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## **PRAGMATIC MINIMALISM:**

# A DEFENSE OF FORMAL APPROACHES TO SEMANTICS

A Dissertation in

Philosophy

by

David W. Agler

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The dissertation of David W. Agler was reviewed and approved\* by the following:

Vincent M. Colapietro Liberal Arts Research Professor of Philosophy Dissertation Adviser Chair of Committee

Emily Grosholz Liberal Arts Professor of Philosophy, African American Studies and English

Christopher Long Associate Professor of Philosophy and Classics Associate Dean for Undergraduate Studies, College of the Liberal Arts

Linda F. Selzer Associate Professor of English

Shannon Sullivan Professor of Philosophy, Women's Studies, and African and African American Studies Head of the Department of Philosophy

\*Signatures are on file in the Graduate School.

## Abstract

Context plays a fundamental role in interpreting language. It aids in determining what was said, what was meant, and how we choose to respond. Knowing what a particular utterance means is thus not simply a matter of knowing what the words in the sentence mean along with a grammar. Knowing a language also requires the non-linguistic (pragmatic) capacity to know how context influences the interpretation of sentences.

Minimalism is the theory that the role context plays in determining the literal meaning of an utterance is guided entirely by the syntactic and lexical features in the sentence. That is, if the meaning of a sentence depends upon the context in which the sentence is used, then there will be some feature in the sentence itself that conventionally directs the language user to the context. In short, language drives a turn to context. Contextualism, by contrast, is the theory that the interpretation of utterances involves a process of free enrichment, i.e. conversational or pragmatic rules will draw upon features from context to shape the content in certain ways.

My argument for minimalism occurs in two parts. First, I articulate and respond to two major objections to minimalism. Incompleteness objections state that the minimalist theory does not deliver propositional content and so falls short as a semantic theory. The inappropriateness objections state that the minimalist theory may deliver propositional content but this content plays no functional role in a larger story involving human communication and cognition. I argue that by appealing to a more expansive notion of language (involving its syntactic and semiotic underpinnings) both of these objections are unwarranted. Second, I offer a number of reasons for choosing minimalism over contextualism. I argue that minimalism offers a psychologically realistic (modular) picture of how we process language, that it provides the best explanation for the existence of cross-contextual communication, and that it best explains the distinction between what we are committed to in virtue of the words we use and what we are committed to in virtue of conversational principles governing communication.

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# LIST OF ABBREVIATIONS

С	Contexts
MOC	Miracle of Communication
NP	Noun phrase
S	Sentence
и, v	variables for utterances
UC	Unarticulated Constituent
VP	Verb phrase
WS	Williams Syndrome

#### ACKNOWLEDGEMENTS

My interest in the philosophy of language grew out of an effort to explain what it means to be a person. Early on, I became convinced that the concept of personhood was a vague one and so if one wanted to give a clear account of the notion of personhood, one had to give a clear account of *vagueness* (specifically vague predicates). Very quickly I found that vagueness itself was no easy concept to crack, that vagueness itself was both a vague and general notion, and that the existing philosophical theories of vagueness were not convincing in the least. My dissatisfaction with the existing philosophical treatments on vagueness led to writing my M.A. thesis 'Vagueness and Its Boundaries: A Peircean Theory of Vagueness.' In it, I argued for what I took to be a 'pragmatic' solution to the problem of vagueness that made the meaning of vague predicates sensitive to context.

From another end, I tried to make sense of *reference* to persons by analyzing the semantic functions of proper names. This led to writing 'Peirce's Direct, Non-Reductive Contextual Theory of Names.' There I argued that while our knowledge of the meaning of a proper name is entirely exhausted by our knowledge of its referent, an account of how we came to label an object with a given name (and how we communicate the referent of a name to others) is a complicated, context-sensitive affair.

So, with respect to vague predication, I was troubled by the fact that it seemed necessary to posit hidden context-sensitivity to make sense of our knowledge of vague terms. And, with respect to singular reference with proper names, I was troubled by the fact that proper names are, on the one hand, insensitive to context, yet, on the other hand, context plays an important role in determining the referent of the name. These two concerns led me to more fully explore (in this dissertation) the role context-sensitivity plays in our understanding of literal meaning.

My thoughts on these issues have been shaped by a number of individuals. In particular, I thank: Vincent Colapietro, Emily Grosholz, Linda Selzer, Christopher Long, Mark Fisher, André De Tienne, Cornelis de Waal, Nathan Houser, Ryan Pollock, Francesco Poggiani, Daniel Brunson, Masato Ishida, Marco Stango, Toby Svoboda, Christopher Gibilisco, Deniz Durmus, and Liz Troisi.

# CHAPTER 1 SEMANTICS AND PRAGMATICS

#### **1. INTRODUCTION**

Context plays a fundamental role in communication. It aids in determining what was said, what was meant, and how we choose to respond. Knowing what someone means by their use of a particular sentence is not just a matter of knowing a grammar, the meaning of individual words, and the meaning of how these words join together. Knowing a language also requires knowing how non-linguistic (contextual) matters influence what an utterance and its speaker mean. But, contexts are vast; they include things like speakers, audiences, common presuppositions made in by language users, times, locations, mutually-perceived objects, and so on. And so, if the possibility of knowing what a speaker means relies upon knowing certain features of a context, communication is both a difficult and challenging activity. In this thesis, I argue that while such non-linguistic capacities are important for determining meaning in general, especially for determining what speakers mean when they use language, the determination of the *literal meaning* of utterances is a rule-governed, syntax-driven, and mostly context insensitive affair.

## 2. SEMANTICS & PRAGMATICS

The study of linguistic meaning involves two primary branches: semantics and pragmatics. Like many sciences, academic disciplines, or areas of inquiry, there is debate concerning their respective definitions, the precise nature of the boundary between them, as well as how semantics and pragmatics interface (or even if they do interact). One prevalent way of defining each branch is that each is concerned with a different type of object and a different kind of meaning. **Semantics** is concerned with the *literal meaning* of *words* and the meaning of the way they are put together in *sentences*, i.e. the meaning

that is the result of grammatical and lexical features of the sentence. **Pragmatics** is concerned with what speakers mean by their *utterances* of sentences in context (see Lyons 1977:643; Palmer 1981:8; Griffiths 2006:4-6). Thus, whereas semantics assigns **literal meaning** to *sentences*, which are the abstract objects of syntactic theory, pragmatics assigns **speaker meaning** to *utterances*, which are the concrete expressions of these abstract objects.<sup>1</sup>

To illustrate, consider the following sentence:

(1a) I ate breakfast.

Semantics provides the meaning of the elements of (1a): *I, eat*, past tense, *breakfast* and the meaning of the way in which these elements are put together: *the speaker at some time before the time of the utterance ate breakfast*.<sup>2</sup> Pragmatics, in contrast, provides the meaning of various utterances of sentences like (1a) by delivering what a speaker means in uttering that sentence in a context. When a speaker means what she says, the speaker meaning delivered by pragmatics will (for the most part) accord with literal meaning delivered by pragmatics extends, enriches, or develops the literal meaning provided by semantics. For example, suppose that John and Vic are roommates, and Vic

<sup>&</sup>lt;sup>1</sup> The distinction between pragmatics and semantics was first put forward by Charles Morris in his contribution to the *International Encyclopedia of Unified Science*, which included contributions from Rudolf Carnap, Otto Neurath, John Dewey, Leonard Bloomfield, Niels Bohr, Ernest Nagel, Bertrand Russell, and others. Morris contributed a short piece on scientific empiricism—a synthesis of radical empiricism, methodological rationalism, and critical pragmatism—and a long entry titled "Foundations of the Theory of Signs" (1955 [1938]). The basis for Morris's distinction stemmed from his definition of 'semiosis,' a concept which he drew from Charles Peirce and which he defined as "the process in which something functions as a sign" (1955 [1938]:81). The semiotic process consists of three components—the sign vehicle, the designatum (the object designated by the sign), and the interpretant—and is characterized as something (the interpretant) taking account of something (the designatum) by means of a third something (the sign). From the triadic process of semiosis, Morris claimed that it was possible to abstract three dyadic relations concerning the sign vehicle and study these relations as three different domains. These three dyadic relations and their associated domains of study are as follows:

<sup>(1)</sup> the sign's relation to its objects, i.e. semantics

<sup>(2)</sup> the sign's relation to its interpreters, i.e. *pragmatics* 

<sup>(3)</sup> the sign's relation to other signs, i.e. syntactics

For more on Morris's distinction of *pragmatics* from *pragmatism*, see (Morris 1955 [1938]:107-110). <sup>2</sup> See (Kearns 2011:1).

has just arisen at 8AM on July 23<sup>rd</sup>, 2011. Vic then asks John whether or not he's hungry and wants some breakfast. In response, John utters (1a). In this case, what John means and what Vic understands John to mean go well beyond what is provided by a semantic theory. For Vic takes John as saying:

- (1b) John has eaten breakfast before 8AM on July  $23^{rd}$ , 2011.
- (1c) John is not hungry.
- (1d) John does not want breakfast.
- (1e) John has eaten breakfast today.

The content expressed by (1b)–(1e) goes well beyond the meaning delivered by a literal semantic interpretation of (1a). Pragmatics thus provides an invaluable addition to an overall account of communication since in (1a) it provides the specific speaker, the specific time and place in which (1) is uttered, and also further information that is only suggested by (1a), e.g. that *John does not want breakfast*.

Let's call any development of the literal meaning of a sentence by using elements or features from the context in which a sentence is uttered, a **contextual (or pragmatic) enrichment**. There appears to be two different types of contextual enrichments in the above examples. First, there are contextual enrichments that are linguistically directed (or mandated) by the meaning of the expressions in the sentence itself. For example, in (1a), there is the first-person pronoun and a marker for past tense. In order to understand the literal meaning of these types of expressions, one must understand a rule for how the expression relates to context in general. Contextual enrichment of this sort can thus be specified in advance insofar as when we learn the meaning of these types of expressions, we learn how they relate to context in general. For example,

'I' refers to the speaker.'You' refers to the addressee.'Now' refers to the time of the utterance.Past tense refers to a time before the time of the utterance of the sentence.

The literal meaning of these types of expressions are defined in terms of features found in the context of utterance. Such expressions are called **indexical expressions** (or more

simply **indexicals**) and the property of being defined in terms of the context of utterance is called **indexicality**.

The second way in which pragmatic information fleshes out the literal meaning of a sentence is what I will call **free contextual enrichment** (see Recanati 2004:10). Recanati (2004:18) defines 'free enrichment' as "the [non-linguistically controlled] process responsible for making the interpretation of an utterance more specific than its literal interpretation." Consider (1) and (2) below.<sup>3</sup>

(1) I ate breakfast.

(2) John went to the cliff and jumped.

(1) might be interpreted as involving a temporal restriction such that the speaker is interpreted as saying that she had breakfast *today* and not sometime before the moment of the utterance. Likewise, the interpretation of 'jumped' as *jumped off the cliff* in (2) is an example of free enrichment since the content in the latter is more specific than the literal content expressed. In both cases, the temporal restriction in (1) and the specification that John jumped *off the cliff* are the result of a process of freely enriching the content of the sentence.

Another type of contextual enrichment that is not linguistically controlled but is not merely a process of interpretation that makes an utterance *more specific* is **conversational implicature**. Here is an example paraphrasing one found in Grice (1989 [1975]:33):

Suppose Professor A is writing a letter of recommendation about a pupil B who is a candidate for a philosophy job, and his letter reads 'Dear Sir, Mr. B's command of English and handwriting are excellent. Yours, Professor A.'

According to Grice, Professor A imparts information that he does not literally express. In Grice's terminology, the proposition *B* is a bad philosopher is **conversationally implicated** by Professor A. According to Grice, conversational implicatures are possible provided language users engage in communication in a cooperative spirit governed by

<sup>&</sup>lt;sup>3</sup> These examples are common in the literature but this discussion is drawn from Recanati (2004:18).

certain conversational maxims like 'Be Informative,' 'Be Relevant,' 'Avoid Ambiguity,' and so on. Provided this is the case, Grice (1989 [1975]:30-31) contends that a proposition p conversationally implicates q if and only if (i) the speaker is assumed to be cooperative in accordance with conversational maxims, (ii) the speaker is aware that q is required in order to make p consistent with this assumption, and (iii) the speaker thinks that it is within the competence of the hearer to intuitively grasp (or at least reasonably work out) that q is required to make p consistent with the assumption of (i). With this definition of conversational implicature in place, we can see that 'B has nice handwriting' conversationally implicates B is not a good philosopher since supposing the latter proposition makes A's utterance consistent with conversational maxims (Be Relevant). In short, by actively withholding information that he should mention in a letter of recommendation, Professor A succeeds in imparting information he does not actually say. A reader of A's letter will be able to grasp A's intention by *inferring* it from the content and context of the utterance.

So, there appear to be at least two different types of contextual (pragmatic) processes. There are contextual enrichments that are *linguistically directed* by features in the sentence itself. These are various indexical expressions like 'I,', 'you,' 'he,' 'she,' 'now,' 'yesterday,' and words and morphemes that indicate tense, etc. whose literal meaning is defined in terms of features found in the context of utterance. And, there are contextual enrichments that are *not* linguistically directed but are optional developments guided by conversational or psychological principles that either make the utterance *more specific* or deliver content more in line with what a speaker *means* in uttering a sentence.

The presence of these two different types of contextual enrichments opens up a question concerning the scope of semantics and pragmatics. Namely, does the specification of the *literal meaning* of an *utterance* involve only linguistically-directed contextual enrichment or does it also involve free contextual enrichment? There are two competing answers to this question. Descendents of ideal-language philosophy or theorists with a foot in formal semantics (or **minimalists**) contend that context plays a limited role in determining literal meaning and so all contextual information is supplied by linguistic rules like those of indexical expressions. Descendents of ordinary-language philosophy or theorists with certain commonsense psychological views on the role

linguistic intuitions have on meaning (or **contextualists**) contend that linguisticallydirected contextual enrichments are not enough to deliver the literal meaning of a sentence. That is, contextualists argue that determining the literal meaning of an utterance of a sentence often requires *free* contextual enrichment.

In this dissertation, I argue that minimalism is more attractive than contextualism. An outline of the argument and this thesis are provided below.

#### 3. OUTLINE OF THESIS AND ARGUMENT

In this section, I provide a brief overview of the chapters in this thesis and of its central arguments. Chapter 2 is primarily concerned with the exegesis of the main topic of this dissertation and with articulating a number of possible positions one could take. In that chapter, I distinguish between two major theories: minimalism and contextualism. At root, both contextualism and minimalism are theories about the role context plays in determining the *literal* semantic content of an utterance. They are not theories about the specific nature of semantic content nor are they theories concerning the role context plays in determining speaker meaning.<sup>4</sup> Minimalism is the theory that the role context plays in determining the literal, semantic content of an utterance is guided entirely by the syntactic and lexical features in the sentence. That is, if the meaning of a sentence depends upon the context in which the sentence is used, then there will be some feature in the sentence itself (syntactic or lexical) that conventionally directs the language user to the context. In short, language drives a turn to context. Paradigmatic instances of such expressions include personal pronouns ('I,' 'you,' 'he,' 'she,' 'it'), the demonstrative pronouns 'that' and 'this,' adverbs like 'here,' 'there,' 'now,' 'today,' 'yesterday,' 'tomorrow,' words or markers that indicate tense, as well as overtly contextual terms like 'local,' 'national,' etc (see Kaplan 1989b:489; Cappelen and Lepore 2005a:1). **Contextualism**, by contrast, is the theory that the interpretation of utterances involves free contextual enrichment of sentences by drawing upon features of the context. In short, conversational or psychological principles without a linguistic analogue drive the language user to the context of utterance.

<sup>&</sup>lt;sup>4</sup> Thus, I do not plan on providing or defending a general theory of meaning, e.g. use-theory, verificationist, truth-conditional, or otherwise.

One aim of this dissertation is to defend formal approaches to semantic theorizing from the objection that the context-sensitivity of language jeopardizes the possibility of such an approach. For if the literal meaning of sentence utterances cannot be antecedently specified by a set of rules that are triggered by formal features in the sentence and abstracted from the features of a specific context but not context in general, then formal approaches to semantic theorizing are in serious trouble. My effort to save the possibility of such a theory amounts to a defense of minimalism. Chapter 3 articulates and responds to two major objections to minimalism. The first objection is called the 'incompleteness objection.' According to the **incompleteness objection**, one of the goals of a semantic theory is to deliver the literal meaning of every grammatically correct sentence capable of being expressed in a natural language. However, if we follow the minimalist and simply read off the features of the sentence and disallow any free, contextual enrichment, then many utterances of sentences will fail to express propositional or truth-conditional content. The second objection is called the 'inappropriateness objection.' According to the **inappropriateness objection**, one goal of a semantic theory is to deliver a layer of meaning that fits into a broader story about human communication and cognition. However, if we follow the minimalist and simply read off the features of the sentence and disallow any free, contextual enrichment, then many utterances of sentences won't accord with our intuitive understanding of what was literally expressed. I argue against both of these objections in chapter 3. In response to the incompleteness objection, I claim that drawing upon the underlying syntactic-lexical features of sentence forms and using a more expansive definition of language, minimalism delivers propositional (truthconditional) content. In response to the inappropriateness objection, I consider a variety of different cognitive-communicative demands placed on semantic theories by contextualists and argue that they are all psychologically unrealistic.

Whereas chapter 2 is exegetical and chapter 3 is mainly defensive, chapter 4 offers three arguments for minimalism. First, drawing upon the work of Jerry Fodor, Emma Borg, and clinical data on a rare neurological disorder called 'Williams Syndrome,' I argue for an alternative account of how semantic facts relate to our psychology. The psychological facts upon which semantic theory depend are *not* readily apparent or available to normal language users who are more concerned and geared

toward what speakers are trying to communicate. Minimal propositions turn out to be psychologically realistic and play a role in a broader story about human cognition and communication but their role is *tacit* rather than *explicit* since they are grasped by their users *en route* to determining speaker meaning. Second, drawing upon the work of Herman Cappelen and Ernie Lepore, I argue that the semantic content delivered by minimalism provides the best explanation for the existence of cross-contextual communication. If we do in fact communicate across contexts then we need some invariant content that is not bound to contextual enrichments tied to the knowledge of a particular context. Third, drawing upon the work of Grice, I argue that it is plausible to posit the existence of a minimal proposition for it best explains the distinction between what we are committed to in virtue of what we say versus what we are committed to in virtue of conversational norms and practices. The need for this kind of distinction shows up when we are faced with unruly language users who point out that we often do not really mean what we say.

Chapter 5 offers a detailed examination of the contextualism-minimalism debate in the work of classical American pragmatist Charles S. Peirce. In this context, Peirce's work is extremely interesting both from a historical perspective and philosophical perspective for several reasons. First, the debate between minimalists and contextualists is usually characterized as having emerged in the post-Gricean era where the distinction between ideal language philosophy (e.g. philosophers like Frege, Russell, Carnap, and Tarski) and ordinary language philosophy (e.g. Austin, Strawson, the late Wittgenstein) has been abandoned. In the post-Gricean era, semantics (the formal study of meaning in terms of truth conditions) and pragmatics (the study of language use in context) are seen to be complementary disciplines due to (i) ideal language philosophers abandoning the Carnapian position that a semantic theory can be delivered independent of the context of use and (ii) ordinary language philosophers abandoning the position that meaning is use (see Recanati 2004:2-3). However, what we find in Peirce's work is both a consideration of the contextualist-minimalist debate well before the work of Grice and a consideration of a number of highly original arguments for contextualism. In that chapter, I articulate many of these arguments, give an overview of the current scholarship on the topic, and

argue that despite appearances to the contrary, Peirce was undecided on the minimalismcontextualism debate.

Finally, chapter 6 concludes the dissertation with a short summary of the work.

## 4. ORIGINALITY OF THE DISSERTATION

While my work draws heavily upon much of the existing literature on the topic, this dissertation makes an original contribution to knowledge in at least two respects.

First, in chapter 4 I offer the following three arguments for minimalism:

Argument	Description of Argument
Semantic Madalarita	minimalism but not contextualism is consistent with modular
Modularity	linguistic processing.
Miracle of	minimalism but not contextualism has trouble explaining cross-
Communication	contextual communication where contexts are sufficiently diverse.
Fallback	minimalism better explains the distinction between what a speaker is
Content	committed to in virtue of the sentence he/she utters and what a
	speaker is committed to in virtue of his/her beliefs about the world.

Two of these arguments have already appeared in the literature. The *Argument from Modularity* was put forward first by Emma Borg (2004) and the *Miracle of Communication Argument* was put forward by Herman Cappelen and Ernie Lepore (2005). Both of these arguments have, however, received extensive criticism. My search of the literature (and some correspondence with the authors) has not revealed that these authors have a response to some of this criticism. Thus, part of the originality of my dissertation involves responding to these criticisms and, in some cases, modifying the original arguments for minimalism. The third of these arguments, the *Argument from Fallback Content*, is entirely my own and so I regard it as an original contribution to the debate.

Second, while much of my responses to inappropriateness and incompleteness objections rehearse previous arguments by minimalists, one part of my response is original. Typically, contextualists contend that the minimal theory either fails to deliver

propositional content (the incompleteness objection) or the content it delivers fails to be psychologically realistic (the inappropriateness objection). Contextualists thus contend that there are certain semantic elements necessary for completeness or appropriateness that are not articulated by elements in the sentence and so must be the result of freely enriching the sentence with contextual elements. The typical minimalist response is to argue that either (i) the elements that contextualists insist are a part of the *literal meaning* are really part of *speaker meaning* (or speech act content) or (ii) the elements that are said to be supplied by a process of free enrichment are really the result of a linguisticallydirected process of interpreting parts of the sentence that are not readily apparent. So, for example, in the case of 'John is tall,' a contextualist might argue that the meaning of an utterance of this sentence is always relative to a *comparative class*, i.e. John is only *tall* relative to basketball players, tall relative to third-graders, etc. In response, a minimalist could argue that knowing what John is tall relative to (i.e. knowing the comparison class) may be a part of knowing what a *speaker means* in uttering the sentence but is not a part of knowing the sentence's literal meaning. Alternatively, in the case of 'John ate a hamburger and so did Frank [ate a hamburger],' the minimalist contends that the bracketed phrase 'ate a hamburger' is not obtained by a process of free contextual enrichment but by a syntactic, rule-driven process. In short, the minimalist either broadens the number of elements that are articulated by a sentence or argues that contextualists are trying to make semantic theories do the work of a comprehensive theory of communication. One way I extend this composite strategy is by taking issue with the definition of natural language itself, namely if we do not narrowly define the parts of a language as strictly those orthographic or phonetic features and instead include other conventionalized items (e.g. gestures, tones, body positioning), then the minimalist has again broadened the number of elements that are articulated by a sentence. This has the result of locating semantic elements in the sentence itself rather than in the context of utterance. And, if the elements required for literal meaning are found in the sentence, it is possible to provide rules that relate these expressions to context in a way similar to other indexical expressions.

### 5. TWO REASONS WHY THIS MATTERS

In what follows, I briefly articulate two reasons why this dissertation has broader, more humanistic consequences. In the first section, I outline the consequences of this dissertation for *philosophy* more broadly considered. In the second section, I give an account of why this issues matters for the *diagnosis of linguistic disorders* and assessment of linguistic intelligence.

#### 5.1. WHY THIS MATTERS FOR PHILOSOPHY

In articulating a version of contextualism, Cappelen and Lepore (2005a:7-8) point to one type of contextualist that they call a 'semantic opportunist.'

They [semantic opportunists] are philosophers who come to semantics *with* a nonsemantic agenda. They might be concerned with defending a view in epistemology, ethics, philosophical logic, philosophy of mind, metaphysics, etc. They have no interest in, or understanding of, the overall semantic project. They postulate that various expressions are context sensitive because doing so lends support to a view, usually radical, they endorse in their respective area (2005a:7-8).

If Cappelen and Lepore are right, then a number of philosophers believe that certain positions in the philosophy of language concerning context-sensitivity offer independent evidence for their position in some other branch of philosophy. Putting all dispersions aside, these 'semantic opportunists' engage in a type of **linguistic philosophy**, which is the use of the method of linguistics or theorizing about language to solve certain philosophical problems outside the realm of the philosophy of language. To test their hypothesis, let's look at how philosophers in two different areas of philosophy argue for their particular philosophical conclusions by using claims involving the context sensitivity of language.

First, one domain of philosophy where context plays an important role is ethics. Peter Unger, for example, claims that not only do the truth conditions of knowledge attributions depend upon context but so do ethical claims. Unger writes,

Now, elsewhere, I've argued for this hypothesis: In many cases, the truth-value of a judgment about whether a person knows a certain thing depends on the context in which the judgment is made, or is grasped. Here, I'll argue for a parallel

hypothesis: In many cases, the truth-value (or the acceptability) of a judgment about whether a person's behavior is morally permissible depends on the context in which the judgment is made, or is grasped (1995:2).

Another proponent of contextualism in ethics is Dreier (1990), who argues for a metaethical relativist theory called "speaker relativism". Dreier writes,

Speaker relativism is the theory that the content of (what is expressed by) a sentence containing a moral term varies with (is a function of) the context in which it is used. The content of a moral term itself depends on the most salient moral system in the context of use (1990:6).

More recently, Alice Crary (2007), in her book Beyond Moral Judgment, claims that the notion of objectivity employed in moral evaluation cannot be confined to the semantic content expressed by linguistic utterances but objective moral evaluation depends upon a wide variety of contextual factors that are not salient in the linguistic utterance. Crary argues for a wider, more inclusive notion of objectivity; one that permits of objective determination in moral matters. Crary defends this claim by first distinguishing between a merely subjective property and a problematically subjective property. A merely subjective property is a property "an object can be said to posses just insofar as it in fact elicits a certain response from some subject" (Crary 2007:15). Examples include properties that are the result of a projection by the subject, e.g. 'that tree looks happy', 'x is nice', or 'x is red' or subject-indexed properties of the form 'that tree looks happy to me', 'x seems nice to me', or 'x looks red to me.' In contrast, a problematically subjective property is a property "an object can be said to possess insofar as it is the kind of thing that would elicit certain subjective responses in appropriate circumstances" (Crary 2007:15). Examples include affective properties like 'amusing' and certain perceptual properties like 'red'.

With this distinction in place, Crary links moral evaluations to a specific notion of objectivity that is not divorced from subjective considerations. This is accomplished first by defining two different senses of 'objectivity,' narrow objectivity and wide objectivity. **Narrow objectivity** holds when our beliefs have complete subject-independence, i.e. when we abstract from *every subjective property* found in our representation of the world. Thus, narrow objectivity requires an abstraction from *both* merely subjective and

problematically subjective properties. In contrast, **wide objectivity** holds when our beliefs have a certain kind of subject-independence, i.e. when we abstract from *merely subjective properties* but not necessarily *problematically subjective properties*. According to Crary, the wide notion of objectivity is compatible with a broader outlook on what constitutes moral rationality while preserving two competing intuitions: (1) the intuition that if an action is morally wrong, then one's recognition of its wrongness provides a motivation not to do said action and (2) the intuition that moral evaluation should be objective (in some sense). So, what does this broader moral thought look like? Crary (2007:45) writes,

[W]e need to consider not only individuals' moral judgments but also modes of thought and speech that do not employ moral concepts and the sensibilities that inform these additional modes of thought and speech. What becomes apparent is that proper respect for challenges of moral conversation involves concern with nothing less than individuals' entire personalities, the whole complicated weaves of their lives.

For Crary, the literal meaning of a particular moral utterance depends upon the entire moral history and outlook of the utterer, making moral evaluation extremely sensitive to the contextual parameter. But why ought anyone accept this wider notion? Crary's argument is mainly negative. She argues that one way of evaluating whether the central thesis of the narrow notion of objectivity is defensible is to assess whether it offers an accurate explanation of meaning. According to Crary, advocates of narrow objectivity are committed to some variety of minimalism, the view that there are a set of antecedently specifiable rules that assign values to sentences in particular contexts. Crary rejects this conception of meaning by offering an interpretation of J. L. Austin's How To Do Things With Words and by articulating a number of Austin-inspired examples which show that the notion of literal sentence-meaning is untenable for some sentences. While rules for indexicals ('I', 'she', 'now') are specifiable in advance, some linguistic phenomena (e.g. 'the vase is red') "may make any of indefinitely many different contributions to what the sentence says" (Crary 2007:79, see 75-84). According to Crary, the literal meaning of linguistic phenomena of this sort cannot be antecedently captured by a set of specifiable rules and so we cannot formulate a notion of literal meaning without some form of free

contextual enrichment. Thus, since the notion of literal sentence-meaning is "taken to underwrite a conception of correspondence between language and the world that encodes an abstraction requirement," and this abstraction requirement allows for the narrow concept of objectivity to take root, Austin's rejection of the notion of literal meaning amounts to a rejection of the narrow concept of objectivity (see Crary 2007:50). However, uprooting a purely semantic account of meaning does not entail an abandonment of every notion of objectivity. Since Crary's contextualist account of meaning underwrites a conception of correspondence between language and the world that incorporates problematically subjective properties, and these problematically subjective properties are consistent with the wide concept of objectivity, moral theorists need not abandon moral objectivity for subjectivism. Instead, once we see that certain sensitivities constitutive of our moral outlooks are internal to language use, an account of moral thinking and moral objectivity that is not merely conceptual but involves an engagement with and refinement of one's feelings can take root (Crary 2007:2-3).<sup>5</sup>

To summarize a little, we have two claims:

(i) If S contains a moral term, then the semantic content of S is relative to C.(ii) The context-sensitivity of moral terms is not linguistically-directed.

In the case of (i), we have the claim that moral terms are context-sensitive. This is a controversial claim in itself for some philosophers argue that only a limited number of terms are context-sensitive (e.g. Cappelen and Lepore 2005a). What is more controversial and more relevant to this dissertation is (ii), which says that the context-sensitivity of moral terms are not indexical but require free contextual enrichment. This is a substantial semantic thesis and one that bears on the topic of this dissertation for while it is no doubt the case that our understanding of what a *speaker means* when she uses a moral term depends upon context, what is hard to swallow is that our understanding of the *literal meaning* of an utterance containing a moral term requires free, contextual enrichment. That is, if a moral term is uttered in English, an individual who does not know certain facts about the context in which that term was uttered will fail to understand the meaning

<sup>&</sup>lt;sup>5</sup> For more on the discussion of Crary's book, see my review (Agler 2011b) as well as related reviews: (see Richter 2007; Kirchin 2008; Fricker 2010).

of the utterance. This is a weighty position since it makes our ability to cognize the conventional meaning of words and sentences depend upon a specific nonlinguistic ability that enriches or modulates these words and sentences.

In less linguistic discussions of aesthetics, there has been debate about the role that contextual factors play in the identification, significance, and evaluation of artworks. Some theorists argue that contextual factors (social, spatiotemporal, historical, cultural, political) play a *negligible* role in explaining the aesthetic information conveyed by a particular artwork. On their accounts, our appreciation and understanding of artwork is largely autonomous from the social-historical context in which it is embedded because the information that artworks convey is principally explained in terms of its observational properties. Monroe Beardsley and W.K. Wimsatt (Beardsley 1981; Wimsatt Jr. and Beardsley 1954), for example, argue that neither the intention of the artist nor the affection of the interpreter or critic have any ontological force on the artwork itself. According to the autonomy (or minimalist) theory of artwork, the meaning, ontology, and evaluation of artwork is only dependent upon contextual factors insofar as further analysis and interpretation of the artwork qua object elucidates the uniquely aesthetic properties. In contrast, contextualists argue that this approach is too short-sided for the identification, significance, and evaluation of an artwork cannot be limited to its descriptive features, i.e. that it is a mostly two-dimensional painting in a frame, with these colors, and these shapes, of this or that object or event. Contextualists argue that there is simply no identification, there is only incomplete evaluation, and there is only the slightest appreciation of the artwork's significance if the factors that are collateral to the artwork itself (causal, historical, spatiotemporal, social, and political factors) are left out of the picture.

One of the strongest proponents of contextualism is Arthur Danto. Danto argues that the identification of objects as works of art requires artistic identification not reducible to perceptual observation. Danto writes, that to "see something as art requires something the eye cannot decry—an atmosphere of artistic theory, a knowledge of the

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history of art: an artworld" (1964:580).<sup>6</sup> Danto argues that the transfiguration of ordinary objects (e.g. Warhol's facsimile Brillo cartons, Raucschenberg and Oldenburg's beds) into artworks is not found in the perceptual features of the artwork itself but in a selective identification made by artistic theories to treat certain objects as artistic objects and in the causal-cultural-historical circumstances that gave rise to an object's creation. For contextualists like Danto, the identification of an object as a work of art and the evaluation of the artwork is not the result of a process whereby a viewer draws upon the artwork's descriptive features but requires enriching the artwork with contextual features like its place in a certain cultural, social, theoretical, and causal networks. For consider The Polish Rider, a 1655 painting attributed to Rembrandt and to Willem Drost. Now imagine that paint is thrown into a centrifuge and the paint splatters on a canvas so as to produce a painting indiscernible from, or nearly identical, to *The Polish Rider*. Concerning this scenario, Danto (1974:140) claims that his view is that "the splatted [sic] disposition of colors, though it resembles a deep and searching work is neither deep nor searching in its own right, nor has it any meaning, nor is it of the right sort to have one." The reason is that just because two things resemble each other does not entail that they have the same significance, e.g. a nest of vipers coiling into the words "Buy Ampex!" or the shouting of "Buy Ampex!" and the subsequent echo of "Buy Ampex!"<sup>7</sup> This lack of entailment, however, does not undermine the distinction between art and ordinary objects since for Danto, contextual factors play an important role in whether or not an object is an artwork. To this end, Danto (1974:140) writes the following:

one sort of condition for something to be in candidacy for an interpretation, title, and structure will be certain assumptions with regard to its causes. And causes are not the sorts of things we can read off the surfaces of alleged effects, all the more so since indiscernible objects, as we have seen, may have radically divergent causal histories. Something is an artwork, then, only relative to certain arthistorical presuppositions, failing which it *can* prove merely to have been a thing, with no importance for art save what importance the confusion between it and an artwork may have for the philosophy of art.

<sup>&</sup>lt;sup>6</sup> As Danto (1998:130) puts its elsewhere, "So what *couldn't* be an artwork, for all one knew? The answer was that one could not tell by looking. You could not after all pick the artworks out like cashews from a pot of peanuts."

<sup>&</sup>lt;sup>7</sup> Danto offers a variety of other examples in (Danto 1998:129).

Danto thus contends that the classification of an object as an artwork depends upon contextual factors not localizable within the artwork itself. In short, artistic meaning, evaluation, and identification is partly the result of a process of free contextual enrichment.

So just as in ethics where there is a debate over whether utterances with moral vocabulary are sensitive to a process of free contextual enrichment or incorporate context in a rule-driven way, discussions of aesthetics also involve debate about the extent and manner in which the significance of a work of art is shaped by contextual factors. Ethics and aesthetics are, no doubt, not the only area of philosophy affected by this issue for the significance of the topic extends to issues in logic, epistemology, the philosophy of science, metaphysics, and the philosophy of mind.<sup>8</sup>

#### 5.2. WHY THIS MATTERS FOR THE DIAGNOSIS OF LINGUISTIC DISORDERS

The ability to identify how context shapes the literal meaning of an utterance plays an important role in how linguistic intelligence, rationality, competency, and linguistic disorder are assessed. Formal exams that assess linguistic competency are part of primary education, used as a requirement for citizenship (Kunnan 2009), used to determine proficiency in a non-native language (Shih 2008), and used to diagnose linguistic disorders. One major problem with tests designed to assess particular components in a language (e.g. grammar, vocabulary, pronunciation) is whether the test can accurately assess psycholinguistic abilities (mental abilities that function in understanding and operating with linguistic units) as opposed to knowledge-based abilities (mental abilities that are the result of previous experience and knowledge of vocabulary). This is of considerable importance because tests that rely heavily upon knowledge-based abilities run the risk of being culturally biased. A clearer understanding of the role context plays in shaping semantic content is crucial for determining how to measure psycholinguistic in a culturally-unbiased (or at least a culturally-sensitive) way.

Here is one example. Many minorities perform poorly on exams designed to test linguistic competency. Deutsch (1965), John (1963), and Bereiter and Engelmann (1966)

<sup>&</sup>lt;sup>8</sup> For representative articles in epistemology, see (DeRose 1992, 1995, 2002; Feldman 2001; Cohen 1986, 1987, 1999).

claim that this phenomena can be accounted for by positing a *language deficiency* in certain ethnic and socioeconomic groups. On this hypothesis, these groups suffer from some type of mental deficiency that compromises their ability to process and interpret the meaning of utterances. Many theorists have argued against this hypothesis on theoretical, methodological, and empirical grounds. Labov (1966, 1969), Shuy (1969), Baratz (1969a, 1969b:99), Terrell and Terrell (1983), and others claim that the difference in test scores can be accounted for by positing a difference in dialectics among groups or can be explained by non-linguistic factors, e.g. lack of experience with test-taking format, lack of exposure to certain vocabulary, or the fact that tests are formulated in "standard English."<sup>9</sup> These theorists argue that while there is a language *difference* between certain minority students and speakers of standard English, this difference is not the result of a linguistic *deficit*. Further evidence against the deficiency hypothesis comes in the form of tests that are directed at psycholinguistic processing by minimalizing the role culturallyspecific knowledge plays in an exam (e.g. Campbell et al. 1997). In tests designed to minimize the effect of cultural-specific knowledge upon linguistic processing, the discrepancy between different ethnic and cultural groups greatly diminishes.

The deficiency hypothesis is widely rejected and part of the basis for its rejection is due to an inattention to the role context plays in linguistic competency. Terrell and Terrell (1983:2) write the following:

Taken collectively, these studies seem to indicate that there is little merit in advocating a deficiency interpretation to account for the performance of black children on various linguistic and cognitive tasks. Indeed, it appears that proponents of the deficiency hypothesis may have failed to take into account the situational and contextual variables that contribute to the differing communicative behaviors of culturally different groups.

<sup>&</sup>lt;sup>9</sup> Baratz (1969b:92) writes, "Because the educational system has been ineffective in coping with teaching inner-city children to read, it treats reading failure (in terms of grading, ranking, etc.) as if this failure were due to intellectual deficits of the child rather than to methodological inadequacies in teaching procedures." Labov (1969:92) writes "they [language teachers] look upon every deviation from schoolroom English as inherently evil, and they attribute these mistakes to laziness, sloppiness, or the child's natural disposition to be wrong. [...] Anyone who continues to endorse such myths [that dialectical differences are the result of a linguistic deficiency or laziness] can be refuted easily by such subjective reaction tests as the Family Background test which we are using in our current research in Harlem."

Thus, it is important to have a clear account of how context shapes the literal meaning of an utterance for if the interpretation of literal meaning is always subject to a process of free, contextual enrichment, then the only possibility of an objective, formal test for linguistic disorders must be based on one that is guided by psychological/conversational principles that are applied across cultures.<sup>10</sup> Alternatively, if the interpretation of effects of context on literal meaning is a linguistically-controlled process, then features of language itself provide a key to formulating such a test.

<sup>&</sup>lt;sup>10</sup> One of the most dominant trends in test fairness studies is differential item functioning (DIF), which is a statistical detection of items that are potentially biased. For more on DIF, see (Ferne and Rupp 2007; Ockey 2007; Roever 2007). One major difficulty with DIF approaches to detecting test bias concerns the demarcation of genuine biases and statistical biases.

# CHAPTER 2

# SANDCASTLE SEMANTICS IN THE SEA OF PRAGMATICS

## **1. INTRODUCTION**

In the last chapter, two definitions were put forward. Semantics is the study of the meaning of words and sentences in partial abstraction from their contexts of use in particular speech situations. **Pragmatics** is the study of how the context of use enriches and shapes the meaning of sentences and particular utterances. In the next three chapters, I defend a theory about the role extralinguistic context plays in determining the literal meaning of utterances. I call this theory 'pragmatic minimalism' since it aims at minimizing the role pragmatics has on the determination of literal meaning. At root, this theory consists of the following three claims. First, the literal meaning of utterances is sensitive to the context in which a sentence occurs only when indicated by certain features found in the sentence itself. I call this a commitment to a linguistic direction **principle**. Second, while context may play a larger role in determining what a speaker means, asserts, or claims (i.e. the content of their speech act), the content expressed by the literal meaning is insensitive to and autonomous from speech act content. I argue that our linguistic intuitions about speech act content do not provide a reliable guide to the literal meaning of an utterance. I call this a commitment to a division between the literal semantic content and speech act content. Third, the minimal, semantic interpretation of sentences yields a proposition or truth-evaluable entity. I call this a commitment to the view that minimalism can provide an **adequate semantic theory**.

The principal goal of this chapter is to articulate a number of different theories about the relation of context to literal meaning. The next two chapters defend the theory I favor by responding to an assortment of objections to minimalism (chapter 3) and providing some independent arguments for minimalism (chapter 4). The general trajectory of this chapter is to provide an example of a formal semantic theory, to present the major question of this dissertation, and then to characterize the core principles of contextualism and minimalism (as well as to enumerate a number of particular versions of each).<sup>11</sup>

## **2. FORMAL SEMANTICS**

The goal of this thesis is neither to defend a specific approach to formal semantic theory nor to construct a formal semantics. My project is more clearly philosophical insofar as it aims to defend formal approaches to doing semantics in general. In particular, it attempts to protect this type of approach to semantics from opponents who contend that the *context of utterance* plays an ineliminable role in the determination of literal meaning. However, despite the fact that the goal of this thesis is not to defend one particular formal semantic theory, it is helpful first to present one such theory. In this section, I offer two overviews of a truth-conditional approach to semantics.

