversions differ from the corresponding yes-no interrogatives? I would like to suggest that the difference is signalled by intonation, the presence of a particle, or both. I would now like to make some suggestions about how intonation and the particles in question can give rise to the appropriate interpretations. In section 3.4 this overall analysis will be extended to other inversions.

How do intonation and linguistic form interact in the interpretation of exclamatory-inversions? An answer to this question presupposes an account of how intonation affects utterance-interpretation in general. As far as I know, no such general theory exists. What I want to do now is to make some general observations about what such a theory might look like and then to suggest how this would account for the interpretation of exclamatory-inversions. (For fuller discussion of these ideas see Clark and Lindsey 1990; Lindsey 1981, 1985, 1991; Lindsey and Gil forthcoming.)

As discussed above (chapter one), relevance theory "treats interpretation as a two phase process: a modular decoding phase is seen as providing input to a central inferential phase" (Wilson and Sperber 1990: 95). So far we have considered what is contributed to this picture by certain lexical items and certain syntactic structures. How does intonation fit in?

It is clear that intonation contributes in some way to utterance-interpretation as can be seen by the different interpretations associated with intonationally distinct utterances of (45):

(45) Syntax is easy.

This might be interpreted as stating that syntax is easy or as asking whether syntax is easy (among other possibilities) and different intonation contours make different interpretations more likely. For example, any kind of fall on easy makes the statement interpretation more likely than the question interpretation. A rise on easy makes the question interpretation more likely. It is difficult, if not impossible, to imagine a context in which a high-rise nucleus on easy could be used to convey the statement

interpretation. The important point here is that we can easily imagine contexts where one intonation contour would lead to one kind of interpretation and another intonation contour to another. Assuming Sperber and Wilson's model of utterance-interpretation, where would the effects of the different intonation contours fit in?

A preliminary question, which does not have a clear-cut answer, is whether intonational meaning is essentially arbitrary or iconic in the following sense: do different intonation contours encode different information, or is there some natural link between certain kinds of pitch information and certain kinds of interpretation? This question is discussed in detail by Lindsey (1985).

If intonational meaning is arbitrary, then it involves decoding and there are two possible ways in which it can fit into Sperber and Wilson's picture: intonational decoding might take place within the language module or it might take place within a separate module which interacts with the language module in some way. Intonational meaning would then be just like traditional linguistic meaning where, for example, the form cat means something different from the form dog because of an arbitrary link between linguistic forms and concepts.

If intonational meaning is iconic, then the existence of some causal link between, say, high pitch and tension or low pitch and relaxation, means that pitch would provide evidence for certain kinds of inference without the existence of any kind of code. Consider the following example, discussed by Wilson and Sperber (1986a):

(46) A: Did you enjoy your ski-ing holiday?

B: *[displays her leg in plaster]*

(Wilson and Sperber 1986a: 25)

A knows that B intends to convey that she did not enjoy her ski-ing holiday because of assumptions he has about the world. No code exists which associates B's behaviour with the particular message it is used here to convey. Intonation might work in a similar way. Hearers might know, for example, that high pitch follows from excitement or uncertainty (or whatever high pitch does communicate) in the same way as broken legs follow from one kind of ski-ing holiday and not another.

Another example, perhaps even more apt, is discussed by Sperber and Wilson:

(47) A: Did your treatment for stammering work?

B: Peter Piper picked a peck of pickled pepper.

A: How amazing!

B: Yes, b-b-but th-th-that's not s-s-something I v-v-very often w-w-want to s-s-say.

(Sperber and Wilson 1986: 178)

Sperber and Wilson say of this example:

B's first reply communicates that the treatment worked well, not by saying so, but by producing direct evidence that it did. Properly speaking, this is not a case of verbal communication, and it falls outside the scope of pragmatics. Verbal communication proper begins when an utterance,

such as B's second reply, is manifestly chosen by the speaker for its semantic properties. (Sperber and Wilson 1986: 178)

What is the connection between the exchange in (47) and the utterance of (45)?

(45) Syntax is easy.

If intonational meaning is iconic, the speaker who utters (45) with a high rise on the nuclear easy communicates her uncertainty as to its truth "not by saying so, but by producing direct evidence" of it, as with B's first reply in (47). If intonational meaning is arbitrary, this intonation contour encodes such information and "is manifestly chosen for its semantic properties", as with B's second reply in (47). The debate between those who view intonational meaning as arbitrary and those who view it as iconic can be seen as a debate between those who believe pitch contours have semantic properties (form-meaning associations which constitute part of a code) and those who do not.

Lindsey (1985) reviews some of the literature on this question. The most well-known proponent of the view that intonational meaning is iconic is Bolinger, who has suggested that:

intonation...has its symbolising power thanks to a primitive drive mechanism that raises pitch as tension rises and lowers it as tension falls.

(Bolinger 1982: 194)

Perhaps the most well-known proponent of the view that intonational meaning is arbitrary is Gussenhoven (1983) who proposed "morphemic" meanings for three nuclear pitch accents. This view has been convincingly criticised by House (1984) and Lindsey (1985).

In fact, there are problems with both Bolinger's and Gussenhoven's position, as pointed out by Clark and Lindsey:

Attempts to posit linguistically coded meanings for intonation have not been successful...such an account fails to capture the generalisations regarding iconicity and the by-pass of double articulation: it fails to explain why, in language after language, pitch is used in similar ways to perform similar functions. On the other hand, the view of intonation as an atomistic or continuous gestural phenomenon...is equally problematic in that it fails to account for the degree of conventionalisation that exists in intonational systems. (Clark and Lindsey 1990: 42)

In other words, there are certain aspects of intonational meaning which suggest that it is iconic and certain aspects that suggest it is arbitrary. Lindsey (1981, 1985) claims, therefore, that intonational meanings are neither purely iconic nor purely grammatical. Clark and Lindsey (1990) attempt to develop this proposal more formally and to fit it into the overall framework proposed by Sperber and Wilson. I want now to sketch this proposal briefly and to suggest an alternative view which, I believe, is preferable from the point of view of linguistic semanticists.

Clark and Lindsey (1990), following Lindsey and Gil (forthcoming), propose the existence of a separate melodic module, analogous to the language module and other Fodorean "input systems" (see Fodor 1983), whose output is also input to central inferential processes. On this view, melodic interpretation, like utterance-interpretation, is a two-phase process consisting of a decoding phase and an inferential phase. While

the output of the language module is used to recover conceptual representations, the output of the melodic module is used to recover "affective representations"; these can be thought of as representations of affective states which, combined with conceptual representations, give rise to representations of emotions such as grief, happiness, and so on (for more detailed discussion see Lindsey and Gil forthcoming). The output of the melodic module, which can be used to recover affective representations, can be thought of as corresponding to the "prolongational elaborations" in Lerdahl and Jackendoff's (1982) generative theory of tonal music. These are structurally precise (represented in tree diagrams) and reflect intuitions regarding "relative stability expressed in terms of continuity and progression, the movement toward tension or relaxation, and the degree of closure or nonclosure" (Lerdahl and Jackendoff 1982: 123).

The overall picture proposed is of a separate module whose output can be used to recover a distinct kind of representation and which is responsible for the first phase of intonational interpretation. The output of both the language module and the melodic module is input to global, central, inferential processes. At this level they may interact in various ways.

On this view, a hearer of an utterance of (45) who might otherwise assume that it is a statement, might reject this hypothesis on the grounds that it is inconsistent with information derived via intonational interpretation that the utterance is "unresolved" or "incomplete" in some way:

(45) Syntax is easy.

Following Lindsey (1981, 1985), this approach attempts to take account of both the arbitrary and the iconic aspects of intonational meaning. Intonational meaning is arbitrary in that different intonation contours have different meanings for different language or dialect groups:

...while a terminal high rise, perhaps universally, represents strong non-resolution or incompleteness, a low rise is more resolved or complete in Belfast, Tyneside and Merseyside English than in standard British and American English dialects. (Clark and Lindsey 1990: 43)

It is also claimed that there exist holistic intonational structures associated with relatively specific meanings, such as the famous surprise-redundancy contour discussed by Liberman and Sag (1974).

The iconicity of intonational meaning is accounted for in that, it is claimed, there is a relationship of resemblance between both input and output representations of the melodic module and affective representations. The claim is that humans can respond affectively both to the "prolongational elaborations" which are the output of melodic decoding and to the merely transduced pitch contours which are the input to melodic decoding. It is a reasonable hypothesis, for example, that high pitch is universally associated with affective strain and low pitch with affective relaxation.

The account I have outlined seems to satisfy many of the requirements a theory of intonation would have to meet, of which the following two seem to be the most important: first, it provides an explanation for both the arbitrary and the iconic nature of intonational meaning and second, it suggests an account of the effects of intonation

on utterance-interpretation. However, I would like to suggest a modification to this proposal which would be less radical from the point of view of a relevance-theoretic semanticist: that is, that intonational interpretation involves decoding procedural constraints rather than "prolongational elaborations".

On this view, intonational interpretation can be seen as internal to the language module rather than involving a completely separate module. The procedural information which it encodes can be seen as contributing to conceptual representations rather than affective representations. This view has the significant advantage that it does not involve the postulation of much more than is already required by the picture of linguistic semantics which I have been assuming so far. The only extra assumption is that procedural information can be encoded by intonation contours as well as by lexical items and syntax.

This does not mean that we lose the account of the iconic aspect of intonational interpretation. The assumption that intonation contours resemble affective representations can be retained, which means that we can still account for the iconic aspect of intonation as well as the use of melodic structure in music. At the same time, this view of intonational interpretation involves no more than is already required for the interpretation of those syntactic structures and lexical items which, we already assume, encode procedural information. This is surely preferable to the assumption that hearers must perform two parallel interpretation processes, melodic and linguistic, and then compare the two before deciding what the end result of the interpretation process will be.

In fact, the details of the theory of intonation are not crucial for the present discussion. What is important is the claim that intonation contours encode something which can affect the interpretation of utterances, either indirectly, as proposed by Clark and Lindsey (1990), or directly, as I am suggesting here. If we assume this, it is easy to see how different intonation contours could lead to different interpretations of inversions like (48):

(48) Is syntax easy.

Let us assume that inversions encode exactly the same thing as interrogatives, namely that the proposition expressed represents a thought entertained as an interpretation of a desirable thought. We might assume that a high rise on easy encodes affective non-resolution or a procedural constraint to the effect that the speaker is not entertaining the thought of which the proposition expressed is an interpretation. We might also assume that high rises resemble affective non-resolution. Any of these assumptions would explain why the hearer of this string with a high rise on easy will interpret it as a question of some sort, i.e. he will assume that the speaker is not entertaining the thought of which the proposition expressed is an interpretation. From this assumption, we can see how the hearer might arrive at an interpretation on which the speaker might be seen as asking whether syntax is easy.

