A TEST CASE FOR RELEVANCE THEORY: THE COGNITIVE
UNDERPINNINGS OF EMPHATIC “DO”

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A Test Case for Relevance Theory: The Cognitive Underpinnings of Emphatic

“do”

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DEDICATION

This thesis is dedicated to the people of Armenia.
I could perhaps like others have astonished you with strange improbable tales; but I rather chose to relate plain matter of fact in the simplest manner and style; because my principle design was to inform you, and not to amuse you.

Jonathan Swift

_Gulliver’s Travels_
The field of Pragmatics was born of the recognition that certain elements of the propositional form of a sentence (e.g. pronouns, tense), as well as many other conveyed meanings, depend crucially on contextual information for their determination. These context-sensitive aspects of meaning are not easily accommodated in a theory of semantics, for which the primary object under investigation is the context-free sentence, an abstract, formal entity defined within a theory of grammar, and having only logical and causal properties.

One linguistic construction which poses a prima facie problem for a truth-conditional semantics is the emphatic “do”, taken in its “implicitly contrastive” use. An example of this use is: “Criminals aren't too bothered about the problems they cause victims in the commission for their crime, but as a general rule they do draw a line somewhere,” where the contrast is, very roughly, between the first disjunct of the “but” construction and the second disjunct.

Beginning from the observation that implicitly contrastive emphatic “do” does not contribute to the truth-conditional content of the utterance that contains it, I will offer a hypothetical analysis based on the classical Gricean theory of implicature, before settling on a thesis that stretches the uses of the cognitive apparatus of Relevance Theory. Following Relevance Theoretic principles, I will argue that emphatic “do” is a linguistic device that does not contribute to truth conditional content but generates an implicature to the effect that the proposition introduced by the “do” contradicts one of more propositions inferentially related to utterances made earlier in the discourse. The Relevance Theoretic solution, while superficially similar to the hypothetical Gricean one, employs a mode of explanation which allows for a more precise statement of the hearer’s inferential strategy and the potential for integration into other scientifically-minded research programs.
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CHAPTER 1

INTRODUCTION

Any act of speech is necessarily spoken by an embodied agent situated in space and
time. Like a living haiku, one must craft one’s utterance to serve one’s purpose, while being
subject to the contingencies of a material form of communication.

The field of Pragmatics was born of the recognition that certain elements of the
propositional form of a sentence (e.g. pronouns, tense), as well as many other conveyed
meanings, depend crucially on contextual information for their determination. These context-
sensitive aspects of meaning are not easily accommodated in a theory of semantics, for which
the primary object under investigation is the context-free sentence, an abstract, formal entity
defined within a theory of grammar, and having only logical and causal properties. The
essential unit of meaning for most varieties of semantics is the proposition, which is
equivalent to the literal content of a declarative sentence, is thought to correspond to a state
of affairs in the world, and is evaluable for truth or falsity. Semantics runs into trouble either
when the grammatically encoded form underdetermines the proposition expressed (as with
pronouns), or conversely, if one or more aspects of the conveyed meaning of a sentence
outstrips its propositional content (as with implicatures).

One linguistic construction which poses a *prima facie* problem for a truth-conditional
semantics is the emphatic “do”, taken in its “implicitly contrastive” use. An example of this
use (from § 3.4, no. 2) is: “Criminals aren't too bothered about the problems they cause
victims in the commission for their crime, but as a general rule they *do* draw a line
somewhere,” (Davies, 2004) where the contrast is, very roughly, between the first disjunct of
the “but” construction and the second disjunct.

Beginning from the observation that implicitly contrastive emphatic “do” does not
contribute to the truth-conditional content of the utterance that contains it, I will offer a
hypothetical analysis based on the classical Gricean theory of implicature, before settling on
a thesis that stretches the uses of the cognitive apparatus of Relevance Theory (henceforth
RT). Following RT principles, I will argue that emphatic “do” is a linguistic device that does
not contribute to truth conditional content but generates an implicature to the effect that the proposition introduced by the “do” contradicts one of more propositions inferentially related to utterances made earlier in the discourse. The RT solution, while superficially similar to the hypothetical Gricean one, employs a mode of explanation which allows for a more precise statement of the hearer’s inferential strategy and the potential for integration into other scientifically-minded research programs.

Our paper will be structured as follows: In Section 2, we’ll introduce the problem of semantic underdeterminacy as the motive force for the establishment of pragmatics as a discipline. Then we’ll select Relevance Theory as a representative of that discipline and provide a summary of its preferred mode of explanation (§ 2.4-2.8). In Section 3 we’ll circumscribe our object of investigation, the implicitly contrastive emphatic “do”, first by setting it apart from closely related constructions, and second by illustrating its use with some examples taken from the British National Corpus (Davies, 2004). In Section 4, we’ll partake in a “thought experiment” with the aim of determining the most plausible “Gricean” analysis of the implicitly contrastive emphatic “do”. Then, in Section 5, we’ll put forth our central argument for a cognitive account of emphatic “do” based on the principles of Sperber and Wilson’s Relevance theory, and end by comparing RT’s analysis with the Gricean one.
CHAPTER 2

LITERATURE REVIEW

In this section we will give an overview of the central problem facing formal semantics—that of “semantic underdeterminacy”.¹ This problem puts pressure on semanticists to take some account of contextual or “use” factors in their analysis of meaning and language, and so we turn to pragmatics, the field which singularly concerns itself with the contribution of context to language. From the range of pragmatic theories on offer, we select Sperber and Wilson’s Relevance Theory as the framework in which to unravel the workings of the emphatic “do”. To familiarize the reader with this (perhaps underappreciated) research program, we will reconstruct Relevance Theory in broad outline, with an overall aim of demonstrating its solution to the problem of semantic underdeterminacy. Relevance theory is a complex theory and we cannot hope to do justice to its subtlety and depth in so short a space, but the main contours of the theory and its critical argumentative moves will be given sufficient coverage.

2.1 THE PROBLEM OF SEMANTIC UNDERDETERMINACY

The birth of modern semantics can be traced to the “ideal language philosophy”, which flourished in Cambridge near the beginning of the 20th century² and to the logical positivists of the Vienna Circle.³ The philosophers represented by these schools advocated a philosophy where the primary function of language was the description of states of affairs in the world (Lycan, 2008). Following this credo, formal semantics arose as an attempt to

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¹ As attested by Carston (1999), “the thesis that the encoded linguistic meaning of utterances typically falls far short of determining the proposition expressed by an utterance is supported by a number of philosophers now. In addition to Travis, Recanati and Bach, it is discussed by Atlas (1977, 1989), Manor (1995), and Turner (1997), to name just a few” (p. 125, footnote 10). Similarly, Horn (2004) opens his outstanding paper on Implicature with the pithy statement: “linguistic meaning radically underdetermines the message conveyed and understood” (p. 3).

² with figureheads Bertrand Russell and “early” Wittgenstein

³ whose notable members were Rudolf Carnap, Alfred Tarski, Otto Neurath, and Moritz Schlick
specify the relation between a sentence and the state of affairs in the world which it presumably reflects, amounting to a “referential” theory (Lewis, 1972, p. 19). On a simple semantic model, like the well-known Montague Grammar, the primitive units of a formal language are assigned their meaning and built up into larger composites of meaning based on syntactic rules and semantic rules which accompany them (Lewis, 1972).

The object of analysis for the semanticist is a sentence, an abstract entity purged of all non-linguistic features. A sentence is merely a “well-formed string of words put together according to the grammatical rules of a language” (Huang, 2007, p.10). The semantic content of a sentence, called a proposition, is assigned a truth-value and can thus enter into a truth-conditional theory of meaning (Lycan, 2008).4

It is generally agreed upon by semantics and pragmatics practitioners alike that semantics somehow falls short of realizing its stated goal (Atlas, 1977, 1989; Carston, 1998). Even if we were to develop an unassailable logical representation of language, and precisely specify the correspondences between semantic units and their denotata, there would be something missing. The semantic representation, or logical form, of a sentence “can take no account of . . . non-linguistic properties” such as time, place, or identity of the speaker, and much more besides (Sperber & Wilson, 1995, p. 9). When the underdetermined aspects of meaning contribute to the truth conditions of the utterance, the corresponding problems have been named the problems of referential indeterminacy, semantic incompleteness, and semantic ambiguity. Referential indeterminacy refers to the impossibility of assigning content to a pronoun or other indexical in the absence of a context. A logical form can be semantically “incomplete” if it contains one of a number of lexical items, such as “better”, “same”, “too”, “enough” whose arguments are unspecified. So, for example, “It’s big enough” is incomplete because it doesn’t provide an answer to the question “Big enough for what?” (Carston, 2004, p. 637). Ambiguous linguistic constructions are likewise underspecified without contextual information. In all of these cases, the logical form of the sentence cannot determine a truth-conditionally evaluable proposition until it undergoes additional development or elaboration.

4 This is a very crude characterization of semantics but should suffice for our purposes.
Free enrichment and ad-hoc concept construction are additional processes that must be presumed to operate on a semantic representation if we are to arrive at the proposition expressed, but their status is controversial. *Free enrichment* is held to be a process whereby additional constituents are added to the logical form of a sentence to reach the proposition expressed, but there is no overt indexical in the logical form, nor is there any lexical item which might be thought to carry a covert indexical (as with completion). The proposition prior to enrichment is sufficiently truth-conditional, but it does not express what we would normally think the speaker had intended. The classic examples are “It will take some time to repair your watch” to “It will take [an appreciable length of time] to repair your watch“; or the enrichment from “I have had breakfast” to “I have had breakfast [this morning]” (Sperber & Wilson, 1995, p. 190). *Ad-hoc concept construction* is the loosening or narrowing of a concept as it appears in logical form to match what is expressed by the speaker. For example, “He was upset but he wasn’t upset” (Carston, 2000, p. 26) would be self-contradictory were it not for ad-hoc concept construction.

Compounding the problem of underdeterminacy is the existence of *implicatures*, aspects of meaning that are implicit or implied. These may be instances where the speaker’s meaning goes beyond the literal content of her utterance (as with sarcasm), or they may be additional meanings of a construction not carried by its truth-conditional content (e.g. the temporal reading of “and” in the oft-cited example “He got on his horse and rode away.”)

The emphatic “do”, for which we provide a focused analysis below, is problematic precisely because it seems to convey meanings that go beyond the semantic representation of the utterance in which it is spoken.

While most semanticists recognize that processes of reference assignment and completion (collectively “saturation”) are needed to arrive at a fully propositional and truth-conditionally evaluable form, they tend not to delegate these processes to pragmatics, however this is construed (Carston, 2004, p. 637). Many semanticists have taken the strategy of formalizing context to deal with these problems. For instance, David Lewis (1972) stipulated a set of contextual coordinates (possible world, speaker, addressee time, place, contextually salient entities, etc) to give a semantics of indexical forms. When the indexicals are not given, as in the case of semantically incomplete sentences, some treatments posit
hidden indexicals in the logical form which are then “linked in a stipulatoty fashion to contextual indices” (Carston, 2000, p. 2).

These moves would appear to help alleviate some of the easier problems related to the underdeterminacy of semantic form, but they don’t address disambiguation, free-enrichment and ad-hoc concept construction. These latter processes are, in fact, “generally ignored by the advocates of a non-pragmatic means of deriving the context-sensitive aspects of [the proposition expressed]” (Carston, 2004, p. 638). And beyond these, we have to account for the implicit, subtly conveyed meanings that are nevertheless automatically understood by the hearer. It’s true enough that on a truth-conditional semantic theory, these implied meanings are not considered part of the explananda, but in this paper we will take the view that these are legitimate linguistic phenomena that deserve explanation.

2.2 ENTER PRAGMATICS

Despite these problems, formal semantics established itself as the dominant paradigm which structured questions of meaning, and flourished in the first half of the 20th century. Then, in the 1950s and 60s, Paul Grice and his contemporary J.L. Austin made the first major break with semantics by insisting on the primacy of language use and speaker intention. Grice’s work on implicature, along with that of Austin’s on speech acts, are commonly thought to have inaugurated the field of Pragmatics. Grice’s (1975) great insight was to ground the comprehension of implicatures, or implied meanings, on our tacit acceptance of a Conversational Principle, which states that interlocutors in a conversation will generally seek to be cooperative, and its attendant maxims of Quality, Quantity, Manner, and Relevance. On Grice’s theory, to infer an implicature like, for example, “You are to leave now”, based on the speaker’s utterance of “There’s the door”, the hearer has to ask, Given that what the speaker has said is patently irrelevant/uninformative/inappropriate/etc., what would have to be supposed to preserve the assumption that the speaker is following the Conversational Principle (and the maxims)?

Grice’s inferential model of language comprehension shone a light on the processes underlying conversational implicature—however, he did not have

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5 we will not concern ourselves with Austin in this paper

6 to see this comprehension strategy in action, see Section 4.1
anything substantial to say about the various problems grouped under semantic indeterminacy of propositional content.

Grice inspired a whole generation of linguists and philosophers who have seen the power of his theory of implicatures; some have even undertaken to refine it. Laurence Horn (1984) has offered a revision of the Gricean model that retains his Quality maxim but reduces the remaining maxims into two: a lower-bounding “Q principle” (“Say enough”), and an upper-bounding “R principle” (“Don’t say too much”). Implicatures, on this model, are the result of a “clash between Q and R principles . . . resolvable through a variety of contextual factors” (Horn, 2005, p. 196). Stephen Levinson (2000) has similarly offered a reduction of Grice’s system based on a three-way opposition of Q (Quantity), I (Informativeness), and M (Manner) principles. Horn does not offer a specific solution to semantic underdeterminacy (as far as we can tell), but he does criticize Levinson’s attempt to do so (Horn, 2005, p. 193).

A more radical appropriation of Grice’s theory is made by Sperber and Wilson’s (1995) “Relevance Theory”, a cutting-edge theory of utterance interpretation which provides a unique psychological solution to the problems overhanging formal semantics. On this view, the search for relevance guides utterance interpretation, filling in the holes that are left after a full semantic determination. In this paper we will fall in with the cognitive school and take Relevance theory as our framework to demonstrate the necessity of a pragmatic perspective on linguistic analysis, using the emphatic “do” as a test case. This is not to say that the alternate neo-Gricean theories could not have supplied an equally good analysis, nor is it to imply that semantics is ill-equipped when it comes to contextual aspects of meaning. It will be a long time before we can make any warranted judgements about the relative merits of the various semantics and pragmatics theories—the current paper has the modest aim of applying Relevance theory to real-life phenomena in an attempt to see what it’s capable of. The remainder of this section will constitute a concise but comprehensive overview of the basic structure of Relevance Theory to serve as a background for our proposed analysis of the implicitly contrastive emphatic “do”.

2.3 INDISPENSABILITY OF CONTEXT

We might approach all of the foregoing problems by calling attention to the underspecification of context. Context, in the most general sense, is the fund of shared
information that functions as the background for utterance interpretation. Context is a broad term that encompasses “information about the physical environment, information about the immediately preceding utterances... expectations about the future, scientific hypotheses or religious beliefs, anecdotal memories, general cultural assumptions, [and] beliefs about the mental state of the speaker” (Sperber & Wilson, 1995, p. 15-16). We saw already (§ 2.1) how some semanticists chose to handle the problems of indeterminacy by stipulating a set of contextual values. The problem with most of those analyses is that the contextual values are arbitrary, and more importantly, finite. There is no limit, in principle, to the number of contextual dimensions that can be conceived.

One way to overcome the impasse is to transform our conception of meaning, at least qua language, from an externalist, or mind-independent, one, to an internalist one based on mental states and representations. Formal semantics takes as its task the specification of the relation between “[linguistic] forms and entities in the external world”, whereas for Relevance theory, semantics is understood as “a relation between bits of linguistic form and the cognitive information they encode” (Carston, 1999, p. 27). Relevance theory’s cognitive orientation reflects its Gricean inheritance, for indeed, Grice had landed on same insight with his proposal of “speaker meaning”, depending fundamentally on intentionality and mental states.

In this new cognitive framework, the problem of context is a problem of mutual knowledge (Sperber & Wilson, 1995). In order to ensure that the hearer reconstructs the speaker’s intended meaning and not some other, closely related, interpretation, the hearer would have to use exactly the same context in his interpretation as the speaker had in mind when formulating his utterance. Put another way, both the speaker, when formulating his meaning, and the hearer, when interpreting the utterance, should restrict themselves to those facts, beliefs, or knowledge (inclusively, “assumptions”) that they both share, and know that they both share.

Mutual knowledge is a notoriously hard concept to cash out. It seems to demand an infinite regression of knowledge, giving rise to the “Mutual Knowledge Paradox” (Schiffer, 1972). According to Lee (2001), attempts to resolve the paradox have, for the most part, either (a) provided a basis for inferring mutual knowledge (as seen in analyses done by Schiffer and Clark), or (b) postulated a heuristic for truncating the regression (Harder &
Kock, Brown). Lee (2001) has argued that the very notion of “mutual knowledge” must be recast as one of “shared beliefs”. This core idea that what is needed is a reconceptualization of “mutual knowledge” is the solution urged by Sperber and Wilson in *Relevance Theory*.