#### 2.1 A MORE PHILOSOPHICAL OVERVIEW OF TRUTH CONDITIONAL SEMANTICS

**Truth-conditional semantics** is a theory about the meaning of natural language sentences. The core idea is that a specification of the conditions under which a sentence is true is tantamount to giving the meaning of that sentence. In epistemological terms, a truth-conditional approach to meaning is one where an individual's knowledge of the meaning of a sentence consists in her knowledge of how the world would have to be for that sentence to be true. As such, it does not entail knowledge about two related items. First, while an utterance of a particular sentence is true or false, understanding the meaning of that utterance does not require that we know its truth value. In order to know the meaning of 'John is tall,' we do not need to know whether *John is tall*. Instead, according to the truth-conditional approach, our knowledge of the meaning of 'John is tall' only requires we know how the world *ought* to be in order for the utterance to be true. Second, knowing the truth conditions of an utterance does not also require that we know how to verify it. John might know that in order for 'John is the fastest swimmer in the U.S.' to be true, it needs to be the case that *John is the fastest swimmer in the U.S.* 

<sup>&</sup>lt;sup>11</sup> Some of the sections are technical yet illustrative in nature and so can be skipped over without significant disruption to the main thrust of the chapter and the thesis. These sections are marked with an asterisk '\*'.

but he might not know how to *verify* this utterance, i.e. he might not know how to provide a decisive test for this proposition Thus, according to a truth-conditional approach to meaning, we know the meaning of a sentence if and only if we know the conditions under which that sentence is true (i.e. its truth conditions) and not whether it is true or how we can go about proving that it is true.<sup>12</sup>

<sup>&</sup>lt;sup>12</sup> It is worth pointing out that TCS is *compatible with* but not equivalent to a number of other theories of meaning. For example, TCS is compatible with but decidedly different from the verificationist theory of meaning put forward by logical positivists. The most well-known feature of verificationism was the use of a principle of verification to delineate meaningful sentences from metaphysical gibberish (see Carnap 1959 [1932]: Aver 1952). According to verificationists, a sentence S is *meaningful* if and only if either (i) it is analytic or (ii) it is empirically verifiable. If S is neither (i) nor (ii), then it is not cognitively meaningful. The effect of this principle was aimed at eliminating speculative metaphysics and demarcating the empirical sciences from philosophy. However, the verification principle also took a more specific form that identified the meaning of individual sentences with the particular set of experiences that would render the sentence true (or false). Much of the work of logical positivists and objections by its opponents zeroed in on problems concerning the principle notions of *analyticity* and *empirically verifiability*. While some of the early debates over the principle of verification led to refinement of the principle,<sup>12</sup> other objections were more devastating. The most deadly among them were raised by Pierre Duhem (1906/1954) and Quine (1960) against the idea of there being distinctive verification conditions independent of any background theory and Peter Hempel (1950:50) and Alonzo Church (1949) against the use of 'deducibility' in Ayer's (1952:13) mature articulation of the verification condition.<sup>12</sup>

In contrast to verificationism, a truth-conditional approach analyzes the meaning of a sentence with the *conditions under which the sentence is (or would be) true*. Thus, on the truth-conditional approach, to know the meaning of an individual sentence one need only know *the conditions under which the sentence would be true*, while on the verificationist approach, to know the meaning of an individual sentence (or data) that would render the sentence true (or false). The verificationist theory of meaning not only demarcates meaningful from non-meaningful expressions on the basis of whether or not they are verifiable but also makes the meaning of an expression depend on an articulation of how we might *confirm* whether the expression is true or false. Lycan ([unpublished]) offers the following example:

<sup>[</sup>C]onsider a sentence to which the Verificationist would assign a meaning other than its facevalue or ostensible meaning, such as a sentence about electrons; e.g., the Verificationist says, "An electron has just passed through the cloud chamber" means that having squeezed the bulb, one sees a trail of grey specks in the chamber, etc. Now, if a sentence means that P, then that sentence is true iff P. So, on the Verificationist analysis, "An electron has just passed through the cloud chamber" would be true iff having squeezed the bulb, one sees a trail of grey specks in the chamber, etc.; thus the Verificationist theory assigns to that sentence, and to every other sentence to which it applies, a truth-condition, and in particular a truth-condition that according to the theory is the sentence's meaning. So, to put it provocatively: Verificationism = the Truth-Condition theory plus some distinctive advice about how to determine what a given sentence's truth-condition is (viz., by asking how the sentence is verified)

In sum, the truth-conditional approach to meaning drops the epistemological baggage of the verificationist approach since it does not require that one *be able to determine* whether or not a sentence is true in order to know its meaning. Thus, if I know the meaning of 'Penn State is in Bellefonte' I do not need to know whether this is in fact true (it isn't) nor do I need to know what particular set of experiences would render this statement true. Rahter, I only need to know what the world would have to be like if the sentence is true.

A variety of *formal* and *empirical* constraints are imposed on truth-conditional theories so that the theory meets certain semantic goals. The first constraint is what I will call a *completeness constraint*. One goal of a theory of meaning for a language is that it be able to specify the meaning of *each* grammatical sentence in a language and not some fragment of the language.<sup>13</sup> As Davidson (2001 [1970]:55) puts it, "[a] theory of the semantics of a natural language aims to give the meaning of every meaningful expression."<sup>14</sup> On the truth-conditional approach, this amounts to being able to specify the truth conditions for every sentence in the language. Any theory of meaning that only assigns truth conditions to some fragment of the language is an **incomplete** theory of meaning.

A second constraint is what tends to be called the *holistic constraint* but this guideline tends to be cut with certain considerations having to do with the *compositionality* and *learnability* of a language. According to Davidson (2001 [1970]:55),

Since there seems to be no clear limit to the number of meaningful expressions, a workable theory must account for the meaning of each expression on the basis of the patterned exhibition of a finite number of features. Even if there is a practical constraint on the length of the sentences a person can send and receive with understanding, a satisfactory semantics needs to explain the contribution of repeatable features to the meaning of sentences in which they occur.

Davidson makes two points in the above passage. First, there is a specific way in which the completeness of a semantic theory is to be obtained. We do not, and moreover could not, specify the truth conditions for every sentence in a language by providing a finite list where for every meaningful utterance we assign a meaning. Natural languages are recursive and so they are capable of containing an infinite number of sentences. Second, even if we circumscribe the goals of a semantic theory by saying that its aims are only to

<sup>&</sup>lt;sup>13</sup> Davidson (2001:xv) puts this constraint as follows: "What is it for words to mean what they do? In the essays collected here I explore the idea that we would have an answer to this question if we knew how to construct a theory satisfying two demands: it would provide an interpretation of all utterances, actual and potential, of a speaker or group of speakers; and it would be verifiable without knowledge of the detailed propositional attitudes of the speaker."

<sup>&</sup>lt;sup>14</sup> As Davidson (2001 [1965]:8) puts it elsewhere, "we must be able to specify, in a way that depends effectively and solely on formal considerations, what every sentence means."

explain the meaning of sentences that a language could actually produce, Davidson claims that we still "would need to explain the contribution of repeatable features to the meaning of sentences in which they occur." This is to say that one goal of a semantic theory is that it ought to explain the meaning of any recursive features of a language that are responsible for producing a potentially infinite number of sentences in a language. Given the demand that a semantic theory ought to explain the meaning of the recursive features of a language, semantic theories generally aim at explaining two additional factors: a semantic theory needs to explain how natural languages are **compositional** (how the meaning of complex expressions is a function of the meaning of that expression's parts) and **learnable** (how it is possible for a language user with finite mental resources to know the meaning of an arbitrary-chosen and indefinitely-long well-formed sentence). So, in short, part of the holistic constraint is the claim the parts of sentences have their meaning only in the context of their systematic contribution to the meaning of larger expressions (the sentence) and the structure of language as a whole.

In short, a formal semantic theory that takes the truth-conditional approach to meaning as its guide aims to meet the completeness and holistic criteria by assigning truth conditions to sentences.<sup>15,16</sup> This sort of theory differs from an *entitative theory of meaning* that assigns *meanings* to expressions in an object language. According to Davidson, theories of this sort are problematic because there is no clear way to both give the meaning of a sentence and meet the compositionality requirement, i.e. no clear path to showing how the meaning of a sentence is a function of the meaning of its parts. To see this more clearly, consider a theory of the following form:

(M) 'E' means that m.

<sup>&</sup>lt;sup>15</sup> This is somewhat of an overly simplistic account for Davidson does not think that all we can learn about the meaning of a sentence is captured by a T-sentence. Davidson (2001 [1970]:61)writes, "[w]hat we learn is brought out rather in the *proof* of such a biconditional, for the proof must demonstrate, step by step, how the truth value of the sentence depends upon a recursively given structure."

<sup>&</sup>lt;sup>16</sup> Kathrin Glüer (Glüer 2011) puts it as follows:

The basic idea of truth conditional semantics then is that what we know when we understand an utterance is when, or under what conditions, the uttered sentence is *true*. Hence the idea that a formal semantic theory is a theory that assigns truth conditions to the sentences of a given language.

Now suppose that we take a highly referential approach to meaning: one that takes the meaning of sentences to be *truth values*, the meaning of singular terms like proper names to be *singular objects*, and the meaning of predicates to be *concepts* (functions from objects to truth values).<sup>17</sup> On this approach, the sentence 'John is a man' refers to a value of *True*, 'John' refers to *John* (a particular person), and 'x is a man' refers to a particular function from objects to truth values. On this approach, we can certainly explain how the meaning of the sentence is a function of its parts for *True* is the result of inputting *John* into the function 'x is a man.' However, while the theory meets the compositional requirement, the theory has the absurd consequence of making all true sentences have the same meaning and all false sentences have the same meaning. That is, 'John is a man' means the same thing as 'Vic is a man' for both are true.

Rather than produce a theory of meaning through a theory of reference (e.g. one that assigns meanings (truth values) to sentences), the truth-conditional approach gives the meaning of a sentence by specifying the *conditions* under which each sentence in the language is true and specifying how the truth conditions of the sentence are a function of the truth conditions of the parts of the sentence.

As a first step, this is done by replacing (M) with (T) where 'S' is the name (or description) of a sentence in the object language and p are the conditions (specified in the metalanguage) under which S would be true.

(T) 'S' is true if and only if p.<sup>18</sup>

In various instantiations of (T), sentences within quotation marks on the left-hand side of the biconditional are uninterpreted strings in the object language while the italicized information on the right-hand side is a minimal specification under which the left-hand

<sup>&</sup>lt;sup>17</sup> This sample theory is based on a Fregean theory of meaning. See (Frege 1984 [1892], 1952).

<sup>&</sup>lt;sup>18</sup> It is important to note that T-theories must be relativized to particular languages since it is possible for two languages to have identical elements (e.g. sentences) in the object language but for the meaning of these sentences to differ depending on which language the sentence is uttered. For example, 'snow is white' might be a well-formed sentence in English and a fictional language called 'Fictlish' but while in English 'snow is white' is true if and only if *snow is white*, in Fictlish 'snow is white' is true if and only if *blood is red*. Thus, (T) is better represented as (T\*), where 'L' is a placeholder for a particular language:

<sup>(</sup>T\*) 'S' is true in L if and only if p.

side is true. Since the meaning of a sentence is defined in terms of a specification of the truth conditions rather than reference to certain truth values, the theory is not an entitative theory of meaning.

As a final step, we need to show how the truth conditions of 'S' are a function of the truth conditions of the parts of the sentence. The way to achieve this is by producing a finite list of axioms for the sub-sentential primitives, e.g. a *reference axiom for proper names* ('Charles S. Peirce' refers to *Charles S. Peirce*) and a *satisfaction axiom for predicates* ('Red' is satisfied by red things or 'the predicate 'x is red' is true of something if and only if that thing is red) (Carston 2011; see also Morris 2007:184). The result of this is that the meaning of the sentence (specified in terms of its truth conditions) is a function of the meaning of its parts (specified in terms of their referents and satisfaction conditions for predicates). Thus, on the truth-conditional approach to meaning, the meaning of 'snow is white' is given by a specification of its truth conditions (e.g. 'snow is white' is true in English if and only if *snow is white*) but also how each component expression contributes to the truth conditions of the sentence.

Given the above specification of truth-conditional semantics, there are a number of obvious problems that the theory faces. First, our focus has been on sentences whose grammatical form is declarative rather than interrogative, exclamatory, or imperative. It is not straightforwardly the case that sentences of this form have truth conditions and so it might be argued that a semantic theory, in its effort to deliver a complete theory of meaning, falls short.<sup>19</sup> Second, anti-realists about aesthetic or moral claims might argue that declarative sentences involving aesthetic or moral vocabulary do not have truth conditions. If a sentence is only true or false if there is some fact in the world that makes it true, and there are no facts that make aesthetic or moral utterance true (or false), then these sentences do not have truth conditions.

A final objection is that 'p' in (M) occurs in an intensional context and so, given a particular instantiation P of p, you can only substitute a proposition that means the same as P. In contrast, the 'p' that occurs in (T) is after the 'if and only if', which denotes an *extensional* context. Given some acceptable instantiation of 'p', you can substitute for

<sup>&</sup>lt;sup>19</sup> For a response, see (Davidson 2001 [1979])

this proposition any proposition that has the same truth value. Thus, given (i), we can replace *snow is white* with *grass is green* in (ii).

- (i) 'snow is white' is true if and only if *snow is white*.
- (ii) 'snow is white' is true if and only if grass is green.

This result is problematic because it yields T sentences that are *not interpretive*, i.e. while it might be plausibly asserted that T sentences like (i) give the meaning of their target sentences, it is implausible to say that those like (ii) do.<sup>20</sup>

2.2\* A MORE LOGICAL-LINGUISTIC OVERVIEW OF TRUTH CONDITIONAL SEMANTICS A natural language, as conceived from a formal point of view, consists of a syntactic and a semantic component.<sup>21</sup> The syntactic component consists of a **lexicon**, a **syntax**, and a **set of provable theorems**. The lexicon consists of the primitive parts of a language (L), namely the classification of expressions in L into various **syntactic categories**—e.g. S (sentence), NP (noun phrase), VP (verb phrase). The syntax consists of **phrase-structure rules** (or **production rules**), which are rules that specify how complex expressions in each syntactic category are built up. The combination of lexicon, syntactic categories, and phrase-structure rules form the **formal grammar** of a language. Whereas human languages are *unbounded* in that they can express an infinite number of different sentences, the formal grammar of a natural language is *bounded* in that relies upon recursive phrase-structure rules to generate sentences of any arbitrary length. Finally, the **theorems** of the formal grammar are the provable sentences that are capable of being generated by formal grammar. A syntactic theory is adequate provided for any sentence in the language, the phrase structure rules are able to generate it.

The semantic component is closely related to the syntactic component in that it consists of a **lexical semantics**, a **combinatorics**, and a **set of provable theorems**. The lexical semantics and combinatorics form the **formal semantics** of L. The lexical semantics is a finite list of specifications of the meaning of the primitive parts of L (e.g.

<sup>&</sup>lt;sup>20</sup> This is sometimes called the "information problem" (see Segal 2006:201; Davidson 2001 [1967]:26, 2001 [1976]:174).

<sup>&</sup>lt;sup>21</sup> The following characterization is based upon (Larson and Segal 1995:25-62; Higginbotham 2006; Cresswell 2006; Carnie 2007).

to words or morphemes). Crucially, the meaning of any complex expression cannot be determined without the addition of a combinatorics—a specification of how the meanings of the parts of a complex expression combine to determine the meaning of a complex expression. This is because even if we know the meaning of the primitive parts, know the syntactic categories to which they belong, and know the phrase structure rules that generated the sentence, we do not know the meaning of the complex expression. For example, we might know the meaning of 'John' and the meaning of 'runs', know that 'John' is proper noun and 'run' is a verb, and know that the sentence is generated by a phrase-structure rule that allows for combining proper nouns to verbs, but we would not know the semantic effect of combining these two primitives together. Finally, the theorems of the formal semantics are the provable sentences that assign meaning to syntactic structures.

At this point, we might expect the primary goal of a formal semantic theory to be to pair syntactic structures (we will focus on sentences) in L with their meanings. That is, a semantic theory should be construed as a deductive system for a particular L that pairs every sentence in L with its meaning. In particular, for every sentence in L, a semantic theory proves a theorem of the form (M), where S is a name (or description) of a sentence in L (i.e., S refers to a sentence in L) and p is a proposition that has the same meaning as the sentence referred to by S:

(M) S in L means that *p*.

This sort of move has been heavily criticized since it reifies meanings and because it seems unable to account for the fact that linguistic meaning is compositional.

When considering the task of a semantic theory for a natural language, it is important to keep in mind the desiderata we would like a theory of meaning to fulfill. On a truth-conditional approach to semantics, all of the 'meaning facts' we would like a semantic theory to explain (i.e., the traditional desiderata for a semantic theory) can be explained by a theory of the sentence's truth conditions. **Truth-conditional semantics** (TCS) is a theory of the literal meaning of natural language sentences. The essential claim of TCS is that the literal meaning of sentences is deliverable by a theory of the truth conditions (a truth theory or T-theory) of those sentences (Davidson 1967, 1968,

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1965). A **T-theory** is a deductive system that proves statements (theorems or T-schemas) in a metalanguage that tell us under what conditions a sentence (in an object language) is true (Tarski 1983 [1933]). The schemas of these theorems are given below as (T)—known as **T sentences**—where 'S' is the name (or description) of a sentence in the object language, 'L' indicates the particular language in which S occurs, and 'p' are the conditions (specified in the metalanguage) under which S is true.

(T) S is true in L if and only if *p*.

Particular instantiations of (T) are provided below:

(1) 'snow is white' is true in English if and only if snow is white.

(2) 'la neige est blanche' is true in French if and only if snow is white.

(3)  $(\forall x)(Sx \rightarrow Wx)$  is true in predicate logic if and only if *all snow is white*.

Unlike (1), the object language and metalanguage in (2) and (3) differ. For example, in (2), the object language sentence undergoing analysis is in French and the metalanguage in which the T sentence is expressed is in English. In (3) the object language is first-order predicate logic and the metalanguage is English. The divergence of the object language from the metalanguage—while not a necessary feature of the T-theory—helps prevent an important misunderstanding concerning T-theories. Namely, the apparent triviality of Ttheories disappears when it is recognized that a T-sentence does not express the trivial relation that a sentence has to itself. That is, it does not state that a particular sentence  $S_1$ in an object language has a relation to itself  $S_1$  in an object language. For example, 'snow is white is true' if and only if it is true. Instead, the triviality disappears when it is recognized that a T-sentence says that a sentence in an object language has the property of being true under the conditions specified in the metalanguage. Thus, unlike cases where the object language and the metalanguage are homophonic and expressed in the same language, instantiations where the object and meta-languages differ bring out the critical feature of T-sentences that they are statements about the *conditions* under which certain sentences are true.
## 2.3\* A SAMPLE SEMANTIC THEORY

According to Davidson (2001 [1970]:61), the meaning of a sentence is *not* merely found in a T-sentence but in a *proof* of the T-sentence for Davidson thinks that a proof shows how the truth value of the sentence *depends upon a recursive structure* and is not simply a one-to-one assignment of meanings to linguistic expressions. To exhibit the recursive structure of a language, truth-conditional semantics invokes the use of a T-theory. A **Ttheory** for a particular language L is a deductive system that proves something about the truth value of every sentence in L. In particular, for every sentence in L, the T-theory proves a theorem of the form (T), where S is a name (or description) of a sentence in L (i.e., S refers to a sentence in L) and *p* is a proposition that has the same truth value as the sentence referred to by S:

(T) 'S' is true in L if and only if *p*.

Theorems of the form of (T) are **T sentences**. As noted above, these are the provable sentences that assign meaning to syntactic structures. In order to better understand how a T theory works, it is helpful to examine a simplified instance of a language. Consider a dummy language that we will call 'DL' (dummy language). DL contains an infinite number of sentences although it is extremely limited in terms of its basic expressions. For the purpose of illustration, assume there exist three basic (or elementary) sentences in DL:

(1)	a	'John runs'
	b	'Liz smiles'
	c	'John dislikes Vic'

In addition to the presence of the above three basic expressions, also suppose the presence of three propositional operators 'and,' 'or,' and 'it is not the case that.' In DL, elementary sentences are built up by the following rules: <sup>22</sup>

<sup>&</sup>lt;sup>22</sup> It is worth noting that the sample deduction here is simplified since the primitives of this example are sentences rather than sub-sentential units. The way to achieve a more complete theory on the semantic side, for example, would be to produce a finite list of axioms for the sub-sentential primitives, e.g. a *reference axiom for proper names* ('Charles S. Peirce' refers to *Charles S. Peirce*) and a satisfaction axiom for predicates ('Red' is satisfied by red things). For more on this, see (Carston 2011).

(2)	a	$S \rightarrow$ 'John runs'
	b	$S \rightarrow$ 'Liz smiles'
	c	$S \rightarrow$ 'John dislikes Vic'

The remaining set of sentences in DL is generated by using the following production rules:

(3)	a	$S \rightarrow S'$ and $S'$
	b	$S \rightarrow S \text{ or } S'$
	c	$S \rightarrow$ 'It is not the case that S'

Using the above rules, an infinite number of sentences can be generated. Some example sentences include:

(4)	a	[s John runs]
	b	[s Liz smiles]
	с	[s John dislikes Vic]
	d	[ <sub>S</sub> [ <sub>S</sub> John runs] and [ <sub>S</sub> Liz smiles]]
	e	[ <sub>S</sub> It is not the case that [ <sub>S</sub> John runs]]
	f	[s It is not the case that [s [s John runs] or [s Liz smiles]]]

The derivational histories of the above sentences are marked by labeled brackets. These derivations can also be represented by more familiar tree diagrams. For example, (4d) receives the following representation:



The elementary sentences are the **terminal nodes** of the tree. These are elements that have no internal structure. **Nonterminal nodes** are parts of the tree that have internal syntactic structure, e.g. (4d) has internal syntactic structure.<sup>23</sup>

<sup>&</sup>lt;sup>23</sup> Obviously, (4d) has more internal syntactic structure than is being represented above (e.g. it consists of a NP and VP). The example is a simplified account that illustrates the basic workings of a T-theory.

Recall that a T-theory for a particular language L is a deductive system that proves something about the truth value of every sentence in L. In particular, a T theory for DL will allow us to prove a T sentence for every sentence in DL. The theory consists of three parts: (i) an interpretation of terminal nodes (elementary sentences), (ii) an interpretation of nonterminal nodes (complex sentences), and (iii) a set of production rules.

The interpretation rules for terminal nodes in DL specify the semantic contribution of the elementary sentences (1a–b). These are:

(5)	a	'John runs' is true in English iff John runs.
	b	'Liz smiles' is true in English iff Liz smiles.
	с	'John dislikes Vic' is true in English iff John dislikes Vic.

The interpretation rules for nonterminal nodes in DL specify the semantic contribution of non-elementary (or complex) sentences. These interpretation rules allow the derivation of T sentences for complex sentences by using the T-sentences of sentences with less complexity. These interpretation rules are as follows:

(6)	a	$[_{S} S_{1} and S_{2}]$ is true iff both $S_{1}$ is true and $S_{2}$ is true.
	b	[ $_{S}$ S <sub>1</sub> or S2] is true iff either S <sub>1</sub> is true or S <sub>2</sub> is true.
	c	[s It is not the case that S] is true iff it is not the case that S is true.
	d	For any elementary sentence $\alpha$ , [s $\alpha$ ] is true iff $\alpha$ is true.

The production rules are deductive inferences. DL offers two production rules. The first production rule is the substitution of equivalents:

(SE)	Substitution of	
	equivalents	
	$F(\alpha)$	
	αiffβ	
	F(β)	SE

(SE) says that for any elementary sentence  $\alpha$ , if we have proved a statement involving  $\alpha$ , and have proven that  $\alpha$  is equivalent to  $\beta$ , then we can substitute  $\beta$  for  $\alpha$ .

The second production rule is universal instantiation:

(UI)	Universal Instantiation	
	For any S, F(S)	
	$F(\alpha)$	UI

A T-theory for a particular language L is a *deductive system* that can prove something about the truth value of every sentence in L. The interpretation rules for terminal nodes, the interpretation rules for nonterminal nodes, and the production rules jointly form just such a deductive system.

## 2.4\* A SAMPLE DEDUCTION

Above, it was said that a T-theory for a particular language L is a *deductive system* that can prove something about the truth value of every sentence in L. In particular, it was claimed that a T-theory can prove a T-sentence for every sentence in L. Before showing how a T-theory can serve as a theory of meaning, it is illustrative to present a sample deduction. That is, a T theory for DL will allow us to prove a T sentence for every sentence in DL. Consider (4d) in bracketed notation:

(4d)  $[_{S} [_{S} John runs] and [_{S} Liz smiles]]$ 

and in the tree notation presented earlier:



The derivation of a T sentence for (4d) begins by starting with the uppermost node (in the case of the bracketed notation, interpretation begins at the leftmost unit) and interpreting it in terms of the node's subsentences. That is, in order to assign (4d) a T sentence, we begin at the uppermost node of (4d), work our way down with interpretive rules for nonterminal nodes to terminal nodes, and then apply interpretation rules (which yield T sentences) to the terminal nodes. Once T sentences are applied to the terminal nodes, we

work our way back up the tree using production rules, ending the derivation by assigning the complex sentence a T sentence.

To begin, start with (4d)

(7)	[s [s John runs] and [s Liz smiles]] is true iff	(4d), (6b),
	both [s John runs] is true and [s Liz smiles] is	UI
	true.	

Next, (6d) states that any elementary sentence  $\alpha$ , [s  $\alpha$ ] is true iff  $\alpha$  is true. This rule allows for interpreting each of the conjuncts on the right-hand side. Thus,

(8)	a	[s Liz smiles] is true iff 'Liz smiles' is true.	(6d), UI
	b	[s John runs] is true iff 'John runs' is true.	(6d), UI

Next, (5a) and (5b) specify T sentences for the elementary sentences on the right-hand side. Thus,

(9)	a	'Liz smiles' is true iff Liz smiles.	(5b)
	b	'John runs' is true iff John runs.	(5a)

We now have T sentences for the terminal nodes of (4d). That is, we have assigned the sentences 'Liz smiles' and 'John runs' a respective T sentence. It is now time to work back up through the tree using production rules to assign each nonterminal node of the tree a T sentence. The first step is to assign [s Liz smiles] and [s John runs] a respective T sentence. Beginning with [s Liz smiles]:

10	a	Let $F(\alpha) = (8a)$ . That is, let $F(\alpha) = [S \text{ Liz}]$	(8a)
		smiles] is true iff Liz smiles is true.	
	b	Let $\alpha$ = 'Liz smiles is true'	
	c	Let $\beta$ = 'Liz smiles'	
	d	'Liz smiles' is true iff Liz smiles.	(9a)
	e	Therefore, [S Liz smiles] is true iff Liz	(8a),
		smiles.	(9a), SE

The method is the same for [s John runs]:

11	a	Let $F(\alpha) = (8a)$ . That is, let $F(\alpha) = [s]$	(8b)
		John runs] is true iff John runs is true.	

b	Let $\alpha = 'John runs$ is true'	
с	Let $\beta$ = 'John runs'	
d	John runs is true iff John runs.	(9b)
e	Therefore, [ <sub>S</sub> John runs] is true iff John	(8b),
	runs.	(9b), SE

We now have T sentences for two nonterminal nodes of (4d) but do not have a T sentence for (4d). Thus, the next step is to assign [ $_{S}$  [ $_{S}$  John runs] and [ $_{S}$  Liz smiles]] a T sentence. This is achieved in two steps. First, we begin by substituting the [ $_{S}$  John runs] and [ $_{S}$  Liz smiles], which occur on the right hand side of the biconditional in (7) with (11e) and (10e) respectively. That is,

12	a	Let $F(\alpha) = (7)$ . That is, let $F(\alpha) = [s [s (7)]$	
		John runs] and [s Liz smiles]] is true iff	
		both [s John runs] is true and [s Liz	
		smiles] is true.	
	b	Let $\alpha = [s \text{ Liz smiles}]$ is true'	
	c	Let $\beta$ = 'Liz smiles'	
	d	[s Liz smiles] is true iff Liz smiles	(10e)
	e	Therefore, [ <sub>S</sub> [ <sub>S</sub> John runs] and [ <sub>S</sub> Liz	(7), (10e),
		smiles]] is true iff both [s John runs] is	SE
		true and Liz smiles.	

Repeating this same procedure for [s John runs] is as follows:

13	a	Let $F(\alpha) = (12e)$ . That is, let $F(\alpha) = [S[S] (12e)$	
		John runs] and [s Liz smiles]] is true iff	
		both [s John runs] is true and Liz smiles	
		is true.	
	b	Let $\alpha = [s \text{ John runs}]$ is true'	
	c	Let $\beta$ = 'John runs'	
	d	[s John runs] is true iff John runs.	(11e)
	e	Therefore, [ <sub>S</sub> [ <sub>S</sub> John runs] and [ <sub>S</sub> Liz	(12e),
		smiles]] is true iff both John runs and	(11e), SE
		Liz smiles.	

(13) shows that the sentence 'John runs and Liz smiles' is true if and only if *John runs and Liz smiles*. It further illustrates the existence of a formally precise deductive system that proves something about the truth value of every sentence in L. Namely, what was

illustrated above was a T theory for DL, which makes use of a set of explicit procedures for obtaining T sentences.

#### 2.5 INTERNAL AND EXTERNAL OBJECTIONS TO TRUTH-CONDITIONAL SEMANTICS

With the above example of a formal approach to meaning in place, we can now return to the central topic of this dissertation. The goal of this dissertation is to defend formal approaches to semantics from an objection that is increasingly being met with favor. In this section, I briefly distinguish this objection from a related set of worries for formal theories.

Two different types of objections can be leveled at formal semantic theories. Some objections are *internal* to the theory insofar as they apply to features of a specific formal theory but they do not apply to formal semantic theories in general. For example, one popular objection to truth-conditional semantic theories is the problem of coextension. If the meaning of a sentence is to be understood in terms of its truth conditions, then sentences involving coextensive terms appear to mean the same thing even though they intuitively diverge (see Reeves 1974; Blackburn 1984). This has the effect of leaving the truth-conditional theory *uninterpretive*, i.e. failing to interpret the meaning of natural language sentences.<sup>24</sup> For example, the truth-theoretic approach to meaning will not be able to distinguish between 'renate' (creature with kidneys) and 'cordate' (creature with a heart). Thus, the following will be true:

'All humans are renates' is true iff all *humans are cordates*. 'Snow is white' is true iff *living humans have hearts*.

In contrast to objections of the above sort, other objections are *external* to any specific formal theory insofar as they apply to formal semantic theories of any variety. The primary challenge I consider in the rest of this work is that the context sensitivity of meaning threatens the possibility of a formal (e.g. truth-conditional) account of semantics. Recall that a semantic theory delivers theorems about the meaning of sentences by interpreting the syntactic features of the sentence. Now if a formal semantic

<sup>&</sup>lt;sup>24</sup> See (Foster 1976; Davies 1981; Larson and Segal 1995:32; Davidson 2001 [1976]). For more on this issue and alternative accounts, see (Lewis 1975; Higginbotham 1992; Soames 1992).

theory is to be adequate for a natural language, then it must come to terms with the fact that the semantic content of expressions vary from one context of utterance to the next and that this variance in meaning might not occur with any systematic variance in form. The objection then is that the context sensitivity of meaning jeopardizes the possibility of formal approaches to meaning since shifts in meaning are not the result of a syntactic or lexical difference in the sentence. If this is the case, then formal semantic theories will meet their death for one (or both) of the following reasons: (i) they will fail to provide an adequate account of the literal meaning of natural language sentences because the content that the formal theory delivers falls short of what an utterance literally expresses or (ii) they will supply an adequate account but the meanings they supply will be unacceptable given other considerations (e.g. they might be deemed completely unintuitive or incompatible with any account of human psychology).

These two objections are considered in detail in the next chapter. In the rest of this chapter, I outline the view of formal (minimal) semantics I am committed to, differentiate it from an overly strong formal semantic theory and showcase the explanatory rival to my view.

## 3. AN OBJECTION TO STRONG FORMAL THEORIES OF SEMANTICS

The bane of formal semantic theories has always been squaring an abstract model of meaning with how language actually works. One common tactic of theorists with formal tendencies is to sweep troublesome features of natural language under the rug. For example, there is a disconnect between the vagueness in natural language and first-order predicate semantics. When making judgments about the extensions of natural language predicates like 'tall', 'red', and 'heap', we tend to assume that they do not have clearly-defined boundaries (extensions), viz. the addition of 1mm does not make a difference as to whether or not someone is tall or not tall. However, the semantics of first-order predicate logic, it is traditionally assumed that the extensions of such predicates have sharp boundaries (extensions). If this is the case, then small differences in the height of objects do not make a difference as to whether an object is *tall* or *not tall*. Some theorists—for example Russell (1923)—have suggested that vagueness in natural language is evidence for a *defect* in natural language and not something that should be

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incorporated into a formally precise semantic theory. Thus, vagueness is swept under the rug by claiming that it is not a feature that a semantic theory should accommodate.<sup>25</sup> Others have tried to explain away vagueness by claiming it is an *epistemic* rather than *semantic* phenomenon and so does not require any serious modification to the classical semantic account of natural language.<sup>26</sup> Still others have tried to capture vagueness by offering increasingly complex alternative formal semantic theories.<sup>27</sup>

The tendency to partition context from the determination of linguistic meaning amounts to another example of sweeping troublesome features of language under the rug. One core feature of any formal semantic theory is that the *literal meaning* (the semantic content) of a sentence is determined by a specification of the sentence's truth conditions, and these truth conditions are determined by interpreting the formal features in the sentence. A *strong version* of this approach takes *sentence types as input* and determines truth conditions for those sentence types as output.



One example of this type of *strong* model is known as the 'Simple Assign and Combine Model.' As Clapp (2009:80), who credits Reimer (2002) for the label, characterizes the position:

The Simple "Assign and Combine" Model (SACM): The truth conditions expressed by, i.e. what is said by, an utterance of S is a *function of only* (i) S's logical form and (ii) the meaning of the words in S.

<sup>&</sup>lt;sup>25</sup> Wright writes the following "Of course, we have long since abandoned the Frege-Russell view of the matter. We no longer see the vagueness of ordinary language as a defect. But we retain a second-order wraith of the Frege-Russell view in the notion that even if the senses of many expressions in natural language are not exact, there is a precise semantical description for a given natural language, i.e., a theoretical model of the information assimilated in learning a first language or, equivalently, of the conceptual equipment in whose possession mastery of the language may be held to consist. Even if 'bald', say, is imprecise, this does not require any inexactitude in an *account* of its sense" (Wright 1975:325-6).

criticism of this approach, see (Agler 2010:43-52; Gómez-Torrente 1997).

<sup>&</sup>lt;sup>27</sup> One example is supervaluational semantics, see (Fine 1975:63-71; Keefe 2000b, 2000a, 2008; Mehlberg 1958). For a quick overview and criticisms of this approach, see (Agler 2010).

SACM claims that in order to determine the truth conditions of a sentence, all that is required is that language users identify the sentence's syntactic structure and stipulated interpretations. To characterize this position in parameter-based language, a sentence is a function from the meaning of the words and the logical form of the sentence to a proposition or truth conditions.<sup>28</sup>

A rough example of a *strong formal model* comes from Rudolf Carnap. In his *The Logical Syntax of Language*, Carnap (1937:168) writes that unlike logical and scientific languages, natural language contains "sentences whose logical character [...] depends not only upon their syntactical structure but also upon extra-syntactical circumstances." By contrast, scientific and logical languages are capable of having a pure semantics that contain, Carnap writes,

*no expressions dependent upon extra-linguistic factors.* The logical character of all the sentences of these languages is then invariant in relation to spatio-temporal displacements; two sentences of the same wording will have the same character independently of where, when, or by whom they are spoken. In the case of sentences having extra-syntactical dependence, this invariance can be attained by means of the addition of person-, place-, and time-designations (1937:168).

Thus, for Carnap, the truth of an utterance depends upon two parameters: the contextinvariant meaning of a sentence type S and the way things are in the world *w*. The goal of semantics on this approach is to assign meanings to sentence types. In such a formal semantic theory, the context of an utterance C does not play a role in the determination of the truth conditions. In other words, Carnap defines semantics as a sort of word-object or

<sup>&</sup>lt;sup>28</sup> One way to think about this approach is as a serial model of how language gets processed. This is a model where phonetics feeds into syntax, syntax into semantics, and semantics into pragmatics:

phonetics/orthographics  $\rightarrow$  syntax  $\rightarrow$  semantics (truth conditions)  $\rightarrow$  pragmatics

On this picture of linguistic understanding, a language user first comes into contact with an auditory signal, identifies it as speech (phonetic interpretation), identifies its structural properties (syntactic interpretation), then determines the meaning of these structural elements (semantically interpreted). On this model of linguistic understanding, semantic interpretation is explanatory prior to, and its output is autonomous from, features of context that would somehow influence the meaning of S. That is, on such a theory, generating the truth conditions for a sentence does *not* depend upon extra-syntactic or extralinguistic conditions.

sentence-world relation that is independent of the context in which a word or sentence is used.

One problem with the above model is that it is *incomplete* as a model for natural languages since the definition of pure semantics can only specify truth conditions for a limited set of sentence types (those of artificial, context-insensitive languages rather than natural, context-sensitive languages). Such a theory cannot specify the semantic contribution of *natural language utterances* because many utterances contain overt context-sensitive expressions (e.g. 'I', 'you', 'this') and the meaning of sentence types with these expressions *depend* upon features in the context in which the type is used. That is, part of the inherent meaning of these terms depends upon features located in the context of use. These expressions do not have their meanings independent of a context but rather *exploit* the context to produce their literal meaning. Thus, natural languages have indexical expressions that make the truth or falsity of an utterance dependent upon the meaning of a sentence, the way things are in the world, *and also various contextual factors*.

Most notable among those voicing this complaint was Yehoshua Bar-Hillel. He writes (in referring to the passage by Carnap quoted above),

It must be perfectly clear that especially the last qualification restricts highly the immediate applicability of Carnap's General Syntax to natural languages. The overwhelming majority of the sentences in these languages are *indexical*, i.e. dependent upon extra-linguistic factors, and their transformation into a context-invariant form poses formidable problems, which are only touched upon in the last-quoted sentence (1970 [1963]:123).

According to Bar-Hillel, limiting formal analysis to languages that did not depend upon context would result in a severe limitation of formal semantic. Bar-Hillel writes,

Owing to the restriction to non-indexical languages—voluntary and explicit with Carnap, unconscious with most other logicians—the tremendous development of Logical Syntax and Semantics in the last two decades has had only limited bearings on indexical languages, and no satisfactory *logic of judgments* has been proposed so far, although judgments with indexical components play an extremely important role both in common and in philosophical discourse. I have no statistics available, but I guess that more than 90 per cent. of the declarative sentence-tokens we produce during our life-time are indexical sentences and not

statements; it is plain that most sentences with tensed verbs are indexical, not to mention all those sentences which contain expressions like 'I', 'you', 'here', 'there', 'yesterday' and 'this' (1954:366).<sup>29</sup>

What Bar-Hillel recognized was that capturing the truth conditions of a sentence types containing indexicals demands an appeal to the specific context of the utterance. This is because the semantic contribution of overt context-sensitive expressions (e.g. 'I', 'you', 'here', 'there') differs in different contexts of use. Bar-Hillel argued that while the truth conditions of certain sentence types are determinable by the formal features in the sentence, other sentence types require a consideration of contextual factors. Consider the following:

(1) Ice floats on water.

According to Bar-Hillel (1954:359), the literal meaning of (1) can be determined by the sentence meaning alone since it "will be understood by almost every grown-up normal English-speaking person to refer to the same state of affairs." Symptomatic of the context-insensitivity of (1) is that its truth-conditions can be straightforwardly given using a T sentence.

 $(1_T)$  'Ice floats on water' expresses the proposition that *Ice floats on water* and is true if and only if ice floats on water.

However, consider the following sentence:

(2) I am hungry.

The literal (truth-conditional) meaning of (2) cannot be determined simply by interpreting the terms independent of the context since the meaning of the first-person pronoun in (2) depends upon *who* utters (2). For example, with respect to (2), we can imagine two different utterances, one said by John, the other by Frank. In such a case,

 $(2_{John})$  'I am hungry' (uttered by John) is true if and only if *John is hungry*. ( $2_{Frank}$ ) 'I am hungry' (uttered by Frank) is true if and only if *Vic is hungry*.

<sup>&</sup>lt;sup>29</sup> The "logic of judgments" is Bar-Hillel's name for the logic of ordered pairs of sentences and contexts (see 1954:365).

Notice that the propositions expressed by  $(2_{\text{John}})$  and  $(2_{\text{Frank}})$  are different propositions despite the fact that they are both instances of the sentence type (2). The proposition expressed by  $(2_{\text{John}})$  is *John is hungry*, while the proposition expressed by  $(2_{\text{Frank}})$  is *Frank is hungry*. Furthermore, it is readily apparent that the truth conditions for (2) and (2) cannot be straightforwardly given using a Tarskian truth definition. Consider the following:

 $(2_T)$  'I am hungry' expresses the proposition I am hungry and is true if and only if I am hungry.

The problem with  $(2_T)$  is that the first-person pronoun needs to have an object assigned to it but such an assignment depends upon *who* uttered (2), which is not determinable by a linguistic convention independent of the context of the utterance. In short, such a strong version of a semantic theory is extremely limited in that the semantic content of sentencetypes with indexicals cannot be determined without an appeal to the specific context of utterance. The moral of this story then is that a semantic theory that takes *sentence types* as input will not be able to deliver the meaning of *utterances* of these types, especially when these utterances contain indexical terms.

#### 4. A WEAK FORMAL THEORY

A *weaker*, yet still formal, alternative to the strong view takes *sentence-types relative to contexts of utterances* as input and determines truth conditions for those relativized sentence-types as output.



The idea is that a formal semantic theory ought to supply truth-conditions for various sentence types relative to the contexts in which these sentences are uttered. However, in shifting the input of a semantic theory to sentence-types relativized to contexts of utterances, one general question is the following:

(1) How can a formal theory of literal meaning legitimately invoke appeals to context?

This question can be clarified by dividing it into two different questions:

(2) In determining the literal semantic content of a sentence type, *when and under what constraints* are appeals to the context of utterance legitimate?(3) In determining the literal semantic content of a sentence type, *what features of the context of utterance* must be considered?

Two possible responses to (2) are the following:

(2a) appeals are only legitimate when they are syntactically (or formally) mandated(2b) appeals are legitimate even when they are *not* syntactically (or formally) mandated; it is sometimes necessary to engage in free contextual enrichment.