On the other hand, assuming the same semantic analysis, a falling nucleus on syntax and easy will lead to a different interpretation. We might assume that such an intonation contour encodes affective resolution, or that it encodes a procedural constraint to the effect that the speaker is entertaining the thought of which the proposition

expressed is an interpretation. We might also assume that this contour resembles affective resolution. Any of these assumptions would explain why the hearer of (48) with this contour assumes that the speaker is entertaining the thought of which the proposition expressed is an interpretation. From this assumption, we can see how the hearer might arrive at an interpretation on which the speaker is exclaiming on the extent to which syntax is easy.

The discussion so far implies that (48) can be interpreted as a question with certain intonation contours and as an exclamation with other intonation contours:

(48) Is syntax easy.

I would now like to go further and claim that the examples I represented above as (41) and (43) are not linguistically distinct at all:

(41) Is syntax easy!

(43) Is syntax easy?

Rather, there exists one string, an "inversion", which will be interpreted in one way (as an exclamation) on some occasions of utterance and in another way (as a question) on other occasions. The factors which will determine which interpretation is arrived at on a given occasion are contextual assumptions, intonation and the presence or absence of certain lexical items like boy or wow. I will assume that the ways in which contextual assumptions might affect the interpretation process are clear from my overall account of the role of context in utterance-interpretation. I have sketched how an account of the effects of intonation might go. It remains to see what the effects of these lexical items might be.

I would like to suggest that lexical items such as boy and wow encode procedural constraints similar to what is encoded by the syntax of wh-exclamatives. [Fn.3] More specifically, it seems that these lexical items encode the procedural information that a thought is relevant from the speaker's (or the thinker of the thought's) point of view. [Fn.4] This explains why an utterance of the inversion in (48) has only an exclamative interpretation when preceded by either of these lexical items:

- (49) a. Boy, is syntax easy.
b. Wow, is syntax easy.

The claim is that the inversion encodes merely that the proposition expressed is an interpretation of a desirable thought. The particles lead the hearer to make the extra assumption that the speaker finds a thought relevant from her own point of view. Clearly, the most natural assumption is that the thought the speaker finds relevant is the one represented by the proposition expressed. Hence, the overall effect of the particles is to make an utterance which could be interpreted in any of the ways in which interrogatives or exclamatives can be interpreted, into an unambiguous exclamative.

The effect of these particles is similar to the effect of the particle let's discussed in chapter two above. Let's encodes the information that the proposition expressed is entertained as a description of a state of affairs which is potential and which is also desirable from the speaker's (or the thinker of that thought's) point of view. Boy and wow encode the information that the speaker (or the thinker of the thought) considers a thought relevant from her own point of view.

So I am suggesting that an "inversion" is a string which encodes interpretive representation of desirable thoughts, and that intonation and particles can encourage hearers to interpret such strings in particular ways on particular occasions of utterance.

As well as the exclamative particles, there are certain particles which encourage the hearer to interpret the string as an interrogative, such as sentence-initial so and sentence-final then:

- (50) a. So is syntax easy.
b. Is syntax easy, then.

These strings are unlikely to be interpreted as exclamations with any intonation contour (for further discussion see Bolinger 1957; Lindsey 1985). Hence, it is reasonable to suppose that these lexical items encode procedural constraints which are incompatible with the semantic analysis of exclamatives.

Perhaps the most interesting aspect of the interpretation of these strings has to do with how the effects of the particles, the intonation and the syntax interact. I have claimed that what the syntactic structure encodes is compatible with either exclamatory or question interpretations. However, what is encoded by intonation contours can conflict with what is encoded by the lexical items. When this happens, the utterance as a whole may be unacceptable. For example, the string in (51) is unacceptable as an exclamation if there is not a fall either on the particle or on the clause, or both:

- (51) Boy is syntax easy.

If there is a single nucleus it must be a falling one. Multiple-phrase constructions with a fall on the particle are acceptable with any pattern on the clause. Multiple-phrase

constructions without a fall on the particle must have a fall on the clause. (The relevant data is presented in detail in Clark and Lindsey 1990).

One of the main claims made by McCawley (1973) is that exclamatory-inversions should be distinguished from yes-no interrogatives. The view I have defended is compatible with McCawley's view in one sense but not in another. I agree that an inversion which is preceded by an exclamatory particle, or associated with a particular kind of intonation contour, is different from one which is preceded by an interrogative particle, or is associated with a different kind of intonation contour. That is, I agree that what is semantically encoded by the string in (52a) is distinct from what is encoded by the string in (52b):

- (52) a. Boy is syntax easy.
b. So is syntax easy.

However, I disagree with McCawley in that I believe the string in (53) represents a unique linguistic form with one semantic analysis:

- (53) Is syntax easy.

This string can be interpreted in different ways depending on contextual assumptions and what is encoded by certain lexical items or intonation contours. McCawley comments that:

Despite their meaning differences, the surface structures of questions and exclamatory S's in many languages show a striking similarity.

(McCawley 1973: 377)

The analysis I have put forward here suggests a natural explanation for this. They are similar in many languages because the differences are between interpretations rather than linguistic forms or semantic representations.

These data cast significant doubt on the assumption that the "sentence type" is the basic unit of linguistic semantics. It is doubtful that the notion of a sentence type can be adequately defined if the overall semantic analysis of a string depends on the interaction of various factors, and these factors may be in conflict.

One of my main aims in this thesis has been to examine the contribution of various linguistic forms to the semantic representations of strings containing them. If it were the case that the semantic analyses of these forms tended always to point in the same direction in a given utterance, then it would be plausible to claim that sentence types were definable units, i.e. that they could be defined in terms of the contributions made by the parts of which they are composed. However, the fact that these parts may be in conflict suggests that the term "sentence type" might actually be misleading.

There are several significant points which have emerged from the discussion of exclamatory-inversions. First, Wilson and Sperber's proposal can be extended to account for the interpretation of these constructions. Second, "yes-no interrogatives" and "exclamatory-inversions" are to be understood as syntactically and semantically constituting one class of inversions; in other words, the generally assumed distinction between interrogatives and exclamatives is only capable of being absolutely drawn in the case of wh-constructions. Third, we have identified some more lexical items which encode procedural information. Fourth, it has been suggested that intonation also

encodes procedural information. Fifth, it is a combination of contextual assumptions, the presence or absence of certain lexical items, and the effects of intonation, which distinguish exclamatory interpretations from question interpretations of inversions. Finally, I have cast further doubt on the idea that "sentence types" are the basic units of linguistic semantics. In the next section, I consider briefly how this analysis might be extended to other "inversions", namely negative exclamatory-inversions and tag questions.

3.4 Other Inversions

In this section I want to suggest how the analysis I have put forward might be extended to account for two more kinds of inverted construction: negative exclamatory-inversions such as (54) and tag questions as illustrated in (55):

(54) (Boy) isn't syntax easy!

- (55) a. Syntax is easy, is it?
b. Syntax is easy, isn't it?
c. Syntax isn't easy, is it?
d. Syntax isn't easy, isn't it?

Taking the negative exclamatory-inversion in (54) first, everything I have said so far implies that this string is synonymous with (55):

(56) Isn't syntax easy?

We would expect the difference between (54) and (56) to be similar to the difference between positive yes-no interrogatives and positive exclamatory-inversions discussed in

the previous section. That is, the difference should be explicable in terms of the effects of contextual assumptions, lexical items like boy, wow, so and then, and different intonation contours. Further, we would expect the difference between positive and negative exclamatory-inversions to be similar to the difference between positive and negative yes-no questions outlined above. This seems to be the case.

Perhaps the feature of examples like (54) which is initially the most striking is that they do not mean the opposite of examples like (57):

(54) (Boy) isn't syntax easy!

(57) (Boy) is syntax easy!

The fact that an utterance of (54) cannot be used to exclaim at the extent to which syntax is not easy is presented by McCawley (1973) as a reason for differentiating exclamatory-inversions from yes-no interrogatives. However, I do not think this is unexpected given the analysis proposed by Wilson and Sperber.

Wilson and Sperber's account of yes-no interrogatives suggests that negative yes-no questions differ from positive yes-no questions because of the speaker's choice of a negative rather than a positive proposition to represent the desirable thought. The extra effort involved in processing the negative yes-no interrogative means that it has pragmatic effects which are lacking in the positive question. On this view, we would expect that negative exclamatory-inversions differ from positive ones in a similar way. I believe that this is the case.

Quirk et al. (1985) call strings like (54) and (57) "exclamatory questions" and point out that negative exclamatory-inversions are not completely synonymous with their positive counterparts:

It seems odd that pairs of sentences which contrast in positive-negative polarity should have roughly the same effect: *Has she grown! Hasn't she grown!* There is, however, a slight difference: the negative question has, as a feature of its meaning, an appeal for the listener's confirmation; the positive question, on the other hand, implies that the positive response is self-evident, and would therefore be more appropriate where the listener's agreement would normally not be solicited, as in *Am I hungry!* (The experience reported here is of course not shared by the listener). (Quirk, Greenbaum, Leech and Svartvik 1985: 825)

It is not entirely clear here whether the different possible meanings are in the semantic representations or the pragmatic implications of utterances containing the forms in question. It is suggested that a negative exclamatory-inversion conveys the appeal for confirmation "as a feature of its meaning". However, the positive exclamatory-inversion merely "implies" that a positive response is taken for granted.

The difference between positive and negative exclamatory-inversions which Quirk et al. have in mind is perhaps made clearer if we consider the difference between (58a) and (58b):

- (58) a. Aren't I hungry!
- b. Am I hungry!

(58a) seems to be appropriate only when evidence for the speaker's hunger is manifest to the hearer, e.g. if the speaker is eating vast quantities of food in view of the hearer. (58b) seems to be appropriate when it is assumed that the hearer does not know anything about the proposition expressed. The speaker of (58a) assumes that the hearer has some evidence that she is hungry, while the speaker of (58b) assumes that the hearer does not know about her hunger.

This suggests that (58a) functions more like an interrogative and that (58b) functions more like an exclamative. The speaker of (58a) communicates that "I am not hungry" is a representation of a desirable thought. When would such a thought be relevant? When it contradicts an assumption the speaker is entertaining. The speaker can be seen as conveying that she believes she is hungry, from which it would follow that finding out that she is not would be relevant.

Of course, this cannot be right. Nothing the hearer could say would provide stronger evidence of the speaker's hunger than the speaker already has available. I propose, therefore, that this utterance functions like the exam questions and guess questions discussed above:

- (59) a. What are the binding principles?
- b. Which hand is it in?