### 2.4 The Conceptual Apparatus of Relevance Theory: Mutual Manifestness and Manifest Facts

Sperber and Wilson’s crucial insight is to develop and utilize the weaker (but “weaker in just the right way”) notion of *mutual manifestness*, and the associated notions of *manifest assumption* and *cognitive environment* (Sperber & Wilson, 1995, p. 43). It is important to be clear on what is meant by these terms. Here we will give a very basic characterization of these unfamiliar concepts. In a later section, we will show how they are put to use in developing the (more important) notion of ostensive-inferential communication.

*Manifestness* is a property of assumptions, a mental construct. Sperber and Wilson’s (1995) official definition of manifestness, their Definition (39), is found on page 39: “A fact [or assumption] is manifest to an individual at a given time if and only if he is capable [emphasis added] at that time of representing it mentally and accepting its representation as true or probably true” (Sperber & Wilson, 1995, p. 39). The key word here is “capable”—a manifest assumption is an unrealized but realizable assumption. The modalities by which an assumption is made manifest include perception, deduction, and “non-demonstrative inference” (Sperber & Wilson, 1995, p. 65).

What is manifest “is a function of [the individual’s] physical environment and [the individual’s] cognitive abilities” (Sperber & Wilson, 1995, p. 39). An assumption is “made manifest” on the basis of evidence in the (physical or cognitive) environment of an

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7 Assumptions are “the output of cognitive processes of perception, recall, imagination or inference”, and are themselves the input to cognitive processes (Sperber & Wilson, 1995, p. 261). They differ from facts in being cognitive, not objective, entities. Furthermore, assumptions can be mistakenly held, and therefore false, whereas facts, by definition, can never be false.

8 Importantly, actually known facts (i.e. memorized information), for Sperber and Wilson, count as part of the individual’s “cognitive abilities”, rather than as manifest facts themselves (Sperber & Wilson, 1995, p. 39). This seems to imply that facts, if they are made manifest, are made manifest at a certain time and place. In other words, they do not retain their property of being manifest after they have served their function in a cognitive process.
individual, for example on the basis of speech (Sperber & Wilson, 1995, p. 39). Any perceived phenomenon, such as an utterance, will make manifest an indefinite number of assumptions to its perceiver. Certain of those manifest assumptions are “constructed” (or “realized”, to follow up our earlier definition) just in case they connect up with the perceiver’s context in some way to elicit contextual effects (Sperber & Wilson, 1995, p. 39). Only constructed assumptions are consciously apprehended and can enter into processes of conceptual cognition.

Sperber and Wilson (1995) take care to point out that “the claim that an assumption is mutually manifest is a claim about cognitive environments, rather than mental states or processes” (p. 43). Two people can share cognitive environments because they share physical environments and have similar cognitive abilities. Their shared cognitive environment is “the set of all facts [and assumptions] that are manifest to them both” (Sperber & Wilson, 1995, p. 41). Needless to say, this intersection can never be complete, because memorized information (which comprise cognitive “abilities”, for RT) differ from person to person.

When it is manifest who shares your cognitive environment (and likewise for the other party), then the cognitive environment shared between the two is upgraded to the status of a “mutual cognitive environment” (Sperber & Wilson, 1995, p. 42). In a mutual cognitive environment, “for every manifest assumption, the fact that it is manifest to the people who share this environment is itself manifest” (Sperber & Wilson, 1995, p. 42). Mutual cognitive environments are said to be enlarged when any fact or assumption is made mutually manifest to the people who share that cognitive environment, either by an utterance or any phenomenon whatever (Sperber & Wilson, 1995, p. 193).

Sperber and Wilson claim that “the goal of communication is enlargement of mutual cognitive environments” (Sperber & Wilson, 1995, p. 193), and that the communicator’s informative intention is “an intention to modify not the thoughts but the cognitive environment of the audience” (Sperber & Wilson, 1995, p. 58). An enlargement of cognitive

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9 A cognitive environment of an individual (Definition 40) “is a set of facts that are manifest to him” (Sperber & Wilson, 1995, p. 39)

10 it is indeterminate (in this context) whether Sperber and Wilson mean ostensive communication, or all kinds of communication. This is an important difference.

11 the quote continues “ . . . rather than the duplication of thoughts.”
environments encompasses the mutual recognition of the informative intention and its implicatures, assumptions constructed, and assumptions not constructed but made manifest (the inferrables, so to speak.)

The innovation of mutual manifestness gives Sperber and Wilson a way out from the problem of mutual knowledge, and thence from the problem of context. To briefly demonstrate this, we reproduce an example from Sperber and Wilson’s (1995) Relevance: Communication and Cognition intended as an illustration of “successful communication” without mutual knowledge. A full understanding of this communicative episode and all that it entails is contingent on an understanding of Relevance theory as a whole (forthcoming), but at this stage, it should serve to bring out the utility of the notion of mutual manifestness.12

Sperber and Wilson ask us to imagine a scenario where Mary and Peter are out in the country; Mary points to a distant church in the landscape and says, “I’ve been inside that church” (Sperber & Wilson, 1995, p. 44). In formulating her utterance, Sperber and Wilson (1995) explain, she doesn’t stop to think whether Peter has noticed the building or whether he assumes it is a church (and assumes that Mary assumes these things, as mutual knowledge would have it) (p. 44). “All [Mary] needs is a reasonable confidence that... a certain assumption [that there is a church on yonder] will be manifest in [Peter’s] cognitive environment at the right time” (Sperber & Wilson, 1995, p. 44). In real life, communicators take “risks”, and make “assumptions and guesses”—”there is no indication that any particular striving after mutual knowledge goes on” (Sperber & Wilson, 1995, p. 19).

Expanding on the same example, if she were to compare the scene to one in a certain book she knows Peter has read, she doesn’t stop to think whether he knows she has read it, or knows that she knows that he has read it. “What [Mary] expects, rightly, is that her utterance will act as a prompt, making him recall parts of the book that he had previously forgotten [context], and construct the assumptions needed to understand the allusion” (Sperber & Wilson, 1995, p. 44). Sperber and Wilson say that, “As a result of their successful communication, their mutual cognitive environment is enlarged” (Sperber & Wilson, 1995, p. 44).

12 A fully informed reader would recognize this as a case of an “implicated premise”, which forms part of RT’s conceptual apparatus.
2.5 Relevance as a Cognitive Property

Sperber and Wilson, in line with mainstream cognitive science, describe humans as “information-processing devices” (Sperber & Wilson, 1995, p. 46; Thagard, 2005). This is their primary function, at least where language is concerned. Furthermore, they are “efficient information-processing devices” (Sperber & Wilson, 1995, p. 46). That is to say, when they are performing their function at their best, they are doing so efficiently.

In the course of a typical day, we, as human beings, are bombarded with a “blooming buzzing confusion”—an onslaught of unorganized information indiscriminately presented from diverse sources (James, 1981, p. 462). There is obviously a limit to how much of this information is taken up and processed, given the nature of our brains. We would naturally want to process that information that would be the most rewarding (i.e. give us the highest returns in various areas of our life). For Sperber and Wilson, “the key problem for efficient short-term information processing is thus to achieve an optimal allocation of central processing resources” (Sperber & Wilson, 1995, p. 48). They argue that what allows us to do this is a consideration of, or sensitivity to, relevance.

We all have a commonsense idea of relevance that we use in our day-to-day lives unreflectingly and productively. Sperber and Wilson wish to develop a technical version of the concept of relevance that plays a role in psychological explanations of behavior. Relevance, as defined by Sperber and Wilson (1995), can be a property of assumptions used in inferential processes. Relevance can also be a property of external phenomena. In this section we will discuss relevance in the former (theoretical) sense— as a property of assumptions used in inferential processes— and only later extend the notion to a consideration of relevant phenomena, including ostensive intentions.

Assumptions are inputs to inferential processes. The assumptions made manifest in one’s environment (say, by a phenomenon, an ostensive intention, or an utterance) are considered against the background of a subset of the individual’s old assumptions, which constitute the context. Assumptions which connect up with the context to yield contextual effects, are said to be relevant (Sperber & Wilson, 1995, p. 122, Definition 7). In a very

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13 The main varieties of contextual effects recognized by Sperber and Wilson are the generation of new assumptions (“contextual implications”) or the strengthening or weakening of already-existing assumptions.
simple example, at the end of the day, if Peter’s utterance “I’m tired”, in conjunction to some common beliefs of Mary’s constituting a rudimentary context (namely, that if Peter is tired, he wishes that Mary make the dinner), makes manifest a contextual implication that Mary make the dinner, then the assumption Peter has made manifest in his utterance to Mary is relevant to Mary.

Relevance is understood by analogy to the concepts of productivity or yield from economics: the positive factor, contextual effects, is weighted against the negative factor, processing effort. When the stimulus is less salient, or the contextual assumptions are less accessible, or the contextual effects are harder to derive, the processing effort is higher (from the perspective of perception, memory, or inference, respectively), and the overall relevance is less than it otherwise would have been (Sperber & Wilson, 1995, p. 252). Another defining property of relevance is that it is a comparative, and not an absolute or quantitative, concept. Relevance is assessed “from the inside”, based on a monitoring of physico-chemical changes, and the mind “decides as a result to pursue its efforts or reallocate them in different directions” (Sperber & Wilson, 1995, p. 130-1).

The scenario we’ve presented in this section of assumptions in inferential processes is abstract and purely formal, at a remove from psychological reality. In the next section we will move outwards towards a consideration of ostensive-inferential communication, in which the above-mentioned inferential processes are implicated.

### 2.6 OSTENSIVE INFERENTIAL COMMUNICATION AND THE COMMUNICATIVE PRINCIPLE OF RELEVANCE

The fundamental claim common to all inferential theories of communication, neo-Gricean (Horn, 1984; Levinson, 2000) and Relevance theories included, is that communicators provide evidence of their informative intention, which is then inferred by the hearer on the basis of that evidence. In the language of our new conceptual apparatus, a communicator wants to “alter the cognitive environment” of his addressee (Sperber & Wilson, 1995, p. 46). She cannot do this directly. All she can do is present a stimulus

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14 Contextual effects are defined more generally as any increase in knowledge.

14 In addition to comparative judgements, the agent does make “gross absolute judgements” (i.e. “relevant” vs. “irrelevant”). She just does not make “fine absolute judgements” (Sperber & Wilson, 1995, p. 132).
(external phenomena), specifically an utterance, that will alter the hearer’s cognitive environment by making certain assumptions manifest or more manifest to the hearer.

Any behavior of this kind—“behavior which makes manifest an intention to make something manifest”—is termed *ostension*, or an ostensive intention (Sperber & Wilson, 1995, p. 49). All ostension, according to Sperber and Wilson, could be said to be communication. In the case of verbal communication, the ostensive intention is further specified as being a form of *ostensive-inferential communication*, in that it triggers an inferential process.

As we said before, relevance can be a property of phenomena in addition to being a property of assumptions. A phenomenon is relevant to an individual “if and only if one or more of the assumptions it makes manifest is relevant to him” (Sperber & Wilson, 1995, p. 152). Since an ostensive intention is an instance of a phenomenon, it, too, operates by making assumptions manifest to the addressee.

An ostensive stimulus must meet two initial conditions: First, it must attract the attention of the addressee. For verbal communication, this is easy: “Spoken utterances in one’s own native language automatically impinge on the attention” (Sperber & Wilson, 1995, p. 153). In other words, it is impossible to block out, or fail to register, an utterance heard. Second, an ostensive stimulus must focus that attention on the speaker’s informative intention. The second condition “is generally met by stimuli which both pre-empt the attention and are irrelevant unless treated as ostensive stimuli” (Sperber & Wilson, 1995, p. 154).

Any ostensive stimulus makes manifest an indefinite, and possibly immeasurable, number of assumptions. Not all of the assumptions made manifest by an ostensive intention (or any phenomenon for that matter) are “constructed” and “processed”—only the relevant ones. How does the hearer identify the “set of assumptions I” specifically intended to be made manifest by the speaker? This is the problem of utterance interpretation—it is essentially the problem of semantic underdeterminacy from the point of view of the hearer. Sperber and Wilson hold that, since the speaker wants to be understood, it is in her best interest to use the most relevant stimuli to convey her informative intention (Sperber & Wilson, 1995, p. 157). This guarantee of relevance, called the *presumption of relevance*
(codified in the “Communicative Principle of Relevance”), makes it possible for the hearer to infer which manifest assumptions were intentionally made manifest.

**2.7 Utterance Interpretation: Identification of the Proposition Expressed**

The task of the hearer is to “discover for which set [of assumptions] I the communicator had reason to think that it would confirm the presumption of relevance” (Sperber & Wilson, 1995, p. 165). To do this, the speaker must construct and test hypotheses of the intended meaning. The coded form of the utterance goes a long way towards indicating the meaning. The code, once it passes through the language input module (also called the “decoder”), “gives immediate access to a highly determinate set of concepts... assemble[d]... into a logical form which can be directly used as an assumption schema” (Sperber & Wilson, 1995, p. 167). “Assumption schemas” are characterized by Robyn Carston (1999) as “structured string[s] of concepts, configured along the lines of Chomskyan LF [logical form]... with open slots marking constituents that must be contextually filled” (p. 28). The task of the central, “inferential” processor is to “complete[s] these assumption schemas into full hypotheses” using contextual information that is stored or picked up from the environment (Sperber & Wilson, 1995, p. 167).

Sperber and Wilson (1995) hold, against the majority of pragmatic theorists, that the context which is mobilized in utterance interpretation by the hearer is a matter of choice (p. 132). According to Relevance Theory, the “immediately given” context consists of the immediately preceding discourse (Sperber & Wilson, 1995, p. 139). From this point, “extensions” are strategically made to the context in a way that maximizes the contextual

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15 The presumption of relevance, that “Every act of ostensive communication communicates a presumption of its own optimal relevance.” was originally codified as simply the “principle of relevance” (Sperber & Wilson, 1995, p. 158, Definition 62). In their later article, “Relevance theory” it was renamed the “Communicative Principle of Relevance” to distinguish it from the “Cognitive Principle of Relevance” (the latter states that “Human cognition tends to be geared to the maximization of relevance”) (Wilson & Sperber, 2004, p. 255). We will adopt the later terminology.

16 Relevance Theory is introduced in the context of the debate between two competing visions of an “overall theory of communication”: the “code model”, which has been largely assumed without question since antiquity, and an inferential model, popularized by Grice (Sperber & Wilson, 1995, p. 1-28). Sperber and Wilson assess the relative merits of each of these models, and consider the possibility of combining them. In the end, they conclude that there are code models, and there are inferential models but that a “coding-decoding process is subservient to a Gricean inferential model” (Sperber & Wilson, 1995, p. 27).
effects derived, and thus maximizes the relevance of a heard utterance. Extensions to the context can be made by adding (a) utterances heard earlier in the discourse, (b) encyclopedic entries of concepts heard earlier in the discourse, and (c) information picked up from the surrounding physical environment (Sperber & Wilson, 1995, p. 140-1). For example, if Mary utters “I’ll make this”, holding up a piece of steak, to Peter in the dinner scenario introduced above, Peter will have to add to his context some facts drawn from perception, namely the image of the steak, to render this utterance minimally relevant, and thus comprehensible.

This procedure of “complet[ing]... assumptions schemas” follows the same pattern as we saw above (§ 2.5) in our discussion of the inferential processing of assumptions. The hypothesis is selected on the basis of the contextual effects derived. The hypothesis that yields the most contextual effects with the least undue processing (i.e. the most relevant hypothesis) should correspond to the speaker’s intended meaning, provided that the speaker is following the “Communicative Principle of Relevance”.

A major component of interpreting the speaker’s intended meaning is identifying the proposition expressed. The semantic representation of the sentence, either as conceived in formal semantics or as corresponding to the output of the language decoding module, is “typically not fully propositional” (Carston, 2004, p. 633). We saw above (§ 2.1) that semanticists for the most part recognize that processes of reference assignment and completion are needed to arrive at a truth-conditionally evaluable form, but they tend to look for non-pragmatic means to accomplish this end; what’s more, they ignore disambiguation and altogether dismiss “free enrichment” and “ad-hoc concept construction”. Pragmaticists, for their part, universally agree that these processes are needed to arrive at a propositional form but “there is very little in the pragmatic literature to explain how it is carried out—apart from the comment that Gricean maxims and mutual knowledge might help” (Sperber & Wilson, 1995, 179-180). For Relevance Theory, saturation (reference assignment and completion), disambiguation, free enrichment, and ad-hoc concept construction are all subtasks of identifying the proposition expressed. They are computed simultaneously in a central, “inferential” processor according to the standard procedure of choosing the first hypothesis that satisfies the presumption of relevance (Sperber & Wilson, 1995, p. 189). The end result of these various processes is, in RT, an “explicature”. Over and above explicatures, Sperber and Wilson offer cogent arguments that speech act and propositional attitudes are
represented as “higher-level explicatures” in the psychology of utterance comprehension (Wilson & Sperber, 1993, p. 5). Explicatures are computed simultaneously with the implicatures of an utterance, “so that very often pragmatics is making a hypothesis about an intended word sense, or an indexical referent, or even an implicature, before the entire acoustic stimulus has been processed by the linguistic system” (Carston, 2000, p. 4).