Two possible responses to (3) are the following:

(3a) only appeals to objective, formally-specifiable features (narrow contextual features) are legitimate(3b) even appeals to subjective (perspectival/intentional), non-formal features are legitimate

# 5. MINIMALISM AND CONTEXTUALISM (2A AND 2B)

Those that accept (2a), as a response to (2), I call **pragmatic minimalists**, and the theory that they adopt in accepting (2a) as **pragmatic minimalism**. Those that accept (2b), I will refer to as **pragmatic contextualists** (or simply as **contextualists**), and the theory that they adopt in accepting (2b) as **pragmatic contextualism** (or simply as **contextualism**).

ACCEPTS	THEORY	IN DETERMINING THE LITERAL SEMANTIC CONTENT OF
		A SENTENCE
2b	Contextualism	it is sometimes necessary to appeal to contextual
		factors that are not syntactically mandated.
2a	Minimalism	appeals to context are only legitimate when they are
		syntactically mandated

In accepting (2a), minimalists argue that linguistic utterances represent the world in a certain way, the meaning of those utterances relates to context in formally-specifiable

ways, and those utterances are true or false depending upon the way the world is. In claiming that appeals to context are legitimate only when they are syntactically (or formally) mandated, minimalists claim that the context sensitivity of utterances is triggered by syntactic features in the sentence type and it is only when utterances contain such features does extra-linguistic context have a truth-conditional effect. There are two general ways to formulate minimalism. The first is a negative articulation. This articulation says that there are *no unarticulated constituents*. The second articulation is more positive. This articulation says that the truth-conditional role of extra-linguistic context is always traceable to logical form (or syntactic features in the sentence).<sup>30</sup> In the remaining part of this section, I consider both of these formulations.

According to the first formulation of minimalism, *there are no unarticulated semantic constituents*. Sentences can be divided into groups of words or phrases known as **constituents**. For example, the sentence, 'The fisherman caught the fish' can be divided into a noun phrase ('the fisherman') and the verb phrase ('caught the fish'). These constituents can be further divided into smaller and smaller constituents, e.g. the verb phrase 'caught the fish' consists of the noun phrase 'the fish.' We can think of an unarticulated constituent then as a constituent (group of words) that is not articulated by the orthographic, phonetic, or underlying syntactic features of the sentence type that the utterance expresses. An unarticulated semantic constituent is defined as follows:

UNARTICULATED CONSTITUENTS (UC)=df. Semantic elements not present in the surface or underlying logical form of a sentence, but must be interpreted in order to determine the literal semantic content of a sentence.

An intuitive way of thinking about UCs is as hidden elements not present or found in the sentence itself but they are needed to interpret what the sentence literally expresses. They are elements lurking in the context that *enrich* the semantic content of the sentence to make it either capable of expressing a proposition or expressing a proposition that

<sup>&</sup>lt;sup>30</sup> 'Logical form' understood in a *descriptive* rather than *revisionary* sense. According to the revisionary sense of logical form, natural language is deficient for the purpose of exact representation and should be replaced with a more logical language, e.g. first-order predicate logic (Russell 1956a, 1956b). According to the descriptive sense of logical form, natural language has a real structure that is distinct from its surface syntactic structure (Harman 1970, 1972).

accords with our intuitive understanding of what is literally expressed. To illustrate, take the following sentences:

(1) John went for a walk(2) Sally can't continue.

In interpreting the literal semantic content of (1), a UC is some semantically relevant feature found, not in the syntactic structure of (1), but in the *context* in which (1) is uttered. This constituent is *necessary* for interpreting the literal semantic content of (1). For example, suppose that (1) is uttered in a certain context such that it expresses the proposition *John went for a walk on the dark side of the moon*. If (1) expresses this proposition then *on the dark side of the moon* is a constituent of (1) that is not articulated by any orthographic, phonetic, or underlying syntactic feature of the sentence. Finally, if *on the dark side of the moon* plays some critical role in determining the literal meaning of (1), then this UC has a semantic role. Likewise, in the case of (2), one might posit an UC for *what* Sally can't continue.

(1) John went for a walk [UC = where?](2) Sally can't continue [UC = continue what?]

With this definition of an unarticulated constituent in place, minimalism and contextualism can be characterized as the following theses respectively:

 $Minimalism_{UC}$ =df: In determining the literal semantic content of a sentence-type relative to a context of utterance, there are no semantically relevant unarticulated constituents.

Contextualism<sub>UC</sub>=df: In determining the literal semantic content of a sentence-type relative to a context of utterance, there are semantically relevant unarticulated constituents.

In other words, minimalists claim that UCs do not exist. They argue that while UCs are important for determining what is communicated, what a speaker means, for metaphorical utterances, the literal semantic content of a sentence can be determined solely in virtue of the contributions of the articulated features in a sentence and their mode of combination. They argue that whenever context plays a role in determining the meaning of a sentence, it is found somewhere in the logical form (or syntactic structure) of the sentence.

According to a second articulation of minimalism and contextualism, the truthconditional role of extralinguistic context is traceable to the logical form (or syntactic structure) of the sentence. In clarifying this formulation, it is important to get clear on what is meant by 'logical form' or the 'syntactic features' of a sentence. First, according to *a revisionary notion of logical form*, logical form is imposed upon natural language expressions in order to regiment the formal structure of the language. On this notion, logical form is not traceable or inherent to natural language expressions but logical form provides an external constraint or simplification of such expressions. According to *a descriptive notion of logical form*, logical form is an inherent part of natural language expressions. On this notion, natural language expressions express a unique logical form that is discoverable. The minimalist is operating with a *descriptive*—rather than a *revisionary*—notion of logical form. On this account, the logical form explicitly describes the "real" structure of the sentence rather than imposes a logical form on structure of the sentence (Harman 1970, 1972; Borg 2004:62-73; Stanley 2007a).<sup>31</sup>

One way to think about the descriptive notion of the logical form of a sentence is in terms of the distinction between deep structure and surface structure. The **deep structure** of a sentence is the underlying structure of a sentence that transmits the literal meaning of a sentence. In contrast, the **surface structure** of a sentence is the superficial structure of a sentence that concerns the observable arrangement of the constituents. Generally, minimalists contend that the logical form of a theory for a natural language is its *deep structure* coupled with a semantic theory that codes certain expressions for context sensitivity.

The deep syntactic structure of a sentence in a natural language is not determined by philosophy, nor logic in the guise of first-order predicate logic, but by contemporary syntactic theory. Unfortunately, there is no agreed upon syntactic theory for English.<sup>32</sup>

<sup>&</sup>lt;sup>31</sup> For a discussion between the differences between the philosophical and linguistic notions of logical form, see (Lappin 1991).

<sup>&</sup>lt;sup>32</sup> For example, transformational grammar (Chomsky 1957), lexical functional grammar (Bresnan 1978), or government and binding theory (Chomsky 1981). See (Carroll 1994:39-41) for a short introduction to these theories.

Since there is not complete agreement upon how to best characterize the syntactic features of all natural languages, and this thesis is no place to settle this debate. Without offering a precise account of the logical form of a sentence, the minimalism's claim concerning the semantic role of extralinguistic context can be characterized more generally by the **Linguistic Direction Principle**. This principle is motivated by Grice (1989b:87) and has appeared in various places and under various names in the literature (Bach 1994a:137-8, 142-4; Carston 2002:172-173, 185-186, 1988; Stanley 2007a:36; Recanati 2010:4). The principle is defined as follows:

Linguistic Direction Principle=df. In deriving the literal semantic interpretation of an utterance, every semantic feature that is pragmatically supplied (the result of a contextual enrichment) is directed by a linguistic, syntactic, or context-independent construction.

Here are two examples of this principle at play. First, concerning indexical expressions, Kaplan (1989b) notes that there are two kinds of semantic content: (i) truth-conditional content (or propositional content) and (ii) character. A character is a function (set by linguistic conventions) from context to propositional (truth-conditional) content, while **content** is a function from a circumstance of evaluation (e.g. possible world) to a truth value. On Kaplan's account, indexical expressions, unbound demonstratives, and pronouns determine content that varies with context, but these expressions have a *constant character* but *variable content*. That is, the manner in which they pick out their semantic values is always the same even though the value that gets picked out will vary depending upon the context in which it is used. In some contrast, non-indexical, nonpronominal, and non-demonstrative expressions determine content that does not vary with context, and so these expressions have *constant character* and *constant content*. Thus, while a formal semantic theory cannot antecedently specify the particular meaning of an expression without knowledge about the specific context, the fact that indexical expressions have a constant character allows for an antecedent and linguistically-driven way about how such expressions are assigned semantic content. That is, context thus becomes constrained by logical form insofar as the character of an expression is set by linguistic conventions.

One way in which context-sensitive expressions are assigned semantic content relative to context has been to simply list all of the contextually-sensitive expressions in a language. This list is sometimes known as the 'the Basic Set.' The Basic Set includes: personal and demonstrative pronouns, adverbs indicating place, time, direction, expression that indicate tense, certain adjectives, and a set of expressions known as contextuals.<sup>33</sup> Examples include the following:

'I', 'you', 'he', 'she', 'it', 'that', 'this', 'here', 'there', 'now', 'today', 'yesterday', 'tomorrow', 'ago', 'hence(forth)', 'actual', 'present', 'enemy', 'outsider', 'foreigner', 'alien', 'immigrant', 'friend', 'native', 'foreign', 'local', 'domestic', 'national', 'imported', and 'exported'

In other words, minimalists contend that in order to determine the literal semantic content of a sentence expressed in context, appeals to context is necessary but these appeals are activated by various conventions in *language*.

Another example of the linguistic direction principle is syntactic ellipsis, i.e. cases where material that is unexpressed in the surface form of an utterance is grammatically recoverable by purely syntactic means. Here are a number of examples (elided material is in brackets):<sup>34</sup>

<sup>34</sup> Examples of grammatically recovering covert material include (elided material is in braces):

conjunction reduction: John pulled out a gun and [John] fired. right-node raising: John wants, and Victor would do anything to acquire [a new car], a new car. conjunct postposing (gapping): John eats a hamburger and Vic [eats] a hotdog. pseudogapping: Some have given myrrh to Jesus while others have [given] frankincense.

A purely grammatical recovery of the elided material is grounded on the view that the missing material is present in the deep structure of the sentence but is elided during transformational process. For more on the use of purely syntactic means to recover such material, see the discussion of non-sentential assertion

<sup>&</sup>lt;sup>33</sup> See (Vallée 2003; Kaplan 1989b:489; Cappelen and Lepore 2005a:1; Nunberg 1992; Condoravdi and Gawron 1995; Partee 1989). As Jason Stanley, characterizes the position:

My own view of the truth-conditional role of context is very conservative. First, there are expressions which are obviously indexicals in the narrow sense of the term, words such as "I", "here", "you", "now", and their brethren. Secondly, there are expressions which are obviously demonstratives, such as "this" and "that". Third, there are expressions that are obviously pronouns, such as "he" and "she". Overt expressions that are in none of these classes are not context-dependent. If the truth-conditions of constructions containing them are affected by extra-linguistic context, the context dependence must be traced to the presence of an obvious indexical, or pronominal expression at logical form, or to a structural position in logical form that is occupied by a covert variable. (Stanley 2007a:38).

- (1) John pulled out a gun and [John] fired.
- (2) John eats a hamburger and Vic [eats] a hotdog.
- (3) Who is tired from running? John is [tired from running].

While linguistic context plays a role in supplying the elided information, the pragmatic inference that supplies this information is syntactically guided and constrained. On the basis of the principle, pragmatic inference cannot override this constraint and provide an alternative value. For example, the linguistic direction principle dictates that the elided subject is John and not some other contextually salient individual, e.g.

(1\*) John pulled out a gun and [Frank] fired.

The minimalist model is thus characterizable as follows:



Thus, while earlier minimalists and contextualists were distinguished by their respective commitments to the existence of semantically-relevant UCs, minimalists and

presented earlier in this thesis. For a discussion of the difference between syntactic ambiguity and semantic incompleteness, see (Bach 1994a:131-132). For a classic discussion on the distinction between conjunction reduction, gapping, and right-node raising, see (Hudson 1976). For more on conjunct postposing (also called "gapping"), see (Jackendoff 1971; Ross 1970; Hankamer 1973). For more on right-node raising, see (Dougherty 1970:897; Postal 1974:125; Hudson 1976:549). For the distinction between gapping and pseudogapping, see (Johnson 2009).

contextualists can also be distinguished by their differing commitments to the linguisticdirection principle.

Minimalism<sub>LDP</sub>=df: In deriving the literal semantic interpretation of an utterance, every semantic feature that is pragmatically supplied must be directed by a linguistic, syntactic, or context-independent construction. Free contextual enrichment does not play a semantic role in determining literal meaning.

Contextualism<sub>NotLDP</sub>=df: In deriving the literal semantic interpretation of an utterance, every semantic feature that is pragmatically supplied need not be directed by a linguistic, syntactic, or context-independent construction. Free contextual enrichment does play a semantic role in determining literal meaning.

In short, while minimalist is committed to contextual enrichments being linguistically directed, contextualists claim that the determination of literal meaning also requires an additional process of free enrichment.

## 6. NARROW AND WIDE CONTEXTS (3A AND 3B)

Characterizing the context/sentence divide is a difficult but fundamental philosophical problem. One of the principal difficulties is that the everyday notion of context is not univocal. Context plays a role in determining the literal meaning of sentences and the speaker meaning of utterances. Context serves as an object that orients or re-orients one's perspective on things, e.g. when people say 'keep things in context.' Finally, context plays an important role in understanding a variety of different phenomena, e.g. getting jokes, feeling empathy, and so on. A second, nevertheless, related difficulty is due to the complexity and importance of context to understanding of language and philosophical problems more generally. In this section, I briefly examine two major theories of context. Since the focus of this dissertation is not to offer an analysis of context that could cover these diverse topics, it is important to note that my characterization of context will be confined to its role in the understanding of the literal meaning of sentences. The aim of this dissertation is neither to provide a univocal theory of context nor to give a precise treatment of what a context is.

The first theory of context is the **general indexical theory of context**. This theory begins with the assumption that there is some syntactic representation (the sentence's *logical form*) that is appropriate for semantic interpretation. The logical form of a

sentence consists of various constituents that are assigned semantic values, which are combined compositionally to deliver the sentence's truth conditions. In order to interpret sentences involving tense, pronouns, and other sorts of context-dependent expressions, certain expressions specify **parameters** which are extensions whose semantic values are delivered by context. For example, the first-person pronoun 'I' in 'I love Liz' specifies a *speaker parameter*, i.e. specifies a certain parameter on how the semantic content is selected. In a context where John utters 'I love Liz,' 'I' refers to *John*. In a context where Vic utters 'I love Liz,' 'I' refers to *Vic*. A context then is just the objects that deliver values to various parameters in the language. That is, they are just what needs to be specified in order to deliver the truth values of a sentence.

This characterization of context leads to a little confusion between (i) the context that needs to be specified in order to generate some literal semantic content (truth-conditional meaning) and (ii) the context that needs to be specified in order to deliver a truth value to a proposition. David Kaplan (1989b, 1989a) is responsible for distinguishing between these two roles of context and putting forward what is known as a 'double-index theory'. According to Kaplan, the first way in which truth values depend upon context is that the meaning of a sentence determines literal semantic content *relative to a context*. That is, linguistic expressions only spell out truth conditions relative to a parameterized construal of context. The second way in which truth values depend upon context is that the literal semantic content determines truth values *only relative to a possible world*. The general theory then is that a **context** is a kind of *index*: an *n-tuple* of features that deliver the semantic values of specific parameters. Each index (or context) thus looks something like the following:

 $\langle$ speaker, hearer, time, place, ... $\rangle$ 

Thus, whenever we supply T-sentences for sentences in a language, certain contextual parameters are called out by the syntactic features in the sentences.

The second major theory of context is the **presuppositional theory**. This theory points out that when participants engage in conversation, the conversation's participants *presuppose* a collection of propositions. A **context** is just the mutually presupposed and salient information at the point of utterance. According to Robert Stalnaker (1999:6, 1999)

[1998]:98), a **context** is a body of information that is presumed shared between participants within a discourse. This includes both information about what participants in a conversation are talking about (e.g. facts about the world) and information about the conversation in which participants find themselves engaged. Stalnaker represents the shared information (the *common ground*) that constitutes context by sets of possible worlds (the *context set*), understanding possible worlds as ways the world might have been rather than realistically as parallel universes (Lewis 1986) or linguistically as state descriptions (Carnap 1956:9). According to the presuppositional theory, the expression 'I' picks out a given speaker, not because 'I' is an index whose value is supplied by because part of the common ground involves a collective knowledge about who *the speaker* is.

Contexts are certainly not homogenous objects or undifferentiated blocks of information. Instead, they are heterogeneous entities referring to objects in the world (like a speaker or hearer), spatiotemporal reference points (e.g. time and location), information and attitudes in the minds of discourse participants (e.g. their beliefs and intentions), and conversational norms that govern communication (e.g. be relevant!). While semantic minimalists and contextualists part ways concerning when context intervenes to deliver a sentence's literal meaning, there is another in-house dispute that distinguishes different types of minimalism and contextualism. The dispute emerges with respect to the following question:

(3) In determining the literal semantic content of a sentence type, what features of the context of utterance must be considered?

Kent Bach offers the following division of different types of contexts:

*Narrow context* consists of matters of objective fact to which the determination of the semantic contents of certain expressions are sensitive. *Broad context* is the conversational setting, the mutual cognitive context or salient common ground. (Bach [forthcoming]).

There are two quite different sorts of context, and each plays quite a different role. Wide context concerns any contextual information relevant to determining the speaker's intention and to the successful and felicitous performance of the speech act ... Narrow context concerns information specifically relevant to determining the semantic values of [indexicals] ... Narrow context is semantic, wide context is pragmatic. (qtd. in Recanati 2001:85).

There are two sorts of contextual information, one much more restricted in scope and limited in role than the other. Information that plays the limited role of combining with linguistic information to determine content (in the sense of fixing it) is restricted to a short list of variables, such as the identity of the speaker and the hearer and the time and place of an utterance. Contextual information in the broad sense is anything that the hearer is to take into account to determine (in the sense of ascertain) the speaker's communicative intention (Bach 1999)

Bach thus separates context into **broad context** (presupposed information necessary to determine speaker meaning) and **narrow context** (objective parameterized information necessary to determine the meaning of indexical expressions). I find this separation of context into narrow and wide context confusing and non-neutral in clarifying various positions one might take concerning divide between literal (semantic) meaning and speaker (pragmatic) meaning. The major problem with these definitions is that they simultaneously define contexts *in terms of the items that compose them* and *in terms of the role they play in determining different levels of meaning*. That is, they offer both a functional and extensional definition. For example, according to the above definitions, the *narrow context* is determined in terms of the 'objective' items that compose it (e.g. speaker, hearer, location, time, etc.) *and* whatever information might be relevant to determining the literal semantic content of an expression. If this is the working definition, then the possibility of a theory of literal meaning where 'subjective' information is necessary for determining the literal meaning of an expression is excluded (not by argument) by definition.

To avoid this consequence, I offer the following definitions of narrow and wide context:

Narrow Context=df. objective (non-perspectival, narrow) features that are restricted to a list of parameters, e.g. speaker, hearer, time, place, and so forth.

Wide Context=df. subjective and intersubjective (perspectival, wide) features, e.g. shared assumptions and beliefs about the world, familiarity with the speaker and hearer, the speaker's intentions, the conversational norm of relevance, etc.

These definitions are more helpful insofar as they leave open the type of contextual features that are active in the determination of the literal (or speaker) meaning. That is, using these definitions, at least three different answers to (3) can be provided:

ACCEPTS	
3a	Only the narrow context must be considered.
3b	Only the wide context must be considered.
3a & 3b	The narrow and wide context wide context must both be considered.

With these three available options, I think it is now possible to clearly present three possible answers to (3):

3a: Narrow context (in conjunction with linguistic information) simply fixes the *literal meaning* of an expression independent of any relation to a determination of the speaker's intentions. Certain expressions in a language index a specific parameter, and objects in the narrow context fix the semantic values of these expressions. For example, the referent of the first-person pronoun in 'I went to the store' is fixed independently of the referential intentions of the speaker. The first-person pronoun simply picks out the speaker. The role wide context plays is not involved in determining the literal meaning of a sentence but provides an informational (communicational) resource that (i) speakers rely upon to get across their meaning without being explicit and (ii) hearers draw from to determine what a *speaker means*. Wide context, as Bach ([forthcoming]) emphasizes, "does not literally determine, in the sense of ascertaining, what she means." Thus, semantics only involves narrow context while pragmatics involves wide context.

3b: Narrow context (in conjunction with linguistic information) plays a limited role (independent of the wide context) in fixing the literal meaning of a sentence. Wide context determines the literal meaning of a sentence by providing an informational (communicational) resource that hearers draw upon to ascertain not only what a speaker means, but also the literal meaning of the sentence. Thus, semantics primarily involves wide context in the determination of literal meaning.

3c: Narrow context and wide context (in conjunction with linguistic information) both play a role in fixing the literal meaning of a sentence. Narrow context simply fixes the *literal meaning* of an expression independent of any relation to a determination of the speaker's intentions. Certain expressions in a language index a specific parameter, and objects in the narrow context fix the semantic values of these expressions. For example, the referent of the first-person pronoun in 'I went to the store' is fixed independently of the referential intentions of the speaker. In

addition, certain features of the wide context simply fix the literal meaning of a sentence (e.g. speaker intentions).

## 7. FOUR ROLES FOR CONTEXT

In this section, I outline four different linguistic roles that context plays. It is important to see that the minimalist's commitment to the Linguistic Direction Principle does not mean that context plays no role in route to the delivery of the literal meaning of a sentence. Minimalism is consistent with context playing a variety of *pre-semantic* and *post-semantic* roles. To see this more clearly, in this section, we will consider four different roles that context can play in communication.

First, context plays a role in the identification of a physical event as a linguistic act. This is the *phonological (orthographic) role of context*. Here is an example:

Suppose a wave tosses a handful of rocks up onto the shore. You see that the rocks are aligned in such a way that the rocks read 'FEED ME'. Has the ocean uttered a sentence?

The answer is 'no' since the ocean's throwing of rocks is not an intentional act, oceans are not intentional entities, and so they lack the requisite capacity to produce a communicative act. We rely on context in a way that is independent of the linguistic direction principle in order to determine whether acoustic or visual information is phonological or orthographic.<sup>35</sup> Thus, while contextual factors play a role in determining semantic content insofar as it is relied upon to distinguish a communicative act from other physical events, the role of context here is *pre-semantic*.

acoustic sound + context = what is articulated

Second, context has a *grammatical role*. Suppose that either of the following has been phonologically produced by an intentional agent and not by a non-intentional agent like an ocean:

(1) The uncle of the boy and the girl arrived late (Katz 1998:158).

(2) Visiting relatives can be annoying.

<sup>&</sup>lt;sup>35</sup> In addition, blind individuals rely on context in order to determine whether certain tactile information is Braille, Moon Type, or some other tactile-based language.

#### (3) Flying planes can be dangerous (Carroll 1994:37).

(1)–(3) are sentences but they are sentences with two different deep syntactic structures. In the case of (1), the object of the propositional phrase is either (i) the boy or (ii) the boy and the girl. In the case of (2), 'visiting relatives' is either a noun phrase—where 'visiting' modifies 'relatives'—or a verb phrase. We rely on context in a way that is independent of linguistic direction principle in order to determine various syntactic features of phonological (orthographic) information. In the case of (1) and (2), context plays a role in determining which sentence has been phonologically realized.

#### what is articulated + context = what is uttered

The claim that context plays a grammatical role in determining a unique grammatical form is not the same as saying that context plays a role whenever language users have difficulty parsing a sentence. Rather, the drive to interpret one grammatical form over another is often spurred by pragmatic concerns. That is, language users might choose one grammatical sentence over another entirely because it makes more sense given the previous sentences uttered, or because the semantic interpretation of one sentence might yield an absurd result, or because they are in the habit of parsing sentences in one way rather than another. Thus, while settling on what is uttered can be driven by syntactic, semantic, and pragmatic considerations (all of which form a part of the context), in all of these cases context plays a *grammatical role*.

Thus,

what is articulated + context (syntactic, semantic, pragmatic) = what is uttered Examples that illustrate how the grammatical role of context encompasses syntactic, semantic, and pragmatic considerations are garden-path sentences, paraprosdokian, and other syntactic constructions that require interpreters to engage in reparsing or backtracking. **Garden path sentences** are grammatically correct sentences where the initial word-by-word interpretation either yields a syntactically infelicitous expression or a semantically implausible interpretation. Here are two examples:

(1) The man whistling tunes pianos.

(2) Time flies like an arrow; fruit flies like a banana.<sup>36</sup>
(3) When Anna dressed the baby spit up on the bed (Ferreira, Christianson, and Hollingworth 2001).

On a first-pass reading, (1) is parsed as follows:

 $(1^*)$  The man who is whistling melodies ...

The problem with (1\*) is that a first-pass syntactic-semantic construction does not yield a complete sentence. Syntactic constraints on what qualifies as a meaningful unit of language thus drive a reparsing of (1) into the following:

(1\*\*) The man who is whistling [also] tunes pianos.<sup>37</sup>

In the case of (1), notice that what drives reparsing is a *syntactic failure* at the sentence level. In the first parsing of (1) as (1\*), 'the man whistling tunes' forms part of the NP, but further processing of the sentence does not yield a complete VP. Thus, the syntactic construction does not yield a complete unit, so the lexical items are reparsed to form a complete S. In the above, context is playing a grammatical role and this grammatical role functions in relation to certain syntactic principles.

However, while failure at the syntactic level drives a reparsing of (1), this is not the case with the garden path sentence in (2). On a first-pass reading of (2), 'flies' forms part of the VP:

 $(2^*)$  Time flies<sub>VP</sub> like an arrow; fruit flies<sub>VP</sub> like a banana.

Notice that a reparsing of (2\*) is not driven by syntactic principles since the parsing in (2\*) yields a grammatically felicitous expression. (2\*) is reparsed simply because it is absurd. Reparsing in this case is driven by the consideration that (i) bananas don't fly and (ii) the aim to maximize cogency, plausibility or relevance. A final parsing of (2) is the following:

<sup>&</sup>lt;sup>36</sup> This phrase is commonly attributed to Groucho Marx.

<sup>&</sup>lt;sup>37</sup> It should be noted that there is empirical evidence showing that reparsing is not an all-or-nothing activity. (Ferreira, Christianson, and Hollingworth 2001) has shown that garden-path sentences tend to only be partially reanalyzed. That is, a reparsing of 'While Anna dressed the baby spit up on the bed' should yield the belief that Anna dressed herself *and* a baby spit up on the bed. However, see (Ferreira, Christianson, and Hollingworth 2001).

 $(2^{**})$  Time flies<sub>VP</sub> like an arrow; fruit-flies<sub>NP</sub> like a banana.

The role context plays in parsing (2) as (2\*\*) is *grammatical* even though the contextual factors that select one grammatical sentence over another are not grammatical. When language users have to choose whether (2) should be parsed as (2\*) or (2\*\*), they need to rely on extralinguistic factors but these extralinguistic factors are not playing a semantic role. What this suggests is that the grammatical role of context in determining which sentence type is uttered is driven not controlled by factors relating back to logical form (or syntactic principle) but takes into consideration a variety of non-syntactic and non-semantic considerations. What makes (2\*\*) a more likely interpretation than (2\*) is that it accords better in standard (or normal) conversational setting, i.e. a conversational setting where it is a presupposition that fruit does not fly but fruit-flies do. Thus what motivates a speaker to choose one deep structure over another is not a process of determining what a sentence *means* but a process of determining what form is being uttered by a string of phonemes.

Third, context plays a *semantic role* in determining the literal meaning of an utterance. That is, it plays a role in determining what we express and are committed to in virtue of the words we utter and the way in which we put those words together. It is this role upon which minimalists and contextualists disagree. Minimalists contend that the *semantic role* of context is guided by linguistically-directed processes while contextualists contend that it is, in addition, guided by a process of *free contextual enrichment*. To see illustrate the difference between the two theories with an example, consider the following sentence:

#### (1) I am ready.

Suppose that John utters (1). According to the minimalist, to the extent that the literal meaning of (1) depends upon the context in which it is used, this context-dependence can be captured using context-insensitive rules. So, in the case of (1), there is the first-person pronoun 'I' whose meaning can be characterized using a context-insensitive rule, namely *for any context whatsoever, the expression 'I' refers to the speaker of the sentence*. In such a case, (1) expresses the proposition that *John is ready* and is true if and only if *John* 

*is ready*. Contextualists, however, argue that the proposition *John is ready* is either (i) not a real proposition (not something that can be evaluated as true or false) or (ii) not psychologically realistic (not some content consciously cognized by language users). They argue that individuals are not ready *simpliciter* and so when speaker utters (1), we only know what (1) literally means if we know, for example, *what John is ready to do* (e.g. *to play soccer, to go outside, for the party*). But, in the case, of (1), there is no constituent that articulates *what* John is ready to do, and so it is obtained through a process of free, contextual enrichment. Thus, while the semantic role of context is to supply the semantic values to indexical expressions like 'I,' 'he,' 'you,' 'today,' and so forth, contextualists argue that the context plays a *larger semantic role* in freely enriching sentences.

Thus,

what is uttered + linguistic meaning + context = literal semantic content Fourth, context has a *pragmatic role* in determining *what is meant* (speaker meaning) by an utterance or the *meaning* of a speech act, e.g. what is claimed, asserted, judged, etc. While the phenomenon of contextual implicature (discussed in chapter 1) offers one illustration, paraprosdokian provides another. **Paraprosdokian** is a linguistic phenomenon whereby the interpretation of the latter part of a sentence prompts interpreters to reinterpret the beginning of the sentence. Here is a classic example uttered by Winston Churchill:

You can always count on the Americans to do the right thing—after they have tried everything else.

Notice that the clause 'after they have tried everything else' forms part of the linguistic context serving to specify that the initial sentence is meant ironically. That is, while what Churchill literally *says* is that you can count on Americans to do the right thing, the trailing clause informs interpreters that what he means is the exact opposite.

Another illustration is found in irony and jokes. Suppose Victor witnesses John push an elderly man and women out of the way for no apparent reason. At the sight of this, Victor utters the following to a friend in an exaggerated tone: (4) John is a real gentleman.

While (4) says that John is a real gentleman, what Victor means in uttering (4) is that John is *not* a gentleman. Here the extralinguistic context plays a pragmatic role in determining, not what Victor literally says, but what he means and communicates by (4). In order to determine what Victor means, not only do you need to know what the sentence says but also draw on features of the context (e.g. tone of voice). Thus, what is communicated is determined as follows:

literal semantic content + context = what is communicated

To summarize, context plays four interpretive roles in (i) determining that an acoustic sound or orthographical marking is a linguistic item, (ii) determining which sentence is being uttered, (iii) determining the literal semantic content, and (iv) determining what is meant. The debate between minmnalism and contextualism is over whether the semantic role of context is defined solely by the linguistic direction principle or also involves a process of free contextual enrichment.

## 8. Two Theories of Extralinguistic Context

Recall the initial set of questions and possible responses.

(2) In determining the literal semantic content of a sentence type, when and under what constraints are appeals to the context of utterance legitimate?
(2a) appeals are only legitimate when they are syntactically (or formally) mandated
(2b) appeals are logitimate over when they are not support of the context of utterance).

(2b) appeals are legitimate even when they are *not* syntactically (or formally) mandated

(3) In determining the literal semantic content of a sentence type, what features of the context of utterance must be considered?

(3a) only appeals to objective, formally-specifiable features (narrow contextual features) are legitimate

(3b) even appeals to subjective (perspectival/intentional), non-formal features are legitimate

Different combinations of these answers produce different possible approaches one might take toward the role context plays with respect to determining the literal semantic content of a sentence. These are characterized in the table below:

ACCEPTS	THEORY	IN DETERMINING THE LITERAL SEMANTIC CONTENT OF
		A SENTENCE
2b	Contextualism	it is sometimes necessary to appeal to contextual
		factors that are not syntactically mandated.
2b, 3b	Weak Contextualism	2b and these contextual factors can be subjective
		(perspectival, wide, intentional) or objective (non-
		perspectival, narrow, non-intentional) features.
2b, 2a	Strong	2b and these contextual features can only be
	Contextualism	objective (non-perspectival, narrow, non-intentional)
		features.
2a	Pragmatic	appeals to context are only legitimate when they are
	Minimalism	syntactically mandated
2a, 3b	Weak minimalism	2a and these contextual factors can be subjective
		(perspectival, wide, intentional) or objective (non-
		perspectival, narrow, non-intentional) features.
2a, 3a	Strong minimalism	2a and these contextual features can only be
		objective (non-perspectival, narrow, non-intentional)
		features.

The remainder of this chapter articulates some specific instances of these theories as well as offers a summary of the core principles of minimalism and contextualism.

## 8.1. VARIETIES OF MINIMALISM

Minimalists are often characterized as being a descendent of ideal language philosophy and formal approaches to meaning. These include Gottlob Frege, Bertrand Russell, the early Wittgenstein, A. J. Ayer, Rudolf Carnap, and later Richard Montague. Currently, it is championed, implicitly or explicitly, by a variety of figures, including Cappelen and Lepore (2005a, 2005b), Emma Borg (2004, 2007), Jeshion-Nelson (2002), and Jason Stanley (2007a). In this section, I characterize what I take to be the core features of minimalism and then point to three instances of the theory (noting their relevant differences).

#### 8.1.1 THE CORE OF THE THEORY

As a child, I used to play a game where I tried to build a sandcastle near the shoreline. If you built the sandcastle too close to the water's edge, the waves would wash away the whole structure or destroy crucial features of the castle. If you built the castle too far away from the water the sand of the castle would be so dry that it was both difficult to mold and susceptible to blowing winds. It was necessary to build on a middle ground. One had to build the castle close enough to draw upon the water but far enough away so as not to lose everything. The great joy of this game was not found in calculating each wave's distance and then erecting the castle just out of reach of damaging waters. Waves are, to a child, incalculably chaotic forces. My tactic was to build the castle around a series of inlets that carried the flow of water away from the castle to a lagoon. On this approach, the waves would rush toward the castle but the flood would be carried in and around the castle rather than through it.

My approach to building sandcastles along the shore is similar to a minimalist's approach to the semantic role of context. Out near the waterline of context, the formal semanticist builds a castle of literal meaning that is protected from the force of context by harnessing it in specifically-designed ways. Their castle is neither *too far* from the roaring waters of context so as to be blow away in abstraction nor *too close* to said waters so as to be destroyed. Semantics ought neither to take too much on by trying to account for every communicative feature nor retreat too far back so as to be disconnected from how language plays a role in communication. To build the castle, the semanticist posits a level of context-insensitivity to language, and to protect it, she builds inlets that systematically control the roar of context.

What I take to be the core of minimalism are the following three claims. *First*, the minimalist accepts the *linguistic direction principle*. This principle says that in deriving the literal semantic interpretation of an utterance, every semantic feature that is pragmatically/contextually supplied is directed by a linguistic, syntactic, or context-independent construction. In short, appeals to context are directed by features found in the grammar or logical form of the sentence. *Second*, the minimalist claims that context has no further semantic effect on the literal meaning (the truth conditions) of the sentence than what is specified by the linguistic direction principle. Thus, while context may play

a larger role in determining what a speaker means, says, asserts, or claims in using a sentence, the literal meaning of a sentence is insensitive to conscious linguistic intuitions have about the literal meaning of an utterance. These intuitions are impure in that they are cut with non-linguistic intuitions about what *speakers mean* when they utter a sentence. *Third*, minimalism is committed to the claim that the result of semantic interpretation on the syntactic features of a sentence produces a complete thought, proposition, or truthevaluable entity. While such a proposition is not always what a speaker means when she *uses* language, the content expressed by a minimalist reading is nevertheless a really existing proposition that has truth conditions.

So, in short, the minimalist is committed to the following three positions:

(M1) a commitment to the linguistic direction principle,
(M2) a commitment to a division between the literal semantic content and speech act content, and
(M3) a commitment that a context-insensitive approach to meaning produces an adequate semantic theory.

In the remaining part of this section, I examine a number of different varieties of minimalism that have appeared in the literature.

## 8.1.2 BORG'S MINIMAL SEMANTICS

Emma Borg's *Minimal Semantics* (2004) defends formal approaches to semantic theories by reducing their workload. Borg writes,

part of the background motivation for a move away from formal semantics has been an expectation that a successful semantic theory will explain a range of interesting data concerning our use of language (such as how we succeed in communicating with one another using language, or how it is that we know about, and thus can talk about, various objects in the world around us). (Borg 2004:17)

Borg's primary task then is to reduce the number of tasks that a formal semantic theory is supposed to carry out. Her suggestion is that formal semantic theories are viable provided their goals are much more *minimal*. Perhaps the most critical concession made by Borg is that a formal semantic theory ought not to pretend that it can explain our communication practices. That is, formal semantics, while not entirely removed from our communicative practices, is not a theory of communication. Instead, the primary goal of a formal theory of meaning is to supply the literal meaning of sentence-types relativized to context.

Borg's method for doing this is to argue that (i) appeals to the context of utterance are syntactically mandated and (ii) semanticists should limit their appeals to objective (non-perspectival) contextual features (Borg 2004:29-33). The first claim is a commitment to the linguistic direction principle. Her tactic for defending this position turns on responding to various charges from contextualists that minimalism either underdetermines literal meaning or (on a truth-conditional approach to meaning) determines 'unintuitive' truth conditions (see Borg 2004:209-258). The second claim is a commitment to the incompatibility of subjective (wide) contextual features with the overall goals of a formal semantic theory. In other words, Borg accepts a kind of strong minimalism.

Borg's approach for defending this commitment comes in two parts. First, Borg (2004:31) argues that the tenuous and variable nature of speaker intentions goes against the grain of formal semantic theories whose goals are to capture the "repeatable, codelike, normative aspects of meaning." Borg writes:

The speaker who says "I'm hungry' may do so because she wants to request food, or because she wants to bring a meeting to an end, or to issue a complaint about an on-going occupation, or for a myriad of other reasons, none of which results in changes to the formal features of the sentence produced. Thus working out which intention a speaker has when she makes some utterance is clearly a task that goes way beyond any grasp of formal, repeatable, code-like features. We simply lack the kind of sufficiently formal way to model grasp of speaker intentions which might make an appeal to intentional states admissible from within a formal semantic theory. (Borg 2004:31)

According to Borg then, since we lack the resources to render the effects that speaker intentions have on meaning into a formal theory, these sorts of features do not belong within a semantic theory of meaning but to a pragmatic theory of communication. Second, not only are speaker intentions inhospitable to formalizing, but they are also run in conflict with a modular understanding of linguistic meaning where language is processed by autonomous syntactic, semantic, and pragmatic systems rather than a single, undifferentiated processor.<sup>38</sup> This idea is not fully spelled out by Borg (2004) but the idea seems to be that clinical data seems to suggest that individuals with pragmatic deficiencies related to their ability to process speaker intentions are nevertheless able to understand the literal content of an utterance.

#### 8.1.3 CAPPELEN & LEPORE'S INSENSITIVE SEMANTICS

In a number of articles and their book *Insensitive Semantics*,<sup>39</sup> Cappelen and Lepore argue for **minimalism** in conjunction with **speech act pluralism**. According to them, there are three features key to minimalism. The first is a recognition of a limited number of contextually-sensitive expressions. That is a 'Basic List' of expressions whose meaning is affected by context:

the personal pronouns 'I', 'you,' he,' 'she,' 'it' in their various cases and number, the adverbs 'here,' 'there,' 'now,' 'today,' 'yesterday,' 'tomorrow,' 'ago' (as in 'He left two days ago'), 'hence(forth)' (as in 'There will be no talking henceforth'), and the adjectives 'actual' and 'present' [...]. Words and aspects that indicate tense also have their reference so determined. And there are the contextuals, which indicate common nouns like 'enemy,' outsider,' 'foreigner,' alien,' 'immigrant,' 'friend,' and 'native as well as common adjectives like 'foreign,' 'local,' 'domestic,' 'national,' 'imported,' and 'exported'. (Cappelen and Lepore 2005a:1)

The second key feature is that all semantic context sensitivity is *grammatically* trigged (Cappelen and Lepore 2005a:2). That is, the literal meaning of an expression will only turn on context when there is some feature of the syntax that directs this need. In other words, Cappelen and Lepore accept the 'linguistic direction principle.'

Finally, the third key feature of their account is that although context plays an important role in fixing the meaning of those expressions found in the Basic List, context has no further semantic effect on the literal meaning (the truth conditions) of the sentence (Cappelen and Lepore 2005a:2-3). In other words, Cappelen and Lepore claim that in the absence of these contextually-sensitive expressions, the meaning of sentences is *not* contextually sensitive. A corollary to this is that the literal semantic content of a sentence

<sup>&</sup>lt;sup>38</sup> See (Borg 2004:32-33, 110-112, and chapter 4 of this dissertation).

<sup>&</sup>lt;sup>39</sup> See (Cappelen and Lepore 2007, 2006, 2005b, 2005a, 2004, 2003, 1997).
S is the proposition that every utterance of S expresses. That is, they are committed to some shared, minimal content that every utterance of S expresses.

In addition to mounting a defense of semantic minimalism, Cappelen and Lepore also argue for speech act pluralism. This thesis is summarized as follows:

No one thing is said (or asserted, or claimed, or ...) by any utterance: rather, indefinitely many propositions are said, asserted, claimed, stated. What is said (asserted, claimed, etc.) depends on a wide range of facts other than the proposition semantically expressed. It depends on a potentially indefinite number of features of the context of utterance and of the context of those who report on (or think about) what was said by the utterance (Cappelen and Lepore 2005a:4).

More compactly, they write:

No one thing is said (or asserted, or claimed, or ...) by an utterance; rather, indefinitely many propositions are said, asserted, claimed, stated, etc. (Cappelen and Lepore 2005a:199)

The claim then is that there is no single way to describe what goes on when a speaker *uses* language because what goes into this determination are a number of considerations— ranging from (i) our beliefs about a speaker's intentions, (ii) facts about the context in which the utterance occurs, (iii) other facts about the world, (iv) logical relations, and so on—that yield a number of different possible accounts. The best we can do in such cases is to canvass the range of these considerations and make informed hypotheses about the content of the speech act.