I claimed above that such utterances communicate that a thought whose logical form contains an embedding of the logical form of the utterance is desirable. I believe that negative exclamatory-inversions function in a similar way. The thought which is interpretively represented by this utterance is of the following form: "the hearer believes

that the speaker is not hungry". Thus, the speaker of (58a) communicates that she would consider it a relevant thought that the hearer does not think she is hungry. Such a thought would contradict a belief that the speaker is already entertaining that the hearer thinks she is very hungry.

(58b) is, of course, a positive exclamatory-inversion and is interpreted along lines suggested above. Informally, the speaker communicates that she is entertaining the thought that she is hungry and finds that thought relevant. She is telling the hearer that she finds it relevant that she is this hungry. Given that this utterance informs the hearer about the speaker's mental and physical state, it does not follow that the hearer is expected to respond in any way.

Hence, the interpretation of both positive and negative exclamatory-inversions is adequately explained on this view. They are both interpretations of desirable thoughts, but their different forms give rise to different kinds of interpretation.

Notice, by the way, that the hearer is extremely unlikely to treat (58a), or any negative inversion, as an exclamative about a negative proposition. This is because negative exclamatives in general are unacceptable. It is not feasible to exclaim about a negative proposition:

- (60) a. ?How easy syntax isn't!
- b. ?Boy, is syntax not easy!
- c. ?Syntax is so not easy!

This follows from the assumption that exclamatives involve a notion of degree. Negativity is not a question of degree. If something is not the case, it is not the case

absolutely. Thus, it is impossible to exclaim about the extent to which something is not the case, and the hearer of (58a) cannot assume that this is what the speaker intended to convey.

Of course, it is not impossible to express surprise that something is not the case:

- (61) a. Wow! Syntax isn't easy!
b. I can't believe that syntax isn't easy!

It can be relevant that something is not the case, although the degree to which something is not the case cannot be exclaimed about.

I would like to conclude this chapter by suggesting briefly how this approach might account for the interpretation of tag questions:

- (62) a. Syntax is easy, is it?
b. Syntax is easy, isn't it?
c. Syntax isn't easy, is it?
d. Syntax isn't easy, isn't it?

On this view, we would expect the differences between these tag questions to be similar to the account given above of main clause yes-no questions. I believe that this approach can account for all of the examples in (62) simply by assuming the analysis of declaratives mentioned in chapter one and the analyses of positive and negative yes-no questions outlined above in this chapter. That is, I agree with Hudson (1975) that "the meaning of the whole sentence is the automatic consequence of the interaction between the meanings of the declarative and the interrogative" (Hudson 1975: 23).

First, consider the positive declarative with positive tag:

(62) a. Syntax is easy, is it?

The declarative syntax conveys that the proposition expressed represents a thought entertained as a description of a possible or actual state of affairs. One possibility is that the speaker is entertaining this proposition as a hypothesis. On this reading, the use of the declarative clause is similar to the one illustrated in (63):

(63) His name is Chimsky...Chumsky...Chomsky.

The speaker here tentatively puts forward the hypothesis that the name of the person referred to is Chimsky, without communicating that she believes this hypothesis is true.

The declarative in (62a) might be used in a similar way to represent a proposition for which the speaker has some evidence. (62a) might easily be uttered in response to the following utterance:

(64) I'll come to the cinema tonight; after all, I've only got some syntax homework to prepare.

In such circumstances, the utterance of the declarative might be seen as communicating that the speaker is considering the possibility that syntax is easy.

On this interpretation, it is easy to see how the utterance of the tag question would achieve relevance. The speaker of a positive yes-no interrogative with propositional content *P* communicates that either "*P*" or "not *P*" would be relevant and, if anything, *P* would be more relevant. So the speaker of (62a) communicates that the proposition that syntax is easy would be relevant. This thought would be relevant to the speaker because it confirms the hypothesis represented by the declarative clause. [Fn.5]

The tag question could also be interpreted as shorthand for an alternative question. In other words, the hearer might assume that the speaker would consider either a positive or a negative answer equally relevant. The tag question would still perform essentially the same function, in that it requests the hearer either to confirm or disconfirm the speaker's hypothesis.

Informally, the overall interpretation of (62a) would be something like the following: "I am entertaining the hypothesis that syntax is easy, and I would consider it relevant to know that you think this hypothesis is true (or that it is not true)".

Now consider the positive declarative clause with a negative tag:

(62) b. Syntax is easy, isn't it?

This might achieve relevance in a situation where the speaker has always thought that syntax is easy but now has some evidence that it is not. The declarative might be interpreted as representing the speaker's existing belief. The interrogative conveys that the thought that syntax is not easy would be relevant. How would this thought achieve relevance? By contradicting the existing assumption represented by the declarative clause. Informally, the overall interpretation would be something like: "I think syntax is easy, and I would consider it relevant to know that you disagree".

The negative declarative with positive tag is the mirror image of (62b):

(62) c. Syntax isn't easy, is it?

Here the speaker communicates that she thinks syntax is not easy and asks the hearer to disconfirm this thought if he has evidence to the contrary. Informally, the overall

interpretation is: "I think syntax is not easy, and I would consider it relevant to know that you disagree".

(62d) is slightly odd:

(62) d. Syntax isn't easy, isn't it?

As Hudson (1975: 25) points out (though not in these terms) such utterances can only be interpretively used. That is, the speaker of the declarative clause can only be attributing the thought that syntax is not easy to someone else. The tag question then functions in the normal way to communicate that the speaker would find such a thought relevant, if it were actually true. This example might be uttered in response to (65):

(65) Syntax isn't easy.

The next speaker might then utter (62d) and show the speaker of (65) a marksheet on which all the students have scored top marks.

In such circumstances the two clauses are quite separate and the speaker presents two, quite separate, attitudes to the proposition expressed. Informally, the interpretation of the whole utterance is: "you think syntax is not easy: it would be relevant to me to know that you still think syntax is not easy (having looked at these marksheets)".

Why can't this utterance be descriptively used? If it were so used, it might be the negative equivalent of (62a), i.e. it might be used to communicate that the speaker thinks syntax is not easy and would like the hearer to confirm this view. This would be unusual because there is a less effortful alternative available, namely (62c):

(62) c. Syntax isn't easy, is it?

The speaker of (62c) might communicate that she thinks syntax is easy and that she would consider the information that the hearer thinks it is easy relevant (as it would contradict her existing assumption). She might also be using the positive tag question as shorthand for the full alternative question. The overall effect in either case is to let the hearer know that the speaker would consider his views relevant. Given the psychological complexity of negation, it is hard to see what extra effects could be gained by putting the hearer to the extra effort of interpreting a negative proposition.

So the reason why (62d) is odd if descriptively used is related to the reason why the hearer does not assume that (66), discussed in chapter one above, is intended to communicate that there is a tiger on the roof:

(66) There's a cat on the roof.

In the case of (66), the assumption that there is a tiger on the roof is not warranted because the utterance would not be consistent with the principle of relevance on that interpretation, since an adequate and less effortful interpretation is available. In the case of (62d) there is no interpretation consistent with the principle of relevance, since no justification for the extra effort involved in interpreting the negation is possible.

In this chapter I have attempted to show how Wilson and Sperber's proposal can account for a wide range of interrogative and exclamative utterances. In particular, I have suggested how it can account for a range of "inversions" which can be interpreted as exclamations or as questions depending on contextual assumptions, the presence or absence of certain lexical items and intonation. It was claimed that procedural information about higher-level explicatures can be encoded not only by lexical items and

syntactic structures, but also by intonation. Further, the various linguistic indicators in a given utterance do not always point in the same direction. The possibility of conflict in what is encoded by these forms casts further doubt on the assumption that there exists a syntactically definable class of mutually exclusive sentence types which are the basic units of linguistics.

CHAPTER FOUR: FORCES, MOODS AND PROPOSITIONAL ATTITUDES

4.1 Forms and Forces

In this chapter, I want to look at some alternative approaches to the semantics of the "sentence types" and to compare them with the approach discussed above. The proposal I have adopted was originally put forward in Sperber and Wilson 1984, 1986, and developed in Wilson 1986; Wilson and Sperber 1988a, 1990. In the last two chapters, I hope to have shown how Wilson and Sperber's proposal can form the basis of successful semantic analyses of a wide range of linguistic forms. Their account is based on the assumption of "a direct semantic link between linguistic form and representations of propositional attitude" (Wilson and Sperber 1988a: 86). In this chapter I want to give a brief characterisation of two alternative, less successful, approaches and to consider in what ways an account based on Wilson and Sperber's proposal would differ from them. In so doing, I hope to shed some light on the reasons for the greater success of Wilson and Sperber's proposal.

In this section I consider approaches based on the notion that there is a direct link between linguistic form and illocutionary force. In section 4.2 I consider approaches based on a link between linguistic form and semantic mood. In section 4.3 I return to Wilson and Sperber's proposal. I suggest some further reasons for preferring their proposal to the alternatives. I turn now to the account which treats illocutionary force as a semantic category.

The idea that either utterance-meaning or sentence-meaning, or both, should be analysed in terms of speech acts, as originally proposed by Austin (1962), has been extremely influential in recent years and has given rise to an extensive literature (for

discussion see Allan 1986; Kempson 1977; Levinson 1983; Lyons 1977; Recanati 1987; Sadock 1988; Searle 1969, 1979; Searle, Kiefer and Bierwisch 1980; Searle and Vanderveken 1985; Sperber and Wilson 1984, 1986). In this section I want to consider one kind of approach to the meaning of the sentence types which is based on the notion of speech acts. The assumption behind this approach is that there is a direct semantic link between sentence types and speech act categories, between linguistic forms and illocutionary forces. This is what Levinson (1983: 263) calls the "literal force hypothesis".

It is intuitively plausible that there is some sort of link between certain linguistic forms and certain illocutionary forces. Most speakers of English would find it reasonable to say that (1a) is used to make a statement, (1b) to issue a command and (1c) to ask for information:

- (1) a. John is quiet.
- b. John, be quiet.
- c. Is John being quiet?

The approach I am considering now is essentially a more formal version of this intuition. Following Gazdar (1981), Levinson points out that the literal force hypothesis involves the following assumptions:

- (2) a. Explicit performatives have the force named by the performative verb in the matrix clause.
- b. Otherwise, the three major sentence types in English, namely the imperative, interrogative and declarative, have the forces

traditionally associated with them, namely ordering (or requesting), questioning and stating respectively (with, of course, the exception of explicit performatives which happen to be in declarative format).