### 2.8 Utterance Interpretation: Derivation of Implicatures

Relevance theory is a pragmatic theory, so from this perspective, its great triumph is its account of the retrieval of implicated meaning. Let us now demonstrate how implicatures would be identified on the RT model. This exercise will additionally allow us to get clearer on what is meant by “manifestness”, which is notoriously hard to get a grip on. In the chapter, “The identification of implicatures” (Sperber & Wilson, 1995, p. 193-202), Sperber and Wilson ask us to imagine a simple dialogue (numbering is their’s):

\[(33)\] a. Peter: “Would you drive a Mercedes?”
   b. Mary: “I wouldn’t drive ANY expensive car.” (Sperber & Wilson, 1995, p. 194)

Now, obviously, Mary has not provided a direct answer to Peter’s question, but she has given an indirect one by prompting him to supply the *implicated premise* \[(34)\] “A Mercedes is an expensive car”, which is then combined with her utterance to output the *implicated conclusion* \[(35)\] “Mary would not drive a Mercedes”, which has enough contextual effects (in a situation where Peter has asked a question) to confirm Mary’s presumption of relevance. But this could not be all that Mary intended, for if it were, she would have saved him the trouble of calling up an implicated premise and deriving an implicated conclusion, by giving him a simple, direct answer. Mary must have additionally intended for Peter to construct *at least some* additional assumptions made manifest by her utterance. However, “it does not follow that there is any specific implicature, apart from (34) and (35), which Mary must have expected Peter to recover” (Sperber & Wilson, 1995, p. 197). She merely intended to make

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\[17\] “implicated premises” refer to any of the contextual assumptions selected by the hearer for interpretation, either retrieved from memory or newly constructed on an as-needed basis.
manifest an indefinite range of assumptions, some strongly manifest and some weakly manifest.\textsuperscript{18}

Conceivably, the assumptions made manifest by Mary’s utterance include the following implicated premises (37-38) and implicated conclusions (39-40):

\begin{itemize}
  \item (37) A Rolls Royce is an expensive car
  \item (38) A Cadillac is an expensive car
  \item (39) Mary wouldn’t drive a Rolls Royce
  \item (40) Mary wouldn’t drive a Cadillac. (Sperber & Wilson, 1995, p. 197)
\end{itemize}

It is completely natural to expect Peter to construct some of these assumptions on the basis of Mary’s utterance. Moreover, he would want to do so when they help to generate contextual effects and confirm Mary’s presumption of relevance. Sperber and Wilson say that Mary has made them strongly manifest. Likewise, Mary’s utterance may prompt Peter to construct the implicated premise (41) and, after some reasoning, the implicated conclusion (42).

\begin{itemize}
  \item (41) People who refuse to drive expensive cars disapprove of displays of wealth
  \item (42) Mary disapproves of displays of wealth. (Sperber & Wilson, 1995, p. 197)
\end{itemize}

These have also conceivably been made strongly manifest by Mary’s utterance. However, there are some assumptions that Peter may construct on the basis of Mary’s utterance which we would be less confident in saying were made manifest by Mary’s utterance. That is to say, it’s less obvious that Mary intended Peter to construct these assumptions.\textsuperscript{19} These include the implicated premises (43) and (44) and implicated conclusions (45) and (46).

\begin{itemize}
  \item (43) An Alfa Romeo is an expensive car
  \item (44) A BMW is an expensive car.
  \item (45) Mary wouldn’t drive an Alfa Romeo.
  \item (46) Mary wouldn’t drive a BMW. (Sperber & Wilson, 1995, p. 198)
\end{itemize}

Sperber and Wilson opt to call these “weakly manifest” assumptions. Finally, there are assumptions which Peter may construct based on Mary’s utterance which we would be strongly disinclined to say were made manifest by Mary’s utterance—these have been constructed on Peter’s own volition, and on his own responsibility.

\textsuperscript{18} Alternately, Mary could have communicated merely by making “more manifest” one, or a set of, assumptions which were already present (as in the case of communicating an impression).

\textsuperscript{19} One might need some background knowledge about cars to fully understand this example. Presumably these models are less prototypical examples of “expensive cars”, at least in the minds of Sperber and Wilson.
(47) People who would not drive an expensive car would not go on a cruise either.
(48) Mary would not go on a cruise. (Sperber & Wilson, 1995, p. 199)

Therefore, on Sperber and Wilson’s (1995) model, any given utterance makes manifest an (indefinite) range of assumptions, from strongly manifest ones to weakly manifest ones, to those which “it is very doubtful” were made manifest at all (Sperber & Wilson, 1995, p. 199). These assumptions are taken up by Peter and constructed whenever they help Peter to accrue contextual effects in his efforts toward confirming Mary’s presumption of relevance.

This example, while deftly illustrating the role of “manifestness” in the communication of implicatures, also brings out a strength of RT that is not shared with other pragmatic theories—its ability to explain the “vaguer” aspects of communication. For the most part, pragmatic accounts of implicature “tend to focus on examples... where the implicit import is fairly precise”, where the implicatures are fully determinate and enumerable (Sperber & Wilson, 1995, p. 56). In reality, most verbal communication is intentionally vague—in fact, “in human communication, weak communication is found sufficient or even preferable” (Sperber & Wilson, 1995, p. 59). This vagueness usually resides in the implicatures—some implicatures are strongly implicated and some only weakly.

Taking another example from Sperber and Wilson, when Mary utters “I have a headache” in response to Peter’s question, “What do you intend to do today?”, she “intends to make [strongly] manifest to Peter the assumption that she has a headache and [weakly manifest] all the further assumptions manifestly required to make this a relevant answer to Peter’s question” (Sperber & Wilson, 1995, p. 56). Or, let us say Peter and Mary are at Disneyland for the first time, and Mary, overwhelmed, exclaims, “I will remember this moment for the rest of my life!”. In saying this, she intends to make manifest the propositional content of her utterance, along with “all the further assumptions that this initial assumption makes mutually manifest” (Sperber & Wilson, 1995, p. 59). Crucially, it is not necessary for Mary to have all of these assumptions explicitly in mind (Sperber & Wilson, 1995, p. 59). In Sperber and Wilson’s language, Mary’s informative intention consists of a set I of assumptions she intends to make manifest, but “it is not necessary [on their theory] to have a representation of each assumption in the set. Any individuating description will do” (Sperber & Wilson, 1995, p. 58). We will see later how this has important consequences for an analysis of emphatic “do”.
What we have presented above has been an exposition of Relevance theory. We have sought merely to introduce the essential ingredients and sketch out the basic framework of the theory to serve as the ground for our emphatic “do” analysis. Sperber and Wilson offer many qualifications to their theory, having to do with social contexts and non-standard cases. A sampling of their assorted qualifications is found in Appendix.
CHAPTER 3

DELIMITING THE AREA OF RESEARCH:
MATERIALS AND METHODS

As we saw in Section 2.1, if we subscribe to the truth-conditional picture of semantics, certain linguistic phenomena seem to pose a problem. The emphatic “do” is one such phenomenon.\(^{20}\) It’s easy to show that emphatic “do” contributes nothing to the truth-conditional content of the utterance which contains it. To take our opening example (in the Introduction), “They draw a line somewhere” and “They do draw a line somewhere”, are true in exactly the same conditions (whatever the context). Emphatic “do” is redundant: it merely reiterates the action of the verb without adding any substantial modifications to that action. At the same time, emphatic “do” does contribute a meaning to the utterance. It seems to suggest that the proposition in which it appears contrasts with another proposition which is inferentially available based on the information given in the discourse.

As a preliminary to my analysis, I will describe the specific sense of emphatic “do” with which I am concerned. As Grice himself noticed, it is hard to define a research topic without making implicit reference to some theory.\(^{21}\) Accordingly, we will try to articulate the description using intuitive, commonsensical concepts that would be understood and accepted by a moderately-educated reader. In Section 3.1 we’ll identify emphatic “do” as a member of the class of auxiliary “do”. In Section 3.2, we will define our distinctive sense of emphatic “do” negatively,\(^{22}\) as it were, by distinguishing it from two closely-related senses: the non-contrastive and explicitly contrastive emphatic “do”. In Section 3.3 we will give a definitive statement of the implicitly contrastive emphatic “do”, its use and function. In Section 3.4 we

\(^{20}\) The analysis that follows may be felicitously applied to other emphatic auxiliaries (e.g. emphatic “will”, emphatic “could”). We will restrict this study to the simplest case—the emphatic “do”—since it doesn’t have any additional semantic features which may conceivably complicate the analysis.

\(^{21}\) “I shall, for the time being at least, have to assume to a considerable extent an intuitive understanding of the meaning of say in such contexts, and an ability to recognize particular verbs as members of the family with which implicate is associated” (Grice, 1975, p. 44).

\(^{22}\) recalling Saussure’s differential system of signs
will describe the methodology we used to collect representative examples of our construction from the British National Corpus, and finally in Section 3.5 we will present our data samples, with commentary on the speaker’s intended meaning, as we imagine it is understood pre-theoretically by the addressee.

3.1 Auxiliary “do”

Emphatic “do” is generally recognized in the prescriptive (i.e. “school”) grammars as a subclass of the auxiliary “do”. The auxiliary “do”, a finite auxiliary verb, is classified in Fries’ (1940) *American English Grammar* as having an emphatic use, a “substitute” (i.e. suppletive) use, a use “with the negative verb”, and one “in questions” (p. 147). A nearly identical classification is found in Twaddell’s (1963) *The English Verb Auxiliaries*. Apart from these, there is the “lexical ‘do’”, which signifies something like “perform, accomplish, make, bring about, produce” (Fries, 1940, p. 146). It may be worthwhile to investigate the relationship of emphatic “do” to the other auxiliary uses, or the development of the auxiliary “do” from the lexical “do”, but this is not our purpose in the current paper.

3.2 The Emphatic “do”

The same authors who classify the auxiliary “do” as having uses in questions, suppletion, and negation also recognize a fourth function of emphasis. Fries (1940) individuates the “emphatic” form as one that “receives strong stress in speech and one that usually stands in a statement offered as... a contradiction of a preceding assertion” (p. 146). Twaddell (1963) concurs that it “bears the stress of truth-value insistence” (p. 19). Speaking of auxiliaries in general, Quirk, Greenbaum, Leech, and Svartvik (1972) identify what they call the “emphatic positive use”, whose function is to “deny a negative which has been stated or implied”, adding that “sometimes the emphatic operator has no contrastive meaning, but is used purely for emotive force” (p. 124). Although not every investigation arrives at the same typology of functions of the emphatic “do”, we will follow Quirk et al. and make a tripartite

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23 Some examples of the “lexical” use found in our search of the BNC (methodology described below) are “do exercises”, “do level one”, and “do stuff”.

24 Fries’ definition is misleading insofar as it implies that the emphatic “do” is necessarily stressed at the phonetic level. This is not so: the emphasis can be, and usually is, conveyed and understood in other ways (most often, by context).
distinction between the “non-contrastive”, “explicitly contrastive”, and “implicitly contrastive” uses of emphatic “do”. We are concerned only with the last of these three—the implicitly contrastive emphatic “do”. To forestall any misunderstandings or misappropriations of our analysis, we will distinguish each of the three possible construals of “emphatic ‘do’” below. The examples we’ve used to illustrate these uses are drawn from the British National Corpus (henceforth BNC). We have described the methodology guiding our data collection further below in Section 3.4.

3.2.1 Non-Contrastive Emphatic “do”

Under the heading of “non-contrastive” uses of emphatic “do”, we find cases in which emphatic “do” is employed for the purposes of politeness; for speech act insistence; simply to add affective emphasis to an entire sentence; or to buttress a conclusion. The first three functions may overlap in any of their six possible ways; the fourth may overlap with the first or third. Some characteristic examples of each type are given below, with brief comments where appropriate:

3.2.1.1 Politeness

(SP:PS3WU) Er (pause) I wish to move that the (pause) er motion which is on the green order paper. I do draw (pause) member's er (pause) an an in particular Mr (-----) attention to (pause) paragraphs seven and eight of the report. Paragraph seven making it clear (pause) put that an initial assessment has already (pause) established (Davies, 2004, JSC)

(SP:PS1U2) Currently sir erm I I do propose Mrs (-----) (SP:PS1TX) Yes.

(SP:PS1U2) (unclear) sir, firstly because there is a slight divergence on matters of approach, and secondly sir to deal with the factual matters. (SP:PS1TX) Right.

(SP:PS1U2) What what I propose not to do is to ask Mrs (-----) (Davies, 2004, FMP)

(SP:PS4KC) well I do think I have, I have those points, erm, I don't want to stop you Mr (-----) er, and I do repeat I'm going to, I'm going to rule on these matters and both parties have er, erm, will have certainly have full liberty to come back (Davies, 2004, JSC)

(SP:JJAPSUNK)… So if we would like further consultation apparently it was noted in view of the test (unclear) carry out (unclear) what we could do erm in

Others who settled on this preferred classification include Nevalainen and Rissanen (1986), Ranger (2004), and Zandvoort (1942), and doubtless many more we have not met with in our research.
fact the questionnaires (unclear) have the response, I do share some of Mr (-----)'s er er worries (unclear) that erm I think we ought to get (unclear) out of the way and say (unclear) to number one that this er (unclear) (Davies, 2004, JJA)

(SP:PS1P3) thank you very much indeed for (pause) a very informative talk erm (pause) I am actually, myself, er a chartered structural engineer (pause) so, what you (SP:PS1P2) (unclear) (SP:PS1P3) had to say was of, of deep interest to me! Unfortunately I'm (pause) rather pessimistic about the situation obviously at the moment! Erm, I think er (pause) your idea of of getting the ins-- professional institutions together (SP:PS1P2) Mm. (SP:PS1P3) to work for a common goal is (pause) admirable! But, I do suspect that erm (pause) I think we're all probably guilty of guarding our own (Davies, 2004, F8B)

Nevalainen and Rissanen (1986) make a alternative classification of the subtypes of the non-contrastive emphatic “do”, corresponding to the four “discourse ‘positions’ which relate to topic development and topic shift in discourse” (p. 42). Their analysis does not exactly parallel our own, but our ‘politeness’ class is coextensive with their third sub-type of “developing or elaborating on a topic, adding a new item, explaining, giving reasons, specifying or generalizing” (p. 42). The only example they provide of this so-called ‘topic-changing’ sub-type is “and the other thing that I did want to point out you know is is [sic] this. I’m told that . . .” (Nevalainen & Rissanen, 1986, p. 42).

In this author’s opinion, the “politeness” designation and the “topic-changing” designation are interchangeable with reference to the emphatic “do”—the only difference is that one is an evaluative label and the other, a descriptive label. This is, of course, open to debate.

3.2.1.2 SPEECH ACT INSISTENCE

(SP:PS6TB) Do cook the turkey and baste (Davies, 2004, KB7)

(SP:PS26K) …if that, that's in place, but you have to also make sure that the, the screws on the hinge side are fitted correctly as well. Cos I had an occasion where I had a, a replacement door (pause) it was my own house (unclear) and they ripped off half the screws. And if you think of a the main fabric of them, they're quite flimsy. And there have been occasions now where (pause) our local police, certainly, and that er frees areas and just knock the back of the (unclear). So, do choose very carefully if you're thinking of having replacement glazing and doors. Every house has weak areas (pause) you can probably identify them yourselves, and so can burglars. (Davies, 2004, KNF)

Now, as I say, I've covered that very quickly. That is probably about two lectures worth there, ok? I mean if you go it's normally I chat about two lectures on that
(SP:PS4SH) …and you give lots of examples. Text books are very good, do read them and that about covers that part. (Davies, 2004, JT1)

(SP:PS4VP) Erm this is taken again from medieval pictures and one of the materials we use in this house quite a lot which is (unclear) is horn. So this is these ink horns actually are ink horns. Equally these are horn books, do pick them up and wander about with them. They were the earliest type of school text book erm which came in in about fourteen fifty, er to teach your A B C which you just copied and copied and copied until you got it right. (Davies, 2004, JTE)

If it ends in an O it's probably not always but probably going to be L and if it ends in an A as he says there it's a good point it's probably a (unclear) word. So try and remember that. It may save you a lot of time a lot bother a lot of marks. Yea?

(SP:KPAPSUNK) You don't have to put L (unclear) with the commas do you?

(SP:KPAPS000) No. Unless you tell (unclear)2. (pause) Yeah might be plurals as well things like that. So do revise your work carefully. (Davies, 2004, KPA)

(SP:F7WPSUNK) Do deal with that your worships (pause) please? (Davies, 2004, F7W)

The non-contrastive “speech act insistence” use of the emphatic “do” are called “Do-imperatives” in Bolinger (1974).