Cappelen and Lepore's minimalism bears important differences from and similarities to that of Emma Borg's. First, while all three claim that appeals to context are syntactically triggered, there is nothing in Borg's work like a 'Basic List' of contextuallysensitive expressions. Thus, while both Borg and Cappelen and Lepore's adopt the linguistic direction principle, they part ways on the scope of contextually-sensitive expressions. Second, while both Borg and Cappelen and Lepore's minimize the workload of a semantic theory, there are some subtle differences with the extent to which the work is reduced. Borg's project minimizes the work of a semantic theory by divorcing its explanatory role in communication. In contrast, Cappelen and Lepore's think that while a semantic theory does not explain speech act content, they point to cases where a semantic theory might explain certain aspects of communication, particularly cases of crosscontextual communication.

### 8.1.4. STANLEY & ASSOCIATES' WEAK MINIMALISM

Jason Stanley has, with a number of co-authors, argued for a distinct way in which the division of labor between semantics and pragmatics should be separated. Stanley argues that the role of semantics is to provide the truth-conditional (semantic) content of the lexical items (including sentences relative to context) while the role of pragmatics is to supply what the speaker communicates over and above the literal meaning of the uttered sentence. In arguing for this sort of division, Stanley and others adopt the linguistic direction principle:

All truth-conditional effects of extra-linguistic context can be traced to logical form (Stanley 2007a:30, 64; see also Stanley 2007c:11-112, 2007b:182-183).

The nature of the lexical item dictates what non-linguistic facts are relevant, and constrains the nature of its referential content in a context. (Stanley and King 2007:139).

Much of the work of Stanley and others has been to provide technical fixes to problematic linguistic data that initially appears to undermine the linguistic direction principle. These include cases of non-sentential assertion (Stanley 2007a), quantifiers (Stanley and Szabó 2007; Stanley 2007c:112-122), gradable adjectives<sup>40</sup> (Stanley 2007c:122-124) and mass terms (Stanley 2007c:125-129). These fixes have not let to an exhaustive list of which elements of a sentence manifest context-sensitivity. Stanley and associates offer some indication of the expressions they do think are contextually-sensitive in the following statement:

These elements are the obvious indexicals, the obvious demonstratives, pronouns, context-dependent quantifiers such as "many" and (perhaps) "that", and covert pronominal elements whose existence can be demonstrated by purely syntactic tests (Stanley 2007b:182).

<sup>&</sup>lt;sup>40</sup> A gradable adjective is a gradable if and only if the property it expresses can vary in degree, intensity, or grade. For example, 'tall' is gradable for an object can be 'tall', 'somewhat tall', 'fairly tall', 'pretty tall', 'very tall', 'taller', 'tallest.' Some non-gradable adjectives include those that express properties at limit points or extremes (e.g. freezing), absolutes (e.g. dead), or those that classify (e.g. atomic).

The minimalism of Stanley and associates bears some differences and similarities to the work of other minimalists. In contrast to the minimalism of Borg, but similar to that of Cappelen and Lepore, Stanley and associates claim that speaker intentions (perspetival or wide context) play a role in determining the literal meaning of sentences. They write,

if the lexical item is the English pronoun "she", its standing meaning dictates that only certain sorts of intentions are relevant for fixing its referential content in a context, and constrains that content to be, for example, a salient female human (reference to boats, countries, etc., to one side). That is, speaker intentions are relevant to fixing the referential content of a lexical item in a context only when they are determined to be so by the standing meaning of a lexical item. So, the role played by speaker intentions in semantics remains significantly constrained [...] by the standing meanings of lexical items. (Stanley and King 2007:139; Stanley 2007e:205-206)

So, unlike Borg, who offers an explicit argument for a minimalism that does not make use of speaker intentions in determining the literal meaning of a sentence, the ability of a semantic theory to draw upon speaker intentions appears to be assumed by Stanley and others. In short, whereas Borg accepts a form of strong minimalism, Cappelen, Lepore, Stanley and associates accept a kind of weak minimalism.

However, Stanley's minimalism differs from that of Cappelen and Lepore in that he admits a greater number of context-sensitive expressions than Cappelen and Lepore would allow. For instance, Stanley and Szabo (2000) argue that domain restrictions on quantifiers should be accommodated within semantic theory by positing a hidden argument place for noun phrases. The value of this argument place is a contextuallydetermined domain restriction. Thus, the semantic value of a quantifier is the intersection of the set picked out by the quantifier and the nominal and the set picked out by the contextually-determined domain restriction. So, for example, in the expression 'all the beer is gone,' the literal meaning of 'all the beer' is not all of the beer in the universe but all the beer in the contextually-determined domain (e.g. all the beer in the refrigerator I am currently looking at).

Cappelen and Lepore object to expanding the scope of context-sensitive terms beyond those of what they call 'the Basic Set' (see 2004:1). They argue that if we allow the meaning of different utterances of the same quantified noun phrase to shift across different contexts of use, then we fail to explain how language users can say the same thing as a speaker by disquotation or by giving an indirect (yet disquotational) speech report (Cappelen and Lepore 2006). Thus, while Stanley and associates offer a variety of minimalism in that context-sensitivity of expressions is linguistically-motivated, their position differs from that of Cappelen and Lepore (see 2006:1021-2) who think that one of the principal aims of a semantic theory is to explain how it is possible for different utterances of the same sentence to express the same proposition across contexts.

### 8.2. VARIETIES OF CONTEXTUALISM

Contextualists are descendents of ordinary language philosophy, the use theory of meaning, and early developers of speech act theory. Some notable early influences upon contextualists include the late Wittgenstein (2001), J. L. Austin (1975, 1979), John Searle (1969), Wilfrid Sellars (1974), and others. Currently, it is championed, implicitly or explicitly, by a variety of figures. Contextualists include John Searle (1978, 1979b, 1980), Charles Travis (1985, 1996, 2000), François Recanati (1989, 2001, 2002, 2004, 2010), Anne Bezuidenhout (1996, 1997b, 1997a, 2002; 2002), Sperber and Wilson (1995; 2004), Robyn Carston (1988, 2002, 2008), and others (e.g. Wieland 2010; Bach 1994a, 1994b, 2006). In this section, I articulate a variety of different versions of contextualism.

# 8.2.1 THE CORE OF THE THEORY

Contextualists argue that the semantic role of context is not always syntactically triggered. As such, they reject the linguistic direction principle. Context-sensitivity can be found in quantified sentences,<sup>41</sup> comparative adjectives, propositional attitude and knowledge ascriptions, moral and aesthetic judgments, utterances about shape, and so on. Versions of the theory are sometimes further divided into a *radical* and *moderate* forms according to the *extent* to which pragmatics pervades semantics. **Radical contextualism** is the theory that *every* sentence (even if free of ambiguity, vagueness, indexicality) is context sensitive (i.e. expresses a different proposition in different contexts of utterance),

<sup>&</sup>lt;sup>41</sup> See (Neale 1990:95; Schiffer 1995; Stanley and Williamson 1995:291; Gaulker 1997:17-19; Lewis 1996:225; Recanati 1996:445; Stanley and Szabó 2000:219-220; Taylor 2001:56-7).

while **Moderate contextualism** is the theory that *some* sentences in a natural language that appear *insensitive* to context are actually context sensitive.<sup>42</sup>

At root, I understand contextualists to adopt the following fundamental claim:

Contextualism=df. The determination of the literal meaning of an utterance requires at least one non-linguistically-directed pragmatic process.

In other words, it is a rejection of the completeness or adequacy of the linguistic direction principle:

(R1) A rejection of the linguistic direction principle and a commitment to the free, pragmatic enrichment of utterances.

Contextualists claim that in order to capture what a sentence literally says, it is necessary that we make use of both (i) contextual enrichment that is syntactically triggered and (ii) contextual enrichment that is not syntactically triggered. In the language of unarticulated constituents, we might phrase this view as follows:

Contextualism<sub>UC</sub>=df. In order to determine the literal meaning of a sentence, it is necessary to posit unarticulated constituents.<sup>43</sup>

However, in addition to (R1), contextualists tend to adopt two additional claims:

(R2) A commitment to the dependence of the literal semantic content on speech act content, i.e. a methodological commitment to the role linguistic intuitions play in determining the literal semantic content of an utterance.(R3) A commitment to the view that a non-minimal, context-rich approach to literal meaning produces a complete and adequate theory.

With respect to (R3), contextualist approaches to semantics are not merely the *negative* rejection of minimalist approaches. Instead, they offer their own context-rich approaches that aim at explaining the traditional desiderata of a semantic theory, e.g.

<sup>&</sup>lt;sup>42</sup> It is important to see the point at which the contrast between contextualism and minimalism is made since versions of contextualism could easily be classified as a type of minimalism. For example, Taylor (2001:53), who I am classifying here as a moderate contextualist—classifies his position as a form of minimalism, namely parametric minimalism.

<sup>&</sup>lt;sup>43</sup> As defined earlier, Unarticulated Constituents=df. Semantic elements not present in the surface or underlying logical form of a sentence, but must be interpreted in order to determine the literal semantic content of a sentence.

compositionality, systematicity of language, etc. Contextualists, however, argue that this view is not subject to the pitfalls of the minimalist approach since it can (i) provide a straightforward explanation of a variety of linguistic phenomena that either does not seem to be fully propositional on the semantic minimalist's account (e.g. non-sentential assertion) and (ii) better accords with our intuitions concerning what a sentence intuitively says.

With respect to (R2), the manner in which a complete and adequate theory of meaning is achieved relies upon using speech act content (our intuitions about what a speaker has said claimed, or asserted in *using* language). That is, the literal meaning of an utterance requires not merely the use of the linguistic direction principle but also the commonsense linguistic intuitions that speakers have about what speakers have literally expressed.

In what follows, I characterize five versions of contextualism, with particular emphasis on how each theory shares a fundamental position that truth-conditional content involves pragmatic processes that are not linguistically directed.

### 8.2.2 **Relevance Theory**

Relevance theory is a theory of communication championed most prominently by Sperber and Wilson.<sup>44</sup> While relevance theory acknowledges that an utterance in a language is a linguistically-coded item and linguistic interpretation involves an aspect of decoding, their principal claim is that linguistic interpretation is mostly an inferential process guided by what cognitive input is relevant. According to relevance theorists, an input is **relevant** when it allows an interpreter to use available background information to infer conclusions that matter to the interpreter (see Wilson and Sperber 2004:251).

Relevance theorists claim that a non-linguistic pragmatic processes are integral to the determination of literal linguistic meaning. Sperber and Wilson argue that while linguistic decoding plays a role in recovering the semantic representation of an utterance, "[v]erbal communication is never achieved merely by the automatic decoding of linguistic signals" (1995:177). Again, while relevance theorists contend that linguistic

<sup>&</sup>lt;sup>44</sup> This theory is motivated by Grice's concern that an essential feature of communication involves the expression and recognition of a speaker's intention (Grice 1989b; Wilson and Sperber 2004:249).

interpretation involves a process of linguistic (formal) decoding, this procedure does not capture the literal meaning of an utterance since such decoding falls short of the criteria specified by the principle of relevance. In order to achieve relevance, further free contextual enrichment (guided by the principle of relevance) is required. Thus, on relevance theory:

Linguistic (formal) decoding  $\rightarrow$  propositional schema Linguistic (formal) decoding + free contextual enrichment  $\rightarrow$  explicature<sup>45</sup> (truthconditional content) Explicature + free contextual enrichment  $\rightarrow$  what is implicated.

Relevance theory thus amounts to a rejection of the linguistic direction principle since obtaining the literal meaning of an utterance is not determined simply by the meaning of the parts and the way they are put together (coupled with linguistic directives as to when to turn to context). Instead, relevance theorists think that determining the literal meaning of an utterance requires pulling from relevant inputs from the context.

Relevance theory is distinct from other contextualist theories in that it purposively does not distinguish between processes involved in the recovery of literal linguistic content. Free contextual enrichment is guided by a single principle of relevance and nothing more. Wilson and Sperber (2004:615) write,

There has thus been a tendency, even in much of the recent pragmatic literature, to treat the "primary" processes involved in the recovery of explicit content as significantly different from —i.e. less inferential, or less directly dependent on speakers' intentions or pragmatic principles than—the "secondary" processes involved in the recovery of implicatures.

In relevance theory, the identification of explicit content is seen as equally inferential, and equally guided by the Communicative Principle of Relevance, as the recovery of implicatures.

Thus, according to relevance theory, there is a singular, inferential pragmatic process guided by the principle of relevance that plays a role in the interpretation of literal linguistic content and implicature.

<sup>&</sup>lt;sup>45</sup> "Explicature" is a technical notion defined by Wilson and Sperber (2004:629n10) as "a proposition recovered by a combination of decoding and inference, which provides a premise for the derivation of contextual implications and other cognitive effects"

### 8.2.3 RECANATI'S TRUTH-CONDITIONAL PRAGMATICS

Another version of contextualism is Recanati's truth-conditional pragmatic (TCP) approach. Much like relevance theory, Recanati (2004:56) claims the minimalist picture determines a propositional function (or semantic schema) rather than a determinate proposition or truth-conditional content. This is not to say, of course, that logical form plays no role in the determination of truth-conditional content, only that it falls short of delivering a truth-evaluable entity or expressing a complete thought. But Recanati's primary complaint centers on the psychological adequacy or appropriateness of the minimalist's position. To see this objection more clearly, Recanati distinguishes between two pragmatic processes: saturation and free enrichment (2002:300). **Saturation** is the contextual assignment of a semantic value to expression. This assignment can either be linguistically directed (bottom-up) *or* fully pragmatic (top-down). **Free enrichment** is the contextual assignment of a semantic value to unarticulated parts of a sentence. This assignment is, according to Recanati, fully pragmatic (top-down) since it is not linguistically controlled.

According to Recanati (2002:302), the notion of literal meaning (what is said) that captures our intuitive judgments about truth conditions makes use of saturation and free enrichment. Since the latter pragmatic process is not linguistically-controlled, the theory rejects minimalism, and since two pragmatic processes are involved in delivering implicature, the theory is a species of contextualism.

Crucial to Recanati's theory is what he calls the 'Availability Principle':

Availability Principle: In deciding whether a pragmatically determined aspect of utterance meaning is part of what is said, that is, in making a decision concerning what is said, we should always try to preserve our pre-theoretic intuitions on the matter.

Since for Recanati the literal meaning of an utterance must be consciously (intuitively) available to language users, Recanati takes contextualism and minimalism to be compatible but rejects the linguistic direction principle as unrealistic from a psychological point of view. For according to minimalism, an utterance like 'John had breakfast' literally means *John had breakfast at some time before the moment of the* 

*utterance* but intuitively we judge someone who has uttered 'John had breakfast' to say the more determinate *John had breakfast today*. Likewise, we take the utterance of 'John has three children' to literally express *John has exactly three children* and not the minimal interpretation that *John has at least three children* (see Recanati 2004:8-17). So, in short, since much of the literal content rendered by the minimalist theory is unintuitive, i.e. it fails to accord with our immediate, conscious linguistic judgments about what speakers say, assert, contend, or claim, the minimalist theory fails to give us the right sort of semantic content, i.e. a type of content that is 'available' or fits with psychological facts.

While relevance theorists posit a single (inferential) pragmatic process responsible for recovering both literal propositional content and implicature, Recanati's TCP claims that literal propositional content and implicature are recovered by two different types of pragmatic processes. These two pragmatic processes are primary pragmatic processes—those responsible for delivering literal meaning or intuitive truthconditional content—and secondary pragmatic processes—those responsible for delivering implicatures. With this distinction, Recanati's TCP looks something like the following:

Linguistic (formal) decoding  $\rightarrow$  propositional schema Linguistic (formal) decoding + pragmatics (primary pragmatic processes)  $\rightarrow$  what is said (intuitive truth-conditional content or explicature) what is said + pragmatics (secondary pragmatic processes)  $\rightarrow$  what is implicated

Recanati has argued that the above model does not commit TCP to a modular or sequential account of the determination of literal meaning that ignores the role of implicature. <sup>46</sup> In distinguishing TCP from relevance theory, Recanati argues that what is important is that there is an "an *asymmetry* between implicature and explicature, in that implicature must be grounded in, or warranted by, the explicature" (2004:47). That is, what distinguishes the two views is not that the determination of literal meaning *precedes* implicature but that the determination of literal meaning *warrants* the inference to

<sup>&</sup>lt;sup>46</sup> This account has been criticized for its commitment to a sequential or modular account of the derivation of implicature runs into conflict with the so-called 'mutual adjustment' phenomenon. For the original criticism, see (Matsui 2001:250-251). For a discussion, see (Recanati 2004:46-47).

implicature. In other words, positing a separate pragmatic serves as a *logical organization* of meaning rather than as a *model of language processing*.

#### **8.2.4 DISCOURSE REPRESENTATION THEORY**

Discourse Representation Theory (DRT) was first put forward by Hans Kamp (1981), developed by Kamp and Uwe Reyle (1993; see also Kamp 1984/1985), with a variant theory coming from Irene Heim (1983). DRT takes seriously two principal features of discourse. First, multi-sentential passages of discourse are **incrementally constructed** sentence by sentence. Second, discourse is **semantically cohesive**, involving a variety of different types of cross-reference. These two features are connected in the interpretation of discourse:

to understand what information is added by the next sentence of a discourse to what he has learned already from the sentences preceding it, the interpreter must *relate* that sentence to the information structures he has already obtained from those preceding sentences (Kamp and Reyle 1993:59).

The representation of this mediating level of information between syntactic structure and semantic content is what is called a **Discourse Representation Structure** (DRS). According to DRT theorists, without a DRS, the simple interpretation of a syntactic structure will frequently fail to determine propositional or truth-conditional content. This is because the semantic content of a sentence relies upon the *linguistic context* in which it is uttered. It is only when syntactic structures are interpreted with reference to the information contained in the DRS that sentences can yield determinate truth-conditional content. For example, in the sentence 'John went to the store. He bought some milk.' a DRS is necessary to determine the referent of 'he' in the second sentence.

DRSs are graphically represented as boxes consisting of (1) a set of discourse referents that occupy the universe of discourse (at the top of the box) and (2) a set of discourse conditions (represented under the discourse referents). Consider the following example from Kamp and Reyle (1993:60):

(1) Jones owns Ulysses. It fascinates him.

In terms of a DRS, the first sentence in (1) takes the following shape:

xy		
Jones (x)		
Ulysses (y)		
x owns y		

The second sentence of the two-sentence passage contains an anaphoric pronoun. DRT imposes a condition on such pronouns that aims at identifying the pronoun's linguistic antecedent. However, unlike a purely syntactic approach to pronominal anaphora that relates pronouns to kinds of NPs, DRT analyzes anaphora "not as a relation between pronouns and other NPs, but as one between pronouns and discourse referents that are already present in the semantic representation under construction" (Kamp and Reyle 1993:67). In the case of the second sentence of (1), the goal of linguistic theory is to assign the pronouns 'It' and 'him' to the discourse referents represented in the DRS. Thus, the remaining DRS for (1) is developed as follows:

x y u v  
Jones (x)  
Ulysses (y)  
x owns y  
$$u = y$$
  
 $v = x$   
u fascinates v

It is important to note that the presence of DRSs does not undermine the formal, minimalist approach to literal, truth-conditional content. For, if the information in the DRS is produced by a linguistically-guided process rather than by free contextual enrichment, then it is only necessary that the determination of semantic content be relativized to sentences in a discourse. For example, gender constraints in the twosentence passage 'John married Sarah. He will make a good husband.' allows for a grammatical measure to identify the discourse referent of the pronominal expression.

However, it is not altogether certain whether *all* cases of pronominal anaphora can be recovered syntactically. DRT's response to this consideration is that while some

cases of anaphora are linguistically directed, e.g. the equation u = y and v = x in the above DRS is linguistically directed, identifying the intended linguistic antecedent cannot always be achieved by solely syntactic measures. The example that Kamp and Reyle (1993:67) consider which illustrates this is the following:

(2) Billy hit Johnny with his baseball bat. He burst into tears.

In the case of (2), there is no linguistically guided way (e.g. by invoking gender agreement) to determine whether 'He' refers to Billy or Johnny. Instead, the discourse referent introduced by the pronominal expression selects a *suitable* discourse referent from the universe of the DRS. Kamp and Reyle note that the notion of what qualifies as 'suitable' is unexplained and may depend upon a variety of linguistic and non-linguistic considerations. They note that examples like (2) indicate that "often when the interpreter is able to reach a decision as to what the intended antecedent is, he does so on the strength of what he knows about the kind of situation that is being described and not exclusively on the basis of his knowledge of grammar or linguistic meaning" (Kamp and Reyle 1993:67). Thus, DRT is a species of the contextual theory insofar as the determination of the literal truth-conditional content appears to involve the process of free contextual enrichment for the choice between the referents of 'he' and 'him in (2) is not linguistically guided.

## 8.2.5 SITUATION SEMANTICS

Situation semantics was first put forward by Jon Barwise and John Perry (1999 [1983]).<sup>47</sup> In this theory, utterances are assigned *interpretations* in virtue of (i) the meanings of expressions used and (ii) factors in the context of use. One of its key features is that its proposal that a semantic theory ought to account for more features of natural language than entailment between sentences. One feature in particular is the **efficiency of language**. According to Barwise and Perry (1999 [1983]:5), "expressions used by different people, in different space-time locations, with different connections to the world around them, can have different interpretations, even though they retain the same

<sup>&</sup>lt;sup>47</sup> See also (Kratzer 1989).

linguistic meaning." In short, language is **efficient** because we can recycle a single sentence to say different things. For example, the sentence 'I'm right, you're wrong' can be used to say *John is right and Vic is wrong* when uttered by John to Vic, or can be used to say *Vic is right and John is wrong* when uttered by Vic to John. Language thus shows itself to be efficient insofar as it involves the ability to employ a single sentence—with a fixed and unambiguous meaning—to say different things.<sup>48</sup>

According to Barwise and Perry, language achieves its efficiency by exploiting the context in three different ways (see Barwise and Perry 1999 [1983]:32-39). First, language users can exploit features of the discourse situation, i.e. public facts concerning time, place, speaker, and audience, etc. Two examples of this exploitation are indexical expressions and tensed sentences. For example, the interpretation of John's utterance that 'Today is your birthday' will depend upon who John is addressing and when he utters the sentence.

A second way in which language users exploit the context of use in order to move from an understanding of the meaning of an expression to having an interpretation is that language users can exploit their *connections* to objects, properties, places, and times. Barwise and Perry (1999 [1983]:34) call this the **exploitation of speaker connections**. In the case of proper names, Barwise and Perry (1999 [1983]:34-36) argue that when someone utters 'Sandy is asleep,' they have told you something about Sandy. However, the meaning of the name 'Sandy' is not sufficient to pick out the particular Sandy who is being referred to here for there are many Sandys, e.g. Sandy Koufax, Sandy Dennis, and so on. When a speaker utters that 'Sandy is asleep,' the speaker exploits her connection to people she knows, has read about, has seen, or is acquainted with to refer to one Sandy rather than another.<sup>49</sup>

The third and final way in which language users draw upon the context to move from meaning to interpretation is by exploiting one state of affairs to say something about another state of affairs. Barwise and Perry (1999 [1983]:36) call this the **exploitation of resource situations**. For example, suppose I know that John has been killed but don't

<sup>&</sup>lt;sup>48</sup> The efficiency of language is perhaps a property of language overlooked by Carnap who aimed at formulating a language suitable for science that is context-insensitive.

<sup>&</sup>lt;sup>49</sup> Other examples of the way a language user's connection to objects, properties, places, and times are exploited involves deictic uses of pronouns and referential uses of tense.

know the name of his killer. If I wanted to describe how John was killed, I might say 'John's killer is evil.' Here I am exploiting the fact that I know John was killed to say something about John's killer.

Collectively, Barwise and Perry (1999 [1983]:36-37) contend that these three forms of efficiency support a type of contextualism. They claim that

Taken together, though, they [the three ways in which language users exploit context] provide ample evidence for a central fact about natural language. The linguistic meaning of an expression in general greatly underdetermines its interpretation on a particular occasion of use. Or, for short, **meaning underdetermines interpretation**. (Barwise and Perry 1999 [1983]:36-37, original emphasis).

Since language users draw upon their *connections* to object, properties, places, and times to flesh out what proposition an utterance expresses in a way that is *not linguistically controlled*, situation semantics is a form of contextualism.

# 8.2.6 SYNCHRONISM AND IMPLICITISM

Finally, there are a number of theories that attempt to merge contextualism and minimalism by contending that each theory is concerned with a different type of 'literal meaning.' These are what I will call **synchronic theories**. Synchronism posits two different truth-conditional layers of meaning between the (i) meaning a sentence has in virtue of its syntax and the meaning of the words (sentence-type meaning) and (ii) an enriched meaning corresponding to what a speaker intends to get across to his/her hearers (speaker meaning). These middle layers are two types of literal meaning, i.e. a minimal notion of literal meaning (what is said<sub>MIN</sub>) and a more robust notion of literal meaning (what is said<sub>MIN</sub>).

Nathan Salmon (1991:88) has claimed that the use of the word 'say' and 'assert' covers a variety of different senses, and so it is possible to distinguish between what a use of words *literally says* or says in *"in the strict and philosophical sense"* from what a use of words says *"in the loose and popular sense."* In other words, Salmon suggests that an additional layer of meaning is present between sentence meaning and what is implicated.

Syncretism			
1	<b>sentence meaning</b> = meaning of the linguistic type		
2	what is $said_{MIN}$ = sentence meaning relativized to narrow contextual factors		
	(context constrained by logical form)		
3	what is said <sub>PRAG</sub> = sentence meaning relativized to wide contextual factors		
	(context is not constrained by logical form)		
4	<b>what is implicated</b> = what is said <sub>PRAG</sub> + additional contextual factors		

Likewise, Scott Soames (2002:55-66) distinguishes between four levels of meaning: (i) what a sentence says, (ii) what is semantically expressed by a literal use of a sentence across contexts (also known as 'invariant semantic content'), (iii) descriptive information conveyed that goes beyond what is literally expressed in a context but is part of what is said, and (iv) what is implicated. The division, while motivated by trying to distinguish the differing informational content of co-referential terms, extends more widely to sentences. For example, consider the following utterances:

- (1) Carl Hempel lived on Lake Lane in Princeton.
- (2) Peter Hempel lived on Lake Lane in Princeton.
- (3) Peter Hempel is Carl Hempel.
- (4) Carl Hempel is Carl Hempel.

Soames claims that (1) and (2) express the same Russellian proposition, i.e. the same semantic content. This semantic content is the information that is invariantly asserted and conveyed across normal contexts (2002:68). However, while (1) and (2) express the same semantic content, they do not convey the same linguistic information in all contexts. That is, speakers routinely rely upon conversational participants acquaintance with background information and shared assumptions to infer a proposition that is both an extension of the semantic content yet truly descriptive of what the speaker has literally said.<sup>50</sup> To see this more clearly, consider the following truncated example from Soames (2002:75):

The scene is the Princeton philosophy department's party held at the beginning of the academic year [...]. At a certain point Paul Benacerraf gestures in Mr. Hempel's direction and asks one of our new graduate students, Mary, "Have you

<sup>&</sup>lt;sup>50</sup> Soames' additional layer of meaning allows for an explanation of the cognitive difference between identity statements of the form 'a is a' and 'a is b' where a and b are co-referential. At the level of minimal semantic content, both identity statements express the same proposition, while at the level of what is conveyed,

been introduced to Peter Hempel?" Mary says that she hasn't and the following conversations [sic] ensues:

Mary: "Who is Peter Hempel?"
Paul: "Peter Hempel is Carl Hempel.:
Mary: "You mean the famous philosopher of science?"
Paul: "Yes."
Mary: "Why do you call him 'Peter' instead of 'Carl'?"
Paul: "His friends and colleagues call him that."

Based upon the above example and others, Soames claims that assertions like (3) convey information that goes beyond its minimal semantic content relative to context. Speakers rely on facts available to conversational participants and these facts are used to expand upon the semantic content of sentences that are semantically redundant. However, Soames claims that these expansions are *direct* and do not go as far as what is implicated. Soames (2002:79) writes,

In order for p to be asserted by an utterance of a sentence, it is not enough that conversational participants be in possession of information which, together with the speaker's utterance, might, after long or careful consideration, support an inference to p. Rather, the speaker must have reason to believe both that p is a potentially direct, immediate, and relevant inference for all conversational participants, and that the conversational participants recognize this belief of the speaker.

According to Soames then, there are two layers of literal meaning beyond the meaning of sentence types. There is a layer that expresses minimal semantic content relative to context. On top of this minimal content is an expanded layer of what is said that expresses what the language user literally asserts and is constrained by information within the conversational setting. Soames' account thus produces the following four-level model of meaning:

SYNCRETISM				
1	<b>sentence meaning</b> = meaning of the linguistic type			
2	what is said <sub>MIN</sub> (semantic information) = sentence meaning plus contextual factors			
	abstracted from diverse contexts (this is the common information conveyed across normal			
	contexts). This is the base semantic content expressed by a sentence relative to context.			
3	what is said <sub>PRAG</sub> (asserted information) = sentence meaning relativized to wide contextual			
	factors (context is not constrained by logical form but is constrained by available			
	information within the conversational setting).			
4	what is implicated = what is said <sub>PRAG</sub> + additional contextual factors			

Finally, perhaps the strongest and most comprehensive proponent of the syncretic view is put forward by Kent Bach (1994a, 1994b, 2001, 2006). Bach has argued that the distinction between sentence meaning, what is said, and what is implicated is too simplistic. Evidence of its simplicity is found in that three-level models are not sensitive to a distinction between **sentence non-literality**, various forms of **constituent nonliterality** (e.g. metaphor), and **semantic incompleteness**. In order to accommodate these linguistic phenomena, it is necessary to add additional layers of meaning between sentence meaning and what is implicated.

The distinction between sentence non-literality and semantic incompleteness can be illustrated through a few examples. First, let's consider a case of sentence nonliterality. Imagine that a child has cut his finger, and his mother tells him (1):

(1) You are not going to die.

The child responds with 'Really? I am going to live forever?' In the case of (1), there is no constituent that is meant non-literally, there is no semantic vagueness or ambiguity, and the sentence is syntactically well-formed. However, the sentence as a whole is not meant literally, and this is reflected in the child's obtuse reading of it. When the various indexicals are fixed, the literal meaning of (1) expresses the following proposition:

 $(1_{MIN})$  You [the addressee] are immortal.

This, however, is not what the mother meant by (1). What the mother literally means is something more qualified than  $(1_{MIN})$  but this qualification is unarticulated. Namely, what the boy's mother intends to communicate is the following:

 $(1_{MIN + EXP})$  You are not going to die *from that cut*.

Note that part of what the mother literally means is left unarticulated and so communication of  $(1_{MIN + EXP})$  requires some sort of free contextual enrichment of  $(1_{MIN})$ . The speaker needs to either insert additional words to make the speaker's meaning explicit or the audience needs to provide those words from context.

In contrast to sentence non-literality is **semantic incompleteness**, namely syntactically well-formed sentences that do not express a proposition because they are

missing a constituent that is *necessary* to express content that is truth evaluable (i.e. that expresses a proposition). For example,

### (2) John is taller.

(2) fails to express propositional or truth-conditional content because a conceptually mandatory constituent is unarticulated. Since (2) contains the comparative 'taller', which requires at least two argument places, (2) fails to express a proposition unless the missing argument is supplied, i.e. the object that John is taller than. Bach calls the fragment that (2) expresses a "propositional radical" since it fails to express something fully propositional or truth evaluable. Supplying (2) by providing the missing constituent is, however, not the result of an enrichment aimed at determining speaker meaning but the result of **semantic completion** aimed at raising the content to the level of a truth-evaluable entity.

Note that there is a difference in how each of the unarticulated constituents of (1) and (2) are supplied. (1) is used literally (as opposed to figuratively in the case of metaphor), but the sentence as a whole is used non-literally. That is, the sentence is used non-literally since, as Bach (2001:251) contends, "the speakers says one thing but intends to convey something distinct from that." Supplying the unarticulated constituent is a wholly pragmatic concern, i.e. to make articulated what the speaker literally means by the sentence as a whole. It is the result of a process of free contextual enrichment that determines what the speaker means. In contrast, supplying the unarticulated constituent in (2) is driven by conceptual or semantic considerations, viz., it is an effort to develop the sentence into a complete thought (propositional or truth-conditional content). Unlike the sentence non-literality, semantic completeness is, according to Bach (1994a:133), a conceptually, not linguistically, mandated process.

Thus, to summarize, Bach sees the need to posit three layers between *sentence meaning* and *what is implicated*. There is (1) the propositional radical expressed by the conventional meaning of a sentence but lacking semantic completeness, (2) the minimal proposition expressed by a semantically complete sentence, and (3) the pragmatic proposition which is an expansion of the minimal proposition. Bach calls the propositions resulting from semantic completion of propositional radicals and expansion of non-literal

sentences **impliciture**. To keep these separate, I will call the impliciture that results from completion 'impliciture<sub>MIN</sub>' and the impliciture that results from expansion 'impliciture<sub>EXP</sub>'.<sup>51</sup>



# 9. CONCLUSION

The principal goal of this chapter has been to articulate two theories concerning the semantic role of extralinguistic context. Minimalism is characterized by three different commitments: (i) a commitment to the **linguistic direction principle**, (ii) a commitment

<sup>&</sup>lt;sup>51</sup> Impliciture is not what is explicitly or literally said by an utterance because it goes beyond (i) the propositional radical in the form of semantic completion and (ii) the minimal proposition in the form of expansion in the case of sentence non-literality. Yet, impliciture does not go as far as implicature since an implicature are propositions external to what is said while implicitures are built on what is said. According to Bach (2001:252):

Implic-a-ture is an indirect constantive speech act, whereby one says and means one thing and thereby asserts something else in addition. In implic-i-ture one says something but does not mean that; rather, what one means includes an implicit qualification on what one says, something that one could have made explicit but did not.

to a division between the **literal semantic content** and **speech act content**, and (iii) a commitment that a context-insensitive approach to meaning produces an **adequate semantic theory**. In contrast, contextualists argue that the linguistic direction principle is false, that speech act content plays a significant role in determining what a sentence literally says, and that formal, context-insensitive theories, in many cases fail to produce a proposition or produce content that is psychologically realistic.

The next two chapters lay out my case for minimalism as follows. In chapter 3, I articulate and respond to a variety of arguments for why minimalism ought to be rejected. I argue that arguments against minimalism are not convincing for a variety of reasons. Once the contextualist's arguments have been put to the side, the next step is to consider what, if any, reason there is to accept minimalism in its own right. In chapter 4, I provide three independent arguments for accepting minimalism and rejecting contextualism. Finally, in chapter 5, I turn to the work of Charles S. Peirce and evaluate an interesting case where the minimalist-contextualist debate plays out.

# CHAPTER 3 Dry Land: Shoring up Minimalist Semantics

# 1. INTRODUCTION: TWO OBJECTIONS TO MINIMALISM

In the previous chapter, minimalism was characterized by three different commitments: (M1) a commitment to the **linguistic direction principle**, (M2) a commitment to a division between the **literal semantic content** and **speech act content**, and (M3) a commitment that a context-insensitive approach to meaning produces an **adequate semantic theory**. In contrast, contextualists argue that the linguistic direction principle is false, that speech act content plays a significant role in determining what utterances of sentences say, and that formal, context-insensitive theories either (i) fail to produce propositional (truth-conditional) content or (ii) do not deliver the right kind of content. The goal of this chapter is to lay out a number of objections to minimalism and respond to each.

The principal objection to minimalism is the following:

The Big Objection: The minimalist model is incorrect for it either radically underdetermines literal semantic content or gives the wrong (non-intuitive) semantic content.

As Jason Stanley puts it,

Innumerable researchers from pragmatics have challenged the semanticist's model. Here is the form of the standard challenge. First, a linguistic construction C is produced that appears intuitively to have a certain reading R. Secondly, the researcher claims that the readings cannot be due to the semantics of that construction. That is, the claim is that R cannot be due to the compositional semantic interpretation of C, relative to the envisaged context of use. The conclusion the researcher draws is that the assumption that the intuitive truth-conditions of a sentence relative to a context are due to semantics is incorrect (Stanley 2007e:202).

The aim of this chapter is to respond to this objection. The initial subsections of sections 2–4 split the above objection into two different forms, beginning with what I call the 'incompleteness objection' and then turning to what I call the 'inappropriateness objection.' Subsections within 2–4 respond to these objections by showing how much of the linguistic data that contextualists' appeal to in undermining minimalism is either misunderstood or can be captured by the minimalist theory. With the major objections out of the way, the next chapter serves to more aggressively argue for minimalism.

## 2. TWO GENERAL PROBLEMS AND THREE GENERAL RESPONSES

The big objection to minimalism is that it fails because it underdetermines the semantic data or fails to describe the semantic data correctly. This objection can be broken into two, more specific objections: an incompleteness objection and an inappropriateness objection. The **incompleteness objection** is, in a nutshell, the claim that minimalist's commitment to the linguistic direction principle results in an inadequate (or incomplete) semantic theory. In other words, in limiting the role of context to those cases indicated by syntax of the sentence, we are left with a layer of meaning that falls short of being truthconditional, propositional, or a complete thought. Contextualists thus argue that since minimalism does not deliver truth-conditional content, a process of free contextual enrichment is necessary. The inappropriateness objection claims that while a commitment to the linguistic direction principle may deliver truth-conditions, it delivers the wrong sort of truth-conditions. That is, adherence to the linguistic direction principle delivers *unintuitive* truth-conditions which language users do not associate with the literal (semantic) meaning of a sentence. In short, minimalism either falls hopelessly short of being a legitimate semantic theory or fails miserably in getting the linguistic data to mesh with psychological facts.

A number of examples offer illustration:

- (1) John is tall [for a soccer player].
- (2) John is ready [to go dancing].
- (3) All of the beer [in the refrigerator] is gone.
- (4) John and Vic went to Chicago [together].
- (5) John ate [breakfast].
- (6) John ate breakfast [in the normal way].

- (7) The [person who ordered the] ham sandwich is getting annoyed.
- (8) The [skin of the] apple is red.
- (9) John kicks [the ball].
- (10) It's raining [in Palo Alto].

In each sentence, there is some bracketed information (a constituent) that contextualists claim is necessary to provide the literal meaning of the sentence. Contextualists argue that the above information is not articulated by any constituent in the sentence itself and can only be recovered by a process of free contextual enrichment. Without such a process, the literal meaning of the above sentences will either (i) fall short of expressing a real proposition or truth condition or (ii) express a truth condition that is not intuitive. In (6), for example, the bracketed information ensures that John ate breakfast in a normal way, through his mouth rather than say through a feeding tube. A contextualist might argue that to say that (6) expresses *John ate breakfast* and to leave the manner in which he ate breakfast unspecified fails to realize that (i) *how* John ate breakfast is not *necessary* for determining the literal meaning of (6) but is necessary if we want the *right kind of truth condition*, i.e. one that accords with what we might call the **intuitive truth conditions**.

Traditionally, there appear to be two general ways to respond to both of these objections.<sup>52</sup> The first response, which I will call the **Pragmatic reply**, says that this information is *not* a part of the literal semantic content of the sentence but is an element of *speaker meaning* or *speech act content*. The idea here is that while the manner in which John ate breakfast is important for understanding what a *speaker means* or *what she says, asserts, expresses* when she utters (6), it forms no part of the literal semantic content of (6). And, if the bracketed information is not a part of the literal meaning of the utterance, the argument for the necessity of free contextual enrichment falls flat.

A second response, which I will call the **Syntactic reply**, says that the bracketed information *is* a part of the literal semantic content of the sentence but the missing information can be straightforwardly recovered once a full account of the syntactic structure of the sentence is given. The idea behind this response is that bracketed information is not supplied by language users appealing to context in non-linguistically

<sup>&</sup>lt;sup>52</sup> This three-pronged response is similar to that of (Stanley 2007e:206) and others.

directed ways but is found in the underlying syntactic structure that is elided in the sentence's surface structure.

One difficulty in responding to the purported examples above (1)–(10) is that they are a mixed bag. Some of them seem to call for a pragmatic reply, others a syntactic reply, and others seem to allow for a hybrid reply. The rest of the chapter considers these examples in more detail, but before we turn to such examples, it is helpful to provide a brief illustration. Take, for instance, (9)

### (9) John kicks [the ball].

On the one hand, we might say that (9) ought to involve a pragmatic reply. The literal meaning of 'John kicks' is just *John kicks*, this is true if and only if *John kicks*, and so *what* John kicks forms no part of the literal truth conditions of (9). On the other hand, a minimalist might argue that (9) should involve a syntactic reply and pragmatic reply. For example, the verb 'kick' is a dyadic relation, and so is of the form *x* kicks *y*. Thus, once we have drawn out the deep syntactic structure of (9), the literal meaning of (9) is just that *John kicks something*. Arguably, this is less determinate than *John kicks the ball*, but having pulled more information into the syntactic arena, we can now make use of a pragmatic reply and say that *the exact object that John kicks* forms a part of the speaker meaning of (9) rather than the literal meaning.

A third reply I consider has not been addressed in the literature. This reply I call the **Broad Language (Semiotic) Reply**. This type of response is similar to the *Syntactic Reply* in that it expands the number of features that undergo semantic interpretation. It does so by broadening our notion of language to include, not merely orthographic or phonetic features that are organized in syntactic structures but also features of the context. By expanding the scope of what gets articulated in any given utterance to include features like pointing fingers and other associated gestures, the minimalist can maintain that various aspects of the utterance that are delivered by a process of free contextual enrichment are really delivered by an interpretation of the conventional meaning of indexical signs.

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# 2.1 UNARTICULATED CONSTITUENTS: WHAT ARE THEY?

In order to frame both the incompleteness and inappropriateness objections, it will first be helpful to get a clearer idea of the nature of unarticulated constituents and then to formulate contextualist objections to minimalism using this notion. In what follows, I offer a rough definition of what it means for something to be an unarticulated constituent, point to the three ways that unarticulated constituents purportedly get called upon in determining the literal meaning of a sentence, and then voice various objections to minimalism with these distinctions in mind.