(Levinson 1983: 263-364)

The analysis of explicit performatives is itself interesting (for discussion see Austin 1962; Blakemore forthcoming; Recanati 1987; Urmson 1966) but I will restrict the discussion here to the first part of clause (2b): the assumption that declaratives, imperatives and interrogatives are each associated with a particular kind of illocutionary force. I will also have nothing to say about the "performative hypothesis" which assumes that "the three basic sentence types will be reflexes of underlying performative verbs of ordering, questioning and stating" (Levinson 1983: 264), which is discussed in some detail by Levinson.

Assuming that the literal force hypothesis is correct, the task of analysing the semantics of the sentence types will fall into three parts. First, define the sentence types. Second, define the illocutionary force types. Third, work out a mapping between the two.

I have cast doubt above on the feasibility of taking "sentence types" as the input to linguistic semantics. However, I will ignore such problems here, as my main aim is to point out the inadequacy of attempts to characterise the meanings of linguistic forms in terms of illocutionary forces. I will also ignore the question of how to classify speech act, or illocutionary force, types, on which there is already a considerable literature (see,

for example, Allan 1986; Allwood 1976; Bach and Harnish 1979; Hancher 1979; Lyons 1977: 725-787; Searle 1976, 1979; Searle and Vanderveken 1985). My main concern is with the putative mapping between forms and forces.

A natural assumption is that declaratives are used to make statements, imperatives to request action, and interrogatives to request information. In terms of Searle's (1976, 1979) classification of speech acts, this means that declaratives perform assertive speech acts while imperatives and interrogatives perform directive speech acts. (For analyses along these lines, see J.D. Fodor 1977; Katz 1977; Searle 1969, 1979).

According to Searle, assertive speech acts "commit the speaker (in varying degrees) to somethings's being the case, to the truth of the expressed proposition", while directive speech acts "are attempts (of varying degrees)...by the speaker to get the hearer to do something" (Searle 1979: 12-13). On this view, then, the utterance of a declarative commits the speaker to the truth of the proposition expressed, while the utterance of an imperative or an interrogative is an attempt to get the hearer to do something. Imperatives and interrogatives might be distinguished as sub-cases of directive speech acts: imperatives are requests for action while interrogatives are requests for information (giving information is, of course, a form of action).

On this view, the speaker of (1a) is committing herself to the truth of the proposition that John is happy:

- (1) a. John is happy.

The speaker of (1b) is attempting to get the hearer (John) to be happy:

- (1) b. John, be happy.

The speaker of (1c) is requesting the information either that John is happy or that John is not happy:

- (1) c. Is John happy?

Wilson and Sperber have surveyed the wealth of counterexamples to this proposal, some of which have already been discussed above. I reproduce a small selection of these below.

First, there are a wide range of utterances with declarative syntax which do not perform assertive speech acts:

- (3) a. Life is a bowl of cherries.
b. It was nice of you to drink all the whisky.
c. Two racehorses were in a bar having a chat...
d. Your best friend has B.O. Do you tell him?

The metaphorical utterance in (3a) does not commit the speaker to the truth of the proposition that life is a bowl of cherries. Nor does (3b), which might be an example of verbal irony intended to convey the speaker's displeasure. (3c) might be uttered as part of a joke. (3d) might appear in a personality test where the hearer is expected to think about what he would do if his best friend had B.O. In none of these cases is the speaker intending to commit herself to the truth of the proposition explicitly expressed.

Second, as we have already seen in chapter two, there are utterances with imperative syntax which do not request action:

- (4) a. Come one step closer and I'll shoot.
b. Drop dead.

- c. Get well soon.
- d. Don't tell me Mrs. Thatcher's resigned.

The speaker of the "pseudo-imperative" in (4a) is not attempting to get the hearer to come closer. The speaker of the curse in (4b) is not attempting to get the hearer to die. The speaker of the good wish in (4c) cannot expect the hearer to decide to get well, since this is not normally an act under his control. The speaker of the expression of surprise in (4d) does not expect the hearer to keep quiet if Mrs. Thatcher has resigned.

There are two ways in which one might attempt to characterise directive speech acts. On the stronger of the two views, the characterisation would parallel that of assertives: the speaker would be seen as attempting to get the hearer to bring about the state of affairs described by the proposition expressed. On the weaker of the two claims (adopted by Searle 1979), the speaker would be seen as attempting to get the hearer to bring about some state of affairs, i.e. not necessarily the one described by the proposition expressed.

The examples in (4) would all be counterexamples to the stronger claim. However, the weaker claim can accommodate an utterance like (4a), and possibly (4b), where it can be claimed that the speaker is attempting to get the hearer to do something, though not necessarily to bring about the state of affairs described. The speaker of (4a) is attempting to get the hearer to stay where he is, or to stop moving. The speaker of (4b) might be seen as attempting to get the hearer to be quiet, or to stop irritating the speaker, or perhaps to act in a way which is less clearly defined.

The stronger claim must be rejected in any case, because it would rule out the possibility of treating interrogatives as specialised for performing directive speech acts. The serious problem the weaker proposal gives rise to is that it is extremely vague. As Wilson and Sperber put it (1988a: 82), "how does the hearer decide which action the speaker wants him to perform?"

Ignoring this problem, there are still many counterexamples to the claim that interrogatives are used to request information, some of which were discussed in chapter three:

- (5) a. What do we say when we want to leave the table?
- b. What are the binding principles?
- c. Now where did I put my pen?
- d. Why does bread always land butter side down?

The rhetorical question in (5a) is likely to be uttered by someone who knows exactly what we (ought to) say when we leave the table. If (5b) appears in an exam, it is presumed that the examiner knows the answer while it is not obvious that the examinee does. (5c) might be uttered by a lone speaker to herself, in which case she cannot be requesting information. (5d) is the sort of speculative question to which it is not assumed that anyone knows the answer. Thus, none of the utterances in (5) can be described as requests for information.

This wide range of counterexamples raises the question of whether it is possible to work out a different mapping between form and force which would accommodate them all. Wilson and Sperber suggest that it is not. Attempts have been made to weaken

the account in order to deal with a wider range of examples, but they do not appear to have been successful. I will conclude this section with a brief look at two such proposals: Schmerling's (1979, 1982) proposal for the analysis of imperatives and Bell's (1975) proposal for the analysis of interrogatives.

Schmerling discusses a range of examples which she labels according to their use and lists "in (more-or-less increasing order of distance from the stereotypical command of the speech-act literature" (Schmerling 1982: 210):

- (6) Request:(Please) pass the salt.
- (7) Plea: (Please) let me go.
- (8) Offer: Have some meatloaf.
- (9) Permission: Help yourself.
- (10) Warning: Don't trip on that cord.
- (11) Exhortations of varying directness:
 - a. Run.
 - b. Save 10 cents.
 - c. Make me proud of you.
 - d. Be big and strong.
- (12) Wishes:
 - a. Sleep well.
 - b. Have a good time.
 - c. Don't get the flu.

(13) Healing:

- a. Walk.
- b. Hear.

(14) Hocus-pocus:

- a. Stay.
- b. Start (dammit).
- c. Please don't rain.

(Schmerling 1982: 210-211)

Schmerling believes that some problems for speech act theory arise because of the "lexicon-based ontology", so the labels she provides are purely informal. She points out that:

Unlike orders, none of the illocutionary forces listed involves the imposition of an obligation on some listener; as we approach the hocus-pocus commands we cease to find any notion of subsequent intent or cognition of any sort on a listener's part, if indeed the notion of an actual listener is at all relevant. (Schmerling 1982: 211)

(11)-(14) are the examples which Schmerling finds the most interesting. The examples in (11) are intended to show that the hearer's control over the realisation of the state of affairs described might be indefinitely indirect. Thus (11b) might be the result of buying a certain product, (11c) of going to law school and (11d) of eating nutritious food.

Schmerling's attitude to (12)-(14) is particularly interesting. She says that these examples:

...do not rely for their effect on any intended cognitive response in a listener; they involve something closer to the instinctive sense of magic that underlies superstitious or other compulsive ritual...The point is that it is the very uttering of the imperative that should bring about the desired state of affairs. A special kind of institutionalised ritual of this sort is exemplified by the imperatives in [my (13)] as used in acts of faith healing. It is thus perfectly appropriate to address [my (13a)] to a paraplegic as part of a healing ritual, and we thus see that in the uttering of a clause with imperative form it is not necessary to assume that the imperative can be complied with prior to the uttering of it. By the same token, [my (13b)] could function in the healing of deafness even though it itself will not be heard by the addressee. (Schmerling 1982: 211)

The examples in (14) are intended to show that the addressee of an imperative may be inanimate or even abstract. For example, (14a) could be addressed to a stack of papers balanced on the edge of a desk, (14b) to a car and (14c) to "it".

On the basis of examples like these, Schmerling proposes a weaker link between form and force than the traditional account outlined above:

the uttering of a (categorical) imperative is an attempt thereby to bring about a state of affairs in which the proposition expressed by the imperative is true. (Schmerling 1982: 212)

As Wilson and Sperber (1988a: 82) point out, "while this proposal would deal with good wishes, audienceless cases, and predetermined cases, it does not handle advice,

permission, threats, or dares". That is, it will account for cases where the speaker can be seen as attempting to bring about the state of affairs described such as those discussed above (with the notable exception of (9) which I will discuss in a moment), but it will not account for cases like the following:

- (15) a. Come one step closer and I'll shoot.
- b. Go on. Try it.
- c. Open the Guardian and you'll find three misprints on every page.
- d. A: How do I get to the station?
B: Go to the traffic lights and turn right.

There are two problems with Schmerling's proposal. First, it assumes that speakers always want to bring about the state of affairs described. Thus, it will not work for cases like (15a) (assuming the speaker is carrying a gun rather than a camera) or (15b), where the speaker is attempting to bring about a state of affairs other than that described, or attempting to prevent the state of affairs described from taking place. Second, it assumes that speakers of an imperative utterance are always attempting to make something happen. Thus, it will not work for cases like (15c) and (15d), where the speaker does not seem to be attempting to make anything happen. Both (15c) and (15d) seem to be used to inform the hearer of something rather than to get him to do something; (15c) tells the hearer something about opening the Guardian and (15d) tells the hearer something about getting to the station. There is no reason to assume the speaker of (15c) wants the hearer to open the Guardian and no reason to assume the speaker of (15d) wants the hearer to go to the traffic lights.

It is interesting that Schmerling presents an example of permission and that Wilson and Sperber cite permission-giving examples as a counterexample to Schmerling's proposal. The example in question is (9):

(9) Help yourself.

Presumably, Schmerling sees this utterance as an attempt to get the hearer to help himself. Wilson and Sperber see permission as similar to advice (example (15d)) where the speaker doesn't care whether the hearer brings about the state of affairs described or not. Perhaps the different views arise because Schmerling imagines (9) as an attempt by a host to get a guest to eat, whereas Wilson and Sperber have in mind cases like (16):

(16) A: Can I have a sweet?