3.2.1.3 EMPHASIS

(SP:PS0NE) I must say I do miss that thing. (Davies, 2004, KDP)

(SP:PS1MR) I worry about you sometimes Emma! I (pause) I really do worry about you! (Davies, 2004, F7U)

(SP:KCNPSUNK) …“Yes, you qualify for it! (pause) (unclear), you do qualify for it.,” (BNC, 2004, KCN)

(SP:J3UPSUNK) …“remember first impressions do count.” (Davies, 2004, J3U)

(SP:PS585) Oh you do disappoint me Rachel. (Davies, 2004, KPU)

Were you disappointed not to get Alaysi? (SP:PS69H) There's no doubt about that because the young man has got a brilliant, truly brilliant future ahead of him. He's in all the typical things a young man who's too quick does, that's fly off the road all the time, but that's part of the normal learning curve, and I think that he'll be trouble for every team that doesn't have him in their actual car at the time. He'll be very quick and I do regret that he's not here. (Davies, 2004, KRT)

The affective emphasis function may well be regarded as the unmarked use of the non-contrastive emphatic “do”.

3.2.1.4 CONCLUSION

ought to be, so you actually do see the same people over a period of time, and you do establish a modicum of trust, not entire trust, because it's asking too much for
entire trust in all circumstances, but at least there is a certain understanding, particularly with the, on the, on the local basis. (SP:PS62R) It was a pretty (people-talking) (SP:PS62M) With this business of embargo, Liz, I'll agree with that but the, the off the record, one wants to get the local people very well (pause) and you do develop this, this trust (Davies, 2004, KRP)

(SP:PS0BB) This survey says men does the cooking. (SP:PS0BA) Yeah, that th--(pause) they've dra-- drawn a conclusion that men actually do cook a lot. (Davies, 2004, KC6)

(SP:PS4V2) Do is there is there anything we can do about this. (SP:PS4V3) Yeah well what we do i-- All D K (-----) is double wrapped. We select the pallets then (SP:PS4V2) Do you? (SP:PS4V3) they must be uniform. They mustn't be out of the perimeters of the pallet. We go to no end of trouble to (SP:PS4V2) (unclear) D K (-----) I mean the fee-- (SP:PS4V3) And it's all all the loads have to be signed by Chand and or (unclear) to say (unclear) (SP:PS4V2) Okay so you do bend over backwards for D K (-----) (Davies, 2004, JTC)

(SP:PS2PE) but you see the point I'm making, in our species males do contribute. (Davies, 2004, HUJ)

(SP:PS3HH) …And secondly we do recognize the quality of the countryside (unclear) South of Cleveland and need to to retain its character and the lit-- the character of its villages which erm in fact do add to the attractions of the area when you're trying to e-- erm bring in new industry. (Davies, 2004, HVF)

ones have to be quite crafty when you get up to twenty two carat for example and eh, very eh, eh, large chunk of gold in it, and it can indeed be very soft, but then you see that's an eighteen carat ring that I've had for, worn, all the time for twenty four years (SP:PS107) Yes. (SP:PS05X) and it really was pretty much like that when I had it, so eh, it's probably a bit more rounded than it was. (SP:PS107) Yes, yes. (SP:PS05X) So they, they do last. (SP:PS107) Yeah. Oh, yes, because rings come in to quite a bit of wear don't they? (SP:PS05X) Yes, oh yes, yes, yes, no with doubt. (Davies, 2004, KBK)

Nevalainen and Rissanen (1986) similarly single out the conclusion-supporting emphatic “do” as a distinctive sub-type of the non-contrastive emphatic “do”. As with the politeness cases, they define this use with reference to discourse topic, preferring to describe its function as that of “rounding off or summarizing a topic, to signal the end of its treatment” (Nevalainen & Rissanen, 1986, p. 42).

### 3.2.2 Explicitly Contrastive Emphatic “do”

Explicitly contrastive cases of emphatic “do” display a typical structure. The verb introduced by the emphatic “do” is explicitly contrasted with another verb in the discourse. The following are some straightforward examples, drawn from our Corpus data:
a. (SP:PS066) Because I mean they don't sort of grow out, they grow up don't they? (pause) (SP:PS065) Yeah, but they do grow out a bit too. (Davies, 2004, KBP)

b. (SP:PS0WS) I don't fight with the girls. (SP:PS0WN) You do fight with the girls! (Davies, 2004, KE4)

c. (SP:KPGPSUNK) Jo! Don't even bother joining in. (SP:PS555) Yes, I do bother! (Davies, 2004, KPG)

d. (SP:PS3SS) Mm. Did you put a bet on? (unclear) (SP:PS3SR) Did I? I didn't. (SP:PS3SS) You're a mathematician. (SP:PS3SR) I I often, well, usually, if I'm in the country at the time I bet on the National just for a, for a (unclear) to sort of waste some money. (SP:PS3SS) But you've got to check out the odds (unclear). (SP:PS3SR) I l-- I do check out the odds, (Davies, 2004, J91)

e. (SP:PS26K) Well (pause) well actual fact, unless it's done, the security's fitted at the time of manufacture you can actually serious damage the framing. And I wouldn't suggest you, you tamper with it, er, because if you do damage the framework of it you've got no redress from the company. (Davies, 2004, KNF)

We may be tempted to conclude from these initial examples that, in its explicitly contrastive use, emphatic “do” necessarily actuates a contrast between a verb and another token of the same verb. This, however, is not the case, as seen in the following more nuanced uses of the explicitly contrastive emphatic “do”:

g. (SP:PS5N9) So the actual timings (pause) are as follows (pause) you have five minutes preparation before each role play to get yourself together (pause) there's fifteen minutes role play which is recorded but there's no playbacks, we haven't got the time unfortunately. Okay so you do record the role play but you do not play it back and we have fifteen minutes of feedback. (Davies, 2004, K70)

h. (SP:J43PSUNK) Thank you Chairman. Chairman, I welcomed this paper altogether. There are so many things in it that are good. There are one or two things that do bother me. (Davies, 2004, J43)

i. (SP:PS2B5) But whoever hates his brother, that's another fellow believer, is in darkness. Now that's a hard word isn't it? That's verse eleven. (SP:G5KPSUNK) Mhm. (SP:PS2B5) (reading) And walks around in the darkness, he does not know
where he is going because the darkness has blinded him. (SP:PS2B9) May I ask a question? (SP:PS2B5) Yes. (SP:PS2B9) Most of us don't hate anybody but we do dislike some. (SP:PS2B5) Well that's just about as bad (SP:G5KPSUNK) (unclear) (SP:PS2B5) isn't it? (SP:PS2B9) Is that the same? (Davies, 2004, G5K)

j. (SP:PS220) Erm well (unclear) temple in Caldmore has erm played a very important part in the life of the Sikh community, people in the Si-- er families here. Er number one (pause) that is the only place (pause) where we normally can meet. Er people do go to pub, they do meet, but it's not a family outing because our women don't go to pub, it's not socially approved. (Davies, 2004, G4S)

Assuming that the reader accepts our intuition that these are cases of explicitly contrastive emphatic “do”, we can refine our characterization of contrastive emphatic “do” further. It appears that the crucial thing is not that a negated verb be exactly duplicated and affirmed, but that the pair of verbs contrast in some way. The contrast may be a simple relationship of antonymy, as in example (f); it may be a contrast of one semantic feature or dimension, as in example (g); or it may be a difference on a scalar range (example (i)). This is not an exhaustive list.

### 3.3 Implicitly Contrastive Emphatic “Do”

Having identified these neighboring notions, we are in a position to characterize our object of study—the implicitly contrastive emphatic “do”. It is generally recognized that implicitly contrastive emphatic “do” exists—we all feel intuitively that it has a meaning and function. To give the reader an impression of its use, we provide an example (with context):

Eva lives in a communal housing complex with a bevy of dedicated vegans, environmentalists, and political activists. She invites her linguistics study partner, Adam over to the house and introduces him to her housemates. Adam wears cardigans and thick-rimmed glasses and gives an impression of being stuffy and reserved. Adam is afraid that Eva’s friends won’t receive him warmly.

Eva (to housemates, who are sizing up Adam): This is my friend Adam. He’s a graduate student whose life revolves around linguistics.

Adam (to housemates): [furtively glancing around] [pause] I do attend political rallies.

As a working definition, let us say that this breed of emphatic “do” suggests a contrast (or similar relationship, such as opposition) between the proposition which the “do” modifies and one or more *inferences* arising from propositions appearing earlier in the discourse, in contrast to the explicitly contrastive cases where the contrast is between the proposition (or word) introduced by the “do” and an earlier proposition (or word) itself. In his
study, *Untersuchungen zur Funktion des emphatischen do im Englischen*, reviewed by Nurmi (2000), Gerner comes close to the same definition when he describes the contrast arising from the emphatic “do” in terms of “the speaker’s mental image of the hearer’s opinion”: specifically, emphatic “do” is used “when the speaker utters something s/he believes to be in contrast to the hearer’s opinion” (p. 111). In our above example, the contrast is between, on the one hand, the proposition that “Adam does not engage in political/activist/liberal activities”, suggested by Eva’s remark that he is an academic linguist (along with contextual information about his appearance), and, on the other hand, Adam’s assertion that “[He] does attend political rallies”.

What marks this use apart from the explicitly contrasting emphatic “do” is that in the case of the latter, the contrast is between the proposition introduced by the “do” and an earlier proposition *itself*. It’s reasonable to assume that the implicitly contrastive emphatic “do” developed out of its explicitly contrastive counterpart, and that the non-contrastive type developed out of the implicitly contrastive type. This would fit well with the view that contrastiveness is a “gradient notion” (Lambrecht, 1994, p. 290). This might be a fruitful area for future research, but we will not pursue this hypothesis here.

The implicitly contrastive uses tend to have a marked “rhetorical” feel to them. This is to say that they have a(n) emotional effect(s), clearly intended by the speaker, but which may be hard to put into words and equally hard to trace to a linguistic source. For this reason, rhetorical effects, and poetic language more generally, are usually thought to resist any attempts at scientific (in this case cognitive or linguistic) explanation. By the end of this paper, we will have shown how the elusive “rhetorical effect” can in fact be given a scientific explanation, and so does not exceed the limits of linguistic science.

### 3.4 Methodology and Data

Before we launch into an analysis, it would be helpful to flesh out our description of the implicitly contrastive emphatic “do” with some illustrative examples. In this section I shall discuss some concrete examples drawn from the British National Corpus that give some

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26 We have had to rely entirely on Nurmi’s review for a sense of Gerner’s theory, as Gerner’s study is written entirely in German.
indication of the behavior and distribution of this construction. In prose format, I will articulate the relationship that can be seen to hold between the proposition introduced by “do” and the previous propositions. We will not subject these data to any judgement at this stage. Our purpose is merely to bring to conscious awareness the contrast which is intuitively felt in these examples. These examples will, additionally, serve as a point of reference for future theorists who wish to critically evaluate our analysis.

To give some substance to our threshold claim that emphatic “do”, in its implicitly contrastive sense, suggests a contrast between the proposition which contains it and another proposition arrived at by way of inference, we collected tokens of this use from the British National Corpus. Our procedure was as follows: We made a search for constructions of the form: “‘do’ followed by a verb in any tense” using the search query “do [v]”. Commensurate with the limitations of the BNC, we expected this search query to retrieve samples of all three senses of emphatic “do”. There is no search query, in theory, which would retrieve the implicitly contrastive uses to the exclusion of others.

To attain unbiased results, we excluded the inflected forms of “do” (e.g. “does”, “did”). While it is almost certain that emphatic “do” can perform the same function in any of its forms (“did”, “does”), there is a possibility of some unknown variable co-occurring with the inflected forms. If this should be so, we wanted to guard against the possibility of such a variable interfering with our results. For similar reasons, we filtered the results so that they only displayed spoken discourse. Finally, we increased the “# Hits” in the Options tab to show a frequency of 1000.27

The search produced 460 types28 of the “do”+V construction, totaling 4508 tokens. We manually sifted through the hits with an eye for the implicitly contrastive uses, and stopped when we had attained 9 viable examples. In the following section we examine each of these examples individually. We will state what the contrast is in each case, and show how the contrast is deduced from the available propositions through the intermediary of inference.

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27 An objection could be made that the BNC does not code for phonetically realized emphasis, and so we cannot be sure if our results are genuine cases of emphatic “do”. As before (in footnote 4), we stress that phonetic emphasis is not essential to the emphatic “do”, and so this objection is out of place.

28 A “type”, in this context, is a construction of ‘do+a specific verb’, e.g. do+change, which may appear any number of times in the corpus (in fact it appears 29 times). A token is one occurrence of the type.
The explanations we offer are not the only ones that may be given, but they should readily be given assent by any third-party readers.

1. over anyway (pause) (SP:PS09V) I can never (SP:KC2PSUNK) (unclear) (SP:PS09U) Wrong L E D (SP:PS09V) No, that, that L E D has been (SP:KC2PSUNK) (unclear) (SP:PS09V) all the way round (SP:PS09U) Well change it then, ain't you change that yet, you found that this morning early (SP:KC2PSUNK) (unclear) (pause) (SP:PS09U) all you have to do is pull it off, they do come off you know? (SP:PS09V) Yeah but I can't be doing with it (pause) (SP:KC2PSUNK) (unclear) (SP:PS09V) I'm only going by what this (SP:KC2PSUNK) (unclear) (pause) (SP:PS09T) They ain't very far apart (pause) they **do** grow big you know (SP:PS09U) Yeah I know (SP:PS09T) There's this old girl at er the top of the road you know, got them, she planted them half way down her garden, right, when they'd grown to about six foot high she said we could have the rest of their garden, so we did, that's how come our garden's so big cos people give our, give us the garden (SP:PS09U) Mm (pause) (SP:PS09T) Council come round our house they'll say yeah your garden (Davies, 2004, KC2)

The speech partners in this exchange seem to be discussing the state of someone’s garden, presumably speaker 9U’s or 9V’s. Speaker 9T makes the observation that the plants (let’s suppose they are vegetables) in question are not spaced very far apart, then follows this up with the sentence containing emphatic “do”: “they **do** grow big you know”. The contrast in this case is between ‘the vegetables grow big’ and an inference following from the narrow placement of the vegetables, (made plain by Speaker 9T’s utterance “They ain’t very far apart”), that the vegetables don’t need much space to grow. In this case, the utterance “they ain’t very far apart” is voiced by Speaker 9T in anticipation of his emphatic “do” sentence, but the inference could well have been traced to another speaker’s utterance or from the environment itself.

2. incident happened between 1.30 and 2.40 on Saturday afternoon; police want to speak to a young man seen on a pedal cycle in the area at the time. He's described as being in his late teens, 5' 8' tall and of slim build. P C Mike Patching crime intelligence officer at Banbury and head of the crime stoppers organization in the town, says it was a despicable crime. (SP:PS645) Criminals aren't too bothered about the er problems they cause victims in the commission for their crime, but er as a general rule er they **do** draw a line somewhere, but I think to er rob a lady who is er presumably grieving over the loss of a relative, at the graveside, has got to be plumbing some new depth of er depravity and er I'll expect the erm vast majority of the citizens of Banbury will think similarly. (SP:PS657) A man's been taken to hospital with a chest injury after a road accident near Bicester. Two cars collided outside a service station at Baynard's Green at about 2 o'clock this afternoon (Davies, 2004, KRT)
The speakers are reviewing the recent crimes in the area in a professional setting, and they come to a particularly “despicable” one. The contrast here is between ‘criminals drawing a line somewhere’ (understood metaphorically) and an inference that may be approximated as ‘criminals have no moral conscience’. The inference is a sort of truism, and so follows easily from the antecedent sentence that “criminals aren’t too bothered about the . . . problems they cause victims”. On a wider reading, the contrast is between ‘criminals drawing a line somewhere’ and the situation represented by the crime under discussion, an extreme case of moral depravity, but this is a further rhetorical effect and is not essential to the function of the emphatic “do” in this sentence.

3. And erm, I'll move those recommendations from the budget review sub-committee, a, b, c, d, e, f, g and h. In doing so I would erm, particularly like to say how much I appreciate the success of the (unclear) bid, in erm, as, as an example of county, counties working together, erm, and indeed officers working together, and indeed of getting a positive response from the Government. I think from time to time, little bits of the Government do work reasonably well, and do respond reasonably well to county council and local authority initiatives, and although I couldn't pretend that a hundred and, that twenty-five thousand pounds is going to solve the unemployment problem in Wiltshire, nor indeed solve the problem being created by the run-down of defence industry, nevertheless, I think credit should be given where credit's due. A lot of credit is due to our officers in this respect, for er, securing the success of that bid, and indeed for securing a back-up capital (Davies, 2004, JG).

The contrast is between the speaker’s utterance that ‘governments work reasonably well [etc.]’ and the common sentiment that governments are prone to inefficiency and mismanagement. The latter half of the contrast is an inference having its basis in the situation in general or, to point to a linguistic source, in the succession of preceding sentences. Of the sentences given in the excerpt, the first (beginning with “And erm . . .”) and ending with “. . . f, g and h”) would be the best candidate for a proposition that licenses the inference. That ‘governments are prone to inefficiency’ is the contrasting proposition is confirmed later in the excerpt, where the speaker avows, “I couldn’t pretend that . . . is going to solve the unemployment problem”.