First, the term 'unarticulated constituent' appears to have been first introduced by John Perry (1986:138):

It is a rainy Saturday morning in Palo Alto. I have plans for tennis. But my younger son looks out the window and says, 'It is raining'. I go back to sleep.

What my son said was true, because it was raining in Palo Alto. There were all sorts of places where it wasn't raining: it doesn't just rain or not, it rains in some places while not raining in others. In order to assign a truth-value to my son's statement, as I just did, I needed a place. But no component of his statement stood for a place. The verb 'raining' supplied the relation *rains* (t, p)—a dyadic relation between times and places, as we have just noted. The tensed auxiliary 'is' supplies a time, the time at which the statement was made. 'It' doesn't supply anything, but is just syntactic filler. So Palo Alto is a constituent of the content of my son's remark, which no component of his statement designated; it is an *unarticulated* constituent. Where did it come from?

According to Perry, the verb 'raining' is a two-place relation between *times* and *places*. However, in the case of 'It is raining', only *one* of the two relata is articulated by a component in 'It's raining.' That is, the argument for *time* is articulated by the tense of the utterance but the argument for *place* is not articulated by any component of the utterance, and so *Palo Alto* is a propositional constituent but it is not an articulated constituent.<sup>53</sup>

To see this more point more clearly, it helps to consider that expressions that occur as parts of more complex expressions make specifiable contributions to the

<sup>&</sup>lt;sup>53</sup> The constituents of a proposition are the objects (relations, individuals, properties, times, places, etc.) that propositions are about. So, in the proposition *John kicked Liz*, the constituents are *John*, *Liz*, the dyadic relation of *kicking*, and some moment of *time*. See (Perry 1986:139).

meaning of a complex expression. In the sentence 'John hit Liz,' the names 'John' and 'Liz' supply the objects *John* and *Liz* respectively, while the verb 'hit' supplies the twoplace relation of *hitting*. When thinking about sentences, a natural question is whether each element that contributes to the literal meaning of a sentence is articulated by some component in the sentence. When this is the case, that is when every propositional element is traceable to a feature in the sentence, the proposition is **fully articulated**, and when there are propositional elements that are not found in the sentence, then the proposition is **partially articulated**. Mark Crimmins (1992:9-10) defines 'full articulation' as follows:

a statement is fully articulated, when each item that it uses to generate the content of the sentence (each "input" to the composition rule for sentences of that kind) is itself the content of some expression within the sentence. For example, it is plausible that a use of the sentence 'Rex is now scratching' is fully articulated. The proposition is generated from Rex, the property of scratching, and the time of the statement. And for each of these "building blocks" of the proposition, there is an expression in the sentence with that building block as its content ('Rex', 'scratching', and 'now').

The idea then is that if every propositional constituent (e.g. object, property, relation) is specified by some component in the sentence itself, the sentence *fully articulates* the proposition. That is, a proposition is fully articulated when the semantic contribution of the proposition is exhausted by the contribution of the component expressions (and their mode of combination) in the sentence.

What is undefined however is what it means for an expression to be a 'component expression' of a sentence. One suggestion is that something is a **component expression** if and only if it is part of a more complex expression *and* it shows up in the *surface structure* of the sentence, i.e. as an orthographically available or vocalized unit. For example, 'John', 'hit', and 'Liz' are all component expressions because they are optically present to any interpreter of the sentence. The problem with this conception of a component expression is that it is too restrictive and discounts propositional elements that while not orthographically present in the surface form are, in some measure, available in the logical form (or deep syntactic structure) of the sentence. For instance, in uncontroversial cases of syntactic ellipsis there are propositional constituents that are not

present in the surface form of the sentence but can be found in the deep syntactic structure of a sentence. For example,

- (2a) John ate three hamburgers, and Liz ate one.
- (2b) John ate three hamburgers, and Liz ate one [hamburger].
- (3a) Liz can play guitar and John can too.
- (3b) Liz can play guitar and John can [play guitar] too.
- (4a) John can do something but I don't know what
- (4b) John can do something but I don't know what [John can do].

In the above cases, a propositional constituent is expressed by the second sentence but these constituents are elided and hence do not show up in the surface form of the sentence. Each of the above constituents can be recovered by a rule-driven procedure. In sum, the principle of full articulation cannot hold if what counts as a component expression are those expressions that form a part of a more complex expression and that show up in the surface structure of the sentence.

A second suggestion is that something is a **component expression** if and only if it is part of a more complex expression *and* it either shows up in the surface structure of the sentence or is traceable to the underlying (deep) structure of the sentence. On this suggestion, a proposition can still be fully articulated even though every propositional constituent is not traceable to a component in the surface form of the sentence. Using this notion of a component expression, we can define an **unarticulated constituent** (UC) as a semantic element (or value) that plays a role in the delivering the literal meaning of sentence but does not show up in the orthographic (vocalized) features of the sentence nor are they traceable to the deep structure of the sentence.<sup>54</sup> An intuitive way of thinking about UCs are that they are simply constituents of a proposition that do not show up anywhere in the sentence itself but they are needed to interpret what the sentence literally means. They are features critical to either (i) assigning truth conditions to an utterance or

<sup>&</sup>lt;sup>54</sup> Unarticulated Constituents (UC)=DF. Propositional (semantic) elements not present in the surface or underlying logical form of a syntactically complete sentence, but must be interpreted in order to determine the literal semantic content of a sentence.

(ii) making the utterance more intuitive so that it better fits with our unreflective, conscious judgments about what speakers say, contend, and claim.

Here is an illustration. Consider a scenario where John is getting ready to play soccer. He is lacing up his boots and is fully warmed up. One of the players on the field suffers a brutal injury and the assistant coach looks over to the head coach, who utters the following:

(5a) John is ready.

Suppose that (5a) literally expresses the proposition that *John is ready to play* and *to play* is not recoverable by some syntactic means. If this is the case, then *to play* is an unarticulated constituent since it is not expressed by any component expression in (5a).

Before explaining a little more how the existence of UCs threaten the minimalist view of things, it is important to point out three different roles that UCs can play. In the first role, what I will call the **completion role**, UCs enrich the meaning expressed by the syntactic features in the sentence by raising the sentence to propositionality, viz. so it can express conditions under which the utterance is true or false. The main function of these UCs is to raise an utterance out of a state of semantic incompleteness into a truth-evaluable proposition. For example,

(1) It is raining (Perry 1986:138).

(2) Steel isn't strong enough (Bach 1994a:127).

According to theorists like John Perry (1986, 1997, 1998) and Kent Bach (1994a), while (1) and (2) are syntactically well-formed, they are semantically incomplete since in order for 'It's raining' to express a proposition at all, we need a propositional constituent for the *place* where it is raining. Likewise, in order for (2) to express a proposition, we need to be supplied a propositional constituent for *what* steel is strong enough for. Without the presence of a UC, sentences like (1) and (2) will fail to express a truth-evaluable entity (a proposition). A number of different sentences seem to require that UCs play a completion role, e.g.

*Parametric Underdetermination* That lamp is cheap [relative to what?] John is tall [relative to what comparison class?] That employee is good [in what respect?]

Argumental Underdetermination Gentlemen prefer blondes [to what?] The princess is late [for what?] The king has arrived [where?]

In the second role, what I will call the **communicative** (**psychological**) **role**, UCs enrich the meaning expressed by the syntactic features in the sentence so that the proposition expressed by the speaker matches the proposition understood by the hearer. Recanati characterizes these cases as those that involve a *mismatch*:

an interpreter's failure to retrieve the unarticulated constituent results in a *mismatch*: the proposition which the utterance is taken to express is not the proposition actually asserted by the speaker, but (typically) a less specific proposition. If, in interpreting (1) [I've had a very large breakfast], we don't supply the unarticulated constituent (the day of utterance, to which the speaker tacitly refers), the time of the described event remains unspecified, except for the feature 'past' (Recanati 2002:307).

UCs thus play a role a role in making what the sentence literally expresses *more specific* than what is expressed by the articulated constituents alone. So, without the use of a UC, the utterance 'I've had a very large breakfast' simply expresses that the speaker has had a very large breakfast at some unspecified time in the past (not necessarily the day of the utterance), whereas with the addition of a UC, what is literally expressed is the more specific statement that the speaker has had breakfast that day. In these cases, the role of UCs is not to raise what is expressed by a sentence to the level of a proposition but to spell out what is needed so that the proposition that the speaker takes herself to have literally expressed corresponds to the proposition that the hearer understands as having been literally expressed.

In the third role, what I will call the **inference-bridging role**, UCs offer an informational bridge from the meaning expressed by the syntactic features in the sentence to what the speaker means. In this role, UCs are necessary so that language users can work out the implicatures (the speaker meaning) from the literal semantic content. To give an example of how UCs play this role, suppose that Liz is asked, in the morning, whether or not she'd like to get something to eat. In response, she utters (3):

# (3) I've had breakfast.

In this context, (3) does not literally express that she is not hungry but rather implicates the proposition that Liz is not hungry or Liz does not want to eat. How do we get from the content expressed by decoding the meaning of (3) along with assigning referents to any pronouns, names, and so forth to the proposition *Liz is not hungry*? On one line of reasoning, it is thought that the interpreter must first work out the literal meaning of (3) and then using conversational principles such as relevance, quantity, quality, etc. infer another proposition, which corresponds to what is *meant*. But, it may be thought that the gulf between the literal meaning of (3) and what (3) implicates is too large to directly bridge. Instead, an intermediate process of free contextual enrichment must take place so that the implicatures of (3) can be more readily generated. For instance, notice that while the tense of (3) indicates that Liz has had breakfast at some previous period of time, no specific time is provided as to when Liz had breakfast. On a minimalist reading of (3), (3)expresses something like *Liz has had breakfast at some point in the past*. This proposition alone might not seem enough to get us to what Liz means in uttering (3). Thus, one role for UCs is that they deliver a more enriched proposition that offers more specific information—e.g. the proposition that Liz has had breakfast that morning—so that we can work out what users imply in their utterances.

With these different roles of UCs articulated, we can now articulate three different objections to minimalism. First, according to minimalism, the literal meaning of a sentence is delivered by an interpretation of the formal features articulated in the sentence. As such, minimalists reject the existence of UCs since these are propositional constituents that are not found among the formal features of the sentence and rejects that they are necessary for delivering the literal meaning of the sentence. However, if UCs exist, then one objection to minimalism is that it offers an incomplete theory of meaning insofar as it radically underdetermines literal meaning by failing to allow UCs in their *completion role*. Contextualists, by contract, allow UCs to play a completion role through a process of free contextual enrichment.

Second, according to minimalism, the literal meaning of a sentence is delivered by an interpretation of the formal features articulated in the sentence. As such, minimalism rejects the existence of UCs since these are propositional constituents that are not found among the formal features of the sentence, However, if UCs exist, then a second objection is that minimalists offer an *inappropriate* theory of meaning, i.e. the truth-conditions it delivers does not correspond to what speakers judge themselves to have literally expressed and to what hearers judge as having actually been literally expressed by a speaker. In short, minimalism provides the wrong kind of truth-conditions to sentences by ignoring the *communicative role* of UCs. Contextualists, by contract, allow UCs to play a communicative role through a process of free contextual enrichment.

Finally, if UCs exist, then a third objection to minimalism is that it offers an unsuccessful theory of meaning not because (i) it fails to deliver a complete proposition (or truth-conditions), not because (ii) speakers and hearers consciously judge the literal meaning to be something *more specific* than *sparse* content that the minimalist judges to have been expressed, but because (iii) the content that the minimalist's theory delivers is an *insufficient* starting point for working out the what the speaker means (the implicatures). In short, minimalism again provides the wrong kind of truth conditions by ignoring the inferential role that literal meaning plays in a broader theory of meaning.<sup>55</sup> Again, contextualists, by contract, allow UCs to play an inference-bridging role through a process of free contextual enrichment.

	Minimalist Content is	UCs are needed for
1	Incomplete	Completion
2	Inappropriate	Communication
3	Insufficient	Inference to implicatures

# **3. INCOMPLETENESS OBJECTIONS**

Again, consider the three major commitments of the minimalist:

(M1) a commitment to the linguistic direction principle,

(M2) a commitment to a division between the **literal semantic content** and **speech act content**, and

(M3) a commitment that a context-insensitive approach to meaning produces an **adequate semantic theory**.

<sup>&</sup>lt;sup>55</sup> In what follows, I articulate the incompleteness and inappropriateness objections and offer a variety of different ways the minimalist could respond to these objections. I skip the insufficiency objection altogether.

In its commitment to the linguistic-direction principle, minimalism claims that the truthconditional effects of extra-linguistic context are traceable back to the logical form of natural language (M1).<sup>56</sup> On this account, the effects of extra-linguistic context on the truth-conditions of a sentence are constrained by syntactic and semantic rules. This sort of constraint means that the truth-conditions of an utterance are encoded in the logical form of a speaker's utterance and are derivable by the hearer who is familiar with the syntax and semantics (relative to context) of the utterance. As such, they do not require a semantic consideration of how the speaker says, asserts, claims when uttering a sentence. That is, we do not need to consider the speech act content of an utterance in determining what a sentence literally means (M2).

If one goal of a formal theory is to be able to take any well-formed sentence in a language and deliver its truth conditions, then sentences whose truth conditions cannot be delivered in this way would jeopardize the formal approach. Incompleteness objections are characterized by the claim that if the semantic interpretation of a sentence is done over only the formal features of a sentence, then minimalism will fail to deliver truth conditions for a number of different sentences. In other words, UCs play a necessary role in semantic theory insofar as they *complete* (or flesh out) the meaning of sentences that would otherwise fail to express a proposition or truth-conditions.

In the following sections on the incompleteness objection, I consider two different cases: (i) cases of non-sentential speech that seems to express a complete proposition and (ii) cases of sentential speech that would fail to express a complete proposition if minimalism were true.

### 3.1. INCOMPLETENESS OBJECTION #1: NON-SENTENTIAL ASSERTION

One sort of phenomenon that would threaten the minimalist's claim would be an utterance that was at once capable of expressing a proposition yet not the result of a reading of the logical form of the utterance. Such an example would, according to the

<sup>&</sup>lt;sup>56</sup> 'Logical form' understood in a *descriptive* rather than *revisionary* sense. According to the revisionary sense of logical form, natural language is deficient for the purpose of exact representation and should be replaced with a more logical language, e.g. first-order predicate logic (Russell 1956a, 1956b). According to the descriptive sense of logical form, natural language has a real structure that is distinct from its surface syntactic structure (Harman 1970, 1972).

contextualist, render an incomplete semantic theory since minimalism would fail at delivering the literal meaning for all of the linguistic items that have literal semantic content. Robert Stainton (1994, 1995, 1997, 1998, 2005) has argued that one apparent linguistic phenomenon that suggests that extra-linguistic context plays a role that is *not* traceable back to the logical form of a sentence is sub-sentential or non-sentential assertion.<sup>57</sup> Non-sentential assertion is a form of sub-sentential speech whereby a speaker performs a speech act (an assertion) without uttering a complete sentence, viz., without a clausal structure containing at least a noun phrase and a verb phrase.<sup>58</sup> Here is an example from Stainton (2005:384):

Meera was spooning out strawberry jam onto her toast, and produced (or, more safely, appeared to produce) the phrase 'Chunks of strawberries'. Anita nodded, and (seemingly) added 'Rob's mom'. It appears that Meera asserted something like *This jam contains chunks of strawberries* while Anita asserted something like *Rob's mom made it*. In both cases, they appear to have made true statements while using something sub-sentential.<sup>59</sup>

There are at least three things of note concerning the above example. First, the phrases in question are examples of sub-sentential speech since 'chunks of strawberries' does not contain a subject. Second, the non-sentential phrases are not embedded in a larger linguistic structure from which a missing element can be supplied by a semantic or syntactic rule. The phrases 'chunks of strawberries' is in a 'discourse initial' position, i.e. it lacks an explicit linguistic antecedent that could somehow function in the production of a sentential unit. Third, a proposition (truth-conditional content) and the illocutionary

<sup>&</sup>lt;sup>57</sup> For more on the syntactic ellipsis hypothesis, see Morgan (1973) for a positive evaluation, but confer (Yanofsky 1978; Napoli 1982; Barton 1989, 1990; Stainton 1993; Dalrymple 2005) for negative responses to this position.

<sup>&</sup>lt;sup>58</sup> Alternatively put by Stainton (1995:281) "Speakers can make assertions by uttering ordinary, unembedded, words and phrases." Or, more exactly, Stainton (1995:285) writes, "Speakers can make assertions by uttering formatives which: (a) are members of, or are headed by, a lexical category; (b) are assigned to non-propositional semantic types; and (c) do not exhibit illocutionary force."

<sup>&</sup>lt;sup>59</sup> Another example from Stainton (1995:281): "One can easily imagine someone, say Andy, approaching an apple cart and producing the word "red" on its own, not within any sentence, thereby making an assertion." Another more ubiquitous example of such non-sentential assertion are assertions made in null subject languages, i.e. languages that allow for independent clauses that do not explicitly mention a subject. The lack of an explicit subject pronoun in Spanish—for example, 'Vamos a la playa': [We] go to the beach—suggests that speakers can make assertions without uttering full sentences. Other linguistic evidence includes the use of null pronouns (Carnie 2002:255-273).

force of the utterance is, nevertheless, recoverable by its interpreters. Thus, the phrase 'chunks of strawberries' is not a complete sentence, is not embedded in a larger linguistic structure, yet language-users are able of cognize the proposition *this jam contains chunks of strawberries*.

The focus of attention for theorists is to construct a model that explains how literal semantic content is recoverable from non-sentential utterances. On the contextualist (pragmatics-oriented) approach, what bridges the gap between the subsentential item encoded by the syntax and lexicon and the recoverable propositional content is information from extralinguistic context (derived from vision, hearing, olfaction, knowledge of history, background knowledge) that is the result of free contextual enrichment. In other words, the presence of a UC raises the sub-propositional content to the level of a psychologically-realistic proposition that actively figures in communication. As Stainton puts the same point "what makes the former filling-in-to-arrive-at-what-is-asserted pragmatic is that the saturation is not a matter of linguistic derivation, but is instead a matter of all-purpose inference triggered by pragmatic unfitness of the sub-propositional content—where, moreover, the inference is based on both linguistic context and other kinds of knowledge" (Stainton 2005:389).<sup>60</sup> In sum, cases of non-sentential assertion appear to show that minimalism is incomplete for it fails to deliver truth conditions for a select number of expressions that contextualism can

(9) fire

<sup>&</sup>lt;sup>60</sup> Another tactic for explaining away apparent cases of non-sentential assertion is to claim that *some* apparent cases are actually unembedded phrases that, while syntactically defined as non-sentential, are nevertheless semantically defined as sentences. Here is an example from Stainton (1995:286):

A typical speaker can make assertion by saying (9) on its own. Let us suppose that Mary says it, thereby asserting that there is a fire nearby.

According to the semantic ellipsis hypothesis, this is not a case of uttering an ordinary word or phrase; rather, what gets produced in this case is a sentence, in the semantic sense. This sentence expresses a proposition (in particular, that there is a fire nearby) and has illocutionary force (in particular, assertoric force).<sup>60</sup>

The idea here is that when speakers *appear* to meaningful use non-sentential speech (words, phrases), what they are in fact doing is uttering one-word or phrasal sentences. What the semantic ellipsis hypothesis says is that while (9) is not non-sentential from a syntactic point of view, it expresses a proposition and has illocutionary force from a semantic point of view. In short, single words and phrases are capable of expressing sentences.

explain. If the linguistic direction principle demands that the semantic role of context is linguistically constrained, then minimalism does not yield the literal semantic content for cases of non-sentential assertion.

### 3.2. INCOMPLETENESS OBJECTION #2: SEMANTIC INCOMPLETENESS

A second form of the incompleteness objection does not revolve around sub-sentential speech. The objection claims that a specification of the literal meaning of the formal features of a variety of *syntactically complete sentences* will fail to deliver a real proposition or truth conditions. The objection to a formal (minimal) approach to semantics then is this:

Minimalism cannot deliver the literal meaning (truth conditions) for a natural language (e.g. English) because, for at least some complete sentences, determining the literal meaning of a sentence requires the use of unarticulated constituents and a process of free contextual enrichment.

What does it mean to say that the literal content expressed by a reading of the syntactic features of the sentence falls short of being propositional or truth-conditional content? For this dissertation, I will define a **proposition** as an abstract and structured entity that is the primary bearer of truth and falsity. Propositions are **truth-bearers**; they are the kinds of entities that have the property of truth and falsity. To say that a proposition is a **structured entity** is to say that it is a complex entity that has constituents which can be grouped together in various ways. Minimalism, I have been arguing, claims that we can determine the constituent structure of a proposition simply by using the constituent structure of the uttered sentence. That is, the parts or constituents of a proposition are fully articulated by the parts or constituents of the sentence. To say that an utterance of an expression **fails** to express a proposition is another way of saying that it does not express an abstract, structured entity that can bear the property of being true or being false.

But, this explanation of what it means to fail to express a proposition is pretty opaque. Intuitively, it is the case that not every abstract entity can be a bearer of truth and falsity, e.g. persons (which are concrete entities) like *John Santello*, events like WWII, and the content expressed by certain sentence fragments like *Uh*! do not express propositions. However, what is less intuitive is what criteria should be invoked to say that the content of a well-formed declarative sentence fails to express a proposition. However, I think a proponent of incompleteness objections have two criteria in mind. To see this more clearly, consider the sentences in (1)–(10):

(1) John is tall [for a soccer player].

(2) John is ready [to go dancing].

(3) All of the beer [in the refrigerator] is gone.

(4) John and Vic went to Chicago [together].

(5) John ate [breakfast].

(6) John ate breakfast [in the normal way].

(7) The [person who ordered the] ham sandwich is getting annoyed.

(8) The [skin of the] apple is red.

(9) John kicks [the ball].

(10) It's raining [in Palo Alto].

According to the contextualist, utterances of (1)–(10) fail to express a proposition or

truth-conditional content. Why? Here are two reasons:

*Reason* #1 (Brute Intuitions): We have brute linguistic intuitions that the content expressed by an utterance of these sentences would fail to deliver a proposition. Any utterance of 'John is tall' or any utterance from (1)–(10) will always leave you feeling like you don't quite grasp what the sentence means without also understanding the context in which it is used.

*Reason* #2 (Lingering Questions): We have a lingering suspicion that the content expressed by (1)–(10) is too indeterminate. Utterances of (1)–(10) always express something *more*. In order to get at content that actually has truth conditions, we need to make the content more determinate. The test then for whether a sentence expresses a real proposition is whether, when we encounter such a sentence, we intuitively feel the need to ask additional questions that make it more determinate. For example, with respect to (1), we can ask, 'tall in comparison to what?' With respect to (2), we can ask 'John is ready to do what?' With respect to (3), we can ask 'all the beer is gone, in what location?' and so on.<sup>61</sup>

So, UCs play a necessary role in the completion of well-formed sentences. When we interpret an utterance, we take the indeterminate and incomplete content and, using a UC, enrich it through a process of free contextual enrichment. When we hear that 'John is ready,' we do not know its meaning until we look to the context to see *what John is ready to do* or what *John is ready* for. So, in short, in the examples above, the elided

<sup>&</sup>lt;sup>61</sup> See (Cappelen and Lepore 2005:61-62).
information is an unarticulated constituent since it is *not articulated* in the surface structure nor is it traceable to the deep structure of the sentence. Thus, minimalism fails at giving the literal meaning of these sentences, as well as any other that might involve an unarticulated constituent.

One popular way of motivating a need for *increased context sensitivity* are context-shifting arguments. Consider a context ( $C_1$ ) where John is a very, tall and strong third-grader. He plays basketball and is known for towering over other third-graders. At a game where John is demonstrating his height advantage, Vic utters (1a):

(1a) John is tall.

Intuitively, we think that Vic has uttered something true for *John is tall*. Now imagine another context ( $C_2$ ) where John, still in third-grade, is playing a number of high school basketball players. John is easily pushed around and he is no longer taller than the majority of players. Now suppose Vic utters (1b):

(1b) John is not tall.

Intuitively, we think that Vic has uttered something true for *John is not tall*. However, despite the fact that Vic has uttered (1a) and (1b), we don't think that he has contradicted himself. That is, we don't think that it is both the case that *John is tall and not tall*. In order to explain this seeming contradiction away, contextualists argue that all we have to do is relativize the meaning of (1) and (2) to the context by positing a UC in each.

On a more moderate approach, the UC simply selects one feature or component of the context. For example, a contextualist might contend that (1a) and (1b) require that the meaning of 'tall' is always contextually sensitive in that it requires a *comparison class*. In this case, (1a) expresses the proposition *John is tall relative to third-graders* while (1b) expresses the proposition *John is not tall relative to high school basketball players*. This type of relativization removes any seeming contradiction. Let's call this type of contextualism **moderate contextualism**. On a more radical approach, the UC selects, not merely one feature or component of the context but relies upon *all* of the information in the context. That is, the meaning of (1a) and (1b) are not merely relativized to a

comparison class but to a variety of other contextual factors. Let's call this type of contextualism **radical contextualism**.

Another way that *increased context sensitivity* is motivated is by pointing out how certain utterances fail to specify whether or not the utterance would be true or false in some context. Consider, for example, the following sentence:

### (2) The cat is on the mat.

We might think that the literal meaning of (2) is easy enough to determine and that (2) does not require additional context sensitivity. However, one way to motivate additional context-sensitivity (and hence the need for a UC) is to ask various questions about whether or not (2) would be true or false. For example, imagine a context in which the cat and the mat are floating freely in outer space. Even given a perfect knowledge of the facts and the syntax and meaning of the words in (2), it is uncertain whether or not to evaluate (2) as true or false in the zero-gravity scenario. Again, a moderate contextualist will argue that (2) requires a UC but the number of contextual factors needed to understand (2) are somewhat limited and it may be the case that some sentences do not require UCs. A radical contextualist, by contrast, will argue that potentially any and every bit of information from the context is needed to determine the meaning of (2) and potentially every sentence is contextually-sensitive.

So, to summarize, according to the contextualist, minimalist readings of sentences like (1) and (2) are overly indeterminate since without additional context sensitivity, there are (i) a range of situations where different utterances are not determinate enough to avoid inconsistency when contexts shift, (ii) a range of situations where we won't know whether (1) and (2) are true or false, and (iii) the range of situations that the sentence does admit are unacceptably wide. I consider (i), (ii), and (iii) to be different types of concerns. In the case of (ii), the objection appears to be not only that we need to know the conditions under which a proposition is true in order to know its meaning but also we need to know how to *verify* whether it is true. This is, I take it, a conflation of the

verificationist and truth-conditional theories of meaning.<sup>62</sup> I take (i) and (iii) to be more pressing and challenging of the points and so—in a later section—consider three problems with these types of claims.

# 4. THE MINIMALIST'S COMPOSITE REPLY

In this section, I argue that the appeal to UCs to deliver the literal meaning of a sentence is unwarranted. Traditionally, there have been two different ways that a minimalist might respond to the above challenge. In some cases, we can resist the temptation to appeal to UCs by showing how some constituents can be traced to syntactic features in the deep structure of the sentence. I consider this a *Syntactic Reply*. On this approach, a more nuanced or expansive notion of the syntactic structure of a sentence reduces the need for UCs since the semantic role that UCs play is carried out by elements constituents in the sentence (either in the deep syntactic structure or as logical features of words in the lexicon). In other cases, we can resist the temptation to appeal to UCs by showing that they are part of the speaker meaning (what speakers intend to convey in uttering a sentence) or speech act content (the proposition that users communicate in virtue of

<sup>&</sup>lt;sup>62</sup> Another example is that a language user's knowledge of the literal meaning ought to enable him or her to determine whether or not a given situation satisfies it. That is, our knowledge of the literal meaning of a sentence ought to enable us to determine, for any situation, which situations would make the sentence true and which situations would make the situation false. The prevailing response to this assumption is to distinguish one's knowledge of the truth conditions of a sentence from one's knowledge that these conditions are satisfied in a given situation (Borg 2004:237-242, 2005:247; Cappelen and Lepore 2005b). That is, the truth conditional approach to meaning is not a form of verificationism for knowing the conditions under which 'John is tall' is true is not the same as knowing how to verify, for a given situation, whether *John is tall*. As Borg writes:

It seems that the claim made by this kind of approach to semantics is that grasp of meaning is grasp of truth-conditions, not knowledge of whether those truth-conditions are satisfied, nor possession of a method by which to discover if those truth-conditions are satisfied; to think otherwise, is, I believe, to fall pretty to a kind of creeping Verificationism. What we are allowing is that the competent interlocutor can grasp the truth-conditions of the sentence, she knows how the world would have to be for the sentence to be true. To think that, in addition to this, the agent must be in a position to ascertain whether or not that condition is satisfied in order to count as understanding the meaning of the sentence is to run together two notions of meaning and verification which [...] are best kept apart. (2005:246).

Recanati (2004:93) argues against this response for he contends it amounts to an unacceptable weakening of the central idea of truth conditional semantics: "if we know the truth-conditions of a sentence, we know which state of affairs must hold for the sentence to be true.

asserting, claiming, saying some sentence) and not the literal meaning. I consider this a *Pragmatic Reply*. On this sort of reply, the minimalist either argues that the need for UCs is an effort to get at what a speaker means in using an expression and, while this aspect of meaning plays an important role in human communication, it is not the literal meaning of the utterance. The minimalist also argues that our linguistic intuitions about what we think has been uttered is not reliable data for determining the literal meaning of the utterance for the former tends to be cut with aspects of speaker meaning.

In short, minimalists have suggested that syntactic and pragmatic replies pose an effective two-pronged attack on incompleteness objections. The syntactic reply reduces the need for UCs by locating (or positing) hidden structure, while the pragmatic reply reduces the workload of a formal semantic theory by claiming it need not accord with our linguistic intuitions concerning what a sentence literally says. In addition to these traditional modes of response, I suggest a third way to make the minimal view even more plausible. On my approach, I suggest that minimalists can expand the scope of what gets articulated by a sentence by expanding their notion of a natural language. Whereas traditionally we think about what goes into a sentence as certain vocalized or orthographic units along with its underlying syntax and compositional structure, we can, however, take a broader view on language by allowing it to encompass features typically thought to belong to the context of utterance. The tactic then is to pose the following question 'what is a sentence/language made out of?' and then to try and appropriate features typically thought to belong to the context into the language itself. By arguing that various conventionalized gestures like pointing fingers, glances, intonations are not a part of the context of utterance but actually form a part of a language, what gets expressed by the sentence gets expanded, and consequently the role of UCs becomes further reduced. I call this third reply the *Broad Language Reply*.

## 4.1. CRITICISM #1: 'NON-SENTENTIAL ASSERTIONS'

In contrast to a pragmatic treatment of non-sentential assertion is the minimalist (or semantics-oriented) explanation. On the semantics-oriented approach, the bridge between the sub-propositional linguistic content encoded in the syntax and semantics (relative to context) and the recoverable propositional content is in the deep structure of the sentence

and logical components of the lexicon. All the needed information can be found in the logical form of the sentence. Jason Stanley, for example, argues that apparent cases of non-sentential assertion can be handled in either of two ways: (1) as cases of **syntactic ellipsis**, and so non-sentential assertions turn out to be sentential after all or (2) as **non-genuine speech acts**, and so non-sentential assertions turn out not to be assertions after all. The response then is a partly what I have called the 'Syntactic Reply to Contextualist Objections' and partly a measure of discounting the data. In what follows, I articulate Stanley's response as well as develop it with an additional (non-syntactic and non-pragmatic) response.

First, in arguing that some cases of non-sentential assertion are cases of syntactic ellipsis, Stanley considers the central distinction between the two phenomena. It is generally assumed that non-sentential assertion is distinct from syntactic ellipsis insofar as the former, but not the latter, can occur in the discourse-initial position. So, to clarify syntactic ellipsis, consider the following:

- (1a) Frank is a heavy drinker.
- (1b) John isn't.

Notice that (1b) is non-sentential but an utterance of (1b) would express the proposition *John isn't a heavy drinker*. The constituent *a heavy drinker* appears to be unarticulated but can be recovered by a context-insensitive, syntactic rule.<sup>63</sup> That is, (1b) is an example of syntactic ellipsis whereby the phrase 'a heavy drinker' is covert element of the logical form of (1b) given the linguistic antecedent in (1a). What distinguishes cases of syntactic ellipsis from non-sentential assertion is that the latter can occur felicitously without being embedded in a larger linguistic context. In contrast, cases of syntactic ellipsis cannot occur in 'discourse-initial' positions and are instead reliant upon previous linguistic discourse to supply any covert elements needed for propositionality. As an example, consider the mere utterance of the following:

(2a) John isn't.

<sup>&</sup>lt;sup>63</sup> Here is a very rough idea of one: if a S is missing some component from a VP, then insert that missing component by moving to the VP in the previous S, and finding it in that VP.

(2a) is infelicitous since there is not enough linguistic information to sustain the position that the missing element can be covertly supplied by expanding the vantage point beyond the single sentence into a larger linguistic (or discursive) structure.

Stanley, however, has argued that while it is true that syntactically elliptical sentences cannot occur discourse-initially (i.e. they must have a linguistic antecedent), advocates of the contextualist approach offer an implausibly narrow account of what it means for an utterance to have such an antecedent. Stanley (2007a:42) writes,

It is true that syntactically elliptical sentences cannot felicitously occur in the absence of a linguistic antecedent. But explicitly providing a linguistic antecedent by mentioning it is only the simplest way to provide it. There are other methods of raising linguistic expressions to salience in a conversation without explicitly using them.

What Stanley has in mind is that utterances can have linguistic antecedents without being embedded in an explicitly provided linguistic structure. Linguistic antecedents can instead be supplied by extra-linguistic context provided these linguistic antecedents are explicit.<sup>64</sup> Here is Stanley's example:

For example, suppose that a group of friends, including John and Bill, has gone bungee-jumping. Every member of the group is watching Bill, who is the first to muster the courage to bungee-jump. As Bill is standing either stories above the water on the platform of a crane, ready to plummet into the water below, Sarah, aware of John's terror of heights, turns to one of the other friends and utters (4) ['John won't'], shaking her head. Sarah's utterance is perfectly felicitous. But it would be wrong to conclude from this that explicitly elliptical expressions can occur without linguistic antecedents. In this case, the expression "bungee-jump" has been made salient by the utterance context, and can serve as a linguistic antecedent for the syntactic ellipsis (2000:42).

This is confusing due to some of the language used by Stanley. First, it is strange to say that "bungee-jump" can serve as a *linguistic* antecedent when its purported salience is not due to a use of language in the traditional sense. Neither Bill, John, nor Sarah use an expression that would put *bungee-jump* in a discourse initial position, so it is slightly odd to say that "bungee-jump" can serve as a linguistic antecedent for Sarah's utterance 'John

<sup>&</sup>lt;sup>64</sup> Stanley writes that "an expression that requires a linguistic antecedent can be provided one by extralinguistic context, though context needs to work hard to do so" (Stanley 2007a:43)

won't.' What I think Stanley is trying to get across is that while cases of syntactic ellipsis cannot occur in a discourse-initial position insofar as they need to pull from the previous information in order to recover certain covert elements, this pulling need not be restricted to *linguistic contexts*. Stanley's point is that syntactically elided phrases can pull from cover elements also found in *non-linguistic contexts*. But, while Stanley's reply seems to get the needed results, the maneuver by which he achieves it is *ad hoc* and there is, to my knowledge, no explanation of why the elements drawn from context come from a linguistically-directed (or motivated) process rather than the result of a process of free enrichment. What Stanley needs is a principled reason why an utterance of 'John wont' can pull *bunjee jump* from the context in which the utterance is used. In a later section, I argue that the ad hoc nature of Stanley's response.

Second, while some apparent cases of non-sentential assertion may be handled by syntactic ellipsis, it is not necessary to argue that *all* apparent cases of non-sentential assertion are forms of syntactic ellipsis.<sup>65</sup> Another way of discounting the negative effect that non-sentential assertion has upon the minimal theory is to show that at least some putative cases of this phenomenon are not full-blown speech acts. Consider Stanley's (2007a:44) example:

[A] thirsty man who staggers up to a street vendor and utters:

(10) water

Clearly, this utterance occurs discourse-initially in every sense. However, in this case, I doubt that the thirsty man has made a linguistic speech act.

Stanley offers two reasons why (10) fails as a speech act. The first is that in order for an act to count as a speech act of a certain kind, the act must be determinately made with the force appropriate to an act of that kind. So, if an utterance of (10) is to count as an

<sup>&</sup>lt;sup>65</sup> Some philosophers seem to reject the assumption that the objection is based on, i.e. that a speech act can be performed with non-sentential phrases. Dummett (1973:194), for example, writes that "A sentence is, as we have said, the smallest unit of language with which a linguistic act can be accomplished, with which a 'move can be made in the language game': so you cannot *do* anything with a word—cannot effect any conventional (linguistic) act by uttering it—save by uttering some sentence containing that word (save for the cases in which, as in the answer to some questions, the remainder of the sentence is understood from context)."

*assertion*, then it must be made with the force appropriate to assertions. Likewise, if (10) is a *command*, then it must be made with the force appropriate to commands. However, Stanley argues that in the above example, the thirsty man's utterance of (10) is consistent with a variety of different kinds of speech acts, e.g. a command, a request, an assertion. The indeterminate force of (10) excludes it from being a genuine speech act and thus excludes it from qualifying as a non-sentential *assertion*.

The second reason why Stanley claims (10) fails as a speech act is that it also fails to express any determinate proposition, literal semantic content, or truth condition. The idea is that even if we start by assuming that (10) is an assertion, if (10) fails at expressing a complete thought or proposition, then it fails as a speech act. According to Stanley then, (10) simply doesn't express anything determinate:

But what proposition has thereby been expressed? [...] Is the proposition thereby expressed the proposition that the thirsty man wants water? Is it the proposition that the vendor should give the thirsty man water? The available facts do not determine a determinate propositional content for the alleged assertion. And when a communicative act lacks a determinate content, it is not a linguistic speech act (2000:45).

The idea is that sub-sentential speech just doesn't rise to the level of a complete proposition and so cannot be used against the minimalist as a bit of data that it fails to explain. In sum, apparent cases of non-sentential assertion are explained in two different ways. On the contextualist (pragmatics-oriented) approach, non-sentential assertion is an example where there are truth-conditional effects not traceable to logical form. On the minimalist (semantics-oriented) approach, apparent cases of non-sentential assertion are reducible to cases of syntactic ellipsis and so all truth-conditional effects are traceable to logical form. I have argued above that despite some minor hiccups in explanation, Stanley's response is largely correct. Cases of non-sentential assertion that purportedly undermine the minimalist position can be divided into two different types: those that are genuine speech acts but whose hidden elements can be recovered syntactically and speech acts that are *non-genuine* and which can be discarded.

In criticism of Stanley, which I will return to later, I claimed that while elided material may be recovered syntactically, greater care should be taken in characterizing how features of the non-linguistic context can supply the linguistic antecedents necessary for syntactic ellipsis. The maneuver by which this is to be achieved (and which I have not yet specified) is what I call the *Broad Language Reply*.

### 4.2 CRITICISM #2: SEMANTIC INCOMPLETENESS

In this section, I argue that the semantic incompleteness objection is not persuasive. I argue that there are a variety of different ways in which the minimalist might respond to this objection and that the minimalist need not be wedded to one in particular.

Consider again, (1)–(10):

John is tall [for a soccer player].
John is ready [to go dancing].
All of the beer [in the refrigerator] is gone.
John and Vic went to Chicago [together].
John ate [breakfast].
John ate breakfast [in the normal way].
The [person who ordered the] ham sandwich is getting annoyed.
The [skin of the] apple is red.
John kicks [the ball].
It's raining [in Palo Alto].

First, an advocate of minimalism might point to certain key elements that form a part of the underlying syntactic structure even if they are not found in the surface structure.<sup>66</sup>

For example, consider (5) and (9)

(5) John ate [breakfast](9) John kicks [the ball]

In (9), it might be argued that without the UC *the ball*, a minimalist construal of (9) would fall short of representing the literal meaning of (9). The general idea is that without a specification of *what* John kicks, (9) does not express a complete thought or fails to express any truth-conditional content. However, I suggest that the minimalist can give a multi-pronged response.

<sup>&</sup>lt;sup>66</sup> Much of the need for UCs can be undermined by a fuller articulation of the underlying structure of natural language sentences. However, a full articulation of the sub-syntactic basement of natural languages is not currently available, is largely an empirical question, and whose ultimate specification is left to a complete syntactic theory. While it is likely the case that any philosophical argument that comes down on the scope of semantics or the pragmatics-semantics divide will be premature (if it rests on assumptions concerning the ultimate syntactic theory).

First, drawing upon (Recanati 2002; Taylor 2001), Emma Borg claims that while the surface form of (9) reveals only one slot for the verb 'kicks', i.e. x kicks, the underlying form of 'kicks' as a transitive verb involves two slots for arguments, one for the agent and another for the object being kicked. Borg (2004:226) writes,

If we get a surface level description of a sentence utilizing this expression ['x kicks y'], but with only one argument place explicitly filled (e.g. 'John kicks'), the syntactic level description of that sentence will nevertheless supply the second argument place, with an existentially bound variable acting as a placeholder, yielding 'John kicks something' or ' $(\exists x)$ John kicks x.'