B: Take a few.

Here, there is no reason to assume that B wants A to have a few sweets. Rather, she is letting him know that he may have some, given that his desire to have some is already manifest (due to A's utterance).

Schmerling's proposal can account for cases like (9) but not for cases like (16). The difference is a terminological one: if the term "permission" describes examples like (9), Schmerling's proposal can account for it, if it describes examples like (16), it cannot. This can be seen as illustrating the kind of problem which Schmerling sees as arising from the fact that speech act theory is built on a "lexicon-based ontology". It also illustrates a general problem with speech act theory: the terms which it takes as central

are neither clearly defined nor obviously definable. This fact is what has given rise to the considerable literature on speech act classification which I mentioned above.

The main conclusion I want to draw at this point is that Schmerling's proposal does not provide an adequate account of the relationship between form and force.

Bell (1975) discusses a range of examples where the utterance of an interrogative does not count as a request for information. After making a distinction between propositions and assertions and between questions and askings of questions (in each case the former is the logical content of the latter), Bell claims that:

Just as one and the same proposition may occur in discourse now asserted, now unasserted, so a question may occur now asked, now unasked. (Bell 1975: 198)

The examples he has in mind are classroom or exam questions such as (17a), guess questions such as (17b) and requests for advice such as (17c):

- (17) a. When was the battle of Waterloo?
- b. Which hand is it in?
- c. What should I do now?

Bell says that (17a-c) are not requests for information. Rather, (17a) is a command to tell, (17b) is a request to guess, and (17c) is a request for advice. Accordingly, he suggests the following schema to represent the forces that the utterance of an interrogative might have:

- (18) I {request } you to {inform } me Q.
 {order } {tell }
 {command } {advise }
 {beg } {suggest}
 {order }

This schema is intended to parallel a schema such as the following which will account for the force of utterances of imperatives:

- (19) I {order } you to ...
 {command}
 {ask }
 {request}
 {etc. }

I will ignore problems with the schema for imperatives, except to point out that several of the examples we have already discussed are counterexamples to it.

The important point about Bell's schema for interrogatives is that the notion of informing has several properties which are not shared by notions such as telling, advising, suggesting and ordering. In particular, the speaker can only legitimately request someone to inform her of something she does not already know. However, according to Bell, there is no reason why the speaker cannot request the hearer to tell her something she already knows. So the speaker of an exam question like (17a) or a guess question like (17b) can be seen as requesting the hearer to tell her something, not because she wants to become informed of it, but for some other reason, e.g. to find out about the hearer's knowledge or ability to guess. (17c) is requesting the hearer to advise, which is different from requesting information. So this account is designed to accommodate cases where the speaker "asks" about something to which she already knows the answer or requests something other than information.

Wilson and Sperber (1988a: 93) point out that "while this would deal with exam questions and guess questions, it does not handle rhetorical questions, surprise questions, expository questions, self-addressed questions, or speculative questions". In other words, Bell's account will work for cases where the speaker expects some sort of response from the hearer but not for cases where no response is expected at all. It will work for the cases Bell considers, but not for cases like the following:

- (20) a. Is it my fault if syntax is difficult?
b. A: Mrs. Thatcher's resigned.
B: Has she? That's amazing.
c. Why has speech act theory been so influential? First,...
d. Now where did I put my pen?
e. Why does bread always land butter side down?

In none of these cases does the speaker expect any kind of response from the hearer. The speaker of the rhetorical question (20a) is, rather, drawing the hearer's attention to a fact. The speaker of (20b) is expressing her surprise at the news she has just heard. The speaker of the expository question (20c) goes on to answer the question she asks herself. The speaker of (20d) and (20e) might be alone, in which case either she herself is the only hearer or there is no hearer. In all cases, an analysis on which the speaker is attempting to get anyone to do anything at all will fail, even if that analysis is weaker than the analysis in terms of requesting information discussed above.

In fact, Bell does mention expository questions such as (20c), though he makes no attempt to account for them in terms of his proposed semantic analysis:

(20) c. Why has speech act theory been so influential? First...

Bell says:

...there are cases where, as we say, a question is *raised*, though not put. For example, a lecturer may raise a question before going on to provide an answer, or even do so without attempting himself to answer it, simply leaving his audience to consider it, if they wish...Here the question is, as it were, in quotation, and no illocutionary force attaches to it. (Bell 1975: 209)

It is not clear what Bell means when he says the utterance is "in quotation". However, it is interesting that Sperber and Wilson's notion of "interpretive use" is, perhaps, the closest technical notion to "in quotation" within relevance theory and that this notion might account for the utterance of expository questions. That is, one might claim that expository questions are used to attribute the thought expressed to a particular kind of person. Informally, one might say that the speaker of (20c) communicates something like the following: "You might ask me why speech act theory has been so influential. First..."

Sperber and Wilson's account allows for the possibility of such questions, but their framework predicts that not all "expository" questions are of this type. Just as their analysis of imperatives predicts that there are imperatives which describe a state of affairs which is desirable from the hearer's point of view, so their analysis of interrogatives predicts that there are questions whose answers are desirable from the hearer's point of view. Rhetorical questions are one obvious illustration: here the hearer already knows the answer, and is being encouraged to remember it. It seems reasonable

to claim that the most basic type of expository questions are another illustration: here the hearer is presumed not to know the answer already, and this type of question amounts to an offer of information. On Wilson and Sperber's account, then, there will be not one type of expository question, but two.

The main point which emerges from the above discussion is that Bell's proposal can not account adequately for the relationship between the form and force of interrogatives.

It seems from all this that the assumption of a direct link between linguistic form and illocutionary force is too strong and that an adequate account of the various "sentence types" will have to reject this notion. The simple assumption that declaratives are specialised for the performance of assertive speech acts, while imperatives and interrogatives are specialised for directive speech acts (requests for action and requests for information), runs into a large range of counterexamples. Attempts to solve the problem by weakening the link between form and force, as in the proposals of Schmerling and Bell, do not fare much better.

In fact, Schmerling and Bell take a similar stance in attempting to solve the problems. They retain the notion of a form-force link, while weakening the semantic analysis so that it will be compatible with a wider range of actual forces. In both cases, a wide range of counterexamples remain to be accounted for. This suggests that the flaw in the proposal that there is a semantic link between forms and forces is more fundamental than Schmerling or Bell suppose. That is, the problems do not arise simply because the forces proposed in the semantic analyses are the wrong ones.

In the next section, I will consider some approaches intended to solve the problems by postulating an intervening category of semantic mood.

4.2 Forms and Moods

Some theorists have responded to the problems with the above approaches by postulating an intervening category of semantic mood. Their main concerns were, on the one hand with "non-literal", "non-serious" utterances - e.g. figurative language, jokes, story-telling, etc. - which invariably lack the force predicted by the speech-act account; and on the other hand with embedded declaratives and interrogatives, which often lack the predicted force. They have attempted to deal with the problem by developing a framework in which the various syntactic structures would be associated with certain moods, rather than directly with forces. Hearers would then contextually infer the force of an utterance on the basis of its semantic mood, among other factors. McGinn (1977) says that what "drives a wedge" between mood and force is:

...the observation that the very same sentence can be employed, without alteration in its sense, now assertively, now unassertively. More generally, a sentence can be uttered with or without its customary force, its strict meaning remaining unchanged...What this shows is that it cannot be any feature of the sentence *itself* that confers on its utterance the requisite force, or else its utterance would be invariably endowed with that force. Mood, to be sure, conventionally and standardly *signifies* force, but it cannot *guarantee* it. Force is a property of speech acts, mood

is a property of sentences...mood is a matter of meaning, whereas force is a strictly pragmatic affair. (McGinn 1977: 303-304)

The proposal is, then, that the task of a semanticist is to work out the moods of the sentence types. On the basis of this mood, force will be determined pragmatically.

This response to the problems with the early type of speech-act approach is a natural one: the link between form and force is too strong, or too direct, so it makes sense to weaken it, or make it more indirect. If syntactic structure alone is not enough to determine force, perhaps force is determined by the interaction of pragmatics and contextual factors with whatever the syntactic structures semantically encode.

Wilson and Sperber (1988a) have also demonstrated failings with proposals based on semantic mood. These proposals are all rather programmatic. The question which ought to be considered when evaluating them is whether it would be possible to work out an analysis of the semantic mood of a particular sentence in such a way as to account for the various interpretations of utterances of that sentence. The answer to this question appears to be no.

Hare (1971) and Davidson (1979) both propose to treat mood as a conventional indicator of force. This, of course, means that, while they might deal with the "non-literal", "non-serious" and embedded uses just mentioned, the proposals risk encountering all the other problems of the force-based approaches, but by a more circuitous route. It also raises questions about when the convention breaks down and what hearers understand when it does.

Hare suggests that a particular mood conventionally indicates a particular force, and that this connection breaks down in certain linguistic or non-linguistic contexts.

Thus he says that:

...the fact that, in an utterance like "The cat is on the mat", the verb is indicative tells us, in the absence of certain contextual counter-indications, that the speaker is performing one of the genus of speech acts which we may call "assertions"...Would someone who did not know...that the man who said "The cat is on the mat" was making an assertion, be said to know the meanings of these words? The answer seem to be plainly that he would not. (Hare 1971: 77-78)

In other words, it is part of the meaning of declaratives that they are conventionally used to perform assertive speech acts.

If this were all Hare said, then his account would be indistinguishable from the approaches based on force discussed above. What makes Hare's approach different is the claim that the link between form and force can break down given certain "contextual counter-indications". These contextual counter-indications can be of two types: linguistic or non-linguistic.

Linguistically, conventional force is cancelled under certain types of embedding. Declaratives, for example, do not perform assertive speech acts when they appear in conditionals, as in (21a), or as subordinate clauses, as in (21b):

- (21) a. If the cat is on the mat, it is purring.
- b. John said that the cat is on the mat.

Non-linguistically, the metaphorical declarative in (22a) and the ironical declarative in (22b) do not assert the proposition expressed:

- (22) a. Life is a bowl of cherries.
b. It was nice of you to drink all the whisky.

Jokes, fictions, fantasies, etc. are further illustrations.

The question this raises is whether all the counterexamples to the claim that forms are associated with forces can be adequately analysed by this account. That is to say, can we account for all the cases where declaratives are not used to perform assertive speech acts, where imperatives are not used to request action, and where interrogatives are not used to request information, by simply describing their normal force and appealing to a notion of contextual cancellation? Consider the following imperatives:

- (23) a. Build your own road through life.
b. Come one step closer and I'll shoot.
c. Drop dead.
d. (*to a bus*) Please don't be late.

Is it really adequate to note that these are normally used to request action, and add that their force is cancelled here? Surely we need some positive account of what these utterances do communicate; but this is not something that is normally attempted by mood-theorists.