4. they've just (laughing) disappeared. (SP:PS1VT) Mm. (SP:PS1VS) Erm a less introverted erm er response would be, half way through the preparations to say, well you know actually I'm, I don't really think I can come. I mean I've got this person to see, or this essay (SP:PS1VT) Mm. (SP:PS1VS) to write, or something to buy in town, or whatever you know (SP:PS1VT) Mm. (SP:PS1VS) They thought it over and they've worked out, and they're not gon na come. (SP:PS1VT) Right. (SP:PS1VS) Now of course these sort of situations do cause a few problems, because, or can do,
because erm the extroverts expect everybody to share, you see. Erm and of course if you had half a dozen students, and two of them were extroverts, and they both wanted to go, and they both said, Yeah. Terrific idea. And maybe the other four wouldn't like it at all. But if (SP:PS1VT) Mm. (SP:PS1VS) they weren't actually saying anything, then probably the plan would sort of go ahead and, and (Davies, 2004, G3Y)

The interlocutors in this exchange are apparently discussing the possibility of a meeting or event where one or more of the participants chooses to leave prematurely. They imagine that an extrovert’s strategy would be to fabricate some excuse, and to expect others to follow along. The details are not clear but it seems to be the case that there would be a problem if the others did not follow along. The contrast implicit in Speaker VS’s use of emphatic “do” is between the ‘situation causing problems’ and an alternate scenario where the strategy proceeds as planned. The inference represented by the latter half of the contrast is encouraged by Speaker VS’s description of the extrovert’s strategy, which is initially put forward as a viable option.

5. In terms of lectures, there was a fairly normal distribution. That is that most of you felt they're okay, some of you felt they were quite good and some of you felt they were quite bad. They distributed normally quite well. Erm, some specific points that came up in the comments that you made. Er, firstly that I'm too fast and and er a number of people have said this to me so er and it's true (laugh) so (laugh) I don't wish to elaborate further on that (laugh). However, I do respond well to requests to slow down so (SP:JT0PSUNK) (unclear) (SP:PS4SG) from all courses, so do erm make sort of gestures or something. Erm but okay. The point a lot of you made was that the course does seem to be very based on one text, the Arnold text and you're quite, well you're almost right about that. Ha-- about half of you thought that was a good thing and about half of you thought it was a bad thing. Erm th-- the general idea is (Davies, 2004, JT0)

The speaker, presumably a university professor, is reviewing the feedback he received from the students on the quality of his lectures, and exploring ways to improve his lectures on the basis of those comments. The contrast intended by the use emphatic “do” is between ‘the professor responding well to requests to slow down’, and the suggestion that the professor is incapable of slowing down his lectures or, more directly, that he would not “respond well” in the event that there were requests to slow down. The assumption that the professor is unable to slow down his lectures is one natural inference arising from the fact that the professor, as he himself admits, lectures too fast. The other inference, which figures more directly in the contrast, that he does not respond well to requests to slow down, is a
second-order inference arising from the first one. This chain of inferencing is a normal feature of fluent speech, and the case is no different with the emphatic “do”.

6. some further work. The disputes procedure, that has been in place for some time, and enables us to resolve disputes locally, if they can not be resolved locally, then they are referred up through the management systems. In the case of practitioners, who are now included in the disputes procedure, that's, that is then referred up to the Family Health Service Authority. The major item for work this year is the Department of er, sorry the District Health Authority's responsibility to providing specialist palliative care. Now the responsibilities for terminal care do rest with both authorities, er, the original D S S er funding that was transferred, did include an element for terminal care in nursing and residential homes. Although the ex-- the special allowance was actually withdrawn, but nevertheless, the responsibility for generally dealing with it, was picked up by the local authority. However the specialist provision, the specialist palliative care remains the responsibility of the District Health Authority, and they have received extra funding for hospice work this year. A major piece of work (Davies, 2004, J3R)

The topic of this excerpt seems to be the delegation of various responsibilities in the health care industry. After establishing that the disputes procedure is ultimately under the jurisdiction of the District Health Service Authority, the speaker turns to the status of specialist palliative care. To clarify the status of specialist palliative care, the speaker finds it helpful to distinguish this case with the closely related one of terminal care. The contrast evoked by the emphatic “do” is between “responsibilities for terminal care . . . rest[ing] with both authorities [the District Health Authority and the Family Health Service Authority]” and a situation where those responsibilities rest with either one authority or the other. The suggestion that one authority might be exclusively responsible for terminal care is an inference traceable to the previous utterances that established the Family Health Service Authority as the sole department in charge of the disputes procedure, and quite likely from the audience’s previous knowledge that some functions are assigned to one and only one authority.

7. course. Now there are a lot of supporters, er are they going to be er, is there going to be room for everybody? (SP:PS67H) I don't think so, but it's going to be really interesting this time because we're going to actually, actually see Kevin Maxwell -- hope he doesn't wear that cloth cap, it's not really him, he's a very young man. But we've just got to wait and see, I mean, I know the sort of questions they're going to ask, and they do deserve to hear some answers, I promise you that Jane. (SP:PS63K) Hmm well you've been giving a few answers yourself over the last few weeks. er I mean, they, they don't call these meetings for nothing, have you anything, any idea what might be er brought up at the meeting? (SP:PS67H) Well obviously financially the club has gone downhill, I've no doubt Mark Lawrenson's name will be mentioned
again, Dean Saunders. The supporters are not happy with that, they (Davies, 2004, KRT)

The speakers are speculating about what will transpire at an upcoming meeting being held for an unnamed purpose. They predict that a large number of “supporters” (for some unnamed cause) will be in attendance, and will be asking questions. The emphatic “do” is employed in the sentence “I know the sort of questions they’re going to ask, and they do deserve to hear some answers” to contrast the proposition that “[they] deserve to hear some answers” with its opposite, that ‘they don’t deserve to hear some answers, or have their concerns addressed’. The contrast is implicit because the latter proposition is an inference. Assuming that the issue is a contentious one (suggested by the use of the word “supporters”), it seems reasonable to assume that at least some parties at the meeting would be unwilling or hesitant to answer their questions.

8. Alright. (SP:PS4PW) So certain areas can have delivery Saturday. (SP:PS4PR) What are the things apart from the value of the item ones in erm (pause) you're right (pause) Phil, by the way I'm not saying you're wrong. (SP:KGUPSUNK) The urgency of the package. (SP:PS4PW) Convenience. (SP:KGUPSUNK) If a restaurant needed a microwave cos they're open all weekend (unclear) they couldn't wait till Monday. (SP:PS4PR) Well what about erm (pause) working weeks (pause) for industry and (pause) commerce. (SP:KGUPSUNK) A lot of (SP:KGUPSUNK) Six (SP:KGUPSUNK) a lot of factories (SP:KGUPSUNK) Yeah. (SP:KGUPSUNK) do open on a Saturday (SP:PS4PS) That's right. (SP:KGUPSUNK) and they don't actually do collections, they don't actually do, do any production. (SP:PS4PR) What do they do? (SP:KGUPSUNK) They do all the (SP:KGUPSUNK) Cleaning. (SP:KGUPSUNK) clean up on a Saturday. (SP:PS4PR) Right. (SP:PS4PW) I've put that down. Mhm. Put that (SP:PS4PR) Right. (SP:PS4PW) down. (SP:PS4PR) Mm mm mm. (SP:PS4PW) Cos (SP:PS4PR) That's what we want. Obviously, it's again, it's control so, so (pause) (Davies, 2004, KGU)

The working schedules of various sectors of the economy are being discussed for some unknown reason. The speakers first try to reason out why a delivery service might operate on Saturdays. The speakers consider the schedule for “industry and commerce”. The contrast is between “factories . . . [being] open on a Saturday” and the opposite, ‘factories not being open on Saturday’. This use of emphatic “do” is implicitly contrastive because the latter proposition is not stated explicitly, but is rather an inference coming from the appearance in the discourse of “working weeks”, or from the topic in a more general sense. The possibility of a factory being closed on a Saturday is in the background of the speaker’s
assertion and so the emphatic “do” effectively sets up a contrast between that state of affairs and the actual one of factories being open.

9. (SP:G4FPSUNK) …wife was earning, working or had a pension and did use her allowances, but the husband was paying forty percent, the same switch of investments, transferring income to the wife, even though it was chargeable at twenty percent or twenty five, was relieving the husband's forty percent. Or down the scale again, the husband could be paying twenty five percent and the wife twenty percent, and they could switch investments between the two. Or between wife and husband, we tend to think only of transfer from husbands to wife, but er we do meet quite er a w-- er ladies who've got quite high earnings and they themselves are paying forty percent in which case they should make sure that any investment income of theirs is transferred to the husband, so as to get the, to either use up allowances that are not being used at all because of absence of the income, or to benefit from these different rates of tax. (SP:G4FPSUNK) They might run off and take it with them. (SP:G4FPSUNK) (laugh) (SP:PS1WM) Well this is the risk you have (Davies, 2004, G4F)

In this speech situation an economist or financial advisor is explaining a strategy that couples have the right to pursue if they want to minimize their tax burden. Very roughly, it seems that the couple will benefit financially if the “investment income” of the higher-earning spouse is “transferred” to the lower-earning spouse. The contrast intended by the emphatic “do” is between the speaker “meet[ing] . . . ladies who’ve got quite high earnings”, and what is taken to be the normal case, of ‘encountering couples where the wife makes modest earnings [or at least less than her husband]’. The unstated (latter) half of the contrast, aside from being generally assumed, is an inference made on the basis of the previous propositions invoking talk of the differential income of husbands and wives. The inference is most strongly supported by the immediately preceding proposition, “we tend to think only of transfer from husbands to wife.
CHAPTER 4

A CLASSICAL GRICEAN ANALYSIS OF THE IMPLICITLY CONTRASTIVE EMPHATIC “DO”

On our conservative picture of semantics, the implicitly contrastive emphatic “do” is an anomaly. It makes no difference to the propositional content of a sentence yet it seems to carry a stable and definite meaning. These peculiar varieties of meaning that are not part of the locutionary content of a sentence were systematically studied by Grice (1975) in his landmark essay, “Logic and Conversation”. Grice sought to bridge the gap between logical languages and natural languages by affirming the existence of implicatures, non-literal aspects of meaning that are nonetheless rule-governed and easily explained on the assumption that speakers are acting rationally. Implicatures are what is meant by the speaker but not said, where “what-is-said” is taken to be the literal content of the speaker’s utterance.

*Conversational implicatures* are the major class of implicatures, and are proposed to explain the phenomenon where the speaker says something X, but means, and is understood as saying, something entirely different, Y. As briefly mentioned in Section 2.2, conversational implicatures are inferred by the hearer as what must be supposed to maintain the assumption that the speaker is following the Cooperative Principle.29 One straightforward example is “There’s the door”, spoken to an offending party, to mean something like, “I want you to leave”. Grice (1975) offered four criteria to verify that a given implicature was a conversational implicature, and simultaneously to rule out the hypothesis that it is a conventional implicature, the only other class of implicatures.30 To qualify as a conversational implicature, the implied meaning must be *calculable, or “capable of being worked out”* (Grice, 1975, p. 50). Whether or not the implicature is understood intuitively

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29 One problem with a Gricean analysis is that it presupposes that we know the normative content of the implicature. This criticism may be justly leveled against us when we state the content of the implicature carried by the implicitly contrastive emphatic “do” in advance of our analysis (§ 4.1)

30 He actually offered six, but two of them are unhelpful restatements of the fact that an implicature is not carried by “what-is-said” (Grice, 1975, p. 58).
and on the spot, it must be undergirded, in principle, by an “argument” that spells out the details of its rational derivation from the Cooperative Principle (Grice, 1975, p. 30). A second defining feature of conversational implicatures is non-detachability. According to this criterion, the utterance carrying the conversational implicature should not be expressible in an alternate way that preserves its literal content but removes the implicature. Looking at our example, it seems clear that any other way of stating the literal content of “There’s the door” (e.g. “The door is five paces to your right”; “The customary exit is in that direction”; “You will find the egress if you turn 90 degrees clockwise”) would prompt the same rationalizing effort and arrive at the same conclusion.

The third cardinal feature of conversational implicatures is cancellability. This refers to the fact that the speaker has the option of explicitly canceling the implicature “by the addition of a clause that states or implies that the speaker has opted out”, or (more theoretically), by imagining a context in which the implicature no longer holds (Grice, 1975, p. 57). The implicature in our working example will meet the criterion of cancellability if we imagine a scenario where the speaker and hearer, in the midst of their apparently confrontational encounter, both hear a knock on the door. The hearer, knowing that he is responsible for any door-related activities (by some prior agreement), expresses confusion as to where the door is located (perhaps because he has developed an inner ear problem). The speaker then indicates the location of the door so that the hearer may dutifully open it. The fourth feature of conversational implicatures is that they often, but not always, exhibit indeterminacy, which is to say that the hearer cannot be sure that he has made the correct implicature on the basis of the speaker’s utterance, and indeed, there may be no single identifiable implicature that the speaker might affirm, retrospectively, that he had intended.

31 Grice did not say whether this reasoning was reflected in psychological processes. In this respect, Relevance theory stands as an improvement.

32 An exception is found in some cases of conversational implicature “where some special feature of the substituted version is itself relevant to the determination of an implicature” (Grice, 1975, p. 58). These tend to be implicatures arising from the Maxim of Manner (e.g. “Be Brief”)

33 This analytical move may be difficult or counterintuitive for some to grasp because it requires discounting the speaker’s apparent annoyance with the hearer, suggested by the utterance “There’s the door”. We ask that the reader have an open mind.
Grice’s study also introduced the idea of *conventional implicatures*, which have been hotly debated as a genuine class of phenomena, but so far appear to have some staying power (Bach, 1999). Rather than being inferred from “what is said” in conjunction with the cooperative principle and maxims, they are “attached by convention to particular lexical items or expressions” (Levinson, 1983, p. 127). A conventional implicature is a separate proposition with its own truth value (Grice, 1961); the speaker is committed to the truth of that proposition as much as he is committed to “what-is-said” (Grice, 1975, p. 25); however, the truth of the utterance is not affected by the truth of the implicature (Grice, 1975, p. 25-26). Grice’s classic examples are the contrast carried by “but” (Grice, 1961) and the consequence relation carried by “therefore” (Grice, 1975); but conventional implicature analyses have been proposed for particles like “even” (Kempson, 1975), “yet” (Wilson, 1975), and “effortful” verbs like “failed (to)” (Karttunen & Zaenen, 2005). Conventional implicatures are generally defined by opposition to conversational implicature—they exhibit non-calculability, detachability, and non-cancellability, but not necessarily determinacy.

In what follows we will avail ourselves of the apparatus developed in “Logic and Conversation”, and put forward a hypothetical Gricean analysis of the emphatic “do”. To the best of our knowledge, there has been no dedicated pragmatic analysis of the emphatic “do”. Having a standard Gricean analysis of the emphatic “do” on the table will allow us to make comparisons with the competing analysis given by Relevance theory, without necessarily announcing one or the other as victor. The comparison will also illuminate crucial differences between the Gricean and Relevance Theoretic approach. At the other end of the spectrum, the Gricean analysis that we produce may be compared with current or future semantically-oriented analysis of the emphatic “do” which may have some part to play in adjudicating the semantics/pragmatics border. For our present purpose, we adopt Grice’s attitude and underlying commitments—that is, we will represent Grice in his original form before the elaborations and modifications put forth by his successors (Horn, 1984; Levinson, 2000). This should not be taken as an implicit endorsement of his views.

Of course, this treatment will only be admissible if we first accept that semantic treatments are not a viable option. This is disputable—there have been numerous developments in recent years to build contextual factors into semantic analyses, going under the headings of “File Change Semantics”, “Situation Semantics”, or “Discourse
It is at least clear that no “formal” semantic analysis is up to the task, so we are left with a choice between (a) pursuing increasingly sophisticated semantic theories, or (b) looking to pragmatics for a way out. As should be obvious, we advocate the pragmatic approach, but we add that the emerging semantics approaches look promising.

In the first stage of the analysis, we will describe the relevant “Gricean” features of the phenomenon from an impartial standpoint. Since the categories of conversational and conventional implicature are mutually exclusive with respect to the proposed Gricean criteria (for the most part), applying those criteria to the implicature carried by the emphatic “do” should allow us to make an informed judgement about its status as conversational or conventional. In the second stage, we will assess the arguments for the conventional implicature hypothesis and those of the conversational implicature hypothesis and find that, all things considered, emphatic “do” fits Grice’s (1975) criteria for conventional implicature better.