So, in addition to a constituent structure (and accompanying phrase-structure rules), part of what is involved in understanding a language involves understanding the language's lexicon, which includes a variety of information about particular words. Such information includes a word's spelling, pronunciation, and syntactic (logical information) about the word. In the above example, the lexicon is capable of supplying its interpreter with 'kicks' as a transitive, two-place relation. The utterance of 'John kicks' thus articulates an unspecified missing argument (constituent) but this constituent does not show up in the surface form of the utterance.<sup>67</sup> Thus, on the syntactic reply, appealing to the hidden structure of (9) averts the need for positing contextually-delivered, but *unarticulated* semantic constituents because the hidden structure of the sentence articulates a placeholder for *some* constituent in the underlying syntactic structure. Thus, (5) and (9) in their fully articulated forms are *complete propositions* even if they are less determinate than the propositions supplied by (5) and (9) with a UC:

<sup>&</sup>lt;sup>67</sup> More specific information might be obtained if one advocates Lexical-functional grammar for this grammar consists of a constituent structure (with accompanying phrase-structure rules), a functional structure (a compilation of information about the subject, object, tense, predicates, etc.), and lexical entries. Similar to other grammars where the lexicon for a particular word contains its pronunciation, meaning, spelling, and certain syntactic features, lexical-functional grammar contains, in addition, the semantic roles that a particular word can play. For example, in the case of 'kicks,' the lexicon will include various forms of the word ('kick,' 'kicks,' 'kicking,' 'kicked') and that 'kicks' involves an *agent* (the thing that does the kicking) and a *patient* (the thing being kicked). In the original example, 'John kicks,' the lexicon in lexical-functional grammar not only specifies the two-place relation 'John kicks *x*' that we can existentially quantify over so that 'John kicks *x*' expresses the proposition *John kicks something* (where something quantifies over an unrestricted domain). However, drawing upon lexical-functional grammar, the semantic role can serve to restrict the domain of quantification, such that *John kicks something* is expressed by 'John kicks' but the domain of quantification is only over items that can play the semantic role of a patient. For more on lexical-functional grammar, see (Carroll 1994:41-42; cf. Bresnan 1978).

(5min) John ate something (9min) John kicks something.

The general tactic of the Syntactic Reply is to expand the notion of logical form to include logical features found in one's lexical knowledge of terms. Thus, transitive instances of verbs like 'kick' and 'ate,' adjectives that are comparative in nature like 'better' or 'taller', certain spatial relations like 'higher,' 'lower,' and 'between,' and an assortment of other constructions that have relational structure but where one or more *relata* are elided can be recovered by drawing on syntactic features in the sentence and logical features of the lexicon. Thus, relying upon certain lexical and syntactic features of terms, we can posit additional argument places and existentially quantify over these variables to give us a proposition or truth-conditional content.

While cases like (5) and (9) may straightforwardly require additional argument places, monadic predicates like 'tall' in (1), and 'ready' in (2) are less straightforward. On the one hand, it might be argued that they are really *disguised relations* whose relata are always elided. That is, nothing is simply *tall simpliciter* or *ready simpliciter* but objects are always *tall for an x* or *ready for x*:

(1min) John is tall for some group of objects.(2min) John is ready for something.

On the other hand, it has been argued by minimalists that for sentences like (1), (2), (8), and (10), as well as some others like 'John dances' and 'John has had enough,' it is not necessary nor empirically motivated to posit additional structure. Instead, there is no problem with straightforwardly saying that sentences like (1), (2), (8), and (10) express complete propositions for 'John is tall' is true if and only if *John is tall* simpliciter and 'John is ready' is true if and only if *John is ready* simpliciter.

There are two different sorts of objections to this latter kind of proposal. First, there is the *metaphysical objection* that these sentences don't express propositions precisely because the state of affairs that these sentences express do not exist. There is no such thing as *being ready simpliciter* or *being tall simpliciter*. There is only *being ready for something* or *being tall relative to some group*. Thus, either it is necessary to posit additional structure or the missing relata is supplied by a UC. Second, there is an

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objection that this view (as well as the alternative position that posits additional structure by way of drawing upon the lexicon) on propositions plays no role in the larger cognitive and psychological story of human communication. I think that there are convincing replies to both of these objections. With respect to the second objection, it is a version of the inappropriateness objection and so I will deal with it in the next second section. With respect to the first objection, I think there are three different types of responses.

The first type of response, from Cappelen and Lepore (2005a:155-175), argues that the objection is not unique to minimalism and is a metaphysical (rather than semantic) question. A second type of response, drawn principally from Emma Borg (2005), points to the fact that many of the types of sentences that contextualists contend require further enrichment are arbitrary. Finally, a third type of response objects to the argumentative strategy posed by contextualists who point to the fact that we feel as though the semantic content of an utterance should be more determinate when put in a context that seemingly calls for more specificity. The minimalist can argue that this creates an unstable and radical form of contextualism where the literal meaning of an utterance depends an in-depth knowledge of a wide variety of contextual factors.

## 4.2.1. FIRST PROBLEM: A METAPHYSICAL (NOT A SEMANTIC) ISSUE

Cappelen and Lepore begin their defense of this position by pointing out that worries concerning 'John is tall,' 'Steel isn't strong enough,' or 'It's raining' are "about *any* claim to the effect that two objects *can share the same property or engage in the same activity*" (2005:157). The minimalist claims that 'John is fast' is true if and only if *John is fast for a runner*, or *John is fast for a sixth-grader*, or *John is fast when he is in a dead sprint*. And so, when queried about what is it to be *just fast* rather than *fast for a runner* or *fast for a sixth-grader* or *fast when he is in a dead sprint*, minimalists are being ask to state what *being fast* picks out in all of these more determinate scenarios. The worry then is that there is nothing *common* to all of these separate ways of *being fast* and so it is meaningless for someone to just *be fast*. Such a state of affairs simply does not exist and so an utterance that purports to pick out *being fast* does not really pick out a property that applies to all uses of the term. The alternative

then is that one is always fast *relative* to some comparative class, e.g. runners, sixthgraders, etc.

However, Cappelen and Lepore's response is that this is a metaphysical worry (not a semantic one) that applies to any variety of semantic theory:

Suppose, for example, you're interested in what consciousness is. Then you ask a question like 'What do all conscious things have in common?' If you're interested in what causation is, you ask 'What do all events A and B have in common in which A causes B?' [...]

Notice that none of these questions are *about* language. They are not about the expressions 'conscious,' 'cause,' or 'identity.' They are not about how people use those expressions. They are *non*linguistic questions (Cappelen and Lepore 2005a:159).

As a metaphysical question, Cappelen and Lepore think that the question of what further specifications have in common with a less specific determination is a *metaphysical question* and applies to semantic theories in general. In other words, it poses a problem for contextualists just as much as for minimalists. To illustrate, suppose you are worried about the property of *being fast* but more determinate properties like *fast for a runner* are safe. For you, there is no such thing as *fast simpliciter* and so the proposition *John is fast* doesn't exist but *John is fast for a runner* does exist. Cappelen and Lepore argue that this more determinate proposition *John is fast for a runner* isn't any better than just *John is fast for a runner*? Is it to be:

fast at sprinting? fast over five kilometers? fast in the final stretch of a race? fast in the initial part of the race? fast for a ten-year old? fast for a Kenyan? fast for an American distance runner? fast for someone who is late for an appointment? fast for someone who is running from a criminal? fast for a distance runner?

The same difficulty that seems to jeopardize the minimalist account also seems to jeopardize any semantic theory that tries to make the content expressed by an utterance *more determinate* by making its literal meaning depend upon features in the context. For

just as there is a worry that *being fast* does not pick out anything in common with *being fast for a runner* or *being fast for a hippo*, there will be similar worries for more contextualized states like *being fast for a runner*. That is, the same worry that a contextualist might raise against *being fast can be raised against being fast for a runner* or any additional specifications. For again, suppose that there is no such thing as *being a fast runner simpliciter* and so the proposition *John is fast for a runner* doesn't exist but *John is fast for a distance runner* does exist. With a little imagination, the same worry raised against *fast simpliciter* and *fast for a runner* can be raised against *fast for a distance runner*? Is it to be:

fast at distances over five kilometers? fast at distances between three and five kilometers? fast in the final stretch of a marathon? fast for an average Kenyan runner? fast for an average American runner who participates in a 5K event? fast for an Olympian in the 19<sup>th</sup> century? fast for a distance runner? fast for someone who runs 20 miles per week and lives in Central Pennsylvania? fast for a twelve-year old in a 5K race?

So, again, the same worry that a contextualist might raise about *being fast*, can be raised about *being fast for a runner* and for *being fast for a distance runner*. And so, if the point generalizes, then the worry raised about 'tall,' 'fast,' 'red' and so forth are not worries that apply uniquely to the semantic minimalist since they apply to a contextualist who thinks that the meaning of terms like 'tall,' 'fast,' and 'red' are sensitive to the context.

### 4.2.2. SECOND PROBLEM: DETERMINACY AND ARBITRARY CONTEXT-SENSITIVITY

The first difficulty with positing additional context sensitivity (a UC) because there is a *felt need* to make a proposition more determinate is that it is unclear whether the demand for a more determinate content is the result of a felt need to know more about the context in order to know what an *utterance means* or a desire to know more about the context in order to know what a *speaker means*. Contextualists seem to pick and choose (i) sentence-types where a knowledge of the meaning would require the existence of a UC and (ii) sentence-types where a knowledge of the meaning would not require a UC.

Consider the following sentences:

(1a) It's raining.(2a) Jane can't continue.(3a) There's no beer left.

According to the contextualist, we can't simply interpret the syntactic features of the sentence to get the literal meaning. That is, we can't derive the meaning of (1a)–(3a) to get (1b)–(3b) respectively:

- (1b) 'It's raining' is true if and only if *It's raining*.
- (2b) 'Jane can't continue' is true if and only if *Jane can't continue*.
- (3b) 'There is no beer left' is true if and only if *There is no beer left*.

The contextualist claims that our knowledge of the literal meaning of the sentence depends upon knowing certain features of the context that are not indicated by the sentence, e.g. where it is raining in (1a) or what Jane can't continue in (2a). Without a reading of the sentence that is enriched by these features, the disquotational readings in (1b) or (2b) fail to specify truth conditions that are determined enough to correspond with our intuitions concerning the literal meaning of (1a) and (2a). As Borg (2005:243) puts it, the truth conditions of the form of (1b)–(3b) "allow a range of more specific conditions each of which would serve to make the sentence true." For example, we can imagine more determinate truth conditions of 'All the beer is gone' as All the beer is gone at the party, All the beer is gone at Vic's wedding, All the beer is gone in the fridge downstairs until at least 6p.m., and the party is over. Thus, the debate between minimalists and contextualist then is over the extent to which the truth conditions of a sentence should be constrained. The contextualist claims that the minimalist is *too liberal* in that the range of conditions that she admits are too wide and conflict with a narrower set of conditions dictated by our intuitive judgments about literal meaning. The minimalist, however, offers a powerful rejoinder by pointing out how appeals for UCs are just appeals for more determinacy and so no explanation has been given why some sentences or expressions call for UCs while others don't.

To see the arbitrary nature by which contextualists choose which propositions to enrich, take (2a):

(2a) Jane can't continue.

Now perhaps there is a felt need that (2a) is not determinate enough and so ought to be enriched by positing an UC for what Jane can't continue. Thus,

# (2c) Jane can't continue [playing].

(2c), in contrast to (2a), has far fewer situations under which it would be true, and the felt need to make (2a) more determinate is not felt when we encounter (2c). But why ought a *difference* in the *range of conditions under which a sentence is true* correspond to a difference in whether a sentence is sensitive to context or not? And why should our ability to understand the literal meaning of (2a) depend upon our ability to understand the more enriched and determinate proposition expressed by (2a)?

I think there are two ways in which counterexamples can be marshaled against the proposal that a felt need to make a proposition more determinate corresponds to a context-sensitivity in language. The first sort of counterexample to the objection are sentence-types that *do not intuitively* call for a UC yet still admit a broad range of conditions under which the sentences would be true. The idea is that a lack of determinacy does not entail a need for additional context sensitivity. Pointing to such cases show that our intuitive judgments that a sentence ought to be *more determinate* cannot be used as reliable data for determining which sentences require UCs to determine their meaning. Such judgments could very well be the result of a long-standing communicative practice (or conversational norm) to make propositions as determinate as possible given the purpose of the discourse.<sup>68</sup>

Thus, consider that the contextualist claims that an interpretation of (2a) requires *what* Jane can't continue in order to express appropriate truth conditions. That is, there are a broad range of situations that would satisfy (2a) and this range ought to be constrained by positing a UC for *what Jane can't continue* as a part of the sentence's literal meaning. But, Borg argues, there seems to be a contrast between cases like (2a),

<sup>&</sup>lt;sup>68</sup> Borg (2005:243-247) and Cappelen and Lepore (2005a:239).

which require a UC and (4a), which seemingly does not intuitively require enrichment with a UC:

(4a) Jane is happy.

(4b) 'Jane is happy' is true if and only if *Jane is happy*.

The idea then is that cases like (2a) which demand UCs in order to deliver the literal, intuitive content of (2a), further enrichment of (4a) are not mandated and additional enrichment of the sentence would only go to form part of what the speaker means.

Now that we have contrasted sentences that require further specification with a UC from those that don't, next note that there are a range of situations or scenarios that would make (4a) true but that are not specified by (4a). That is, according to Borg (2005:244), (4a) does not

uniquely constrain the range of possible situations in which the object language sentence will be true. A world in which Jane is happy because it is her birthday but not because her boyfriend has left her, or where she is happy now but not five minutes ago, or where she has never been unhappy, are all worlds which serve to make the object language sentence true.<sup>69</sup>

Finally, if both (2a) and (4a) involve a range of situations that would satisfy them, we are left wondering what substantive (non-arbitrary) difference is there between cases that require additional specification involving a UC and those that don't. *Why* do cases like (2a) require UCs and those like (4a) do not? Why does our ability to understand the literal meaning of (2a) require knowledge of context but (4a) does not? Given that both examples do not uniquely constrain the possible situations in which they would be regarded as true, why should the felt *need* for greater specification of (2a) be reflected (or found) in its literal meaning while potential further specifications of (4a) are reflected as a part of a speaker meaning?

<sup>&</sup>lt;sup>69</sup> Borg (2005:244) writes: Finding out whether Jane is happy, then involves, undertaking exactly the same kind of investigation as finding out whether Jane can't continue, it is just that we might think (speaking somewhat crudely) that there is a 'broader' range of situations which would make it true that Jane can't continue then there are which satisfy 'Jane is happy'

## 4.2.3. THIRD PROBLEM: INSTABILITY

In the previous sections, I argued that the appeal to intuitions is deeply problematic because if a felt need (or conscious, intuitive judgment) for increased determinacy is the criterion for the existence of a UC, then UCs can be triggered at any time by asking questions about whether the utterance would be true in a scenario it has left unspecified. However, the contextualist may argue that our initial assumption concerning (4a) is mistaken because 'Jane is happy' and 'Jane can't continue playing' are just as much in need of further specification as 'Jane can't continue, 'It's raining' or 'All the beer is gone.' That is, the contextualist may argue that while moderate contextualism is an unsuitable position, a more radical contextualism is not.

In chapter 4, I will argue that radical contextualism is false. I argue that this position cannot explain how we communicate across contexts because it ties our understanding of an utterance too tightly to features of a context. However, before turning to the next type of inappropriateness objection, I want to further argue that moderate contextualism slides into a type of radical contextualism. Namely, if our intuitions about the determinacy of an utterance are a reliable guide to determining when an utterance requires additional non-linguistically-directed enrichment from the context, then the number of UCs needed to determine the literal meaning of an utterance is extremely unstable.

The most prominent advocate that moderate contextualism is instable and leads to radical contextualism are Cappelen and Lepore (2005a:39-52; see Borg 2005:244). Their argument begins by giving a rationale for why sentences like 'Jane is happy' is just as much in need for UCs as 'Jane can't continue.' They argue that the need for UCs in interpreting sentences like 'Jane is happy' can be triggered by context-shifting arguments (CSAs):

CSAs: intuitions and feelings about the context shiftiness of various kinds of content (what's said, asserted, and expressed) are triggered by imaginatively varying the context of utterance for S, i.e. the sentence which contains the alleged context sensitive e (Cappelen and Lepore 2005a:40).

Second, they argue for the following claim

(GEN) With sufficient ingenuity, a CSA can be provided for any sentence whatsoever, and consequently, for any expression (Cappelen and Lepore 2005a:40).

Finally, they argue that if (GEN) is true, then contextualism is forced to endorse the radical view that in order to understand the literal meaning of an utterance we need to know the unique (highly determinate) conditions of the world that would fully make it true.<sup>70</sup> To illustrate, consider (5a) and its proposed completion as (5b):

(5a) Steel isn't strong enough.

(5b) Steel isn't strong enough [to support the roof].

Cappelen and Lepore (2005a:63) argue that (5b) much like (5a) is insufficiently determinate:

because it doesn't settle for how long the support must last. Do a few seconds suffice? More than three days? Many years? Why mustn't [5b] also settle whether [5b] is false if steel fails to support the roof when placed in temperatures over 390°? Then there is a question of why the amount of steel needed to support the roof mustn't be decided in order to settle whether [5b] is true. Would [5b] be true if one tenth of a square inch of steel wouldn't suffice to support the roof?

Cappelen and Lepore thus argue that a contextualism which posits a moderate amount of contextual sensitivity (i.e. a limited number of cases that require free enrichment) is an unstable position for we can always point to features of the context that show the utterance as failing to be determinate enough for some issue.

To consider this in some further detail, consider

(6) The cat is on the mat.

(7) Give me a hamburger, medium rare, with ketchup and mustard, but easy on the relish.

John Searle argues that neither (6) nor (7) have a clear application independent of background conditions since we can easily imagine contexts where the application of (6) and (7) are uncertain. For example, in the case of (6), we can imagine a context where the

<sup>&</sup>lt;sup>70</sup> This is somewhat of a distortion of Cappelen and Lepore's argument. Cappelen and Lepore argue that if (GEN) is the case, then a radical form of contextualism—that every sentence is contextually sensitive—is the case.

cat and the mat are floating freely in outer space. Even given a perfect knowledge of the facts and the syntax and meaning of the words in (6), it is uncertain whether or not to evaluate (6) as true or false in the zero-gravity scenario. A moderate contextualist might, try to account for the lack of determinacy of (6) by saying that it expresses the following:

(6a) [At, or near, the surface the earth or in a similar gravitational field,] the cat is on the mat.

However, Searle argues that specifying (6) in terms of (6a) won't work for two reasons. First, if the meaning of (6) is specified in terms of (6a) then there should not be contexts where a literal use of (6) comes out as true. Searle, however, argues that there are such contexts, such as when "we are strapped in the seats of our space ship in outer space we see a series of cat-mat pairs floating past our window." (1978:212). In such a case, we would say that (6) comes out true. Second, even if we can account for background assumptions by further specifying what is presupposed about gravitational fields, there appears to be a host of other presuppositions that need to be specified in order for (6s) to avoid inappropriateness. Searle's example is where the cat and the mat are both in the earth's gravitational field but the cat and the mat are "suspended on an intricate series of invisible wires so that the cat, though slightly in contact with the mat, exerts no pressure on it" (1978:212).<sup>71</sup>

Recanati (2004:91) echoes this claim when he writes that with respect to Searle's example 'cut the sun':

<sup>&</sup>lt;sup>71</sup> Concerning other examples, Searle argues as follows:

Though the occurrence of the word "cut" is literal in utterances of ['Bill cut the grass', 'The barber cut Tom's hair', 'Sally cut the cake', etc.], and though the word is not ambiguous, it determines different sets of truth conditions for the different sentences. The sort of thing that constitutes cutting the grass is quite different from, e.g., the sort of thing that constitutes cutting a cake. One way to see this is to imagine what constitutes obeying the order to cut something. If someone tells me to cut the grass and I rush out and stab it with a knife, or if I am ordered to cut the cake and I run over it with a lawnmower, in each case I will have failed to obey the order. (1980:222-223)

What counts as obeying that order? We don't quite know. The abstract condition we can associate with that sentence (involving some form of linear separation affecting the integrity of the sun) is, precisely, too abstract to enable us to tell the worlds in which the condition is satisfied from the worlds in which it is not. It is not determinate enough to give us specific truth-conditions or obedience-conditions.

Thus, according to Searle, trying to limit the ways in which context sensitivity affects the literal meaning of a sentence by proposing one type of parameter will not work. Instead, the literal meaning of the sentence depends upon contextual factors in a variety of different ways that are not specifiable in advance. Searle argues for a type of radical contextualism since (i) for any sentence, there are an indefinite number of background assumptions and (ii) any attempt to specify these assumptions by appealing to the semantic structure of the sentence will only (ii.1) incorrectly restrict the breadth of application of the sentence to other contexts and (ii.2) bring in further assumptions that require further specification to avoid inappropriateness.

Considering (7), Searle writes the following:

I will remark first of all that a prodigious amount of background information has already been invoked even by the example as so far described—entire institutions of restaurants and money and of exchanging prepared foods for money, for a start; and it is hard to see how the sentence could have quite the same obedience conditions if these institutions did not exist, or if the same sentence were uttered in a radically different context [...]. [T]here are all sorts of other assumptions on which the application of the sentence rests and which are not even remotely close to being realized in the semantic structure of the sentence. (1978:215-216).

Searle's point is that without an indefinite set of assumptions about the world and society, the actions that qualify as fulfilling the order in (5) are *not specific enough*. This is evident to the variety of cases where it is uncertain whether or not the sentence applies. Examples include: (i) delivering a hamburger, medium rare, with ketchup and mustard, easy on the relish but encased in a solid block of concrete, (ii) delivering a hamburger, medium rare, with ketchup and mustard, easy on the relish by throwing it at me, and so on. Trying to remove the indeterminacy of (7) by elucidating various entailments in the meaning of (7) is a dead end since the very elucidation of these entailments will either (i) cut it off from applying to contexts where such entailments do not hold, or (ii) will require further and further analysis for its application to other contexts. Contextualists thus are forced to either abandon the view that our intuitions about how determinate a proposition should be determines when additional contextual sensitivity is needed or they

should accept the view that our understanding of the literal meaning of an utterance is radically indeterminate.<sup>72</sup>

### 4.4. THE BROAD LANGUAGE REPLY

To review, I have articulated two incompleteness objections to minimalism that charge it with a failure to deliver truth-conditional content when it should. On the first objection, involving non-sentential assertion, it was argued that minimalists cannot explain how utterances of sentence fragments seem to express full-blown truth conditions. On the second objection, involving complete sentences, it was argued that minimalists wrong-headedly assign truth conditions to sentences that fall short of expressing them. In contrast to minimalism, it was proposed that non-sentential assertions and a variety of complete sentences express truth conditions but do so only because of the presence of an unarticulated constituent and through a process of free contextual enrichment.

In response to these objections, I proposed a multi-pronged response: (i) a variety of constituents that are thought to be unarticulated turn out to be articulated given a wider understanding of the utterance's underlying logical form (a syntactic reply), (ii) much of the impetus to enrich various utterances with unarticulated constituents can be construed as some other type of demand, e.g. a demand to know what a speaker *means*, a demand to know what a speaker is *asserting*, a metaphysical demand, (iii) some of the examples that contextualists cite in an effort to support their theory is controversial (discounting the data), and (iv) the use of context-shifting arguments to elicit the felt need to make our interpretations more determinate is extremely unstable and leads to a radical form of contextualism. In addition to these replies, I also issued a promissory note concerning an additional reply that I called the *Broad Language Reply*. In this section, I articulate this reply and show how it might be used to fend off certain contextualist incompleteness objections.

The interpretation of natural languages involves the ability to receive certain *visual, auditory,* or *tactile* stimuli. An underlying assumption present whenever we go to analyze an utterance is that what goes into an utterance (i.e. what is articulated by a

<sup>&</sup>lt;sup>72</sup> For another account of radical contextualism, see (Travis 1985, 1996, 2000).

speaker) is specific to one sensory modality. What happens when we abstract to the level of meaning is *first* an *isolation* of a particular type of sensory stimuli that either relates to language production or is pertinent in language reception and *second* an *abstraction* away from the specific type of sense stimuli to some abstract linguistic representation. The content of the abstract linguistic representation is divorced from its particular spatial, auditory, or visual features since the relation of these features to the objects it refers to, properties it represents, or functions it serves are *arbitrary*. Evidence of the arbitrariness is generally indicated by pointing out variation that occurs across languages (*la neige* in French, *snow* in English).

Now there are two points of concern. First, we might wonder about the extent to which the relation of a wordform (the sounds making up a particular word in a particular language) and its meaning are arbitrary. This has to do with the *material signification* of signs, i.e. whether the relation between signs and things is *conventional* or *natural*. Forms of naturalism were more abundant in the ancient period, having been put forward in Adam's naming in *Genesis*, by Socrates in Plato's *Cratylus*, by Epicurus in his *On Nature*, and Lucretius in *On The Nature of Things*.<sup>73</sup> Conventionalism was argued for by Democritus, Aristotle in *De Interpretation*, and was the dominant position through the medieval period and modern periods. For example, Locke, a proponent of conventionalism, articulates the position as follows:

we may conceive how *words*, which were by nature so well adapted to that purpose [to represent ideas], come to be made use of by men, as *the signs of* their *ideas*; not by any natural connection, that there is between particular articulate sounds and certain *ideas*, for then there would be but one language amongst all men; but by a voluntary imposition, whereby such a word is made arbitrarily the mark of such an idea. (III.ii.1).

In short, Locke insists on the thorough arbitrariness and voluntary imposition of signs upon things (III.ii.1-8).<sup>74</sup>

<sup>&</sup>lt;sup>73</sup> For more on Epicurus' view and those that views that predate his position on the origin of language, see (Verlinsky 2005).

<sup>&</sup>lt;sup>74</sup> One exception to the conventionalism in the modern period is Leibniz, who attempted to straddle the conventional-natural divide by claiming that while words are not tied to the things they signify through *natural necessity*, the relation is not simply an arbitrary decision. Part of the reason motivating Leibniz's insistence on a reasoned connection between words and ideas is his commitment to the principle of

The second, and more relevant, point concerns not the abstraction from a given sensory stimuli to an linguistic representation but the *initial partitioning of sensory* stimuli into distinct modalities (auditory-vocal from visual-body modalities) and then defining language relative to each of these modalities (spoken English, written English, codified gestures in English). Now I think that definitions using such partitions of this sort are perfectly useful especially when the aim is to give an account of the linguistic capacities of individuals whose preferred mode of communication is restricted to specific sensory modalities (e.g. due to blindness or deafness). However, what I find suspicious is that after we define particular languages with respect to different sensory modalities, we use this definition of a language to draw a line between what gets articulated by *language* and what gets supplied by *context*. I think this is problematic because we might argue that this division, while warranted for practical reasons (e.g. it is difficult to embed gestures or vocal elements into a written text), is not innocent in a discussion where we are considering whether an unarticulated constituent (obtained through a process of free enrichment) is necessary. Instead, we might consider recasting the debate in *more* fundamental and semiotic terms. Namely, does the process of interpretation of conventional signs (using sign in the broadest possible sense) require free contextual enrichment or can it be explained by a rule-driven approach?

Now what I want to stress here is not that there is some preferred way of defining debates in the philosophy of language, and that debates that have largely run on *linguistic tracks* should be put on *semiotic tracks*. What I am stressing here is that one way to sidestep various counterexamples that purport to show how a formal semantic theory fails to give the truth conditions for certain utterances is to view what a language *is* with a wider (semiotic) lens. In this way, the Broad Language (Semiotic) Reply is similar to the Syntactic Reply: the latter expands the scope of what gets articulated by drawing upon the deep syntactic structure and logical features of the lexicon while the former expands the scope of what gets articulated by enlarging what features of a speech situation count as components that are capable of expressing a semantic constituent.

sufficient reason. In contrast to Locke's view that words are assigned to ideas arbitrarily, randomly, or without reason, Leibniz took the view that while the relation between things and objects is voluntary, it is driven by an assortment of moral, practical, historical, and natural reasons (see Aarsleff 1969:179; Walker 1972:295; Rutherford 1995:241; RB 278).

Certainly, there is much to be considered here since what is and what is not a conventional sign is a difficult and complicated matter to determine (one that requires a whole semiotic theory). My aim is not to get into these complexities but to show how the minimalist can respond to the incompleteness objection by redefining the debate more broadly. In what follows, I offer a number of illustrations of how this strategy might be used by minimalists.

First, let's return to my criticism of Stanley's response to the contextualist charge that sub-sentential speech expresses truth-conditional content but minimalism cannot accommodate this fact. Consider again the situation where John, Bill, and Sarah are going bungee-jumping and where Sarah utters 'John won't' with a shake of the head. According to (Stanley 2000:42), 'bungee-jump' is salient in the context and serves as the antecedent for syntactic ellipsis. On Stanley's account, what triggers the turn to context is the sentential incompleteness of 'John won't.' I do not think this is a workable approach for even if we think that a sentence's lack of sentential completeness triggers a turn to context, what linguistic reason do we have for enriching the sentence with *bungee jump* rather than some other constituent? My thoughts are that all that can be delivered is the presence of a contextual variable that we can existentially quantify. In other words, the syntactic reply might deliver *John won't bungee jump*.

While I certainly think that 'bungee-jump' is salient in context, my thoughts are that it is so because it has been articulated in a non-phonetic way. Suppose that Sarah utters 'John won't', points to the bungee-cord and then with her hands, and then pantomimes John's jumping off the cliff. In this example, there are at least two different 'languages' at work. First, there are the words governed by certain syntactic rules that Sarah vocalizes. These produce the following:

## Sarah: John won't.

Second, there is an associated group of gestures: a pointing finger acts as an index similar to lexical indices (and so governed by *convention*) and a pantomime of John's jumping off the cliff which is an *iconic* but a no less conventional representation of John jumping off the cliff.

On this approach, I suggest that minimalists can expand the scope of what gets articulated in uttering a sentence. Whereas traditionally we think about what goes into a sentence as certain vocalized or orthographic units along with its underlying syntax and combinatorics, we can, however, take a broader view on language by allowing it to encompass features typically thought to belong to the context of utterance. The tactic then is to pose the following question 'what is a sentence/language made out of?' and then to try and appropriate features typically thought to belong to the context into the language. By arguing that various gestures like pointing fingers, glances, intonations are not a part of the context of utterance but are actually conventional signs that form a part of a language (broadly construed), what gets articulated by an utterance gets expanded.

Second, let's look at some examples involving the incompleteness of complete sentences. On the Broad Language Reply, we might expand the scope of what goes into a sentence by including various hand gestures as a part of a language rather than as a part of the context. In opening up a linguistic text, you are not likely to see a pointing finger play a role in the syntactic structure of a sentence. But, there are conventions governing how this sign should be understood for the rule is that we are to (more or less) draw a straight line from the end of the pointing finger to some object.

Suppose that John utters (3) while pointing to a particular refrigerator. On the Broad Language Reply, what gets articulated is something like:

(3a) All of the beer  $\Im$  is gone.

In this case, we can understand ' $\mathcal{P}$ ' behaves like an indexical expression in that it bears its context sensitivity on its sleeve. Much like 'this' which selects a contextually salient object in context, ' $\mathcal{P}$ ' does so using certain prescribed rules, namely an interpretation of the pointing finger is one that selects the object or property that the finger is pointing at.

Certainly, individuals do not always point at what they are talking about but they do engage in a number of other gestures that can be thought of as being governed by conventional rules. For example, suppose John is staring inside a particular refrigerator intently. He is looking through the drawers and then, with his head still half-way in the refrigerator utters (3). What he has expressed is something like the following:

(3b) All of the beer O is gone.

Namely, *all of the beer in the location when I am looking is gone*. Here is another example. Suppose that Victor and Liz are standing in a field:

Victor: What does John kick? Liz: John kicks

In this example, a pointing finger takes the place of a lexical index or definite description by referring to *some object* that John kicks. In such an example, the scope of language is expanded to include, not simply bits of sound and ink, but also other conventional modes of expression.

Let's consider an example from the literature. Here is a passage from John Perry (1986:138) cited earlier:

It is a rainy Saturday morning in Palo Alto. I have plans for tennis. But my younger son looks out the window and says, 'It is raining'. I go back to sleep. What my son said was true, because it was raining in Palo Alto. There were all sorts of places where it wasn't raining: it doesn't just rain or not, it rains in some places while not raining in others. In order to assign a truth-value to my son's statement, as I just did, I needed a place. But no component of his statement stood for a place. The verb 'raining' supplied the relation rains(t, p)—a dyadic relation between times and places, as we have just noted. The tensed auxiliary 'is' supplies a time, the time at which the statement was made. 'It' doesn't supply anything, but is just syntactic filler. So Palo Alto is a constituent of the content of my son's remark, which no component of his statement designated; it is an *unarticulated* constituent. Where did it come from?

Perry argues that there is an unarticulated constituent for place and this is not specified by a component expression in the sentence:

(10) It is raining.

On the Broad Language Reply, where we understand what is articulated as all of the conventional signs expressed in a communicative context, what Perry's son says is:

(10) It is raining D.

where O, in wearing its context sensitivity on its sleeve, points to the relevant location of the rain.

In sum, the contextualist is able to insist upon the need for UCs and a process of free contextual enrichment *first* by defining language along a single sensory modality and *then* generating counter-intuitive consequences by re-embedding that language in a context where our linguistic understanding is multi-modal. A minimalist might respond by insisting that this objection disappears once we redefine what a language is in more semiotic terms, one that spans multiple sensory modalities.

Finally, there may be a lingering concern that while the Syntactic and Broad Language Replies generate the truth-conditional content for (9), they do not (and will not always) accord with our intuitive understanding of what (9) says. The need to posit a UC in the case of (9) is not to deliver John kicks something but to deliver John kicks the ball. Now this sort of a complaint is different from the way in which the incompleteness objection was originally articulated since this objection contends that while a formal semantic theory is capable of delivering the literal meaning of a sentence such a theory fails because it delivers the wrong kind of literal meaning. What is being demanded here is that a semantic theory delivers the literal semantic content of a sentence that accords with our considered linguistic judgments (or intuitions) about what an utterance of a sentence says. While I consider this objection more fully below, it is important to stress that the minimalist will offer a *Pragmatic Reply*. That is, the minimalist will insist that the further specification of *what* object John kicks is not be a part of the literal semantic content of (9). The reason for mentioning this reply here, however, is that such this reply will make more sense as a part of the minimalist's composite strategy to (i) reduce the need of UCs by positing hidden structure or additional linguistic content (e.g. gestures) and (ii) flatten any remaining need for UCs by claiming that the need for additional specification is an effort to get at what a speaker means or the content of a speech act and not the literal meaning of the utterance.

## 5. THE INAPPROPRIATENESS OBJECTION

To review, the principal objection to minimalism was characterized as follows:

The Big Objection: The minimalist model is incorrect for it either radically underdetermines literal semantic content or gives the wrong (non-intuitive) semantic content.

The specific form of this objection thus far considered is that a commitment to the linguistic direction principle results in an *incomplete semantic theory*. If we limit the role of context to those outlined by minimalism, we are left with a layer of meaning that falls short of being truth-conditional, propositional, or a complete thought. In response to this objection, I argued that the minimalist has the following composite strategy at its disposal: (i) adopt a wider notion of the syntactic form of the sentence by drawing upon its deep structure and logical features of the lexicon, (ii) widen its notion of what gets articulated so that pointing fingers, gestures, and looks take the role of UCs, and (iii) divert any remaining need for UCs into the pragmatic waste bin by arguing that while they may play a role in determining what a speaker means, asserts, contends, says, claims, they do not play a role in determining the literal meaning of a sentence.

However, the contextualist is equipped with response to (iii), namely that one condition of a semantic theory is that it should yield *intuitive* or *functional truth conditions* that accord with our unreflective, immediate judgments about what speaker say or hearers understand. That is, it is not sufficient for a semantic theory to give us any old semantic content. Rather, a viable semantic theory ought to deliver truth conditions that can be incorporated into a broader story about human communication and psychology. In the remaining portion of the chapter, I turn to what I call the **inappropriateness objection**, which contends that while a commitment to the linguistic direction principle may deliver literal truth-conditions, it delivers the wrong sort of truth-conditions.

There are at least two ways to flesh out the inappropriateness objection. First, one might, as Robyn Carston (1988:158, 2002:177-181, 2008:328n) and François Recanati (2001:88) and others have done insist that the minimalist's notion of literal meaning plays a superfluous role in a broader story about communication. First, an opponent to

minimalism might argue that the minimal proposition plays *no functional role* in communication. For example,

I suggested a different sort of principle for deciding whether or not a pragmatic inference resulted in an implicature or contributed to an explicature. This was called the Functional Independence Principle; the idea behind it was that the proposition (the explicature) and implicatures should play independent roles in the mental life of the hearer; if an alleged implicature was such that its role in subsequent inferences such as the derivation of contextual effects subsumed the role of the alleged proposition expressed, then the alleged implicature was most likely really a pragmatic aspect of the proposition expressed (Carston 2002:189).<sup>75</sup>

The point that concerned me was the more general one that this semantic notion of 'what is said', which is so minimally distinct from LEM [linguistic form used by the speaker], appears to play *no role at all* in linguistic communication and understanding (Carston 2008:328n).<sup>76</sup>

The general idea is that the minimalist's literal semantic content fails to be 'appropriate' within a wider story involving human communication and psychology because the minimal proposition does not have a functional role that is *independent* from the functional role played by explicatures (truth-conditional content involve free enrichment) and implicatures. Due to a lack of independent function, the presence of a minimal proposition is inappropriate for it acts as an idle wheel. The only option seems to be that we should disregard it for a more enriched, more context-sensitive notion of semantic content.<sup>77</sup>

To see this point more clearly, it is helpful to look at a specific example from Carston (1988:155):

<sup>&</sup>lt;sup>75</sup> Carston (1988:158) also writes, "we have a further property of any assumption conveyed by an utterance that we would want to call an implicature: as well as cancellability (without contradiction) and calculability, there is the independent functioning of these forms in the inferences involved n deriving the full important of an utterance. Any such requirement on implicatures naturally places an identical requirement on the explicatures of the utterance. [...] This functional autonomy property decides in favour of extending the explicature of (1) ['She didn't get enough units and can't continue'] to include the explanation of what Jane didn't get enough units for and what she cannot continue, since otherwise the explicature is entailed by the implicature and thus is redundant, playing no independent role in inference." <sup>76</sup> "Advocates of the Syncretic View hold that the proposition intuitively expressed by an utterance is only rarely the semantic content of the sentence relative to the context of utterance (King and Stanley (Chapter 4) call the Syncretic View *semantic modesty*). The central problem for the Syncretic View is that the notion of semantic content appealed to in the theory threatens to be an idle wheel in an explanation of linguistic practice." (Stanley 2007d:233). The referenced article in the above passage text is (Stanley and King 2007). <sup>77</sup> For a contextualist critique of Carston's Functional Independence Principle, see (Recanati 1989:320). For Carston's reply, see (Carston 2002:190-191).

(1) A: How is Jane feeling after her first year at university?B: She didn't get enough units and can't continue.

With respect to this example, suppose that A's interpretation of B's utterance is the following:

(1b) Jane didn't pass enough university course units to qualify for admission to the second year of study and (as a result) Jane cannot continue with university study.

On the minimal reading that I have been suggesting, we can get the literal content of B's utterance by an interpretation of the syntactic features of the sentence along with features in the lexicon, *and*, when necessary, existentially quantifying any arguments that might occur free. So, in the case of (1), the literal content of B's expression is just

(1c) Jane didn't get enough units and Jane can't continue something.

According to Carston, this will not do because (1c) does not seem to play any role in communication that (1b) doesn't.<sup>78</sup>

Thus, on the first sort of inappropriateness objection, Carston and others have argued that minimalists are mistaken in assuming that a reading of an utterance with logical principles in mind is cognitively meaningful (Carston 2002:190) and so that one criteria placed upon any semantic theory is that the proposition expressed by an utterance should play a cognitive role that is *distinct from* the cognitive role that implicatures play. Insofar as the minimal proposition plays no such role, it follows that the minimal proposition is simply an idle wheel.

Second, an opponent to minimalism might say that adherence to the linguistic direction principle delivers truth-conditions that do not accord with our consciously-held, intuitive judgments about what a sentence literally says. For example, if Vic utters 'all the beer is gone' to a raucous group at a party, none of them are likely to think that what he has uttered is *false* because it is not the case that all of the beer in the universe is gone.

<sup>&</sup>lt;sup>78</sup> For further discussion on this, see (Carston 2002:189).

Instead, they intuitively regard what he has said as *true* since he is understood as explicitly saying that *all of the beer at the party* is gone. If Vic is looking out the window in Palo Alto and John asks whether or not their soccer game will be cancelled, and Vic utters 'It's raining.' He is only to be understood as saying something true if and only if *It's raining in Palo Alto* and *not* if and only if *It is raining somewhere*. Lastly, according to the minimalist 'John kicks' literally expresses the proposition *John kicks something*, these truth conditions are broader than those expressed by what language users consciously judge the literally meaning of 'John kicks', namely as *John kicks the ball*.

According to Recanati (1989, 1993:246-250, 2004:13-16; see also Carston 2002:166-170; Bach and Harnish 1979:29), the literal meaning of an utterance must be 'available' insofar as it is accessible to our ordinary, pre-reflective intuitions about what is literally expressed. That is, according to Recanati, any semantic theory must obey what he calls the 'Availability Principle':

Availability Principle: In deciding whether a pragmatically determined aspect of utterance meaning is part of what is said, that is, in making a decision concerning what is said, we should always try to preserve our pre-theoretic intuitions on the matter.

Recanati takes the availability principle as a fundamental principle for how he (and other contextualists) can justifiably say that one aspect of the meaning of an utterance corresponds to the literal meaning while another corresponds to implicatures (or what is communicated). He writes:

Why, for example, do Sperber and Wilson claim that the proposition that the speaker has had breakfast at least once in his life is not the proposition actually expressed—what is said—by the speaker who utters (2) [I have had breakfast]? Because *everybody knows* that this is not what the speaker says, under ordinary circumstances, when he utters (2) (Recanati 1989:312).

And, although he disagrees with Carston's Functional Independence Principle, Recanati thanks Carston tends to get examples of what counts as literal meaning and what counts as implicatures.

This should come as no surprise: Carston certainly relies on her intuitions when she decides that a particular aspect of meaning is to be considered as an integral part of what is said, and I have argued that we do have reliable intuitions concerning what is said (Recanati 1989:315).

So, on this view, any viable semantic theory ought to posit truth conditions that intuitively correspond to what we consciously cognize as the literal meaning of the sentence. On this objection, problematic for the minimalist is that the minimal renderings of the truth conditions seem *wrong* or *inappropriate* because they conflict with our linguistic intuitions about what a speaker has literally said when these sentences get uttered in context. In other words, one constraint on a semantic theory of meaning is that it ought to mesh with our linguistic intuitions (immediate, unreflective judgments about a linguistic issue) concerning the literal meaning of a sentence. However, since intuitions tend to be theory laden, we cannot solve the matter by directly applying such intuitions to the matter at hand for it will lead to one question-begging claim after another.