Hare's approach thus seems inadequate to account for the full relationship between form and force. Unless a full account can be given of how the actual force of

an utterance is determined, it amounts to little more than saying that declaratives perform assertive speech acts, unless they don't, and so on for imperatives, interrogatives and other forms.

Davidson (1979) proposes to analyse the meanings of non-declarative sentences by distinguishing between the "mood-setter" of an utterance and its "indicative core":

...an utterance of a non-indicative sentence may be decomposed into two distinct speech acts, one the utterance of an indicative sentence, and the other the utterance of a mood-setter. It should not bother us that in fact we do not usually perform these acts one after the other but more or less simultaneously. Just think of someone rubbing his stomach with one hand and patting his head with the other. (Davidson 1979: 119)

In this paper, Davidson's account is only applied to imperatives. So what is the "mood-setter" of an imperative sentence? Davidson puts it thus:

If we were to represent in linear form the utterance of, say, the imperative sentence "Put on your hat", it would come out as the utterance of a sentence like "My next utterance is imperatival in force", followed by an utterance of "You will put on your hat". (Davidson 1979: 120)

Thus, the meaning of an imperative sentence amounts to the simultaneous utterance of two propositions, one of which is similar (though not identical, due to the presence of will) to what would traditionally be called the "propositional content" of the utterance and one of which amounts to a description of the typical force of that utterance.

Davidson suggests that both the mood-setter and the indicative core will be amenable to truth-conditional treatment. To complete the picture, we need to know what the truth-conditions of the mood-setter are. Davidson says that:

The mood-setter of an utterance of "Put on your hat" is true if and only if the utterance of the indicative core is imperatival in force. (Davidson 1979: 120)

This is not exactly the same as saying that imperatives have imperatival force (which Davidson does not define), because:

Mood-setters characterise an utterance as having a certain illocutionary force; they do not assert that it has that force, since only speakers make assertions. But if someone wishes to give an order, he may well do it by uttering the imperative mood-setter assertively. Then if the truth conditions of the mood-setter hold (if what the speaker has asserted is true), his utterance of the indicative core will constitute giving an order. (Davidson 1979: 120-121)

This proposal is extremely programmatic. No account is suggested of how hearers can tell whether the speaker intends his mood-setter to give rise to its typical force, or how the typical mood-force relationship might break down.

However, there is a further problem with Davidson's sketch. This is that the characterisation of imperatival force seems to amount to the giving of an order. This means that the proposal will be subject to all the counterexamples to the speech act proposal discussed in section 4.1.

Davidson's proposal is unsatisfactory, then, because it is sketchy and because it characterises mood in terms of force. As was suggested above, both Hare and Davidson face the problems of the speech act proposal, but by a more complicated route.

McGinn (1977) sees mood as an operator on propositional content. As he puts it, his aim is:

not to construe nonindicatives *as* more or less disguised indicatives, but rather to discern an indicative component *in* nonindicatives...a sentence is to be conceived as composed of two principal constituents, a mood indicator and a "sentence radical". The radical, it is hoped, will submit to truth-theoretic treatment, while the semantic contribution of the mood indicator to total sentence meaning will be specified separately. (McGinn 1977: 306)

So what is the contribution of the mood indicator? McGinn offers three formulations to illustrate this. Two of his illustrations are "paratactic" along the lines suggested by Davidson (above): they involve two sentences, "a token of the first containing demonstrative reference, via "that", to a token of the second". The third is an "operator treatment". There is little to choose between the three formulations, reproduced in (24):

- (24) a. Satisfies ($u, \ulcorner \text{Make the case } x \urcorner \text{ at } t$) \equiv u is made the case at t .
- b. Fulfilled ($\ulcorner \text{Make the case } \textit{that} \urcorner \text{ at } t$) \equiv denotation $\ulcorner \textit{that} \urcorner$ is made the case at t .
- c. Fulfilled ($\ulcorner \text{Make it the case that } A \urcorner \text{ at } t$) \equiv it is made the case that $\ulcorner A \urcorner$ is true at t .

" μ " here ranges over "(demonstrated) utterances" and " t " over times.

Whether one assumes one of the paratactic analyses (24a-b) or the operator treatment (24c), the end result is that the meaning of the imperative mood indicator is to be understood in terms of satisfaction conditions or fulfilment conditions. These conditions are satisfied if and only if the utterance, or its denotation, or its propositional content, is made the case at the time of utterance. McGinn assumes that "the sense of the sentence radical is given by the assignment of a truth condition, in a style congenial to Davidson" (McGinn 1977: 308).

Ignoring problems with the idea of making an utterance the case, McGinn's proposal does not look very promising as an analysis of "serious", "literal" imperatives. Given that so many of the counterexamples we have looked at do not involve the speaker attempting to get anything made the case, it is hard to see how such a characterisation of the meaning of imperatives could interact with a pragmatic theory to account for the actual forces of utterances of imperatives.

For example, the utterances in (25) do not involve anyone attempting to make anything the case:

- (25) a. Open the Guardian and you'll find three misprints on every page.
b. A: How do I get to the station?
B: Go to the traffic lights and turn right.

McGinn's proposal might appear promising to a truth-conditional semanticist concerned with finding a way of characterising the content of nonindicatives; but only if the way in which the actual force of an utterance - whether literal and serious or non-literal and

non-serious - is determined on an actual occasion of utterance is ignored. In other words, McGinn ignores the question of how to account for the pragmatic interpretation of utterances.

Hornsby (1988), in a sense, gives up on the attempt to characterise mood. She makes a distinction between mood and force, but does not believe that we can give an adequate account of mood.

Looking at the relationship between Austin's phonetic, rhetic and illocutionary acts (she believes that we can disregard phatic, locutionary and perlocutionary acts in this context), she says that:

The division between the two portions of an account of language use, conceived now as dealing with phonetic, rhetic and illocutionary acts, then comes simply at the midpoint, with the rhetic act...when someone is accustomed to using some language, she can be assumed to have the wherewithal to get from rhetic to illocutionary acts, and what she lacks that she would need in order to make sense of what goes on in the use of a language foreign to her is only knowledge how to get from phonetic acts employing the foreign language to rhetic acts. Thus we can think of an extricable component of an account of the use of a language that says, for any particular phonetic acts, which rhetic act is being done by it....It has become usual to speak of this component...as a theory of meaning for the language. (Hornsby 1988: 32-33)

So a linguistic semantic theory defines a mapping from phonetic acts to rhetic acts, and a pragmatic theory will explain how illocutionary force is determined on the basis of rhetic acts and contextual factors.

So what are the rhetic acts associated with the various sentence types? First, she suggests that the mood of a declarative sentence can be accounted for in terms of the notion of saying, understood in a weak sense as "putting a thought into the open". This characterisation, she hopes, will interact with contextual factors, to explain why saying something sometimes gives rise to an assumption that the speaker believes that thing to be true, in which case the utterance constitutes a statement.

Hornsby goes on to suggest that the utterance of an imperative sentence constitutes an act of saying imperatively and the utterance of an interrogative act constitutes an act of saying interrogatively. For this to form the basis of an adequate account of mood, we need to define what saying imperatively and saying interrogatively mean. However, Hornsby does not propose to define these terms, and suggests that it may be simply impossible to find English words which would describe what these moods mean. She suggests that the only way to come to know what the moods mean might be by acquiring skill in a language. The speaker who achieves this will know, then, what range of forces can be performed by a particular mood. The theorist, however, cannot state exactly what the moods mean:

With an ability to recognise rhetic acts, one knows the language-specific determinants of illocutionary, or force-endowed, acts. But it is only in the use of language that such an ability is gained or evinced. And if there is

in fact no way to come to know what it is to do things with words except practically (by coming to do them), then one may suppose that the theorist who helps himself to rhetoric acts only acknowledges that theory runs out here. (Hornsby 1988: 46)

So we can say that sentences have moods and that moods, with contexts, determine force. But we cannot give a characterisation of what the moods actually are.

Wilson and Sperber say of this approach:

This squares with the description of mood as a *conventional* indicator of force. However, it also means abandoning any attempt at an explanatory account of the relation between mood and force. Why, in language after language, do imperative sentences have just this cluster of uses? We should surely be looking for a characterisation of mood that enables us not merely to describe, but to explain, these facts. (Wilson and Sperber 1988a: 82)

Hornsby suggests that we may never be able to say exactly what the moods mean. The existence of Wilson and Sperber's proposal, which does seem to be able to account for force, means we do not have to accept Hornsby's rather negative view. Further, Wilson and Sperber's proposal suggests a reason for the difficulties faced in attempting to characterise the meanings of the "sentence types": they encode procedural information which cannot be brought directly to consciousness.

It seems that approaches based on a notion of semantic mood are not going to succeed in characterising the meaning of the various sentence types either. They seem

unlikely to explain how utterances come to have the forces that they do. In the next section I return to the analysis proposed by Wilson and Sperber and consider some further reasons for preferring this proposal to the alternatives discussed here.

4.3 Forms and Propositional Attitudes

This thesis has already suggested two reasons for preferring Wilson and Sperber's proposal to those based on illocutionary force or on semantic mood. First, Wilson and Sperber's semantic analysis can account for the interpretation of a much wider range of examples than the alternatives. Second, it suggests fruitful lines of research on the semantic analysis of linguistic forms, as well as in other areas, e.g. the interpretation of intonation.

There are two more reasons for preferring Wilson and Sperber's approach: first, it fits into a broader, overall view of communication and cognition, and second, it suggests a reason for the lack of success of the alternatives.

Wilson and Sperber's proposal is placed within a broader framework, namely relevance theory. This means that it is possible to examine all the stages in the determination of force explicitly, and that there are no gaps which are left to be filled by some other theory or theorist. By contrast, many of the approaches above leave it to the reader's imagination to work out how exactly force is determined on a given occasion of utterance, e.g. Hare does not completely account for the "contextual cancellation" of force when the speaker is "not in earnest", and Davidson and McGinn say nothing about how their semantic analyses will interact with contextual factors. The

availability of a fully worked-out pragmatic theory means that it is possible to consider exactly how actual interpretations are assigned to utterances on the basis of the semantic analyses proposed.

In order to see how Wilson and Sperber's approach suggests explanations for the failure of the approaches outlined above, I would now like to point out some differences between Wilson and Sperber's proposal and the alternatives.