4.1 A GRICEAN APPRAISAL OF THE EMPHATIC “DO” IMPLICATURE

Let us first see how the implicature given by the implicitly contrastive emphatic “do” fares with respect to Grice’s proffered criteria of calculability, detachability, cancellability, and indeterminacy, while suspending judgement on its conversational vs. conventional status. We will use Example 6 from Section 3.4 (reproduced below) to illustrate our claims in both the descriptive (§ 4.1) and evaluative (§ 4.2) stages of the analysis. Any one of our collected examples will support an equally lucid analysis, but we’ve selected this one in particular because it describes institutional structures of which the internal relations are especially neat and secure.

some further work. The disputes procedure, that has been in place for some time, and enables us to resolve disputes locally, if they can not be resolved locally, then they are referred up through the management systems. In the case of practitioners, who are now included in the disputes procedure, that's, that is then referred up to the Family Health Service Authority. The major item for work this year is the Department of er, sorry the District Health Authority's responsibility to providing specialist palliative care. Now the responsibilities for terminal care do rest with

34 and we admit that the fact that emphatic “do” codes for something like “contrastiveness” makes it amenable to a semantic analysis
both authorities, er, the original D S S er funding that was transferred, did include an element for terminal care in nursing and residential homes. Although the ex--the special allowance was actually withdrawn, but nevertheless, the responsibility for generally dealing with it, was picked up by the local authority. However the specialist provision, the specialist palliative care remains the responsibility of the District Health Authority, and they have received extra funding for hospice work this year. A major piece of work (BNC, 2004, J3R)

For ease of reference, let us state the content of the implicature as “q contrasts in some way with p” (where ‘q’ is the proposition containing the emphatic “do” and ‘p’ is a proposition inferred from another proposition ‘o’ appearing earlier in the discourse). Stating the content of the implicature in this way does not commit us to one hypothesis (e.g. conversational) over the other (e.g. conventional).

There is a clear case for saying that the implicated meaning of the emphatic “do” is calculable. In this case, the calculation, from the perspective of the hearer, might go as follows.35 The speaker has uttered a sentence with an emphatic “do” construction: “Responsibilities for terminal care do rest with both authorities”. The addition of the emphatic “do” apparently violates the maxim to “Be brief” (part of the supermaxim of Manner). What needs to be supposed to preserve the assumption that she is observing the maxims and the CP? The emphatic “do” seems to add a restatement, or an insistence of truth, to its containing proposition. He could not be doing this unless he thought that “[Responsibilities] do not rest with both authorities”. He knows (and knows that I know that he knows) that I can see that the supposition that he thinks that “[Responsibilities] do not rest with both authorities” is required. He also knows (and knows that I know that he knows) that I can see that that the supposition “[Responsibilities] do not rest with both authorities” is inferrable based on the earlier discourse invoking talk of departmental responsibilities in general.36 He has done nothing to stop me thinking that he intends me to think, or is at least willing to allow me to think, that “[Responsibilities] do not rest with both authorities”. And so he has implicated that “[Responsibilities] do not rest with both authorities”.

35 We have stayed close to the original model of Grice’s explanation, since it has proved to be so enduring (Grice, 1975, p. 50).

36 this is an addition to Grice’s template
Second, the statement can be expressed in an alternate way that preserves the literal content of the utterance but removes the conversational implicature. In other words, it is detachable. In this case, we could simply remove the emphatic “do”. Removing the emphatic “do” would have no effect on the literal meaning of the utterance but would effectively remove the implicature.

With respect to our third criterion of cancellability, the implicature is indeed cancelable, but the argument for saying so is rather weak. In our chosen example, we can imagine the speaker appending a qualification to the effect of “. . . but I don’t mean to imply that there is anything unusual or unexpected about the responsibilities being divided in this way”. While this formulation may sound unnatural or awkward, it is not “unintelligible” by any means (Grice, 1961, p. 129).

Finally, the implicature triggered by the emphatic “do” exhibits indeterminacy (Grice, 1975, p. 58). Indeterminacy refers to the fact that the hearer cannot be sure that he has made the correct implicature on the basis of the speaker’s utterance, and indeed, there may be no single identifiable implicature that the speaker might affirm, retrospectively, that he had intended. It seems more psychologically realistic to suppose that, at least in some cases, emphatic “do” calls up a range of closely related contrasts, some more strongly intended and some weakly. In consideration of the fact that the hearer is sometimes required to go through a labyrinthine inferencing process to identify the implicatures, this would conceivably serve as a safeguard or precaution to ensure that the hearer retrieves some approximation of the implicature. Communication would then be successful if the hearer grasps only a minimal number of these.

4.2 CONVERSATIONAL VS CONVENTIONAL IMPLICATURE

Now that we have isolated the “Gricean” features of the emphatic “do” implicature and seen whether the implicature has or lacks each of the relevant properties, we will move from the evidence to a conclusion regarding the implicature’s status as conventional or conversational, the only two species of implicature recognized by Grice.

4.2.1 Calculability

The fact that the added meaning conveyed by the emphatic “do” appears to be calculable provides support for the view that the implicature in question is a conversational
implicature. As before, the propositional form of the putative implicature would be that, “q contrasts in some way with p” (where ‘q’ is the proposition following the emphatic “do” and ‘p’ is a proposition inferred from another proposition ‘o’ appearing earlier in the discourse).

But I want to argue that the observed facts are equally compatible with a conventional implicature reading, and that, furthermore, when properly considered, they in fact provide more robust support for a conventional implicature reading. My argument is as follows: To any astute observer, the form of the implicature can be put in a general statement that will hold true across all instances of the emphatic “do”— (as above) “q contrasts in some way with p” (where q is . . . ). Given that the implicature displays this kind of constancy and predictability, it seems more economical to suppose that it is attached to the meaning of emphatic “do” (and so is conventional). It’s of course possible to imagine a conversational implicature analysis that calculates the implicature on a case by case basis, but the conventional implicature analysis is a more parsimonious, and hence desirable, one.

But even once we accept that the content of the emphatic “do” implicature can be put in the form of a general statement, an opponent might object that it involves a number of variables that cannot be derived by any rule from the utterance or its context, and so it must be conversational after all. For the hearer to identify the proposition q, he must search the context for a probable candidate, and this relies on factors of subjective judgement. Indeed, the hearer might sometimes be expected to make elaborate second- or third- order inference to discern the contrasting implicature. In defense of his claim, the conventional implicature theorist would only need to point to established cases of conventional implicatures like “even” or “but”, which standardly include unspecified elements in their formulation.37

4.2.2 Detachability

We saw in Section 4.1 that the implicature carried by emphatic “do” shows evidence of being detachable. However, as indicated in footnote 32, this feature of “detachability”

37 Horn (2004) formalizes the implicature induced by “even” in “Even Ken knows it’s unethical” as “Ken is the least likely [of a contextually invoked set] to know it’s unethical” (p. 3). Even more perspicuously, Karttunen and Peters (1979), in their attempt to couch Grice’s theory of implicatures in the language of formal semantics, end up with a thesis that “even” in “Even Bill likes Mary” gives rise to an Existential Implicature: “There are other X under consideration besides Mary such that Bill likes x”, and a Scalar Implicature: “For all x under consideration besides Mary, the likelihood that Bill likes x is greater than the likelihood that Bill likes Mary” (p. 26).
leaves it open whether the implicature is a conventional implicature, or a generalized conversational implicature arising from the supermaxim of Manner (in this case the Maxim “Be Brief”).

The same argument from uniformity and predictability employed in the previous section will apply here, bearing out Grice’s intuition that detachability and cancellability are “really... twin idea[s]” (Grice, 1961, p. 128). Since the implicature, in all its complexity, can be put in a general statement that will hold true across all instance of the emphatic “do”, there is reason to think that it is attached by convention to the meaning of the emphatic “do”.

4.2.3 Cancellability

In Section 4.1 we concluded, with some reservations, that the emphatic “do” implicature appears to be cancelable. Thus, if we are being charitable, we ought to accept it as an admissible argument in support of the conversational implicature thesis. But the argument is by no means decisive. Grice was apparently aware of the difficulty inherent in applying the cancellability test to certain cases, and in particular of applying the reverse of the test to conventional implicatures. As he mentions in connection with the implicature of contrast carried by “but” in the sentence “She is poor but honest”, there is a sense in which the implicature is non-cancelable insofar as saying "She is poor but she is honest, though of course I do not mean to imply that there is any contrast between poverty and honesty" would seem “a puzzling and eccentric thing to have said” (Grice, 1961, p. 129). This seems to imply that “but” is a conventional implicature, as indeed he maintains elsewhere (Grice, 1989, p. 88). But he goes on to say in “The Causal Theory of Perception” that the eccentric clause performing the cancellation is not “unintelligible”, and more importantly not contradictory, seeming to suggest that “but” qualifies as a conversational implicature (Grice, 1961, p. 129). The situation is much the same with the emphatic “do”. Cancellibility may have been evidenced by the example above, but applying this test to our other examples yields less convincing results. All we can say, in view of the foregoing, is that this test is inconclusive in the present case.

4.2.4 Indeterminacy

Finally, the criterion of indeterminacy speaks in favor of the implicature being a conversational implicature. We admit that this is a problem for the conventional implicature
thesis. In his “The Myth of Conventional Implicatures”, Bach (1999) made a similar observation that the implicature carried by “but”, in all other respects a conventional implicature, exhibits indeterminacy, but his solution is to reject the notion of conventional implicature altogether (p. 343-344). One redeeming factor for the conventional implicature hypothesis, in the face of this apparent counter-evidence, is that Grice (1975) never explicitly says, as with calculability and non-detachability, that the lack of indeterminacy (in other words, determinacy) indicates the presence of a conventional implicature, so it is quite conceivable that some conventional implicatures would display the quality of indeterminacy. Indeterminacy is perhaps an unavoidable consequence of the vagueness of human communication in general. In the next section we will show how a Relevance-theoretic analysis provides a satisfactory explanation of the indeterminacy of implicatures.

Despite the partial evidence in favor of a conversational implicature analysis, we must conclude that, on balance, the conventional implicature reading has more to recommend it. Further similarities between the emphatic “do” and the constructions standardly classified as conventional implicatures provide added support by way of argument by analogy.

The Gricean analysis is a valid one, as long as we accept Grice’s distinction without question. But on closer scrutiny, the Gricean notion of a conventional implicature seems ill-defined. The belief that there really is such a thing as conventional implicature has been steadily waning, as the concept “has been subject to... attempts to reduce it to semantic entailment, conversational implicature... presupposition, and more recently, to part of what-is-said, [and] part of tacit performatives” (Huang, 2007, p. 57), and it has even been denounced as “a myth” (Bach, 1999). Conventional implicatures seem to be the awkward result of believing in (on the one hand) implicatures, and (on the other), conventional meaning, both of which are theoretical constructs only known to a small community of linguistics and philosophers. This motivates us enough to look for an alternate account of the phenomenon.
CHAPTER 5

A RELEVANCE-THEORETIC ANALYSIS OF THE IMPLICITLY CONTRASTIVE EMPHATIC “DO”

In this section we undertake a Relevance Theoretic analysis of the emphatic “do” construction. Our immediate aim is to give a proper linguistic account of the meaning and function of emphatic “do”, whatever this might entail. As an ancillary benefit of the analysis, the case of emphatic “do” shall give us an opportunity to evaluate the theoretical validity of Relevance Theory, to clarify its commitments and assumptions, and to introduce the RT style of analysis to a wider audience.

5.1 EMPHATIC “DO”: AN (APPARENT) FAILURE OF THE PRINCIPLE OF RELEVANCE?

Let us frame our analysis with a question that takes very little for granted: Does emphatic “do” have a communicative import, and if so, what is it and where does it come from? We will use the same example from Section 4 to illustrate our analysis (reproduced below):

some further work. The disputes procedure, that has been in place for some time, and enables us to resolve disputes locally, if they can not be resolved locally, then they are referred up through the management systems. In the case of practitioners, who are now included in the disputes procedure, that's, that is then referred up to the Family Health Service Authority. The major item for work this year is the Department of er, sorry the District Health Authority's responsibility to providing specialist palliative care. Now the responsibilities for terminal care do rest with both authorities, er, the original D S S er funding that was transferred, did include an element for terminal care in nursing and residential homes. Although the ex--the special allowance was actually withdrawn, but nevertheless, the responsibility for generally dealing with it, was picked up by the local authority. However the

38 There may be other ways of asking the question. We’re going to assume compositionality of meaning (i.e. that emphatic “do” carries its own meaning apart from the sentence). This may be debated by some theorists (a minority) who would hold that meaning is irreducible and holistic. These include the Indian linguist Bhartrhari, for whom “the sentence could be considered as a single undivided utterance conveying its meaning ‘in a flash’ . . . [or as having a] semantic unity” (Robins, 1997, p. 173), and the English “Contextualists”: Malinowski, Gardiner, and Firth (Nerlich & Clarke, 1996).
specialist provision, the specialist palliative care remains the responsibility of the District Health Authority, and they have received extra funding for hospice work this year. A major piece of work (Davies, 2004, J3R)

(Let us call the sentence containing the emphatic “do” Sentence Z [Zeta], corresponding to this example’s position as #6 in Section 3.4).

Recall the process of utterance interpretation as conceived under RT. A speaker directs an utterance to her interlocutor. The utterance is an act of ostensive communication, which aims to satisfy an informative intention and a communicative intention. The purely linguistic properties of the speaker’s utterance are only sufficient to determine a rudimentary logical form, which is sent through the language input module to be decoded. The hearer’s inferential task is to develop the assumption schemas (or blueprints provided by the logical form) into a hypothesis of the the informative intention, or “set of assumptions I”. To do this, she processes the information in an “initial context”, consisting of the immediately preceding discourse, The context is expanded strategically to maximize contextual effects. Her goal is to find the hypothesis that delivers the most new information gained from the joint consideration of input and context, without undue processing effort. In capsule form, “To recognize the communicator’s informative intention, the addressee must discover for which set I the communicator had reason to think that it would confirm the presumption of relevance” (Sperber & Wilson, 1995, p. 165).

For the sake of argument, let us suppose that the hearer, on hearing Sentence Z, only processes the “proposition expressed” (“what is said”, the truth-conditional content), to which the emphatic “do” makes no contribution.39 In the present context, this should generate some substantial cognitive effects, defined as a useful change to her representation of the world. These might include (1) the addition to the hearer’s knowledge store of the fact that terminal care responsibilities rest with both the District Health Authority and the Family Health Service Authority, (2) (if the hearer is a member of either of these departments), the cognizance that she has some additional duties to familiarize himself with, and/or (3) the

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39 The terminology of “proposition expressed” is not adaptable to Relevance Theoretic notions. Relevance Theory does not draw the line between semantics and pragmatics in the same way. The distinction that maps onto the semantics/pragmatics divide is not between what is said (proposition expressed) vs what is implicated, as in Grice, but rather— between what is decoded vs what is inferred. Nevertheless, let us assume, for ease of exposition, that the proposition expressed is equivalent to what is decoded.
assurance that, if she ever found himself needing terminal care, she would be in good hands, etc. The recognition of some or all of these cognitive effects would be sufficient to verify part (a) of the presumption of relevance, namely that “the set of assumptions I which the communicator intends to make manifest to the addressee is relevant enough [emphasis added] to make it worth the addressee’s while to process the ostensive stimulus” (Sperber & Wilson, 1995, p. 164). Laying hold of the proposition expressed thus goes some way towards recognizing the informative intention, or interpreting the utterance.

However, if the only cognitive effects derived are derived on the basis of the proposition expressed (or “what is said”), the presumption of optimal relevance as a whole is not confirmed. This is true regardless of how rich those cognitive effects might be. We can diagnose the problem as a failure of part (b) of the presumption of relevance, that “the ostensive stimulus is the most relevant one [emphasis added] the communicator could have used to communicate I”, understood with respect to the emphatic “do” (Sperber & Wilson, 1995, p. 164).40 In more generic terms, a speaker who is presumed to be conforming to the [communicative] principle of relevance should be expected to “encode just what is necessary to ensure that the inference process arrives as effortlessly as possible at the intended meaning” (Carston, 2000, p. 9). The emphatic “do”, a non-negligible constituent of the sentence, is perceived by the hearer as an ostensive communicative stimulus. As such, it is automatically processed.41 If the entire relevance of the utterance depended on the content of the proposition expressed, the speaker would have saved the hearer the unnecessary processing effort (a determinant of relevance) by omitting the emphatic “do”.

By producing the emphatic “do”, the speaker prevails on the hearer to expend the effort to process it. If the presumption of relevance is to be maintained, there must be some further contextual effects intended by the speaker that offset the extra processing costs

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40 Part (b) of the presumption of relevance can either be falsified, if it is “manifest that communicator could have used a more relevant stimulus”, or it can be neither falsified not verified, if “the addressee does not know exactly what range of stimuli the communicator had at her disposal” (Sperber and Wilson, 1995, p. 164). The presumption of relevance as a whole can either be “clearly falsified (if either [part] a or [part] b is falsified), or confirmed but not verified (if [part] a is verified and [part] b is not falsified)” (Sperber & Wilson, 1995, p. 164). In the emphatic “do” example, we are investigating a case in which part (b) is (apparently) falsified.