Both Carston's Functional Independence Principle and Recanati's Availability Principle have undergone criticism and revision (see Recanati 1989:315-321; Carston 2002:189-191). In the remainder of this section, I focus on various renditions of a version of the inappropriateness objection that emphasizes Recanati's Availability Principle. But let me get clear on what I take the inappropriateness objection to be in a nutshell. As I understand it, the inappropriateness objection runs something like as follows: an utterance of a sentence expresses minimal truth conditions but such truth conditions are not the right kind. For a semantic theory, the literal meaning of an utterance should not only be cashed out in terms of truth conditions but it should also correspond to our immediate, conscious, linguistic judgments (intuitions) about what speakers say, assert, contend, claim, and so on. When a speaker utters a sentence, a minimal reading of that utterance may deliver truth-conditional content, but this content does not square with our intuitions about what speakers say, assert, contend, and claim. For when John utters 'I've had breakfast' after being asked on a Saturday morning if he's had breakfast, we judge him to have *said* that he has had breakfast *today* and not some time before the moment of his utterance. As Recanati (2004:8) puts it,

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From a minimalist point of view, the first sentence, 'I've had breakfast', expresses the proposition that S (the speaker) has had breakfast before t\* (the time of the utterance). Strictly speaking this proposition would be true if the speaker had had breakfast twenty years ago and never since. This is not clearly what the speaker means (when she answers the question 'Do you want something to eat' and replies 'I've had breakfast'); she means something much more specific, namely that she's had breakfast *on that very day* (that is, the day which includes t\*).

Contextualists, in contrast, by allowing for a process of free contextual enrichment, not only give us truth conditions for utterances but also give us truth conditions that correspond with what we intuitively regard speakers as saying, asserting, contending, claiming, etc.

I think there are two issues to sort out here. First, there is the general objection that minimal readings of utterances cannot fit into a larger story about human communication and psychology. In the next chapter, I argue that if there is evidence showing that linguistic processing is done by a modular language faculty (and I will argue that there is), we have an explanation of how the minimalist's semantic picture fits into a psychological picture about linguistic processing. Second, and what I want to focus on here, is the contextualist's position that the literal meaning of an utterance ought to correspond with our linguistic intuitions (immediate judgments) about what language users say, assert, contend, claim. In the following subsections, I argue that our intuitive judgments about what speakers say, contend, assert do not provide us with a reliable guide to determining the literal meaning of an utterance. In essence, my claim is that *our judgments about what speakers say, assert, contend, claim, etc. is mixed with elements concerning what speakers are trying to communicate (and so is an aspect of speaker meaning) in a given context and this data is unreliable.* 

I argue that there are two reasons why our immediate linguistic judgments (intuitions) should not play a role in determining the literal meaning of an utterance. First, we routinely confuse what an utterance literally means with what a speaker is trying to communicate in a given context, and this confusion is exposed when we are faced with pedantic interpreters who take what we say literally. For given an utterance u of S, we may intuitively judge u to literally mean p, but when we are faced with a pesky and pedantic interpreter, we realize that u meant something less enriched than p. For example,

if I utter 'all of the beer is gone' at a party, I judge myself to have said express the true proposition that all of the beer at the party is gone, but a pesky interlocutor might respond by saying 'false! All of the beer is not gone for there is some next door.' In such cases we realize that our judgments about the literal meaning of the utterance do not correspond with a strictly literal interpretation of what we have said and I think we acknowledge that the pesky interpreter is offering us a more literal reading of our utterance. Second, we routinely confuse what an utterance literally means with what a speaker is trying to communicate in a given context, and this confusion is exposed by the fact that *true* indirect speech reports go *beyond* capturing the semantic content of an utterance and that there are certain *false* indirect speech reports that do capture the semantic content. For instance, take any given an utterance u of S. If we think that our judgments about what speakers say ought to provide us reliable data concerning the literal meaning of u, then we judge any *true* indirect speech report to capture the meaning of u, i.e. we judge any report of the form S said that p (where p is the propositional content expressed by u) to capture the literal meaning of u. However, this proposal suffers from three problems. First, when we examine a permissible range of true indirect speech reports, we see that these conflict with other traditional goals of semantic theory, e.g. systematicity and learnability. Second, when we examine a narrower range of true indirect speech reports, we see that these reports can fail by only capturing *part* of the literal meaning of an utterance. Third, speech reports that do no capture the literal meaning of an utterance can turn out to be *false*.

## 5.1. NON-LITERALITY

Perhaps our conscious, intuitive judgments about what speakers express when they use sentences can be drawn upon in another way. Perhaps language users come equipped with the ability to recognize that the need for a UC is shaped by the different experiences we have when we use language *literally* and when we use it *non-literally*, and a comparison of traditional non-literal speech (e.g. irony, metaphor, etc.) with more putative cases. For the minimalist seems to contend that the *literal* meaning of an utterance diverges from our intuitive judgments about what speakers say, assert, contend, or claim in a given context. If this is the case, then it seems as though our intuitive

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judgments about what speakers say tracks a kind of *non-literal meaning*. But, the contextualist might object, this can't be the case because we know *when we are speaking literally* as opposed to *when we are speaking non-literally*. One way the contextualist might tease out such a response is to say that our consciously-held, intuitive judgments can correctly capture the literal meaning of an utterance rather than some kind of non-literal meaning (or speaker meaning) and evidence for this comes through a comparative assessment of paradigmatic cases of literal speech with non-literal speech.

What reason is there to think that the connection between a language user's judgments about what has been literally expressed and what has in fact been literally expressed coincide? One answer is that our consciously-held, intuitive judgments detect additional context sensitivity (and the need for free enrichment) by a comparative assessment of paradigmatic cases of literal speech with non-literal speech. To see this more clearly, compare the following two cases:

Case #1: Suppose John writes a letter of recommendation for Liz and says that she has nice handwriting. John expects his reader to recognize not only that he literally says *Liz has nice handwriting* but also his intention that he does not think Liz is a good candidate for the position (unless of course it involves handwriting). In this case, John has a *non-literal intention* and he thinks the context of the situation provides sufficient evidence to make this non-literal intention known to his interpreters.

Case #2: Suppose that Liz and John are in Palo Alto and Liz asks John if it is raining. John utters 'It's raining.' In this case, John does not have a non-literal intention. He intends to be understood literally and expects Liz to take the words he uses and the way he puts them together to express his literal intention.

According to the minimalist, the free enrichment of 'It's raining' with the constituent *in Palo Alto* is not a part of the literal meaning of the utterance but instead forms part of the speaker meaning (or speech act content). That is, the utterance of 'It's raining' in context does not actually express *It's raining in Palo Alto*. In contrast, the contextualist argues that this conclusion is misleading since there is a significant difference between the two cases. In the first case, the speaker has a *non-literal intention* and does not intend to be understood literally. In the second case, the speaker does not have a non-literal intention and intends his utterance to express *It's raining in Palo Alto*. Thus, when someone utters
'It's raining,' she utters the sentence with the aim of being understood literally and she takes herself as expressing *It is raining in Palo Alto*.

I don't find this argument persuasive since it makes the following assumption:

The meaning of a sentence is *non-literal* if and only if speakers explicitly intend to express some non-literal proposition.

This assumption is problematic for even if we think that the speaker has total control of what she means, absolute authority over how her message should ultimately be understood, and that the absence of a non-literal intention means that the speaker is trying to articulate her intention the best she can, we ought not to confuse a speaker's efforts to *say what they mean* as equivalent to *meaning what they say*. The main reason that this assumption is problematic is because is that we often confuse what an utterance literally means with what a speaker is trying to communicate in a given context, and this confusion is exposed when we are faced with pedantic interpreters who take what we say literally.

Two cases illustrate this confusion. First, there are cases where the speaker aims at being understood literally but in the face of a hostile or annoying interpreter, realize that their initial judgment concerning what the sentence literally expresses was incorrect. That is, there are cases where speakers intend to speak literally but realize that the meaning of the sentence they utter is not fully explicit. For example,

A: Everyone will be at the party.

B: Oh really? Will the Queen be there? (Borg 2005:249)

A: I love you unconditionally.

- B: What if you found out that I'm a murderer?
- A: Well, not unconditionally.

In the above example, the speaker's interpreters consciously ignore contextual factors and read their utterances literally. They cancel or choose to ignore any reliance the utterance may have upon context and opt for responding to what the speaker literally says rather than what she means. Even further, in response to somewhat hostile interpreters, speakers are apt to qualify what they previously said as failing to express what they *meant*. For example,

A: All the beer is gone.B: Really? All the beer in the world is gone?A: You know what I mean.

A: Everyone will be at the party.

B: Oh really? Will the Queen be there?

A: No, you know what I mean. Everyone in our class will be there.

Whereas the above cases show that having a literal intention (intending to mean exactly what you say) is not a guarantee for actually meaning what you say, a second type of case involves speakers who block *non-literal interpretations* of their utterances in favor of more strictly literal ones. These kinds of cases show that it is at least possible for speakers to actually say what they mean but getting at this content involves denying all sorts of free enrichments made by interpreters. According to Borg,

[I]n an utterance of "I will go to the store" it always seems open to the mischievous speaker, on being chided to actually go, to reply that she did not say *when* she would go and that she merely meant to express the proposition that at some time in the future she would be visiting the store. (Borg 2005:249)

In the above example, speakers retain the right to *cancel* any enriched proposition by claiming that such a proposition was never implied (or meant by them). The mischievous speaker invokes her authority over the way in which context shapes the meaning of her utterance by denying normal ways of inferring more enriched propositions from the content of the sentence and the context.

In cases like those above, how ought we to characterize the individual who utters 'I will go to the store' or who responds with questions about whether the Queen will attend the party. Certainly, all sorts of nasty things can be said about them personally or about their ability to carry on a conversation, but we wouldn't say that they fail to understand the English language. As Borg puts it:

The retreat to the general proposition acquired from the surface contents of the sentence may be pedantic, and a speaker who insists on such unhelpful interpretations will quickly prove an exasperating interlocutor, but the mere fact that we allow such retreats, without charging the speaker with inconsistency or failure to grasp the meaning of the sentence, seems to demonstrate that we have

here precisely the kind of sensitivity to speaker meaning versus sentence-meaning outlined by Grice (2005:249-250).

In rejecting the assumption that non-literal intentions are necessary for non-literal speech, the scope of what counts as non-literal speech becomes much greater. And, in expanding the scope of non-literality to include cases where 'It's raining' expresses the more enriched *It's raining in Palo Alto*, we block the objection that minimalism fails because it does not deliver an understanding of the literal meaning of a sentence that squares with our intuitive judgments about what is literally expressed. The fact is that our intuitions about what we think a speaker has said in uttering a sentence fails to be a straightforward guide to determining the literal semantic content. One reason for it being so unreliable is that language users are often mistaken that non-literal speech requires a non-literal intention so, consequently, they confuse their efforts to *say what they mean* with what is literally expressed by the sentence. So routinely do language users rely upon context in their communicative endeavors that it should be no surprise that the vast majority of what speakers say does not mirror literal meaning. And, further, it is no wonder that the link between semantic content and our intuitions about what was said cannot be drawn in an easy, straightforward fashion.

## 5.2. INDIRECT SPEECH REPORTS

Perhaps there is another way that our intuitions about what a speaker says, claims, asserts can be used to garner the literal meaning of a sentence. For example, we might try to draw upon our intuitions about what qualifies as a successful speech report to get at the literal meaning of an utterance. In other words, our consciously-held, intuitive judgments about what speakers say latch onto more semantic content that is more enriched than a minimal reading of the utterance, and this enriched content can only be accounted for by a process of free contextual enrichment.

Speech reports are common phenomena. Police and lawyers ask witnesses to crimes about who said what and when. Friends relay stories about what was said about whom and when. Office mates routinely engage in he-said-she-said conversations. For example, suppose that John is looking out the window in Palo Alto and utters:

(1) It's raining.

Now suppose we are given the following indirect speech report:

(2a) John said that it's raining.

Assuming that (2) is true, we have an indirect report of what John said and from this information, we have an account of the literal meaning (semantic content) of (1). However, there is a fair degree of permissiveness with respect to what qualifies as an acceptable indirect speech report and if a true indirect speech report captures the literal meaning of an utterance, the minimalist's position is in jeopardy if these more permissive varieties involve UCs. For example, (2b)–(2e) might all qualify as true indirect speech reports of (2a):

- (2b) John said that it's raining in Palo Alto.
- (2c) John said that it's raining now.
- (2d) John said that it's raining in Palo Alto now.
- (2e) John said that it's raining in *l* at *t*.

In addition, given a suitable context, even more liberal indirect speech reports like (2f)– (2i) might count as correct:

- (2f) John said that the baseball game is cancelled.
- (2g) John said that the draught is over.
- (2h) John said that the turnout for today's afternoon run will be small.
- (2i) John said that you ought to bring your umbrella.

The basic assumption concerning the relation of semantic content (literal meaning) and indirect speech reports is the following:

An adequate semantic theory T for a language L should deliver p as the literal meaning (semantic content) of a sentence S in L if and only if in uttering S a speaker says p. (see Cappelen and Lepore 1997:278, italics removed)

That is, a semantic theory ought to deliver *It is raining in Palo Alto* as the literal meaning of John's utterance of 'It's raining' since in uttering 'It's raining,' it is correct to say that *John says that it's raining in Palo Alto*. Given this assumption, minimalism and its commitment to delivering the literal meaning of a sentence by reading off only the

articulated features in the sentence is overly restrictive about what qualifies as the literal meaning of a sentence. For according to an advocate of the above assumption, it is routinely the case that the articulated contents of indirect speech reports are *more enriched* than those in the original utterance. This leads to the conclusion that the literal meaning of the original utterance contained a propositional constituent that was unarticulated. And so, the truth conditions delivered by the minimalist theory are *inappropriate* because the *more enriched propositions* expressed by indirect speech reports capture what speaker's literally say.

I think there is a way of showing, once again, that our reliance upon intuitions does not provide a reliable guide to determining literal meaning. The first step is to point out a wide range of true indirect speech reports. The second step is to argue that not all of these true reports represent the semantic content of the reported utterance. If this is the case, then our intuitions concerning reported speech does not provide a reliable or straightforward guide to semantic content. And, given this result, the inappropriateness objection—that the literal semantic content of a sentence ought to correspond to our conscious, intuitive judgments about what was literally expressed—loses its force.

We have already seen that there is a fair degree of permissiveness with respect to what might qualify as a correct indirect speech report. Sentences like 'It's raining' might be reported as 'John said that it's raining' or the more enriched 'John said that you ought to bring your umbrella.' With this range of permissiveness, there are some reasons why a contextualist might want to narrow the permissivity of what type of indirect speech report we are using. One reason for this is that *if* one of the goals of a semantic theory is to explain certain *systematic* and *creative* features of natural language (especially in connection to certain empirical limitations on language learning), then according to theorists like Borg (2005:250), Cappelen and Lepore (1998, 1997), and others, these features fall out of sight if we allow a single utterance to admit of an indefinite number of indirect speech reports. For if we think that languages are learnable, and we think that we tacitly know the meaning of a potentially infinite number of novel utterances, then we are committed to the view that a semantic theory can, in some sense, provide the meaning of an arbitrary sentence given one knows the meaning of the semantic primitives and various recursive features in the language. But, if the meaning of sentences like 'It's

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raining' requires that we know about baseball games, draughts, afternoon runs, and umbrellas, then the prospect of explaining how languages are learnable seems very bleak. In short, if we let our knowledge of the literal meaning of an utterance rest on our knowledge of the context, then we will fail to explain how we can *learn a language* by antecedently knowing the meaning of a wide range of arbitrary sentences in virtue of a knowledge of the meaning of terms and their compositional structure.

One way of blocking this objection is to reduce the permissiveness of what qualifies as a true indirect speech report. Rather than true speech reports of the following form,

# A said that *p*.

one might obtain semantic content by exploiting our consciously-held intuitive beliefs about the truth or falsity of instances of a more restricted form:

# A literally said that *p*.

This modification seems to get the desired results since now utterances like (2b) will come out as an intuitively true report of (1) but reports like (2i) will come out as intuitively false.<sup>79</sup> The second step of this argument then is to argue that even with a more restricted (less permissive) range of correct speech reports, not all of these true reports represent the semantic content of the reported utterance. If this is the case, then our intuitions concerning reported speech does not provide a reliable or straightforward guide to semantic content. Cappelen and Lepore offer a number of examples that threaten the possibility of somehow distilling some limited set of indirect speech reports that capture the literal semantic content of the original utterance. First, there are cases where the semantic content of the original utterance. Thus, since it is not necessary that a true report be a complete interpretation of the semantic content of the original utterance, there

<sup>&</sup>lt;sup>79</sup> One example of this type of response comes from Marga Reimer (1998:602), who claims that we can tap into a vein of pre-theoretical intuitions—those unconditioned by an existing commitment to a theory of literal meaning—provided we adopt a Gricean notion of *saying* (as opposed to the everyday notion), explain the notion to non-philosophers, and then ask these non-philosophers to evaluate instances of the form that involves 'literally.'

is reason to doubt whether indirect speech reports offer a reliable guide to semantic content.

For example, while (1b) is a true report of (1a), (1a) and (1b) do not have the same semantic content. That is, they don't literally say the same thing since one of the sentences only says *part* of what the other sentence says.

- (1a) Kathya: I ran the Chicago marathon and then I went to the doctor.
- (1b) Kathya said she ran the Chicago marathon.

In addition, there are true reports involving either the elimination of adjectival or adverbial modifiers or the swapping of said terms with synonymous modifiers:

(2a) Witness: John brutally punched him in the face.(2b) Lawyer: The witness said that John punched him in the face.

(2c) Lawyer: The witness said that John maliciously punched him in the face.

Further, there are true reports involving the swapping of co-referential terms:

(3a) Witness: That man is the killer.(3b) Lawyer: Let the record show that the witness says that the defendant is the killer.(3c) Lawyer: Let the record show that the witness says that John Santellano is the killer.

Second, not only is it the case that complement clauses of the reports only *partially overlap* with the semantic content of the original utterance, but there are also cases where capturing the literal semantic content of the original utterance in the component clause is *not sufficient* to be regarded as a correct speech report. That is, there are semantic interpretations of sentences that capture the semantic content but do not qualify as correct indirect speech reports. For example, suppose that John is a lecturer and is giving a talk on Venus. He utters (4a). Vic and Liz are students in John's class but Vic does not attend lectures regularly. After class one day, Vic sees Liz and asks here what the central point of John's lecture was. She utters (4b).

(4a) The morning star is the evening star.

(4b) John said that the morning star is the morning star.

In the above example, while the component clause of the report of (4b) is a semantic interpretation of the original utterance, (4b) fails to count as a correct indirect speech report.<sup>80</sup> That is, we might say that correct indirect speech reports must be informative but a specification of the literal meaning of an utterance need not be.

In sum, intuitions about when indirect speech reports are true cannot be used in any obvious way to get at semantic facts for the former always seem to contain an admixture of intuitions about the conventional meaning of an utterance plus context-rich elements. As Cappelen and Lepore put it:

Intuitions about when such reports [indirect speech reports] are true, it seems, are always cut with non-semantic material: often they are about what a speaker said, sometimes about what he meant, sometimes to explain what was said, sometimes they provide lexical or syntactic or pragmatic information, almost invariably they are a mix of several of these (1997:290).

Thus, the formal semanticist need not worry about the objection that her semantic theory fails to accord with our linguistic intuitions about how speakers report what was said. For her overall response to the charge is what I have been calling the *Pragmatic Reply*. The reply begins by pointing to the fact that it is possible for speaker meaning and literal meaning to come apart, and indirect speech reports are just one of those cases. Similar to how an ironic utterance of 'Nice day' can mean *It is not a nice day*, an utterance of 'It's raining' can mean *It is raining in Palo Alto now*. The minimalist sees no difference in kind between the former and latter case because she realizes that speakers, when reporting on the semantic content of utterance, are largely guided by reporting what was communicated at a given conversational point (speech act content) and not literal semantic content.

<sup>&</sup>lt;sup>80</sup> Cappelen and Lepore (1997:287) consider two different reactions to the view: (i) a strongly dismissive reaction and (ii) a modified dismissive reaction. According to the strongly dismissive reaction, "[o]ne might respond to problematic reports by treating them as merely *appropriate* and *responsible* in the contexts described, but *not* as true." Cappelen and Lepore rightly reject this response as a *dogmatic* adherence to the link between indirect speech reports and semantic content since it requires an argument for why we think that reports are true but we are mistaken. According to the modified dismissive reaction, respondents claim that reports like those of the form 'S said p' are true but when 'said' is modified by 'literally', these reports become false. However, Cappelen and Lepore argue that this puts their respondents in a dilemma: by attaching 'literally' to 'said' respondents are either offering a direct quotation of the utterance (and not a semantic interpretation) or fail to work with a pre-theoretical account of literal meaning (and therefore fail to independently support the link between our intuitions about speech reports and the semantic content of an utterance).

#### 5.3. SUMMARY OF THE INAPPROPRIATENESS OBJECTION

Let's take stock. In the previous section, I articulated the second major objection to the minimalist theory, which I called the **inappropriateness objection**. This objection states that the minimalist theory fails because it fails to deliver literal semantic content that fits in a broader story about human cognition and communication. The literal semantic content of an utterance, so the objection goes, must be cognitively accessible to language users to the extent that it accords with their conscious and intuitive judgments. Insofar as the minimalist renders literal semantic content that is unintuitive, it fails as an adequate semantic theory.

In response to this objection, I argued that we cannot simply beg the question against the minimalist by assuming that our linguistic intuitions about literal semantic content know when the need to enrich a sentence is mandated in order to reach the level of a cognitively meaningful entity or demanded for some other, pragmatic reason. I argued that there are two ways that the contextualist might pursue the inappropriateness objection.

First, we might use our linguistic intuitions concerning what counts as literal versus non-literal speech. On this approach, since the minimalist view expands the scope of non-literal speech to include cases where speakers intend to be explicit (i.e. to articulate exactly what they mean), the minimalist offers an implausible cognitive story. In response, I argued that this objection is built upon the faulty inference that a *speaker's efforts to say what they mean* entails that *the speaker means what they say*. Uncooperative language users show that the former routinely does not entail the latter.

Second, we might use our linguistic intuitions concerning correct indirect speech reports to extract the literal semantic content of an utterance. On this account, since a correct speech report tends to involve content not found articulated in the sentence itself, the minimalist's account fails to mesh with our linguistic intuitions about what speakers say and so fails to be cognitively meaningful. In response, I argued that correct speech reports tend to be too permissive. They seemingly require us to know all sorts of features about a context in order to understand the meaning of an utterance. Many of these, I claimed, conflict with some of the central desiderata of a semantic theory, e.g. systematicity, compositionality, and creativity. A less permissive construal of what counts as a correct speech report faces additional problems. On the one hand, there are correct speech reports where the semantic content only *partially overlaps* (and so use of speech reports is an insufficient test) and there are cases where a report actually does capture the semantic content but the speech report would not be correct (and so use of speech reports is not even necessary). <sup>81</sup>

# 6. CONCLUSION

In this chapter, I have tried to offer a number of responses to two major objections to minimalism. Against the incompleteness objection, I argued that by drawing upon the underlying syntactic-lexical features of the utterance and in expanding our notion of what gets articulated by defining language more broadly, sentences that seemingly fail to express propositions turn out to, in fact, express them. Against the inappropriateness objection, I argued that the literal meaning of an utterance should not accord with our conscious, linguistic intuitions about what speakers say, assert, contend, and claim. Thus far, my case for minimalism has mostly been defensive. In the next chapter, I turn to my positive account of minimalism. I offer three reasons why minimalism should be accepted over contextualism.

<sup>&</sup>lt;sup>81</sup> Additionally, we might use our linguistic intuitions concerning how determinate a proposition needs to be in order to express its literal meaning. On this approach, if the content expressed by a sentence is not determinate enough, it fails to be cognitively meaningful. In response, I would argue that the determinacy of a sentence is not a reliable guide to context-sensitivity for (i) there are many highly indeterminate sentences that we tend to think are not context sensitive and (ii) if intuitions about determinacy are our guide to the role context plays in linguistic understanding, then we are led to the unstable position that our ability to understand a language requires an understanding of everything in the world.

# CHAPTER 4 Building the Minimal Castle

# **1. INTRODUCTION**

Despite a wave of objections raised in the previous chapter by contextualists, the minimalist theory is resilient. In this chapter, my goal is to further convince you that minimalism is true. The argumentative line is the following. Even if you think that my responses to contextualist objections in the previous chapter are not conclusive or you are unconvinced for some further reason, there are three independent reasons for accepting minimalism and rejecting contextualism. That is, there are three reasons for accepting the conjunction of the following three claims:

(M1) a commitment to the linguistic direction principle,
(M2) a commitment to a division between the literal semantic content and speech act content, and
(M3) a commitment that a context-insensitive approach to meaning produces an adequate semantic theory.

One way of characterizing the minimal proposition—the proposition in a formal semantic theory that obey the linguistic principle—is to articulate what role minimal propositions play. There are three different ways to construe the minimalist's commitment to the existence of semantically minimal propositions as well as the role it plays in linguistic activity, ranging from strongest to weakest (see Martínez-Manrique and Vicente 2009:3, 2004). The *strongest* commitment takes the minimal proposition as both logically and serially prior in the interpretation of an utterance. That is, the minimal proposition is both logically necessary for deriving contextually enriched propositions and also cognitively first in order of interpretation. Such a minimal proposition is not only necessary but it is also the foundational, building block that undergoes various forms of non-linguistically-controlled (free) contextual enrichment in the determination of speaker meaning. In

section 2, I argue that an examination of our mental machinery shows that the processing of language takes place via a bottom-up or modular (informationally-encapsulated, domain-specific, and functionally-dissociable) process. I claim that anyone committed to a modular language faculty ought to be committed to minimalism since contextualism is not compatible with such a faculty. In that section, I detail what it means for a language faculty to be modular and provide some empirical data that supports the existence of such a faculty. I argue that there exists a dedicated semantic module that takes syntactic form as input and yields literal semantic output to various pragmatic processes. This argument I call the *Argument from Semantic Modularity* and supports a commitment to (M1) and (M2), while my previous defense of objections in the last chapter leaves open the possibility of (M3).

A more moderate approach treats the minimal proposition as logically but not serially prior in the order of interpretation. On this approach, while there is always a minimal proposition that is cognized whenever one interprets an utterance of a sentence, it is not the case that that the minimal proposition consciously factors into the psychological determination (or processing) of implicatures or free contextual enrichments. While language users entertain this minimal proposition when considering speaker meaning, very often it is simply ignored for some other more contextually salient proposition. In section 3, I argue for this sort of commitment to minimal propositions because I think it best explains how we communicate across diverse contexts. I argue that radical contextualism, which claims that semantic interpretation is sensitive to contextual factors, makes communication across contexts either impossible or at least highly improbable. This argument I call the *Miracle of Communication Argument* and contend that it provides support for (M1) and (M2).

Finally, there is the weakest form of commitment that dispenses with both logical and serial priority. Despite the fact that such a proposition does not play a conscious role in normal communication and is not logically necessary for communication, this type of commitment to minimal propositions treats their role as consciously emerging only under circumstances where (i) language users are deprived of contextual factors and rely upon the logical form of the sentence in order to make sense of the sentence or (ii) when language users are in fundamental disagreement about how contextual factors influence speaker meaning. Thus, in section 4, I argue that even if minimal propositions do not play a necessary role in everyday communication and are not foundational for cognition, they play a role in how we construe the commitments of language users. I argue that even if one is skeptical about both the necessity and seriality of minimal propositions, the presence of a semantically minimal proposition plays a role in communication insofar as it ensures that there is a type of semantic content language users can fall back upon when their beliefs about the world and conversational norms differ. I argue that what a language user is committed to in virtue of the sentence they uttered is captured by a *cancellation test*. This argument I call the *Argument from Fallback Content* and it supports (M1)–(M3).

Level of	Description of	Argument	Description of Argument
Commitment	Minimal		
	Proposition		
strongest	logically and serially	Semantic	minimalism but not contextualism
	prior	Modularity	is consistent with modular
			linguistic processing.
moderate	logically but not	Miracle of	minimalism but not contextualism
	serially prior	Communication	has trouble explaining cross-
			contextual communication where
			contexts are sufficiently diverse.
weakest	neither logically nor	Fallback Content	minimalism better explains the
	serially prior		distinction between what a
			speaker is committed to in virtue
			of the sentence he/she utters and
			what a speaker is committed to in
			virtue of his/her beliefs about the
			world.

To summarize:<sup>82</sup>

Before turning to each of these arguments in more detail, it may be instructive to say something about *why* contextualists are susceptible to these objections. According to the minimalist, contextualists have, in too greatly focusing on the particularity and variability

<sup>&</sup>lt;sup>82</sup> It is important to emphasize that the degree of commitment (strong, moderate, weak) to minimal propositions does not correspond to the relative strength of the argument. One can be strongly committed to minimal propositions but reject the *Argument from Fallback Content*. Thus, it is important to see that the three arguments presented here are independent of each other and should be evaluated as such. Those dubious about the seriality of a linguistic module should not abandon semantic minimalism altogether, nor should they see the failure of this argument as a decisive reason for contextualism.

of utterances, lost sight of some key properties of language. First, they have overlooked the role that formal aspects of language play in the processing of literal meaning. In arguing for semantic modularity, I try to emphasize that the formal features of language play an extremely important role in how we cognize different utterances of sentences. Second, contextualists have, in their emphasizing of how the meaning of an utterance can vary from one context to the next have disregarded what is common to these utterances and that one of the great features of language is that it allows for those who share a language to communicate across contexts. Third, and finally, speaking a language requires taking on certain habits of interpretation and adopting various rules that make communication flow smoothly. However, not all of these rules are mandatory; some of these are merely *optional* principles that make conversation flow more smoothly. Contextualists have lost sight of the fact that language users can opt out of many rules that facilitate communication and resort to using those that constitute meaning.

# 2. ARGUMENT #1: MODULARITY AND MINIMALISM

Semantic theories of natural languages do not merely aim to give an account of some *bare* semantic facts that lack any relation to psychological facts. Instead, in giving an account of semantic facts, theorists aim at also offering an account of what a language user knows (the contents of one's mind) when the language user speaks or understands a sentence. If this is the case, then semantic facts relate to psychological facts by systematically depending on them. That is, the fact that sentence S expresses proposition p is at least partially determined by facts in the minds of speakers and interpreters of S.<sup>83</sup>

If semantic facts depend upon psychological facts, then any semantic theory of a natural language is subject to an empirical confirmation and disconfirmation. For if some putative semantic facts posited by a semantic theory are shown to be without a psychological correlate, then the semantic theory—while perhaps perfectly acceptable and consistent in its own right—is not psychologically realistic. In the previous chapter, I argued that we ought to be suspicious about trying to make semantic facts depend upon our consciously-held, intuitive judgments. This skepticism is, however, somewhat

<sup>&</sup>lt;sup>83</sup> Peirce writes "But formal logic must not be too purely formal; it must represent a fact of psychology, or else it is in danger of degenerating into a mathematical recreation" (CP2.710).

problematic for it leaves the minimalist open to the objection that it provides no account of how semantic facts relate to psychological facts. With these considerations in mind, I argue, in this section, that minimalism better accords with psychological data than contextualism. The reason that minimalism better accords with psychological data is because the minimalist's account of literal meaning, but not contextualist's, is consistent with a modular linguistic faculty. This argument occurs in three steps. First, I articulate what it means for a cognitive system to be modular. Second, I argue that a modular linguistic processing supports the minimalist theory and not the contextualist position. Third, I argue that the linguistic processing of literal meaning is modular. In a nutshell, my argument is the following:

(1) If the literal semantic content is something that warrants a modular explanation, then we ought to accept minimalism and reject contextualism.
 (2) The literal semantic content of an utterance warrants a modular explanation.
 (3) Therefore, we ought to accept minimalism and reject contextualism.

Before beginning, it is worth stressing two points. First, premise (2) in the above argument is contingent and so its plausibility will depend upon the strength of the empirical data cited in support of it. What is problematic is that there is not a consensus concerning (2) and so those familiar with competing strains of empirical work may not find (2) altogether convincing. I cite empirical data supporting my position.

Second, I want to stress at the outset that my concern is with the processing of literal meaning or the semantic interpretation of an utterance. As such, I don't take a stance on another debate in cognitive psychology and the philosophy of mind about whether other (more central) cognitive processes are modular. That is, my argument does not depend upon whether *modest modularity*—the view that peripheral systems (e.g. vision) are modular but central systems are not—or *massive modularity*—the view that all systems (including central cognitive systems) are modular—is true.<sup>84</sup> My focus is on one aspect of cognitive functioning and so whether or not the entire mind is modular, or only part, is not relevant here.

<sup>&</sup>lt;sup>84</sup> For a positive account of modest modularity, see (Fodor 1983); for a defense of massive modularity, see (Carruthers 2006); for objections to massive modularity, see (Currie and Sterelny 2000); for a response to this critical view, see (Carruthers 2006:11-12).

# 2.1. WHAT IS A MODULE?

Premise (2) contends that the cognitive processing of literal semantic content is modular. The notion of a module is both central to and contested within computational approaches to cognitive science.<sup>85</sup> But what is a module and what does it mean to say that a cognitive processor is 'modular'? A somewhat general answer is easy to give. The cognitive architecture of human beings is modular because the computations that go in to producing a mental representation arise from a collection of multiple, differentiated processes instead of a single, undifferentiated process. As such, the modular point of view is closely tied to the nativist position that treats the mind, not as a general-purpose learning device, but as consisting of a number of innate, content-rich, domain-specific structures.

Beyond this rather rough characterization, the notion of a module is contested since philosophers argue over which features are essential to modular cognitive processes.

#### 2.1.1. FODOR-MODULES

Fodor-modules are most prominently associated with Jerry Fodor's 1983 book *The Modularity of Mind*, although Fodor traces the notion back to Franz Joseph Gall's conception of a vertical faculty.<sup>86</sup> Fodor (1983) lists nine features that characterize a modular system. They are:

2. Mandatory operation: modules operate automatically, without the agent's control (1983:53).

- 3. Limited access to central/conscious activity (1983:55-56).
- 4. Fast processing (1983:61-64).
- 5. Information encapsulation (1983:64-86).
- 6. 'Shallow' output (1983:86-97).

<sup>1.</sup> Domain specificity: modules operate only upon specific kinds of input (see 1983:47).

<sup>&</sup>lt;sup>85</sup> David Marr (1982:102, see also 325) writes that "the idea that a large computation can be split up and implemented as a collection of parts that are as nearly independent of one another as the overall task allows, is so important that I was moved to elevate it to a principle, the *principle of modular design*." <sup>86</sup> Franz Joseph Gall. 1758–1828. German physiologist.

7. Fixed (innate) neural architecture (1983:98-99).

8. Characteristic and specific patterns of breakdown: the functioning of modules may be uniquely impaired by neurological damage or genetic malformation (1983:99-100).

9. Characteristic pace and sequencing (1983:100-101).

A cognitive system is modular, in the Fodorian sense provided it has some *weighted most* of the features listed above and so in order for a cognitive processor to be modular it need not have all of the above features. Three features are critical: information encapsulation, domain-specificity, and functional dissociability.

Domain specificity is understood as an essential trait of modular systems. Coltheart (1999:119), for example, insists that the domain-specificity of a process to be a necessary condition. For Coltheart (1999), a processor is 'domain-specific' provided it "responds to stimuli of a particular class; thus, to say that there is a domain-specific facerecognition module is to say that there is a cognitive system that responds when its input is a face, but does not respond when its input is, say, a written word, or a visuallypresented object, of someone's voice" (Coltheart 1999:118). Thus, a cognitive system is **domain specific** if there is a restriction on the types of information it can take as input. So, for example, we would say that a visual system is 'domain specific' if it can only take information supplied by the rods and cones of the retina as input.

Fodor states several times throughout *The Modularity of Mind* (e.g. Fodor 1983:37, 71, 110; see also Fodor 2000) that information encapsulation is a central feature of a modular cognitive process and he uses information encapsulation to distinguish modular processes from non-modular (or central) processes (Fodor 1983:103). For Fodor, a cognitive system is informationally encapsulated provided its operations are restricted to a proprietary subset of information contained within a broader, more global cognitive system. Whereas non-modular processes are said to be 'global' processes in that the information they access is exogenous, non-proprietary, or open source, modular processes are said to be 'local' processes in that their operations do not depend upon exogenous information found within the broader cognitive system. Thus, a cognitive system is **informationally encapsulated** if and only if the operations of the system cannot draw upon information outside of that system. For example, a visual system is encapsulated if whenever operating upon visual input, it does not draw on linguistic or auditory information to determine its output.<sup>87</sup>

One way of getting at the notion of information encapsulation is through the distinction between top-down and bottom-up processing. Language processing and cognition generally can be characterized as occurring on a number of different levels. At the lowest level, we identify sounds as phones and phonemes, and phonemes as syllables. At a slightly higher level, we use this identification of phonemes and syllables to select wordforms and information about these wordforms from the lexicon. At a level higher still, these wordforms are organized into constituents using phrase structure rules drawn from one's knowledge of grammar. Moving upward again, we use our identification of the syntactic structure and semantic information assigned to wordsforms to assign meanings to more and more complex constituents. Still higher yet, we draw upon contextual, pragmatic, and discursive information in order to determine what a speaker means by an utterance or the practical import of their utterance.

**Bottom-up processing** is a process that proceeds such that the lower levels operate without interference from the higher levels. For example, the identification of phonemes is not influenced by higher levels like the pragmatic, syntactic, or semantic levels. **Top-down processing** is a process where higher levels *do* interfere with how lower levels process information. Information encapsulation can thus be considered a type of bottom-up processing where information from higher levels do not interfere with lower-level processing. That is, it is a type of protection from top-down influences. A classic illustration of encapsulation comes from visual illusions since some of these persist long after the illusion has been explained to the viewer, e.g. Ames room,<sup>88</sup> the phi and magni-phi phenomena,<sup>89</sup> the Müller-Lyre illusion in vision. The presence of these

<sup>&</sup>lt;sup>87</sup> More intuitively, information-encapsulated systems are *focused* systems, i.e. once supplied with a certain set of information, they ignore other information that might influence their output.

<sup>&</sup>lt;sup>88</sup> An Ames room is a trapezoidal-shaped room, first conceived by Adelbert Ames and constructed in 1935, that creates a visual optical illusion. The Ames room appears to look like a rectangular-shaped room but is, in reality, a trapezoidal-shaped room with one side of the room significantly further from the observer than the other. To the observer, an object (which is close) standing on one side looks giant while the object (which is very far) standing on the other side looks very small.

<sup>&</sup>lt;sup>89</sup> The phi phenomenon is an optical illusion, discovered by Max Wertheimer, which creates the illusion of motion from a sequence of images.

illusions indicates that background information remains inaccessible when processing visual or auditory phenomena (see Fodor 1983:66, 69).<sup>90</sup>

It is important to keep the notion of domain specificity and information encapsulation apart. Fodor writes

It is perfectly possible, in point of logic, that a system which is *not* domain specific might nevertheless be encapsulated. Roughly, domain specificity has to do with the range of questions for which a device provides answers (the range of inputs for which it computes analyses); whereas encapsulation has to do with the range of information that the device consults in deciding what answers to provide. A system could thus be domain specific but unencapsulated (it answers a relatively narrow range of questions but in doing so it uses whatever it knows); and a system could be nondenominational but encapsulated (it will give some answer to any question; but it gives its answers off the top of its head—i.e., by reference to less than all the relevant information) (Fodor 1983:103-104).

To use an illustrative metaphor from Barrett and Kurzban (2006:631), the notion of a module can be thought of as a pipe where *domain specificity* refers to the entrance of the pipe, namely it is a property that specifies the type of material that can flow through, while *encapsulation* refers to the permeability of the length of the pipe, namely it is a property that protects the material flowing through the pipe from contamination.

Finally, a cognitive system is **functionally dissociable** from another cognitive system if and only if it can perform its operations relatively independent from the function of the other system. Thus, functionally dissociable systems tend to be susceptible to *selective impairment*, i.e. they can be impaired, damaged, or removed, with minimal effect on other systems. Examples include: achromatopsia (color blindness), prosopagnosia (inability to recognize faces), and various forms of dyslexia (reading impairment).

#### 2.1.2. CRITICISM OF FODOR-MODULES

The Fodorian concept of modularity has undergone severe criticism and revision (Barrett and Kurzban 2006:628). First, many have taken Fodor as trying to give an explicit definition of modularity, and so construe the set of features characteristic of modularity

<sup>&</sup>lt;sup>90</sup> However, see (Ahluwali 1978) which argues that people living in carpentered environments are more susceptible to the Muller-Lyer illusion that those in non-carpentered environments.

as a set of necessary conditions for a cognitive processor to be modular. Second, some cognitive scientists think that conceiving modules as innate involves a commitment to anatomical locality. For example, Buller and Hardcastle (2000:308-309) argue that while the brain is partially modularized, they reject the view that the brain is modularized in the sense of being an anatomically localizable, domain-specific, informationally encapsulated, evolutionarily developed cognitive system. Buller and Hardcastle (2000:312) argue that "[w]e are misled by our own localizationist methodologies to a certain extent; we expected the one area-one function rule to apply in the brain before we ever started recording neural activity. However, what we expected to find and what we are in fact finding are two entirely different things." In short, Buller and Hardcastle argue that there is an overwhelming amount of empirical data that undermines a modular account of cognitive processes since these processes are not localized in one spatially contiguous area in the brain. Third, others have argued against modularity on the grounds that it is incompatible with developmental trajectories. Karmiloff-Smith et al. (2003) and others (e.g. Mervis 2003; Mervis and Becerra 2007) have argued against various claims about linguistic or facial modules that are preserved through neuropsychological development. They claim that there is an overwhelming amount of empirical data showing that it cannot be assumed that from a certain phenotypic outcome, end state, or pattern of proficiencies that there is an innate (or intact) cognitive module present in the initial state of one's cognitive structure. In other words, they claim that we cannot simply assume that behavioral deficits found in individuals with genetic disorders are transparent windows to innate modular structure of that individual's cognitive system. To do so, they claim is to misleadingly apply the model of brain damage to normal adults upon individuals with developmental disorders.<sup>91</sup>

<sup>&</sup>lt;sup>91</sup> Particular examples of this line of reasoning can be found in Pinker (1991:534) who, for example, writes that "Although their [patients of Williams syndrome (WS)] Intelligence Quotient is measured at around 50, older children and adolescents with WS are described as hyperlinguistic with selective sparing of syntax, and grammatical abilities are close to normal in controlled testing. [...] This is one of several kinds of dissociation in which language is preserved despite severe cognitive impairments suggesting that the language system is autonomous of many other kinds of cognitive processing."