There is one significant assumption which seems to be shared by a wide range of theorists and which is rejected by Wilson and Sperber, namely that the meanings of the sentence types can be understood in terms of a social convention which must be learned. As discussed above, Schmerling (1979, 1982) proposes an analysis of imperatives where the link between linguistic form and illocutionary force is relatively weak (imperatives are attempts to bring about states of affairs, regardless of whether the hearer is to bring them about, or even of whether there is a hearer). She says that the proposed semantic analysis:

is a general convention on what the uttering of expressions of a certain syntactic category counts as; this is on the order of a Searlian "essential condition" and must presumably be learned. (Schmerling 1979: 6)

In the later work, she modifies this claim to accommodate an element of universality (hence to reduce the amount of learning which is necessary). She suggests:

...that linguistic communities may differ in whether or not they have conventions governing the use in isolation of expressions of non-indicative clause types, but that the ways in which a non-indicative clause

can be used in isolation should follow from its lack of indicativeness.

(Schmerling 1982: 212)

Schmerling explicitly claims, then, that the meanings of non-declaratives involve social conventions which speakers must learn, with an element of universality in the uses to which non-indicatives may be put. It seems to be generally true of speech act and mood-based approaches that the analyses they propose will be socially determined and learned.

The assumption that the proposed semantic analyses are learned implies the further assumption that speakers know them. Thus, speakers know which speech act a particular form is used to perform, or typically performs. It follows that it should not be difficult introspectively to work out what the meanings of the various linguistic forms are. If this is right, it is surprising that attempts to characterise the meanings of these forms have been so unsuccessful.

Wilson and Sperber's proposal is different from those discussed above in several respects. First, the meaning of a "sentence type" for them is not a social convention but some procedural information about propositional attitudes, i.e. about a cognitive entity. Second, there is no assumption that children have to learn propositional attitudes. Third, there is no assumption that speakers of a language know (consciously) what the procedures associated with the various linguistic forms are. Finally, the meanings of these linguistic forms are not conceptually represented but procedural. All of these assumptions imply that it should be difficult consciously to work out the meanings of the forms in question and that attempts to account for them in conceptual terms will be unsuccessful.

Wilson and Sperber's view implies that the approaches based on illocutionary force or semantic mood which I have discussed will be unsuccessful. These approaches assume that the meanings of the "sentence types" are social, conceptual and learned whereas Wilson and Sperber claim that they are cognitive, procedural and acquired. Further, as Wilson and Sperber point out, introspections about procedures ought to be difficult to access:

Conceptual representations can be brought to consciousness: procedures can not. We have direct access neither to grammatical computations nor to the inferential computations used in comprehension. A procedural analysis...would explain our lack of direct access to the information they encode. (Wilson and Sperber 1990: 104) [Fn.1]

If the meanings of these linguistic forms were conceptual, therefore, it should sometimes be possible to bring them to consciousness. If they are not conceptual, they should never be accessible to consciousness. The difficulties which other theorists have faced in describing the meanings of these linguistic forms are evidence for the procedural analysis.

How are the social and cognitive aspects of utterances of the linguistic forms in question related? I assume that the overall picture is similar to the relationship between concepts and word-meanings outlined by Fodor (1981b). On this view, concepts are innately determined and word-meanings are learned. That is, human beings acquire concepts as a result of interaction between the environment (or environmental stimuli) and an innate capacity to individuate concepts (what Fodor calls a "sensorium"). In order

to come to know what words in their language mean, individuals must learn which concepts are associated with which words.

A parallel story can be told about how speakers come to know the meanings of the various linguistic forms which encode information about propositional attitudes. That is, humans acquire propositional attitudes because of the interaction of the environment and their innately determined cognitive make-up. They also acquire knowledge of the attitudes they can have. In order to come to know what the various linguistic forms mean, they must learn which linguistic forms are associated with which propositional attitudes. In other words, propositional attitudes are psychological entities which are acquired independently and there is a mapping between various syntactic structures and propositional attitudes. Children have to learn which syntactic structure goes with which attitude.

I am suggesting, then, that Wilson and Sperber's proposal should be preferred to the alternatives I have discussed because it can account for the interpretation of a much wider range of utterances. It should also be preferred because it constitutes part of a much wider theory, namely relevance theory, which aims to account for aspects of cognition in general as well as for verbal communication in particular. It should also be preferred because it explains certain facts which the other approaches do not, including the failure of the alternative proposals.

Wilson and Sperber's approach might also be taken to imply that the meanings of the various forms will be relatively unstable. If the meaning of a form is a procedure, it is perhaps more likely that children might not acquire exactly the same meaning for

a form as that which adults have internalised. Thus, this approach predicts more variation in these areas than in others. This is borne out to some extent by the fact that intuitions in this area clash quite often. For example, the exclamatory-inversions discussed above are generally acceptable to American English speakers and less so for British English speakers:

- (26) a. Boy, is syntax easy.
b. My, does he make delicious coffee.

However, there is significant disagreement among British English speakers as to their status.

It would be interesting to investigate to what extent this impression of greater variation in this area is justified. It would also be interesting to find out whether children acquire such forms later, or with greater difficulty, than other forms. As mentioned above, Wilson and Sperber's proposal is made more attractive by the fact that it suggests further questions and research programmes.

The speech act proposal invariably leads to worries about classifications. Many papers have been written on, for example, what an assertive speech act is, what a directive is, and so on (see references above). Wilson and Sperber do not assume that speakers need to know such categories, so there is no need to worry about such classifications. Further, it seems likely that the problems with identifying the classes stem from the fact that they are derived rather than cognitively primitive. So Wilson and Sperber's proposal suggests why the attempts at classification are problematic and inconclusive.

Wilson and Sperber have proposed a theory of cognition in general of which a theory of verbal communication forms a subpart. They have proposed an analysis of the semantics of these syntactic structures in cognitive terms (in terms of propositional attitudes). Would it be fair to say, then, as some pragmatic theorists have done (e.g. Mey and Talbot 1988), that Wilson and Sperber ignore the social aspects of verbal communication? I believe not.

On Wilson and Sperber's view, illocutionary force categories such as orders, commands, requests, pleas, etc., are still seen as essentially social and it is true that these social notions do not play a role in the semantic analyses proposed. However, this does not mean that they do not exist. Rather, Wilson and Sperber see the particular force of an utterance as arising out of a combination of factors.

Consider the following utterances:

- (27) a. Stand at ease.
- b. Eat your vegetables.
- c. Read Aspects of the Theory of Syntax.
- d. Have some cake.
- e. (Please) be quiet.

If (27a) is uttered by a sergeant on a parade ground to a group of soldiers, it might count as an order. If (27b) is uttered by a parent to her child, it might also count as an order. It would not, however, be exactly the same kind of order. Punishment for not complying with (27b) is likely to be less severe than would be the case in (27a). The

significant difference here concerns the social relationship between the speaker and the hearer.

(27c) might count as a command if uttered by a teacher to a class of pupils. It might count as advice if uttered by one student to another in response to (28):

(28) I don't know what the difference between competence and performance is.

(27d) might count as an offer if uttered by a host to a guest. (27e) might count as a command if uttered by a parent to a child. It might count as a plea if uttered by a child to noisy parents. It might count as an expression of hope if uttered by someone at home late at night who is being kept awake by cats.

The difference between all of these cases is, of course, dependent on the context. Different forces arise because of the interaction between the proposed semantic analyses, contextual assumptions and considerations of relevance.

Some of the important contextual assumptions concern the social status of speakers and hearers. Thus, (27a) is an order because the social position of the sergeant is such that he is entitled to order the soldiers. The difference between (27c) as a command and a piece of advice is partly due to the difference in social relationships between teachers and students, and between students and other students.

So social factors affect utterance-interpretation in the form of contextual assumptions made by hearers. As such, they play a role in utterance-interpretation but not a particularly privileged one. Social factors affect utterance-interpretation only

insofar as they are mentally represented by the hearer and may help him to find a relevant interpretation of an utterance.

Notice that the particular descriptions of the forces of these utterances which I have chosen are open to question. For example, it is not obvious that a teacher's utterance of (27c) should be described as a command. This is because terms like "command" are not well-defined, technical terms. This is not particularly significant for Wilson and Sperber's proposal as the notion of illocutionary force does not play a crucial role in their account. As mentioned above, any account which accords the notion of force a central role must begin by defining all the forces. This has proven difficult and suggests that Schmerling (1979: 1) is right when she suggests that the fact that linguistic forms and illocutionary forces do not correspond in a regular way might be "an artifact of the lexicon-based ontology", i.e. that a correspondence will not be found if one begins by taking existing lexical items as ways of describing forces.

One final reason for preferring Wilson and Sperber's proposal to those which assume the "literal force hypothesis" is that it does not encounter any problems in dealing with "indirect speech acts", i.e. utterances which seem to perform one kind of speech act by uttering a sentence which would normally be used to perform another (for further discussion see Bach and Harnish 1979; Searle 1979: 173ff; Recanati 1987; Sperber and Wilson 1984).

Utterances such as the following raise interesting questions for theories which equate meaning with force:

- (29) a. You're standing on my foot.

- b. Do you know what time it is?
- c. A: Let's go to the movies tonight.
B: I have to study for an exam.

Such examples are discussed by Searle (1969, 1975, reprinted in Searle 1979) and termed "indirect speech acts". They are of interest to speech act theorists because the speaker appears to perform one kind of speech act by producing an utterance which would normally be used to perform another. Thus, the speaker of (29a) might be requesting the hearer to get off her foot by producing an utterance which would normally be used to make a statement. The speaker of (29b) is requesting an action (telling the time) by producing an utterance which would normally be used to request information. Speaker B in (29c) rejects A's suggestion by producing an utterance which would normally be used to make a statement. Searle describes the class of indirect speech acts as:

that in which the speaker utters a sentence, means what he says, but also means something more. For example, a speaker may utter the sentence "I want you to do it" by way of requesting the hearer to do something. The utterance is incidentally meant as a statement, but it is also meant primarily as a request, a request made by way of making a statement. In such cases a sentence that contains the illocutionary force indicators for one kind of illocutionary act can be uttered to perform, *in addition*, another type of illocutionary act. There are also cases in which the speaker may utter a sentence and mean what he says and also mean

another illocution with a different propositional content. For example, a speaker may utter the sentence "Can you reach the salt?" and mean it not merely as a question but as a request to pass the salt...The problem posed by indirect speech acts is the problem of how it is possible for the speaker to say one thing and mean that but also to mean something else.

(Searle 1979: 30-31)

Levinson (1983: 263-276) discusses the nature of the problem in some detail. If there is a link between form and force, why does that link break down in such a wide range of cases? Why are there so many cases like this where declaratives do not perform assertive speech acts, imperatives do not request action and interrogatives do not request information?

Levinson suggests three ways in which one might respond to the question raised by indirect speech acts. The first two retain the notion of a form-force link, the third - exemplified by Wilson and Sperber's proposal - abandons the literal force hypothesis altogether.