41 “Spoken utterances, in one’s own native language, automatically impinge on the attention” (Sperber & Wilson, 1995, p. 153); a “phonetic signal will be automatically analyzed and assigned a semantic representation” (Sperber & Wilson, 1995, p. 177).
incurred from processing the emphatic “do”. As a logical point, the contextual effects cannot be from the proposition expressed, which is the same for Sentence Z with or without the emphatic “do”. One might think, if the contextual effects from the proposition expressed are augmented artificially towards satisfying the presumption of relevance (made more pressing with the addition of the emphatic “do”), they could offset the processing cost. But, as Sperber and Wilson make clear in another context, by uttering Sentence Z with emphatic “do”, which is truth-conditionally equivalent to the same sentence without emphatic “do”, the speaker “must have expected to achieve some additional contextual effects not obtainable from [the sentence without emphatic “do”]” (Sperber & Wilson, 1995, p. 196). Otherwise put, “the surplus of information” given in Sentence Z (i.e. the information imparted by the emphatic “do”) “must achieve some relevance in its own right” (Sperber & Wilson, 1995, p. 197, emphasis added).

What all of this shows is that the set of assumptions I—the informative intention—must include some as-yet-undefined component contributed by the emphatic “do”. We’ve established that it’s not part of the proposition expressed, but what exactly is the nature of this added meaning? This is precisely what is not agreed upon among pragmatists and semanticists. In the next section we will consider some possibilities that are consistent with Relevance Theory.

5.2 A RELEVANCE-THEORETIC ANALYSIS

Once we accept that emphatic “do” makes some pragmatic (or metadiscoursal) contribution to the utterance, there are various ways to specify the nature of this contribution within the framework of Relevance theory. Emphatic “do” might receive its formal expression in a higher-level explicature, it could be a type of procedural encoding, or it may play a role in the derivation of implicatures. Each of these hypotheses has some prima facie plausibility; below we will examine each of them in turn.

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42 Sperber and Wilson clarify this point in their discussion of an “indirect answer” to a question (example 33; see § 2.8).

43 This quote from Sperber and Wilson supports what I’ll call “compositionality of relevance”, which will be important later in our discussion of a higher-level explicature hypothesis (§ 5.2.2).
5.2.1 First Higher-Level Explicature Hypothesis

There is some reason to think that the import of the emphatic “do” is to be found in a “higher level explicature” (Wilson & Sperber, 1993, p. 5). RT’s higher level explicatures bear some resemblance to Grice’s “higher level speech acts”, but the theoretical commitments underlying each construct are fundamentally incompatible (Sperber & Wilson, 1995, p. 1-9).

Let us try to delineate the basic notion of a higher-level explicature. The criteria for a communicated assumption being an explicature, on the RT model, is that it is “a development of a logical form encoded by [the utterance]” (Sperber & Wilson, 1995, p. 182). This is sufficient to distinguish them from implicatures, which are “wholly pragmatically inferred” with no element of decoding (Carston, 2000, p. 3). The proposition expressed is designated as the “base-level explicature” (or basic explicature), often pragmatically enriched, but staying close to the utterance’s logical form (Carston, 2000, p. 10).

“Higher-level explicatures” were postulated by Wilson and Sperber (1993) to accommodate aspects of meaning, chiefly propositional and speech act attitudes, that “encode concept[s] featur[ing] in some representation derived by the hearer”, but where that representation is not the proposition expressed (Carston, 2000, p. 11). Wilson and Sperber (1993) have extended this analysis to attitudinal and illocutionary adverbials, on the grounds that they have conceptual content not realized at the level of the proposition. Because emphatic “do” is plainly encoded in a logical form (i.e. it is syntactic), but its conceptual content is not realized at the level of the proposition expressed, it seems, on the face of it, to be eligible as a “higher level explicature.”

But there is good reason to arrest the further development of this hypothesis. Almost without exception, the constructions that have received successful higher-level explicature analyses—propositional and speech-act attitudes, attitudinal and illocutionary adverbials—encode concepts that have a straightforward relationship (of “nestedness”) with the proposition expressed and can be easily integrated into that structure via embedding. While this doesn’t rule out the possibility that higher-level explicatures could be adapted to other (i.e. non-nested) sorts of meaning, it is difficult to imagine how Sperber and Wilson would react to a novel application of that kind, or indeed whether they would approve. Since we can’t know Sperber and Wilson’s original intention in theorizing the device of the higher-
level explicature, we will withhold from making any wild speculations about its potential uses.

5.2.2 Meta-Representation or Reflection

But the formalization of emphatic “do” in terms of a higher-level explicature need not be so literal. It’s possible to engineer a more creative account that builds on the notion of higher level explicatures, without forfeiting its narrow applicability to speech act and propositional attitudes. The effect of contrast, rather than figuring in an explicature or implicature, may be a meta-representation resulting from the hearer’s evaluation of the speaker’s argument. If we stipulate that emphatic “do” codes for a higher-level explicature of the form “Speaker[insists that]...", this might signal to the hearer that the speaker insists on the truth of the proposition in which the emphatic “do” appears, and intends for the hearer to take this propositional attitude into consideration in evaluating the validity of his overarching argument as it unfolds over the discourse. It invites the hearer to weigh the evidence and decide, judiciously, whether he should abandon the previous assumption, as per the contradiction that ensues. This would be a case where, as presciently imagined by Carston (2000), “the higher-level explicature describing the speaker’s belief might be [a] contributor to the relevance of the utterance” insofar as it “could overturn or modify the hearer’s existing representation of the speaker’s [or, indeed, the hearer’s] beliefs” (p. 10).

This is an interesting proposal. However, this is not what is underlying the comprehension of the emphatic “do”, at least insofar as the contrastive effect is what we are seeking to explain.

This is why: Notwithstanding the lack of neurological evidence, both our intuitions and the considerations above (§ 4.2.1) attesting to the constancy and predictability of the implicature carried by emphatic “do” support the hypothesis that the contrast is “grasped immediately” and effortlessly, i.e. as a matter of psychological processing and not of meta-

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44 Propositional attitudes like “believes” and “regrets” have already been given convincing higher-level explicature analyses (Wilson & Sperber, 1993).

45 The same observations adduced in support of the conventional implicature analysis may be co-opted for a RT analysis. We can do so because the observation is pre-theoretical and not “theory-laden”, as it were.
representation or reflection (Lycan, 2008, p. 159, on conventional implicature). This obliges us to look elsewhere for an explanatory account of the contrastive effect.

That said, it would be absurd to deny that the emphatic “do” doesn’t carry an insistence on truth. Clearly this is part of the meaning and function of emphatic “do”, and we may certainly formalize it within RT as a higher-level explicature that generates contextual effects of its own. These contextual effects may include such things as (a) a change in the hearer’s attitude towards the speaker, or (b) an alertness on the part of the hearer to the consequences of having the responsibilities distributed in this way, but they cannot be the source of a spontaneously-understood contrastive effect.

It is a matter of preference whether we need to include a higher-level explicature of speaker’s insistence in our final analysis. Ideally, we would want to exclude it. In the remainder of this section I will argue that the higher-level explicature coding for speaker insistence is inessential to the relevance of emphatic “do”. To do this, first we have to step back a bit and get acquainted with Sperber and Wilson’s argument about what I will call the “main contributor to the relevance of [an utterance]”.

In their discussion of the derivation of implicatures (chapter 4, part 4), Sperber and Wilson imagine a scenario where Mary says to Peter (10d) “The dinner will get cold” (Sperber & Wilson, 1995, p. 176). They say that, based on background information (mutually manifest assumptions) this might make manifest the assumption, among other things, (10e) “Mary wants Peter to come and eat dinner at once”, and furthermore, that “it is mutually manifest that it is contextual implication (10e) which makes the whole utterance relevant enough to be worth Peter’s while to process” (Sperber & Wilson, 1995, p. 181). This indicates that it is consistent with RT that one or a set of assumptions made manifest by an utterance may be the “main contributor to the relevance [of that utterance]” (my term). The same is suggested by Sperber and Wilson’s remark that (10d) makes manifest the assumptions (4a) “Someone has made a sound”, (4b) “There is someone in the house”,

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46 This is compatible with the view that the contrast itself is conceptually represented.

47 The utterance is actually [tl getκ ld], which makes manifest a range of assumptions, including the explicatures (10b) “Mary has said that the dinner will get cold”, and (10d) “Mary believes that the dinner will get cold”, but we can ignore these complications and just focus on the proposition expressed, or (10d) (Sperber & Wilson, 1995, p. 176-177).
(4c) “Mary is at home”, and (4d) Mary has spoken, and (4e) Mary has a sore throat”, and “if some of (4a-e) are relevant to Peter, then Mary’s behavior may be relevant simply by making these assumptions manifest to him” (Sperber & Wilson, 1995, p. 177). Then, in my terminology, some of (4a-e) will be the “main contributor to the relevance of the utterance”. This notion bears elaboration, particularly with regard to the relationship between the proposition expressed and whichever assumption(s) is the “main contributor to relevance”, but in this short paper we only have space to lay the groundwork.

In a parallel fashion, I want to suggest that the contrastive effect, however that turns out to be represented (see below), is the “main contributor to the relevance of [the emphatic “do”]”. How do we know this? If, say, the hearer failed to grasp the contrast conveyed by a given instance of emphatic “do”, but did manage to grasp the speaker-insistence coded by the same emphatic “do” (and all its implicatures independent of contrast), then, more often than not, that hearer would feel the emphatic “do” to be infelicitous.

In sum, since the contrastive effect is the main thing that contributes to the relevance of the emphatic “do”, and since the contextual effects triggered by the insistence of truth are relatively trivial ones, we would be justified in excluding the higher-level explication encoding speaker-insistence from an RT formalism of said utterance.

5.2.3 Procedural Encoding

Many of the linguistic expressions that had been analyzed as conventional implicatures on Grice’s model have been reanalyzed as procedurally encoded information, and this leads one to suspect that emphatic “do” might likewise be a case of procedural encoding. Procedurally encoded information was first developed by Diane Blakemore (1987, 1988, 1989, 2000) as an innovative extension to the RT model. To arrive at this innovation, Blakemore reasoned as follows: if it is true that linguistic information serves as an input to inferential processes, then it seems reasonable to suppose, further, that it codes for both

48 assuming compositionality of relevance
49 Many linguists have continued the work in this vein (Blass, 1990; Hall, 2007; Schourup, 2011; Watts, 1988). Some have successfully applied it to orthodox “grammatical” phenomena like modals (Groefsema, 1995; Klinge, 1993; Papafragou, 2000) and tense (Haegeman, 1989; Zegarac, 1993).
50 As we have briefly mentioned in Section 2.7, Sperber and Wilson advance a theory of utterance interpretation in which spoken data first pass through a “language module” in the brain, whose function is to
(a) conceptual information that figures in the logical form, and for (b) procedural information, which gives directions on the inferential processes to be performed on the conceptual representations. Procedural encoding is advantageous from a linguistic processing point of view because it reduces the processing cost that a hearer incurs in computing the relevance of the utterance being interpreted. To illustrate her theory, Blakemore applied it to an analysis of discourse connectives, most notably “so”, and “but”. Consider the following utterance, from Blakemore’s (1989) “Denial and Contrast”:

(1) Susan’s not coming today. Tom is in town. (Blakemore, 1989, p. 22)

In interpreting the second sentence of this utterance, the hearer will take the first sentence as his context (Blakemore, 1989, p. 22). In this case, it is unclear whether the second sentence is to be interpreted as an implicated conclusion, as strengthening a previous assumption, or as weakening a previous assumption, corresponding to the three ways in which an utterance may have a contextual effect in a context (Blakemore, 1989, p. 22). However, the speaker can signal to the hearer how she intends her utterance to be taken by prefacing the second sentence with a discourse connective:

2a) After all, Tom is in town.
2b) So, Tom is in town. (Blakemore, 1989, p. 23)

As Blakemore (1989) explains, if the first sentence of (1) is followed by (2a), it will be interpreted as a premise. It contextual effects lies in the fact that it strengthens an already-held assumption by providing more evidence for it (Blakemore, 1989, p. 23). If the first sentence of (1) is followed by (2b), it will convey a relationship of logical consequence and thus be interpreted as a implicated conclusion, another sort of contextual effect (Blakemore, 1989, p. 23).

When the inferential relation between segments of a discourse is ambiguous, as in the above example, the speaker can facilitate the correct interpretation of her utterance by using discourse connectives to make “a particular set of contextual assumptions immediately accessible” (Blakemore, 1989, p. 21). Even when the inferential relationship is not ambiguous, a speaker presumably following the “Communicative Principle of Relevance” decode the semantic aspects of the utterance and deliver a semantic representation, or “assumption schema”. In the next (pragmatic) phase, the central processor draws on contextual information to develop the “assumption schema” into full hypotheses of the speaker’s informative intention.
will be motivated to use discourse connectives in order to reduce the processing effort necessary for the hearer to access contexts and derive contextual effects. In either case, when they appear in an utterance, the purpose of discourse connectives, or procedural encoding more generally, is to “guide the interpretation process by specifying certain properties of context and contextual effects”, rather than contribute anything substantive to the truth-conditional content of the utterance (Blakemore, 1989, p. 21).

We might consider the realistic possibility that the function of the emphatic “do” is to encode procedural information instructing the hearer to choose a particular context for utterance interpretation. Specifically, it directs him to look for (and make) inferences on the basis of previous propositions that contrast with the proposition introduced by the emphatic “do”. The emphatic “do” constrains the hearer’s context because it lets the hearer know that the proposition that the “do” introduces contradicts one or more of the inferences arising from one or more of the preceding propositions, and thus forces the hearer to abandon those inferences to maintain logical consistency in his belief system. As such, it represents the third way in which an utterance might generate contextual effects, by weakening, and sometimes canceling, a previously held assumption. The linguistic device of the emphatic “do” does not contribute to the truth conditional content of the utterance (nor does generate an implicature) but rather reduces the hearer’s processing effort by signaling exactly which context to select—viz. it tells him to look for inferences arising from previous propositions that might contrast with the “do” proposition. This analysis is attractive in view of the fact that the modal verbs have been given a procedural encoding analysis in recent years (Groefsema, 1995; Heagaman, 1989; Klinge, 1993). “Do” is, on some readings, a modal auxiliary, so we might expect it to follow the same principles of interpretation.

However plausible this hypothesis might seem, it cannot be right. If the result of the logical contradiction brought to light by the emphatic “do” is just the elimination of the previous assumption, then it follows that there are no conscious effects of contrast. We know from our first-hand experience that the contrast induced by the emphatic “do” is consciously apprehended—it is a conceptual representation. Indeed, this is what lends the emphatic “do” its characteristic rhetorical effect. Furthermore, the status of conventional implicature as a conceptual representation was affirmed by Grice (1961) in his “Causal Theory of Perception”, where he refers to the implicature conveyed by “but” as a “proposition” (p. 127)
As the procedural encoding account stands, it only reflects the mechanical operations of a knowledge system seeking to maintain logical consistency.\footnote{This claim may benefit from an elucidation in terms of the “subpersonal” vs “personal” functions of the brain, as explored by Carston (2002) with reference to Relevance theory, but we will not broach that subject here.}

It may be possible to salvage this analysis in the face of this objection by supposing that the simple act of eliminating the contradictory proposition generates further contextual effects, some of which may be implicatures, whence the conceptual effect of contrast. But the details of how such effects are generated are far from clear. In the next section we will show how there is an even better explanation of the meaning and import of emphatic “do” using RT principles.

\subsection*{5.2.4 Implicitly Contrastive Emphatic “do” as a Constraint on Implicature}

The failure of a procedural account points us towards a solution. Having assimilated the lessons that issue from an attempt at a procedural analysis, I want to argue that in the implicitly contrastive cases of emphatic “do”, the effect of contrast is an implicated conclusion, or a conceptual representation, generated in the familiar way based on RT principles (§ 2.8). But I want to argue, further, that the implicatures brought about by emphatic “do” constitute a special case of RT implicatures. They differ from the standard case in that the search for relevance is guided by a specific construction, in this case, emphatic “do”, which functions as a “constraint on implicature” insofar as it gives instructions on how implicatures (both implicated premises and conclusions) are to be derived.

The notion of a “constraint on implicatures” made its first appearance in the arguments of Blakemore (1989, 2000) in support of procedural encoding. As we saw above, procedural encoding is based on the insight that that lexical items can code information that give instructions on how the propositions in a discourse are meant to be processed—as conclusions, strengthenings of assumptions, or weakening of assumptions—when the utterance is ambiguous or if the speaker wishes to reduce the hearer’s processing effort. Sperber and Wilson (1995) themselves, in fact, endorsed the notion in “Logical Form and
Relevance”, where they reiterate that constraints on implicatures, originally only discourse connectives, “guide the search for intended contexts and contextual effects” (p. 21). But as far as we know, Sperber and Wilson never thought to extend the concept to cases of linguistic constructions that reliably generate implicatures (i.e. in rule-governed ways).52

This is how we believe implicature derivation predictably operates in the implicitly contrastive cases of emphatic “do”: The emphatic “do” construction directs the hearer to search the context for a proposition that might motivate the emphatic “do”. On a superficial reading, the “do” insists on the truth of the proposition that contains it (call this proposition $q$), for no apparent reason. This would only make sense against the background of a negation or contrast of proposition $q$. Therefore, the hearer knows he can reasonably expect to find a proposition that asserts the negation, or contrast, of proposition $q$ (call this proposition $p$) that would effectively justify the speaker’s insistence on the truth of proposition $q$. Because of the implicit nature of the contrast, this proposition will not already be given in the discourse.