The two approaches which retain the form-force link are described by Levinson as "idiom theory" and "inference theory". According to the idiom theory, the unusual forces which such utterances have arise because of idioms which associate these forms with the forces in question (this approach has been defended by Sadock 1974, 1975; see also Green 1975).

According to the inference theory, the linguistic forms in question have their literal force, but they indirectly convey some other force because something about the

context gives rise to certain inferences. A typical inference theory account is that proposed by Searle (1975a, 1979), who suggests that the indirect force arises because of a Gricean conversational implicature triggered by the hearer's recognition that the literal force of the utterance would not be consistent with the assumption that the speaker is obeying the Co-operative Principle.

This approach is clearly preferable to the idiom theory, but it is not clear that it is wholly satisfactory. Wilson and Sperber (1981; Sperber and Wilson 1986) have pointed out several problems with the Gricean account of implicature which depends on the notion that a literal meaning might "violate" a pragmatic maxim and thus give rise to an implicature. However, the main reason I would reject Searle's proposal is that there is a simpler alternative on offer: the assumption that the literal force hypothesis is wrong.

As Levinson points out, the rejection of the literal force hypothesis would mean that "there are no indirect speech acts, and thus no indirect speech act problem, but merely a general problem of mapping speech act force onto sentences in context" (Levinson 1983: 274). I have argued that Wilson and Sperber's proposal solves the general problem of accounting for the determination of force. It does so without assuming the literal force hypothesis, and this account explains the force of "indirect speech acts" quite naturally. On this view, worries about speech act type don't even arise.

Here is how the proposal I am defending would account for the examples illustrated in (29):

- (29) a. You're standing on my foot.
b. Do you know what time it is?
c. A: Let's go to the movies tonight.
B: I have to study for an exam.

The speaker of (29a) indicates that the proposition expressed by her utterance is a description of a possible or actual state of affairs. If I am standing very close to you and you utter (29a), a natural hypothesis is that you are telling me that I am standing on your foot. This will give rise to contextual assumptions about such an occurrence of which the following seem important:

- (30) a. Standing on someone's foot causes them pain.
b. People do not want to be in pain.
c. I do not want to cause pain to X.

Given these assumptions, it is easy to see how I might assume that you want me to get off your foot. It is also clear that the utterance, on this interpretation, would be consistent with the criterion of consistency with the principle of relevance: a rational communicator could have intended it to give rise to adequate contextual effects for no unjustifiable processing effort.

(29b) is interpreted as a request to tell the speaker the time because of highly accessible contextual assumptions about the fact that it is often relevant to people to know what time it is, and that people often find out what time it is by asking each other. (In fact, this utterance might even be so common that there is an automatic routine for recovering the implicature and acting on it by pulling out one's watch.)

(29c) involves a straightforward case of conversational implicature. B communicates that she has to study for an exam, and the following contextual assumption is responsible for A's working out that B cannot come to the cinema:

(31) People who are studying for exams have to stay at home in the evenings to work.

So Wilson and Sperber's proposal not only accounts for how the force of an utterance is determined in general; it also accounts in a straightforward way for the interpretation of "indirect speech acts". This account has much in common with the inference theory, since there is an element of indirectness in the communication. However, it is an inference theory based on the view that what is literally encoded is not an illocutionary force but a characterisation of propositional attitude. As such, it avoids the problems of the literal force hypothesis.

In this chapter, I have looked briefly at some alternative approaches to the semantics of "sentence types". I hope to have shown that they are all less adequate than Wilson and Sperber's approach. I also hope to have shown in what ways Wilson and Sperber's approach differs from the alternatives, and to have spelled out how their approach explains the determination of force.

In conclusion, I hope that this thesis has shown that Wilson and Sperber's proposal provides an adequate semantic analysis for a wide range of linguistic forms. In this chapter I have argued that there are more general reasons for adopting this approach which go beyond the fact that it can account for a wide range of data.

FOOTNOTES

Chapter One:

1. In fact, certain theorists are unhappy with the very idea of treating propositional content as basic. In a recent paper, Belnap (1990) has suggested that any view which takes the notion of propositional content as basic, or grants special theoretical significance to declarative sentences over non-declaratives, is bound to be unsuccessful; such views are guilty of what he terms the "declarative fallacy".
2. Throughout this thesis I will follow Sperber and Wilson's convention of assuming that the speaker, or communicator, is female and the hearer, or addressee, male.
3. The term "interpretation" is used with two distinct senses here: "utterance-interpretation" refers to the processes involved in comprehending utterances, "semantic interpretation" is the (non-psychological, according to relevance theory) process of assigning truth-conditions to propositions.
4. Of course, the sentences in (5) do not really express complete propositions. This can be seen as an illustration of the point made by Fodor (1975) that mental representations (i.e. semantically complete language-of-thought expressions) are the only expressions to whose semantic content we have direct access.
5. As will be discussed in section 1.5, Wilson and Sperber (1990) and others (notably Blakemore 1987) have suggested the existence of another kind of linguistic encoding: the encoding of procedural information. If this proposal is right, then there exists another kind of linguistic semantics which is not itself

translational. As will be seen, this process might be seen as mapping expressions onto procedures rather than as a translation process.

6. In fact, there are some candidates. In a recent paper, Wilson (1991) has suggested that please and yet might encode conceptual content at the level of implicature. These are illustrated in (i)-(ii):

(i) Please, you're standing on my foot.

(ii) John hasn't arrived yet.

The speaker of (i) implicates that the hearer should remove his foot. It might be argued that please contributes to this implicature the notion that it is a request.

The use of yet in (ii) gives rise to the implicature that John will arrive at some point, which is an implicitly communicated assumption.

Chapter Two:

1. In fact, the analysis of infinitives I will propose is essentially that proposed by both Bolinger and Huntley for both imperatives and infinitives. The difference between these theorists and Wilson and Sperber is to be found in the analysis of imperatives.
2. Technically, Sperber and Wilson refer to the attitude in question here as one of "assumption" rather than "belief".
3. The analysis I propose here is based on suggestions made by Sperber and Wilson (1984).

4. For a recent analysis of imperatives within a Government and Binding framework see Beukema and Coopmans (1989).
5. For a discussion of such processes of pragmatic enrichment see Carston (1988).
6. For a discussion of the process of context-selection which I am assuming here see Sperber and Wilson (1986: 132-137).
7. The unusual inferential processes exhibited here do not seem to be restricted to disjunctions. I believe that a similar account is possible for utterances containing other connectives. For example, the interpretation of Tom has left, because his wife isn't here where the because clause is taken to provide evidence for the belief that Tom has left. Blakemore (1987: 78-79, 139) describes the relation expressed by because here as one of "dependent relevance". I would suggest rather that this, and several other types of utterance which seem to communicate a complex proposition, actually communicate two propositions: one simple and one complex, the latter containing a large amount of implicit material.
8. I have discussed ways in which the speaker can increase the degree of desirability accorded to the state of affairs by the hearer. Of course, there are also ways in which the speaker can decrease the level of desirability. These include the addition of a conditional clause after the imperative:
 - (i) Open the window, if you like.
 - (ii) Open the window, if it's not too much trouble.Of course, such constructions are often used ironically. This strategy is discussed in more detail by Itani-Kaufmann (forthcoming)

9. I am grateful to Robyn Carston for suggesting the general line of this explanation.
10. I am especially grateful to Dick Hudson for drawing these examples to my attention, and to Deirdre Wilson for pointing out some of their unusual features.
11. Of course, this is merely suggestive. If these "let-constructions" are simply imperatives with let as their main verb, then these "subject" pronouns are really objects and the constructions under discussion behave exactly like all other imperatives.
12. For many English speakers (63c) is also odd, but according to Fries (1952) "the use of us with let's occurs rather frequently". The relevant acceptability judgements will be discussed below.
13. Strictly speaking, this is too strong. As we will see below (exx. 79-80), in cases of interpretive use, the state of affairs is regarded as desirable from the point of view of the person, or type of person, to whom the speaker wishes to attribute the thought. For the sake of simplicity, I will continue to refer to "the speaker's point of view". In fact, the state of affairs described is desirable from the point of view of the thinker of the thought represented.
14. As mentioned in the preceding footnote, it may be someone other than the speaker who regards the state of affairs as desirable from his/her own point of view. However, even if (67a) is interpretively used, it is hard to imagine how such an utterance could achieve relevance.

15. In fact, as Robyn Carston (personal communication) has pointed out, to say that there are restrictions on the subjects of these constructions is, in Sperber and Wilson's terms, to say that there are procedural restrictions at the level of the proposition expressed. Hence, let-constructions, let's-constructions and imperatives themselves actually encode procedural information about the proposition explicitly expressed as well as about higher-level explicatures.
16. There is one kind of utterance (pointed out to me by Deirdre Wilson) where an explicit 2nd person subject seems to be interpretable as a let-construction:

(i) Please God let him come home soon.

It is possible that at least some let-constructions arose historically from utterances of an imperative like (i). Compare, also, constructions containing may:

(ii) Please God may he come home soon.

Presumably a similar historical story could be told about these.

Chapter Three:

1. In fact, full alternative questions are ambiguous, as can be seen in examples like the following:

(i) Do you want tea or coffee?

A relevant response to this question on one interpretation would be either "yes" or "no", and on another interpretation would be either "tea" or "coffee". On this view, the difference between the two interpretations lies in whether the or contributes to the propositional form interpretively represented or not. If it does,

then the utterance is a positive yes-no question asking about a disjunctive proposition rather than an alternative question.

2. This account accommodates quite naturally the difference between what Ladd (1981) calls "inside NEG" and "outside NEG" readings of negative yes-no questions. In the former case, the speaker of (8) would be checking that a new inference (that the hearer did not see Susan) is true. In the second case, the speaker of (8) is seeking confirmation of something she believes (that the hearer did see Susan). On this view, the speaker in both cases communicates that the thought that the speaker did not see Susan would be relevant; on one reading it would achieve relevance by confirming an existing negative assumption of the speaker's, on the other reading it would achieve relevance by contradicting an existing positive assumption of the speaker's.
3. Of course, the form boy can also represent a (rather impolite) vocative. The discussion here is only concerned with the exclamatory particle similar to wow.
4. Boy and wow can be used interpretively, just as let's can. Hence, the reference to the speaker is actually too strong. If an utterance containing boy or wow is interpretively used, it is the person, or type of person, to whom the thought is attributed who is purported to find the thought relevant.
5. In fact, in this case the relevant thoughts might be embedded under descriptions of propositional attitude, e.g. the speaker is entertaining the thought that the hearer thinks syntax is easy and it is this thought for which she requires confirmation.

Chapter Four

1. In fact, Wilson and Sperber are discussing the semantic analysis of "discourse particles" here, but the point they make is applicable to any linguistic form.

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