Following the hint given by the suggested contrast, the hearer will alight on an already given proposition (call it proposition $o$) from which the negation or contrast of proposition $q$, proposition $p$, can be derived. Proposition $o$ is then recalled from memory to serve as a contextual assumption (specifically, an implicated premise), and proposition $p$ is inferred from proposition $o$. From the interaction of proposition $p$ and proposition $q$, the hearer derives the implicated conclusion, that “proposition $q$ contrasts with proposition $p$.” The implicature derived in this manner, let’s call it proposition $r$, justifies the processing effort demanded by the emphatic “do”, and so confirms the speaker’s presumption of relevance.53

Let us demonstrate this procedure as it applies to our examples:54

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52 Delahunty (2001) has offered an analysis of the “inferential” construction (“It’s that . . . ” and its variants) based on a loose interpretation of “constraints on implicature”, as we propose to do here. Our analysis differs from his in several important respects.

53 The pattern of inference that brings about the contrastive implicature in the case of implicitly contrastive emphatic “do” is eerily similar to Kehler’s (2004) proposed “coherence relation” of “Violated Expectation”, which states, “Infer $P$ from the assertion of $S_1$ and $Q$ from the assertion of $S_2$, where normally $P \rightarrow \neg Q$” (p. 247). Kehler’s project of identifying and giving support for the coherence relations of discourse is different from Sperber and Wilson’s project, but we believe the two sets of findings are not only compatible but complementary: Kehler’s typology of coherence relations and Sperber and Wilson’s Relevance Theory would be subsumed into a more encompassing theory of language cognition, to be discovered at some later date.

54 Single quotes indicate a proposition not expressed in the discourse; double quotes indicate a proposition (“sentence”) drawn from the discourse. An arrow is a logical deduction.
q. “Responsibilities . . . do [rest with both authorities]” calls up o. mention of District Health Authorities, etc in the discourse

o. mention of District Health Authorities, etc in the discourse (in conjunction with other background assumptions) → p. ‘Responsibilities of terminal care [rest with one authority or the other]’

p. ‘Responsibilities of terminal care [rest with one authority or the other]’ entails p’. ‘Responsibilities . . . do not [rest with both authorities]’

q. ”Responsibilities . . . do [rest with both authorities]” + p’. ‘Responsibilities . . . do not [rest with both authorities]’ → r. “Responsibilities . . . do [rest with both authorities]” contrasts with ‘Responsibilities . . . do not [rest with both authorities]’

note: p’ is an optional inference. It’s clear enough that p contrasts with q, but, for the sake of logical precision, we’ve spelled out the extra step.

q. “They do [grow big]” calls up o. “They ain’t very far apart”

o. “They ain’t very far apart” (in conjunction with other background assumptions) → p. ‘The vegetables don’t need much space to grow.’

p. ‘The vegetables don’t need much space to grow.’ entails p’. ‘They do not [grow big]’

q. ”They do [grow big]” + p’. ‘They do not [grow big]’ → r. “They do [grow big]” contrasts with “They do not [grow big]”

q. “They do [draw a line somewhere]” calls up o. “Criminals aren’t too bothered about the problems they cause . . . ”

o. “Criminals aren’t too bothered about the problems they cause . . . ” (in conjunction with other background assumptions) → p. ‘Criminals have no moral conscience’

p. ‘Criminals have no moral conscience’ entails p’. ‘Criminals do not [draw a line somewhere]’

q. ”They do [draw a line somewhere]” + p’. ‘Criminals do not [draw a line somewhere]’ → r. “They do [draw a line somewhere]” contrasts with ‘Criminals do not [draw a line somewhere].’

q. “Governments do [work reasonably well].” calls up o. “And erm, I’ll move those recommendations from the budget review subcommittee . . . ”

o. “And erm, I’ll move those recommendations from the budget review subcommittee . . . ” (in conjunction with other background assumptions) → p. ‘Governments are prone to inefficiency and mismanagement’

p. ‘Governments are prone to inefficiency and mismanagement’ entails p’. ‘Governments do not [work reasonably well].’

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55 The retention of our labeling discloses the fact that this account closely parallels the Gricean one. As we admit later on, Grice’s theory provides a satisfactory analysis of the emphatic “do”.

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q. “Governments do [work reasonably well].” + p’. ‘Governments do not [work reasonably well].’ → r. “Governments do [work reasonably well].” contrasts with ‘Governments do not [work reasonably well].’

q. “These sorts of situations do [cause a few problems]” calls up o. Speaker’s optimistic description of the extrovert’s strategy.
o. Speaker’s optimistic description of the extrovert’s strategy. (in conjunction with other background assumptions) → p. ‘The strategy proceeds as planned’
p. ‘The strategy proceeds as planned’ entails p’. ‘These situations do not [cause problems]’
q. “These sorts of situations do [cause a few problems]” + p’. ‘These situations do not [cause problems]’ → r. “These sorts of situations do [cause a few problems]” contrasts with ‘These situations do not [cause problems]’

q. “I do indicate there that the factors which make me believe that . . .” calls up o. Speaker Y9’s question to clarify why the first 3 sectors are better in terms of employment
o. Speaker Y9’s question to clarify why the first 3 sectors are better in terms of employment (in conjunction with other background assumptions) → p. ‘The speaker has no basis for this belief’
p. ‘The speaker has no basis for this belief’ entails p’. ‘The speaker has not properly indicated . . .’
q. “I do indicate there that the factors which make me believe that . . .” + p’. ‘The speaker has not properly indicated . . .’ → r. “I do indicate there that . . .” contrasts with ‘The speaker has not properly indicated that . . .’

and similarly for the remaining examples.

This analysis presents an improvement on the procedural encoding one because it takes due account of the intuition we have that the implicature of contrast is conceptually represented. Furthermore, once we establish that emphatic “do” induces a conceptual representation, we can easily allow for the generation of further implicatures on the basis of that conceptual representation.

There is reason to think that second- or third- order implicatures are made on the basis of the contrastive implicature. We intuitively feel that the effect of the speaker’s utterance does not stop at the suggestion of contrast, but that the contrast itself has myriad social and communicative effects. Sperber and Wilson (1995) accommodate this intuition in their theory when they say, “In real life, of course, [the implicature] would in turn be processed in a context in which it would have further contextual implications and other contextual effects” (p. 122). This iterative property of implicature generation would be precluded by a procedural account, and is not easily integrated into the Gricean model.
Furthermore, it gives us a stronger explanatory base on which to found the “conscious apprehension” of the contrast and its rhetorical effect, which we touched on in Section 3.3.

Generally speaking, the mode of explanation employed in Relevance Theory is more sophisticated than that of the Gricean paradigm. According to Relevance Theory’s proponents, the main failing of the Gricean analysis is that it “explains communication too poorly” (Sperber & Wilson, 1995, p. 32). While the Gricean pragmaticist can indeed claim to have reliable procedure for generating conversational implicature, “what [he] fail[s] to show is that on the same basis, an equally convincing justification could not have been given for some other interpretation that was not in fact chosen” (Sperber & Wilson, 1995, p. 37). A Gricean analysis is circular—it assumes that the analyst knows what would normally be implicated by an utterance before the analysis even gets started.

This problem stems, in part, from the fact that Grice’s framework is based on prescriptive or normative “maxims” of acceptable behavior, rather than scientifically respectable (i.e. naturalistic) concepts and properties. This begets an analysis that can do no more than gesture towards an informal comprehension procedure that is oftentimes incomplete and ad-hoc. It’s true that Relevance theory is similarly non-scientific, insofar as it relies on non-verifiable assumptions about cognitive processes, but Relevance theory has virtue of being potentially substantiated in biological (specifically, neurophysiological) terms.

The more thorough nature of RT explanation allows an RT-analysis to spell out more precisely the reasoning procedures that underlie an implicature. This is especially important for a case like the implicitly contrastive emphatic “do”, whose comprehension relies on the making of inferences that arise from previous propositions. In a Relevance-theoretic analyses, those inferences are clearly identified as having a distinctive role in utterance interpretation, so much so that they warrant having their own label: “implicated premises”. Grice’s theory of implicatures accounts reasonably well for the observed effects of the emphatic “do”, but it’s a point of weakness that he does not offer a specific mechanism or reliable procedure for constructing propositions inferentially. While Grice’s traditional account might be able to explain those functions of discourse markers that rely on explicitly stated propositions (e.g. “P, but Q” signals a contrast between P and Q), it’s less clear how it
might account for cases like emphatic “do”, where the contrast is hidden, so to speak, between the lines of the discourse.

Finally, a Relevance-theoretic analysis has the advantage of being able to explain the indeterminacy of implicatures. The indeterminacy for the emphatic “do” has to do with the fact that proposition \( p \) can be stated in any number of ways. It is consistent with RT that the hearer will derive a range of “weaker” inferences from the discourse-available proposition \( o \), to serve in the capacity of proposition \( p \), and that communication will be successful if “the hearer should pay attention to some of these weaker implicatures” (Sperber & Wilson, 1995, p. 197). While Grice (1975) does recognize that implicatures can be indeterminate, he does not offer any further comment on the causes or psychological origin of that indeterminacy (p. 58).
CHAPTER 6

CONCLUSION, IMPLICATIONS, AND RECOMMENDATIONS

This paper has been guided by the conviction that the problem of semantic underdeterminacy is a serious problem. The failure of a mainstream semantics\textsuperscript{56} to account for a huge array of linguistic phenomena shows us that there is something amiss in the picture of sentence meaning as truth-conditional content. In Section 2.1, we reviewed the various problems grouped under semantic underdeterminacy, and turned to pragmatics, the field of linguistics that looks at context and “use” factors in communication, to shed some light on these phenomena (§ 2.2). From the range of pragmatic theories on offer, we selected Sperber and Wilson’s (1995) Relevance Theory to demonstrate the indispensability of a pragmatic component in linguistic analysis. In Sections 2.4-2.8 we gave a comprehensive overview of RT to familiarize the reader with its theoretical framework.

As a representative of the class of problematic phenomena, we took the “implicitly contrastive emphatic ‘do’”, tentatively defined as a construction which suggests a contrast between the proposition in which the “do” appears and another proposition which is inferentially related to an earlier utterance in the discourse. We circumscribed the area of research by setting off the implicitly contrastive emphatic “do” from its non-contrastive (§ 3.2.1) and explicitly contrastive (§ 3.2.2) neighbors, gave a positive characterization (§ 3.3), and produced a number of illustrative examples drawn from the British National Corpus (§ 3.4).

To get some perspective on the place of Relevance theory in pragmatic scholarship, in Section 4 we offered a hypothetical analysis of the implicitly contrastive emphatic “do” based on Grice’s “classic” theory of implicatures. The analysis turned on the question of whether the emphatic “do” licenses a conversational or a conventional implicature of

\textsuperscript{56} on a conservative characterization
contrast. We evaluated the emphatic “do” against Grice’s (1975) proposed criteria—cancellability, detachability, calculability, and so on—and determined that the emphatic “do” shows more evidence of carrying a conventional implicature than a conversational one.

The core of our analysis was Section 5, where we explored a variety of hypotheses to explain the implicitly contrastive emphatic “do” within a Relevance-theoretic framework. We first argued, on the basis of RT, that the emphatic “do” must make some contribution to the meaning of the utterance (§ 5.1). We reasoned that, if the hearer were to comprehend the bare “proposition expressed”, then part (b) of the presumption of relevance, that “the ostensive stimulus is the most relevant one the communicator could have used to communicate I” would be falsified, and so the presumption of optimal relevance as a whole would not be satisfied (Sperber & Wilson, 1995, p. 164). We considered the initially attractive hypothesis that it might be a higher-level explicature (§ 5.2.1), the hypothesis that it might be the total effect of a higher-level explicature coding for insistence on truth (§ 5.2.2), and the hypothesis that it is a type of procedural encoding. All of these hypotheses were shown to be inadequate. In Section 5.2.4 we explored a variety of possible Relevance-theoretic formalizations of the emphatic “do” and concluded that the conceptualization of the emphatic “do” as a “constraint on implicature” best captured the phenomenon.

The success of Relevance theory in its application to the emphatic “do” stands as proof that it is an operational theory and is worth investigating further. In the wake of critiques like Levinson’s that “[Relevance theory] is obscure and it is not clear how it could be made to have clear empirical application” (Levinson, 1989, p. 456), it seems fitting to ask, How would we validate RT? What kind of data would verify (or, conversely, falsify) it?

Throughout *Relevance: Communication and Cognition*, Sperber and Wilson frequently present linguistic data in the form of isolated sentences, and try to deduce the logical and semantic properties of the sentence. The point is ultimately to illustrate the efficacy of Relevance theory, but it also shows us that RT is perfectly compatible with the customary philosophy of language practice of querying the propositional form of a sentence. Indeed, this is what I have done with the emphatic “do” in the present paper. Linguistic constructions from the level of word to the level of discourse furnish a wealth of evidence that can be used to argue for or against Relevance theory.
On the other hand, Relevance Theory, by virtue of being located squarely in cognitive science, frames pragmatic questions, and solutions, in a way that is amenable to empirical investigation. This makes it possible to test RT’s claims using powerful new procedures already familiar to those in psycholinguistics, such as brain imaging, event-related potentials, eye-movement studies, and computational modeling. Some topics which could be investigated in this way are the modularity of psychological functions, the organization and selection of “context”, and specific claims in RT like, “the linguistic decoding system [is an] automatic, reflex perceptual system” (Sperber & Wilson, 1995, p. 177). Because of the importance it assigns to context selection, RT would excel at explaining breakdowns in communication, which might profitably be understood as an inability of the hearer to find a suitable context for interpretation.

Relevance theory interfaces with psychology in a number of ways that could open up new lines of research. For instance, the psychological study of attention may shed some light on the ostensive processes that RT take to be central to verbal communication. Similarly, Sperber and Wilson claim that “the relation between memory and relevance is so close, relevance theory may well shed light on the organization of memory itself” (Sperber & Wilson, 1995, p. 150). By freeing ourselves from the restraints and prejudices of the preconceived terms of the pragmatics/semantics debate as inaugurated by Grice, we will be able to give a more scientifically admissible account of communication, and to address ourselves to a wider range of phenomena.
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APPENDIX

SOME QUALIFICATIONS: RELEVANCE IN
DIFFERENTIAL CIRCUMSTANCES
Sperber and Wilson offer many qualifications to Relevance Theory that supplement the basic framework (sketched in Sections 3.4-3.8). One theme that runs through their assorted qualifications is that the proper degree of relevance, rather than being biologically determined as might be assumed from the rest of their theory, is conditioned by the circumstances, by the roles of participants, and by other social factors. A lecturer is expected to be more relevant than his students; a servant, more relevant than his master (Sperber & Wilson, 1995, p. 160). The correct degree of relevance in a “cafe or pub” is generally accepted to be much less than that in a “seminar” (Sperber & Wilson, 1995, p. 161). The speech participants can indicate their expected degree of relevance through their choice of utterance.

Similarly, Sperber and Wilson account for a variety of non-standard cases. For example, when someone makes manifest an irrelevant assumption, seemingly a direct counterexample to their theory, it may be relevant by virtue of “making manifest a desire to change the subject” (Sperber & Wilson, 1995, p. 121). Furthermore, they allow for those cases where “there are no definite addressees” but only “individuals falling under a certain description”, as in broadcast communication (Sperber & Wilson, 1995, p. 158).

Finally, they explain what is going on in “non-reciprocal” species of communication where the communicator “adapts her informative intentions to her credibility”, as in the writing of their book (Sperber & Wilson, 1995, p. 63).57 Sperber and Wilson write,

In writing this book, we merely intend to make mutually manifest that we have developed certain hypotheses and have done so on certain grounds. That is, we take it as mutually manifest that you will accept our authority on what we actually think. The mutual cog environment thus created is enough for us to go on to communicate further thoughts which we would otherwise have been unable to communicate. (Of course we would also like to convince you, but we hope to do this by the force of our arguments, and not by making you recognize our informative intentions.

This scenario can be generalized to all cases where the content of the assertion of one’s informative intention are not immediately acceded to, and one must give reasons for the

57 Sperber and Wilson also appeal to the concept of enlargement of mutual cognitive environments to explain another type of non-reciprocal situation—one in which the “communicator is in such a position of authority, that her informative intention is fulfilled in advance” (as with journalists, professors, religious or political leaders) (Sperber & Wilson, 1995, p. 63).
propositions one puts forward, as in disputes and negotiations. While the informative intention may not have been accepted at face value, there *has* been an enlargement of mutual cognitive environments to the extent that the hearer has registered the content of the proposition, albeit not with the force of an assertion, and recognized Sperber and Wilson’s communicative intention. What is communicated, then, is that “Sperber and Wilson believe that X”, and not “that X”. We can conclude that Sperber and Wilson believe that a mutual cognitive environment is enlarged as a result of communication when some but not all of the assumptions in set I are communicated.58

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58 When, in the ideal case, *all* of the assumptions in set I are communicated, this obviously counts too as an enlargement of mutual cognitive environments.