## 2.1.2. MODIFYING THE NOTION OF A FODOR-MODULE

There are a variety of responses to the above three objections. First, all of the features associated with cognitive modules need not be present in order for a cognitive process to be modular in nature. Defenders of Fodor have argued that many of these criticisms involve a misreading of Fodor's work. For example, Coltheart (1999) has pointed out that Fodor's *The Modularity of Mind* explicitly states that the aim of his book was never to define modularity. Fodor (1983:37) writes, "I am not, in any strict sense, in the business of 'defining my terms'. I don't think that theoretical terms usually have definitions (for that matter, I don't think that nontheoretical terms usually do either)." Even further, Fodor was skeptical that any cognitive processor would have all of the features associated with modular processes. Fodor writes,

Given that a system has any of the properties in question, then the likelihood is considerable that it has all of the rest. However, I doubt that a claim that strong could be empirically sustained, since it is reasonably easy to think of psychological processes that are fast but not encapsulated, or involuntary but not innate, and so forth. The present contention, in any event, is relatively modest; it's that if a psychological system has *most* of the modularity properties, then it is very likely to have *all* of them. This claim does not imply that only modular systems are fast, or involuntary, or encapsulated...etc. But it *is* alleged to be characteristic of modular systems to have all of these traits at once (Fodor 1983:137n35, original emphasis).

Second, in response to the locality critique, a distinction is drawn between *anatomical modularity* and *functional modularity*. In particular, calling a cognitive process 'modular' need not imply anatomical modularity for dedicated processing nor need not be localized in one spatiotemporal region of the brain. It can, instead, be distributed across the neural system. In short, modular systems do not need to have a neat, one-to-one correspondence between functional behavior and physical structure. Fodor's original work noted this in response to Martin Gardern's argument that faculty psychology has been demolished by advances in brain research. Fodor writes,

Is faculty psychology literally incompatible with, say, an equipotential brain? Remember that faculties are, in the first instance, functionally rather than physiologically individuated. And perhaps *localization* isn't precisely the notion that Gardner wants, since, after all, there might be neutral specificity of some functions that aren't localized in the sense of being associated with large, morphologically characterizable brain regions (Fodor 1983:98).

That is, according to Fodor, it is not a necessary feature of a cognitive module that it be localized to a fixed portion of the brain. Barrett and Kurzban (2006:641) argue that while there is some sort of isomorphism between cognitive architecture and the architecture of the brain, "at a larger, macroscopic level, there is no reason to assume that there must be spatial units or chunks of brain tissue that neatly correspond to information-processing units."<sup>92</sup> That is, while the various cognitive functions may depend upon sections of the brain, calling a system 'modular' need not involve the claim that there is a one-local space corresponding to one-specific function. The functional architecture of the brain need not be spatially instantiated in this specific way.

Third, in response to criticisms that argue that modularity and developmental cognitive systems are inconsistent, one need only show how modularity is consistent with various development pathways and cultural variations by introducing a distinction between *synchronic* and *diachronic* modularity. Segal (1996) distinguishes between the two in the following way. Synchronic modules are functions attributed to a subject at a given time, e.g. the ability to see, speak, etc. Diachronic modules are functions that develop over time. Further, diachronic modules are understood as undergoing activation (they come "online") and parameterization in the course of development. For example, in the principles and parameters (P&P) framework of generative linguistics, the syntax of natural languages are described by innately-held, abstract rules (principles) that are present in all languages and various switches that are activated (parameters) for particular languages. Assuming that all humans have an innate Universal Grammar, when individuals acquire a specific language, they usually select a parameter for word order, e.g. English is SVO and Turkish is SOV.<sup>93</sup> In other words, the language module

<sup>&</sup>lt;sup>92</sup> See also Johanson (2005:105, my emphasis), who writes that "It is thus hardly tenable to interpret Williams Syndrome as the result of an *intact* language module with some other cognitive modules knocked out. Instead, the kind of pattern with subtle deficits in several areas is more reasonable if the affected functions are distributed in the brain, but with different parts of the brain contributing unequally to different aspects of cognition"

<sup>&</sup>lt;sup>93</sup> Another example of a modular process involves the processing of music. There have been cases of individuals suffering from 'acquired amusia' (the inability, as a result of brain damage, to recognize melodies but normal ability in recognizing spoken lyrics and other environmental sounds ) as well as 'congenital amusia' (the lifelong inability to recognize melodies but an ability to recognize spoken lyrics)

undergoes development by being parameterized for word order. In order to accommodate different developmental trajectories and cultural variation, one need not give up on the notion of a module but instead understand modules as structures having various parameters that are activated when an individual is put into a specific environment.

As Segal (1996:147) puts it,

One can think of the module, as Chomsky sometimes does, in terms of a box that takes experience as input and produces knowledge of linguistic rules as output. The box is a diachronic intentional module. It has intentional contents (innate knowledge of language), and a set of language specific principles that restrict and determine the possible paths of development. And, importantly, the module has been genetically determined in its specifics. Just as we have specific genetic characteristics that determine that we grow hair and not horns, so we have specific genetic characteristics which ensure that we grow a language faculty.

Thus, provided a distinction is drawn between synchronic and diachronic modularity, the notion of modularity can be made amenable to various developmental pathways and cultural variation.

# 2.2. MINIMALISM INVOLVES MODULAR LINGUISTIC PROCESSING

In sum, I understand a module as a diachronic, informationally-encapsulated, domain specific, functionally dissociable cognitive system that need not be anatomically localizable. Later on, I will argue that our ability to cognize the literal meaning of an utterance warrants a modular explanation. That is, language processing for literal meaning involves a specialized set of cognitive abilities that operates relatively autonomous from more general cognitive abilities. More specifically, I think that our ability to cognize the meaning of sentences operates over a limited set of phenomena (domain specific), is protected from certain top-down interferences from our beliefs about speaker meaning (information encapsulation), and is sensitive to selective impairment (functionally dissociable).

Given the possibility that our understanding of literal meaning warrants a bottomup (modular) explanation, I propose the following argument for minimalism:

<sup>(</sup>see Peretz and Coltheart 2003:688). And, reverse cases, namely cases where individuals who have lost the ability to recognize spoken words but retain the ability to recognize music (Peretz and Coltheart 2003:689).

(1) If the literal semantic content is something that warrants a modular explanation, then we ought to accept minimalism and reject contextualism.
 (2) The literal semantic content of an utterance warrants a modular explanation.
 (3) Therefore, we ought to accept minimalism and reject contextualism.

With respect to premise (1), I think there are two reasons why minimalism, but not contextualism, is consistent with a modular language faculty. The first is that contextualism involves a process of free contextual enrichment, which is not compatible with cognitive processes that are informationally-encapsulated. Free-enrichment is a top-down process that can involve the contextual enrichment of a sentence by supplying some missing (unarticulated) constituent by drawing upon the context in accordance with conversational principles. If this is the case, then the manner in which we process the literal meaning of an utterance is a global (unencapsulated) process that relies just as much upon our pragmatic ability to pull from our knowledge of context as it does upon our syntactic-semantic abilities.<sup>94</sup>

The second reason that contextualism is *inconsistent* with a modular explanation of how literal meaning is processed is that contextualism is committed to the view that the literal meaning of a sentence is determined not only by a bottom-up process of the semantic interpretation of syntactic features in a sentence but also by top-down processes like free enrichment. That is, the top-down pragmatic processes and bottom-up syntacticsemantic processes are both integral to the determination of literal meaning. If this is the case, then when it comes to determining the literal meaning of an utterance, neither of these processes is functionally dissociable from the other. One empirical consequence of this view is that we shouldn't see evidence of selective-impairment of cognitive functions responsible for determining literal meaning. That is, we shouldn't see cases where

<sup>&</sup>lt;sup>94</sup> It might, however, be argued that the cognitive processes involved in minimalism involve top-down processes since our *expectations* about what a speaker is going to say plays a role in our cognition of what they do say. This is not problematic with minimalism since minimalism allows for the presence of a number of top-down processes in pre-semantic tasks (e.g. identifying a certain syntactic structure) as well as pragmatic processes playing a *facilitative role* (e.g. pragmatic processes may play a role in our *expectations* about what a speaker says but are certainly not determinative of what they do say). What minimalists reject is the presence of top-down processes in the determination of literal meaning for the process of determining the literal meaning of an utterance is a bottom-up process that is protected from the interference of the pragmatic level.

language users are able to determine the literal meaning but not capable of working out speaker meaning (as well as converse cases).

In contrast, minimalism and a modular explanation of linguistic processing is a match made in heaven. A modular account of linguistic processing is a bottom-up process and so the generation of the literal meaning of an utterance does not rely upon the top-down, pragmatic processes like free enrichment. Minimalism is compatible with this approach since it claims that the determination of the literal meaning is maximally insensitive to contextual factors that are not triggered by syntactic or lexical features in the sentence. In other words, minimalism is consistent with literal meaning being the result of an *informationally encapsulated process*.

And so, whereas a modular account of linguistic processing claims that we cognize the literal meaning of utterances by deductive, computational operations over syntactically-structured phonological and orthographic information (domain specific items) using various semantic rules, minimalism contends that the literal meaning is the result of semantically interpreting the logical form (deep structure) of a sentence and context matters for this determination only when certain linguistic features call for such information.

Secondly, minimalism is entirely compatible with syntactic-semantic processes being functionally dissociable from pragmatic processes, and is also consistent with the psychological reality of selective impairment. For if the processing of the literal meaning is a bottom-up process, knocking out certain pragmatic abilities in speakers will yield an inability to understand *what a speaker means* but not a failure to understand the *literal meaning* of the utterance. In short, minimalism is entirely consistent with there being a functional dissociability between semantic and pragmatic capacities since it makes the literal meaning of a sentence maximally insensitive to free contextual enrichment.

In short, minimalism offers a response to the general charge of contextualists that it fails to be psychologically realistic by arguing that the literal, truth-conditional content of utterance is generated by a bottom-up modular process where language users interpret the syntactic features of the sentence. This mental machinery is consistent with the minimalist's claim that there exists some minimal semantic content that is the result of a computational or decoding procedure over sentence-types relative to context (domain specific), these computations are independent of constituents that are found in the context but not articulated in the utterance (encapsulation), and this process is dissociable from other types of propositions generated by pragmatic interpretation, e.g. generation of implicatures or more contextually-enriched propositions.<sup>95</sup>

#### 2.3. SEMANTIC PROCESSING IS MODULAR

If minimalism, but not contextualism, is compatible with a modular language faculty, then deciding between minimalism and contextualism is a matter of determining whether there is a modular language faculty for literal semantic content.<sup>96</sup> This turns out to be hard to prove since there is no consensus on how language is processed. However, there are three reasons why our comprehension of the literal semantic content is something that might warrant some degree of modular explanation.

First, semantic comprehension is *domain specific* in that it is limited to a narrow set of phenomena, namely orthographic and phonetic input (not buzz saws, explosions, and animal sounds) that is syntactically structured. Second, semantic comprehension is *informationally encapsulated* in that we are able to interpret the meaning of sentences independently of our expectations about the world. That is, we can understand what

<sup>&</sup>lt;sup>95</sup> It might be objected here that contextualism is consistent with a modular explanation since *some* contextualists think meaning is processed by a bottom-up (modular) approach but that this does not yield *truth-conditional content* (or a real proposition). Instead, these contextualists argue that modularity only yields a *propositional radical* or truth-conditional content that falls short of expressing genuine truth conditions. It is important to point out that my argument is partly defensive and partly offensive. On the one hand, I am responding to contextualists who object that minimalism is not *psychologically realistic*. These contextualists tend to think that the generation of literal meaning is a top-down (pragmatic) process. Against these contextualists, I am also offering an offensive argument that their contextualism is incompatible with a modular explanation.

<sup>&</sup>lt;sup>96</sup> Many linguistics, evolutionary psychologists, and philosophers think there is something special about human language, and distinguish aspects specific to a language faculty from those shared with other psychological abilities. In detailing why the language faculty is special, they tend to explain it as though it were a module or a uniquely functioning organ. Chomsky (1980:39), for example, writes, that "We may usefully think of the language faculty, the number faculty, and others, as 'mental organs,' analogous to the heart or the visual system or the system of motor coordination and planning." In other words, just as the visual system is modular, so is language. Chomsky (1980:39) continues "In short, there seems little reason to insist that the brain is unique in the biological world in that it is unstructured and undifferentiated, developing on the basis of uniform principles of growth or learning—say those of some learning theory, or of some yet-to-be conceived general multipurpose strategy—that are common to all domains." Chomsky (1975) states this position elsewhere when he writes "To come to know a human language would be an extraordinary intellectual achievement for a creature not specifically designed to accomplish this task. A normal child acquires this knowledge on relatively slight exposure and without specific training. He can then quite effortlessly make use of an intricate structure of specific rules and guiding principles to convey his thoughts and feelings to others, arousing in them novel ideas and subtle perceptions and judgments."

someone says even if what they say has no relevance to the situation. Third, semantic comprehension is *functionally dissociable* insofar as there are patterns of breakdown and preservation in language users suggest that there is a syntactic-semantic module that can work independently from non-linguistic abilities and vice versa.

The most empirically tractable of these three reasons is *functional dissociability* since its existence appears to be confirmed/denied by whether certain psycholinguistic abilities are subject to selective impairment. For example, in some cases, individuals perform better on non-verbal tests that measure their general conceptual ability than on tests that measure language ability. In other cases, individuals perform better on language related tests than they do on tests that measure general and non-linguistic cognitive abilities. But slight cognitive asymmetries tend not to be as convincing as more severe and highly systematic selective impairments. That is, ideal evidence for functional dissociability would be if we could knock out one system while the other system would run without any degradation in performance. Less than ideal but yet still strong evidence for the presence of a functionally-dissociable module would be a case where the linguistic faculty remains *relatively intact* even when purportedly related, non-linguistic (pragmatic) abilities are *absent or severely impaired*. That is, if there is a disorder that preserves syntactic-semantic processing while non-linguistic (pragmatic) processing is impaired, and the converse pattern is also the case, then it would seem as though syntactic-semantic processes and pragmatic processes run independently of each other. Thus, given a modular view of language understanding that posits a syntactic, semantic, and pragmatic modules, there are eight possible distributions (fig.1) of selective impairment or preservation. Given a modular view of understanding that posits one syntactic-semantic module that determines literal meaning and another pragmatic module that determines speaker meaning, there four possible distributions of selective impairment/preservation (fig.2).

If the processing of literal semantic content is functionally dissociable, then we should see two outcomes. First, syntactic and semantic skills should be capable of remaining relatively intact while there is significant pragmatic impairment. Second, there should be a case where pragmatic skills remain intact while syntactic and semantic skills suffer deficit. Emma Borg (2004:100) claims that empirical evidence suggests that there

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are such scenarios. In the former case, victims of stroke and various aphasic patients retain general, non-linguistic abilities but have severe impairments when it comes to processing and producing meaningful linguistic utterances. In the latter case, patients with asperger's syndrome, some schizophrenics, and individuals with Williams Syndrome manifest the converse pattern, i.e. they retain syntactic-semantic abilities but suffer from significant impairments when it comes to non-linguistic skills that play a role in determining meaning. In focusing just on the latter of these two breakdowns, <sup>97</sup> we need to see whether there is (i) a *genetic disorder* or *brain damage* that either inhibits free contextual enrichment but preserves the processing of literal, semantic content or (ii) a *neurodevelopmental pattern* that reflects general competency in processing literal meaning but deficiency in free contextual interpretation. If there is such a disorder or pattern, then this would suggest the existence of a functional dissociability and so would be supportive of minimalism.

	Syntax	Semantics	Pragmatics	Result	
Α	X	X	X	Complete impairment of linguistic and non-	
				linguistic abilities.	
B	X	X	0	Stroke victims; aphasics (Broca's aphasia)	
С	X	0	X	unverifiable	
D	X	0	0	unverifiable	
Ε	0	X	X	unverifiable	
F	0	X	0	Wernicke's aphasia	
G	0	0	X	Asperger's patients, certain schizophrenics,	
				Williams Syndrome patients	
Η	0	0	0	Normal processing	

Figure 1: Expanded and modified from (Borg 2004:100). Predicted outcomes as a result of the loss/preservation of syntactic, semantic, and pragmatic abilities. X = Impairment; 0 = Normal function

<sup>&</sup>lt;sup>97</sup> It has been argued (Martínez-Manrique and Vicente 2009) that evidence supporting (B) is limited to production aphasiacs, but there is evidence from the limited ability of Broca aphasiacs differential ability to cognize Arabic numbers that stands against this. However Delazer et al. (1999:218-219) argues that Broca's aphasiacs "showed a format effect and scored significantly lower in reading Arabic numerals than in reading number words (none of the other groups presented with this effect). This result indicates that Broca's difficulties in reading Arabic numerals cannot be simply explained by speech output problems, but more likely by specific difficulties in assembling the syntactic structure of complex numerals."

	Syntax-	Pragmatics	Result	
	Semantics			
Α	X	X	Complete impairment of linguistic and non- linguistic abilities.	
B	X	0	Stroke victims; aphasics (Broca's aphasia)	
С	0	X	Asperger's patients, certain schizophrenics, Williams Syndrome patients	
D	0	0	Normal processing	

Figure 2: Predicted outcomes as a result of the loss/preservation of syntactic-semantic and pragmatic abilities.  $\mathbf{X}$  = Impairment;  $\mathbf{0}$  = Normal function

The most prominent defense of this position is provided by Emma Borg (2004:100-106) who points to Aspergers patients, individuals with schizophrenia, and Williams syndrome patients as evidence. Recently, however, Robbins (2007:306-307) has argued that empirical data does not support the claim that semantic interpretation (i) is an encapsulated process or (ii) is functionally dissociable (2007:306-307).<sup>98</sup> However, his case against semantic interpretation being functionally dissociable is much stronger in that he claims that empirical data does not support the minimalist's claim that there exists a functionally-dissociable, linguistic module. Robbins (2007:309–311) argues that while minimalists cite cases where individuals have normal semantic ability but deficits in 'mind-reading' (or pragmatic abilities), such cases are overly brief and sketchy.<sup>99</sup> That is. on closer inspection, empirical data does not support the view that there is a functionally dissociable semantic module since many of the cases that minimalists cite in support of their position (e.g. Asperger's, schizophrenia) do not lack the mind-reading skills that they are said to lack (see Robbins 2007:309-311). The major discussion of the clinical literature by Borg (2004) focused more on breadth rather than depth and so I agree it was both brief and sketchy. However, a closer examination of the literature on Williams syndrome confirms, rather than undermines, the minimalist position. Clinical evidence suggests a selective impairment of literal linguistic processes and context-rich processes and this suggests a functional dissociation that favors a modular explanation.

<sup>&</sup>lt;sup>98</sup> Concerning information encapsulation, Robbins (2007:309) claims that empirical evidence does not decide the matter one way or the other.

<sup>&</sup>lt;sup>99</sup> (Baron-Cohen 1997; see Borg 2004:99-106; Robbins 2007:309-311)

Specifically, what we would expect to see in cases of selective impairment are individuals capable of processing the *literal meaning* of an utterance but are deficient in processing pragmatic features that allow for the determination of a more enriched proposition. That is, we would expect to see breakdowns where users understand the literal meaning (syntax and semantics of sentences) but have various impairments in their understanding of aspects of meaning that depend upon information left unarticulated (i.e. unarticulated constituents) because of the context of utterance. These would be breakdowns associated with understanding various forms of elliptical speech. *Or*, we would expect users to again understand the syntax and semantics of sentences but be impaired in their understanding of aspects of meaning that turn on freely enriching the sentence by drawing upon the context, i.e. fail to understand aspects of meaning even when sentences are fully articulated, e.g. cases of irony, metaphor, joking, sentence non-literality. In what follows, I argue that we do find evidence of the latter of these two phenomena in a rare genetic disorder known as Williams syndrome.<sup>100</sup>

#### 2.3.1 WILLIAMS SYNDROME

Williams syndrome (WS) is a rare neurodevelopmental disorder that is caused by the deletion of approximately 28 genes of chromosome 7 (Schubert 2008). The disorder was first described in 1961 and has been the subject of much discussion by cognitive scientists, linguists, and philosophers.<sup>101</sup> Although philosophers have claimed that WS patients are severely mentally retarded and suffer from a high degree of impairment across a wide range of abilities (e.g. Borg 2004:104; Prinz 2006), empirical research classifies WS patients as having a number of mild to moderate intellectual disabilities with a range of other deficits.<sup>102</sup>,<sup>103</sup>

<sup>&</sup>lt;sup>100</sup> Two points. First, in the case of brain damage, it is important to remember that the brain is a united, interconnected organ and not a block of interchangeable parts. Any functional dissociability that provides evidence that the processing of literal meaning is modular will be a matter of degree and not absolute. Second, in the case of genetic disorders, it is important to pay close attention to the neurodevelopmental profile.

<sup>&</sup>lt;sup>101</sup> See (Williams, Barratt-Boyes, and Lowe 1961; see also Beuren 1972; Jones and Smith 1975; Bennett, LaVeck, and Sells 1978; Kataria, Goldstein, and Kushnick 1984)

<sup>&</sup>lt;sup>102</sup> For example, connective tissue abnormalities, cardiovascular disease, facial dysmorphology, decreased muscle tone, etc. (Martens, Wilson, and Reutens 2008; Bellugi, Klima, and Wang 1996; Pober and Dykens 1996). The IQ of WS patients ranges from 40–100, with an average lying between 50 and 60 (see Martens,

The major turning point in research on WS came in the form of a published chapter by Bellugi et al. (1988). While early research on WS noted that the language abilities of individuals with WS were below their chronological age counterparts.<sup>104</sup> Belugi et al. (1988) argued for the provocative claim that while individuals with WS were mentally retarded, their language abilities were excellent. In particular, while visuospatial construction was severely compromised, WS individuals were able to perform complex syntactic operations and had excellent vocabularies. This claim was quite startling since the divided cognitive profile of WS individuals provided evidence for the independence of language from cognition, i.e. a functioning language processing system that operates independently of other cognitive skills (see Bellugi et al. 2000). The result of this work led to some strong claims concerning the independence of language from the rest of cognition.<sup>105</sup> The problem with many of these claims is that subsequent clinical data revealed that there does not exist a strong dissociation between the language faculty and other cognitive systems. That is, despite early claims concerning the independence of language from the rest of cognition, recent research has identified a number of syntactic deficits in WS patients. This has led many researchers to abandon a modular account of language processing altogether.<sup>106</sup>

Wilson, and Reutens 2008:577). This average places WS patients in the category of individuals with mild to moderate mental retardation.

<sup>&</sup>lt;sup>103</sup> WS patients are probably best known for their hypersociality, their love of music, and a distinctive pattern of physical characteristics (Pober and Dykens 1996; Mervis 2003; Mervis and Becerra 2007). <sup>104</sup> See (Kataria, Goldstein, and Kushnick 1984; Meyerson and Frank 1987).

<sup>&</sup>lt;sup>105</sup> Two examples. First, "Williams Syndrome individuals almost invariably show mild to moderate retardation; they uniformly require special educational placements as children, and for the most part acquire only rudimentary skills in reading, writing, and arithmetic. Particularly severe deficits show up in tests of spatial understanding such as copying patterns of blocks. Their language, though, is if anything more fluent and advanced than that of their ages-mates; in fact, they tend to be so talkative and expressive that to the unwary observer they may not appear retarded at all (at least at first)." (Jackendoff 1994:116-117; see also Jackendoff 2002). Second, "[T]he genetic double dissociation is striking, suggesting that language is both a specialization of the brain and that it depends on generative rules that are visible in the ability to compute regular forms. The genes of one group of children [with specific language impairment] impair their grammar while sparing their intelligence; the genes of another group of children [with WS] impair their intelligence while sparing their grammar" (Pinker 1999:262).

<sup>&</sup>lt;sup>106</sup> See (see Mervis and Becerra 2007; Karmiloff-Smith et al. 2003; Mervis 2003). Part of the reason for this skepticism is that subsequent research seems to show that WS patients suffer from syntactic impairments. However, many of these studies are problematic because they do not show that the impaired syntactic ability is not the result of an overall impairment in mental function or IQ. For while all agree that the language abilities of WS patients is not comparable to normal language users (compared in terms of chronological age), showing that WS patients do not retain an intact syntactic-semantic module requires evidence that compares these abilities to their verbal or non-verbal mental age. For while there may be

However, despite the fact that there is not a clean break between language cognition and other forms of cognition, there does exist a more subtle cognitive asymmetry among WS patients. For WS patients suffer from pragmatic impairments (Laws and Bishop 2004), they show relative strength in language-related abilities than other non-language-related abilities (Harris et al. 1997), and there is evidence that shows WS patients have more difficulty understanding language the more it relies upon contextual knowledge. In particular, Sullivan et al. (2003:97) claim that WS patients "have particular difficulty grasping the underlying connection between mental states and non-literal language."<sup>107</sup> Here are two examples.

First, the ability to distinguish between various forms of literal falsehoods (e.g. mistakes, metaphor, irony, lying, sarcasm) depends upon the ability to interpret a linguistic expression in relation to the mental states of speakers. This is sometimes called 'mind-reading.' **Mind-reading** is the pragmatic ability that requires interpreters to interpret various features to make inferences about the intentions or mental states of the speaker of the utterance.<sup>108</sup>

The ability to distinguish between a *lie* and a *joke* requires mind reading, specifically a type of second order knowledge of mental states. In order to adequately determine a falsehood is a joke, the listener must know something that the speaker knows in order to draw the inference that the joke is both not *merely false* and is not a lie. For example, suppose you and I are at the zoo and you see me staring at a large hippopotamus. Pointing at the hippo, I say to you 'that hippo is little.' For you to know that I'm joking rather than lying, you need to know that I believe that the hippo is *not* little, and further, you need to know that I know that you know this about my mental state. However, if you don't know this, then you might think that I am lying rather than joking.

In normal developing children, the ability to distinguish between various forms of literal and non-literal language occurs between the ages of 5 and 8 (Winner et al. 1987).

certain syntactic and semantic deficits in WS patients, none of that shows that the syntactic-semantic performance is impaired in comparison to their non-linguistic (pragmatic) abilities.

<sup>&</sup>lt;sup>107</sup> For an alternate conclusion, see (Karmiloff-Smith et al. 1995) and (Sullivan, Winner, and Tager-Flusberg 2003:98) for a discussion of this essay.

<sup>&</sup>lt;sup>108</sup> For example, if I say 'John is a really nice guy,' in a sarcastic tone, you are likely to interpret the linguistic item in relation to my tone, and infer that I don't mean John is a really nice guy.

In contrast, to normal developing individuals, Sullivan et al. (2003) have shown that WS patients have difficulty distinguishing between lies and jokes; in particular, they tend to misclassify jokes as lies. What explains this phenomenon is that WS patients evaluate the meaning of false utterances *relative to reality* and *not relative to the second-order knowledge about the speaker*. In other words, WS individuals cognize the literal meaning of utterance without engaging in a process of free contextual enrichment that pulls from contextual factors like discourse participant's beliefs, states of mind, etc.

A second example comes from deficits WS patients have in distinguishing different forms of non-literal language. Studies show that WS patients (in comparison to typically developing individuals) have increased difficulty comprehending the meaning of utterances the *more figurative* the language is. For example, Annaz et al. (2009) show that not only do WS patients perform worse than their developing counterparts on comprehending metaphors and metonyms, but they performed worse than expected on metaphors in comparison to their performance on metonyms.<sup>109</sup> Thus, if metaphors are more pragmatically demanding than metonyms, and WS patients have deficits in understanding this more pragmatically demanding form of non-literal language, then WS patients show a selective impairment for understanding sentences requiring increase pragmatic skills.

This position, however, rests on whether metaphors are more pragmatically demanding than metonyms.<sup>110</sup> There appears to be good evidence for this view. Whereas conceptual metaphors are systematic mappings of the structure of one conceptual domain (the target domain) onto another conceptual domain (the source domain), metonyms are systematic substitutions of one thing (the vehicle entity) for another thing (target entity) within a single conceptual domain. What makes metonymic substitutions less

<sup>&</sup>lt;sup>109</sup> More generally, Martens, Wilson, and Reutens (2008:586) write "Overall, the findings suggest that individuals with WS display typical (but delayed) skills in the following areas of language development: complex syntax, semantics, world fluency, expressive vocabulary, plurals, irregular past tense, and mean length utterance. Language development appears to be atypical in the following domains: grammatical comprehension, gender agreement, morphosyntax, pragmatics, oral fluency, and reciprocal conversation." Notice that these results partially suggest the existence of a modular cognitive processor for syntacticsemantic processing. Pragmatics, oral fluency, and reciprocal conversation are all highly context-sensitive aspects of communication and atypical in the language development of WS patients.

<sup>&</sup>lt;sup>110</sup> Part of this argument may also depend upon a particular sense of metaphor, i.e. whether it deserves a semantic (Stern 1985), pragmatic (broadly Gricean) (Searle 1979a), or Davidsonian treatment (Davidson 1978).

pragmatically demanding is that substitutions are between entities that are conceptually "close" or conceptually *contiguous* with each other. The type of contextual enrichment involved in metonymic interpretation is restricted by a form of material, causal, or proximal relation.<sup>111</sup> In order to understand a metonym, language users do not need knowledge about an entirely different conceptual domain.<sup>112</sup> In contrast, metaphors are highly pragmatically demanding because (i) they require knowledge of at least two different conceptual domains and (ii) metaphors does not involve the same type of conceptual restriction that metonyms do for they are restricted by an intimate, direct, physical, contiguity within a conceptual domain but rely instead upon resemblances or structural similarities between concepts (see Papafragou 1996:172). To see the difference, consider two examples:

- (1) There is a new face in the office.
- (2) The face of the clock reads nine.

In the case of the metonym in (1), 'face' is a part-whole metonym for 'person'. In the case of the metaphor in (2), the use of 'face' requires language users to map the conceptual domain of *human faces* to various *features of a clock*. Understanding the non-literal meaning of (1) is less pragmatically demanding than (2) since the interpretation of (1) both (i) does not require language users to know a lot about other conceptual domains (e.g. about human physical features) and (ii) the interpretation of (1) is guided by various metonymic substitution rules, e.g. you can substitute part of an object for the whole. So,

<sup>&</sup>lt;sup>111</sup> See (Preminger and Brogan 1993). This is not the only way to understand metonomy; for a detailed discussion, see (Papafragou 1996). What is important for the argument in this paper is that metaphor requires more cognitive, pragmatic resources than metaphor. Examples of metonyms include the following: cases where the author of a work is substituted for the work itself ('I'm reading *Hemmingway*'), where part of the object is substituted for the whole object ('There is a new face in the office'), where a location is substituted for people or the institution occupying that location ('Washington said no to universal health care'), and where the date/place where something happened is substituted for an event ('9/11 is a day that changed America'). Thus, in the case of 'I'm reading *Hemingway*', *the work* is conceptually contiguous with the *author of the work* since the author wrote it.

<sup>&</sup>lt;sup>112</sup> According to Kövecses (2002:148) "the main function of metonymy seems to be to provide *mental*, *cognitive access* to a target entity that is less readily or easily available; typically, a more concrete or salient vehicle entity is used to give or gain access to a more abstract or less salient target entity within the same domain." This is only partially correct since while metonymy does provide cognitive access to a target entity that is less readily available, but it is not the case that the vehicle entity is more concrete. Take the example, 'Washington said no to universal health care.' In this case, 'Washington' is the vehicle entity and 'government officials A, B, C, etc,' is the target entity. The target entity is actually *more concrete* but *less cognitively accessible* (i.e. more cognitively and linguistically demanding to articulate).

there appears to be empirical evidence from WS patients that supports the idea that there is an independent syntactic-semantic module that operating autonomously from pragmatic processes.

# 2.4. CONCLUSION

In sum, I have defined a cognitive module as being a computational system that is informationally encapsulated, domain-specific, and functionally dissociable. I claimed that minimalism, but not contextualism, is compatible with a modular language faculty. Finally, I argued that Williams syndrome patients provide an empirical reason for thinking that the processing of literal meaning is done by a cognitive module. What this suggests then is that the semantic facts posited by minimalists are not lacking in a psychological correlate. The psychological facts upon which semantic theory depends are just *not* readily apparent or available to normal language users who are more concerned and geared toward what speakers are trying to communicate. Minimal propositions turn out to be psychologically realistic and play a role in a broader story about human cognition and communication but their role is *tacit* rather than *explicit* since they are grasped by their users *en route* to determining speaker meaning.

# 3. ARGUMENT #2: THE MIRACLE OF COMMUNICATION

A second argument for minimalism relies upon an earlier response to contextualism from chapter 3. Consider the following sentences:

- (1) John is tall [for a soccer player].
- (2) John is ready [to go dancing].
- (3) All of the beer [in the refrigerator] is gone.
- (4) John and Vic went to Chicago [together].
- (5) John ate [breakfast].
- (6) John ate breakfast [in the normal way].
- (7) The [person who ordered the] ham sandwich is getting annoyed.
- (8) The [skin of the] apple is red.
- (9) John kicks [the ball].
- (10) It's raining [in Palo Alto].

In (1)–(10), it is claimed by the contextualist that an unarticulated constituent obtained by free enrichment is necessary either to (i) raise the content expressed by the articulated features to a proposition (i.e. to express truth-conditional content) or (ii) raise the content expressed by the articulated features so that it expresses a proposition that accords with our linguistic intuitions. In both cases our linguistic intuitions are supposed to be sensitive to the presence of an unarticulated constituent for either the purpose of expressing truth conditions or for figuring into a broader story about communication and cognition. So, the contextualist either argues that a minimal reading of (2) fails to express something truth-evaluable (e.g. there is no such thing as *being ready*) or (2) fails to express to have said *John is ready* [*to go dancing*].

However, in chapter 3, I argued that our conscious judgments (linguistic intuitions) that a proposition should be more determinate cannot be used to determine whether an utterance of a given sentence is context sensitive (and requires a UC). On the one hand, there are sentences that admit of a wide range of different situations that would make the sentence true but they nevertheless fail to elicit the intuitive need for a UC. If this is the case, then there is reason to be suspicious of how reliable are intuitions are in tracking context sensitivity by way of determinacy. On the other hand, I argued that if our intuitions are wise to the need of a UC whenever we *feel* one is needed, then we find ourselves in an unstable position. For if the criterion for whether or not the utterance of a sentence requires a UC is whether or not we *feel* that the sentence should be more determinate, then it is possible to elicit these feelings by asking whether a sentence would be true or false in a given scenario (i.e. by pointing to how the sentence fails to account for whether it would be true or false in some scenario). Thus, a middle ground between a minimal theory (that maximizes context-insensitivity) and a radical contextual theory (that maximizes context-sensitivity) is unstable, and so we are forced to choose between one of them.

Now suppose that we accept this form of radical contextualism and pit it against minimalism. In order to do this, it is helpful to align each theory with a theory concerning what an utterance of a sentence says, asserts, claims, etc. **Speech Act Monism** is the
view that each utterance of a sentence says, asserts, claims, etc. just one proposition. So, if Vic utters 'John is tall,' this utterance expresses some one proposition, e.g. *John is tall* or *John is tall for a basketball player*. **Speech Act Pluralism** is the view that each utterance of a sentence says, asserts, claims, etc. a variety of different propositions. So if Vic utters 'John is tall,' the utterance actually expresses a whole set of propositions, e.g. *John is tall for a basketball player, John is tall for an average American athlete*, and so on.

Using these two theories of the content of speech acts, let's position radical contextualism and minimalism in relation to each. Radical contextualism and minimalism are *semantic theses*; they make claims about the literal meaning of the utterance of sentences. Radical contextualism seems to be aligned with (and assume) speech act monism for it contends that each utterance of a sentence expresses, says, asserts, and claims just one proposition that is always determined relative to context. So, if Vic is watching John tie his laces for a soccer match and Vic utters 'John is ready,' the contextualist contends that some one proposition has been expressed by the utterance. It is something like John is ready to play in today's soccer match. In contrast, I think that minimalism is best aligned with speech act pluralism. Speech act pluralism contends that each utterance of a sentence expresses (says, claims, asserts) a variety of different propositions and the minimalist contends that the **literal semantic content** of all of the propositions is the content that overlaps these different propositions. So, an utterance of 'John is tall' might express John is tall, John is tall for a basketball player, and John is tall for an average American athlete, but the literal meaning of these utterance is their intersection, namely that John is tall.

Why might we favor a pragmatic minimalism that is aligned with a speech act pluralism over a radical contextualism? There are at least three reasons. First, we might contend that provided we are attentive to *what's common* among different utterances of a sentence, we have a certain degree of access to minimal propositions (Cappelen and Lepore 2006:1051-2). If this is the case, then there is a level of content that minimalism accounts for but radical contextualism does not. Second, if we suppose that there is no common content between utterances and that radical contextualism is true, then we seem to be led into contradiction. That is, if we think that radical contextualism is true, then there is at least one context where the utterance 'radical contextualism is true' is false (Cappelen and Lepore 2005a:128-140, 2006:1052). Thirdly, we might argue that this common content offers the best explanation for how we communicate across different contexts.<sup>113</sup> I find this final reason most compelling and so offer a detailed argument for it in the next section.

#### **3.1. THE MIRACLE OF COMMUNICATION ARGUMENT**

In this section, I focus on the argument that minimalism, along with a commitment to speech act pluralism, provides a better explanation of the possibility of cross-contextual communication than radical contextualism. The minimalist will contend that baring the presence of context-sensitive terms, individuals who speak the same language will understand the same minimal, context-insensitive proposition given two utterances of the same sentence in different contexts. That is, while two different utterances of the same sentences can be used to mean or say different things (from the standpoint of speech act content), language users will cognize a shared proposition by reading off the syntactic features of the sentence. So, while utterances are sensitive to contextual variation, e.g. 'John is tall' can be used to say John is a tall basketball player in one context or John is a tall third-grader in another, language users are capable of understanding some truthconditional content that is shared by both utterances. It is this content that is capable of being conveyed across contexts. In contrast, radical contextualists make this type of communication somewhat miraculous rather than something that happens on a regular basis. The radical contextualist welds our understanding of the meaning of the utterance to an understanding of the context in which it is used. But, once the meaning of an expression is embedded into a context, it seems impossible (or extremely difficult) to convey content from one context into a different context simply by uttering the same sentence. In order to convey context from one context to another, language users need to find a way to *also* convey the context in which the utterance was expressed. And, in addition, no truth-conditional content is shared between two different contexts where the

<sup>&</sup>lt;sup>113</sup> As Cappelen and Lepore (2006:1051) put it, "if we accept that theory [minimalism], we can explain why contexts are not contextually trapped. If our arguments above are right [against contextualism, subject invariantism, and relativism], then this is our only protection against what can be called *contextual content solipsism*."

same utterance is expressed. For example, no truth-conditional content is shared between two utterances of 'John is tall' where John is being assessed relative to professional basketball players and another where he is being assessed relative to third-graders.

While there are a variety of arguments of this sort, this argument was forcefully put forward by Cappelen and Lepore (2005a:123-125), who argue as follows:

If RC [radical contextualism] were true, then for us to understand what you said by an utterance of 'Philosophy is fun' we would have to know what knowledge has been triggered by previous conversations you have been engaged in, we have to know whom you are talking to, what you know about them, what knowledge you can assume is shared between you and your audience, the nature of your mutually shared perceptual environment, and so on and on. That's a lot of requirements just to figure out what you said. When the full RC story is told, it will turn out to be a miracle every time anyone manages to figure out what someone had said. But there are no miracles. People do not need to access all of this knowledge in order to figure out what has been said. So, RC is false (2005a:124).<sup>114</sup>

I will call this form of argument for minimalism, the *Miracle of Communication Argument* (hereafter MOC). The argument, in a nutshell, is the following:

(i) If radical contextualism is true, then in order for communication to be possible, language users need to know a great deal about the context in which an utterance occurs.

(ii) Communication is possible and does not require language users to know a great deal about the context in which an utterance occurs.(iii) Therefore, contextualism is not true.

It is important, however, to see that the argument is not merely negative. It is not merely an attempt to show how contextualism makes communication a miracle. The argument also aims at showing why reducing the context-sensitivity of language and positing some

<sup>&</sup>lt;sup>114</sup> See also (Cappelen and Lepore 1997:293-4). Borg (2004:61) is somewhat equivocal about her commitment to the 'miracle of communication' argument. She writes, "Grasp of a semantic theory, I'll argue, though a necessary part of linguistic understanding and thus a crucial element in linguistic communication, doesn't have the type of constitutive links to the nature of thought, our contact with the world, or, indeed, communication, which have often been assumed to hold." However, later in the same text, she writes "On the one hand, then, semantic knowledge is important and special—without it we would be robbed of the ability to interpret the meanings of words and sentences and thus linguistic communication would be impossible. Yet, from another perspective, semantic knowledge is quite unimportant and peripheral—without all the other kinds of knowledge we have, semantic understanding would be pretty much worthless" (2004:263).

shared content that cuts across contexts explains *our ability to convey content across contexts*. First, let's focus on the *positive* portion of the argument, the part that attempts to explain how it is possible convey content across diverse contexts. After this, we will turn to the *negative* side of the argument.

Suppose that John starts an internet blog and, in his first entry, writes the following sentence:

## (2) Philosophy is fun.

Vic, stumbles upon John's blog, and reads (2). What does Vic know about the context in which (2) was uttered? Vic probably knows the *date* and *time* when (2) was written (since blogs usually date stamp entries) and (let's suppose) knows that it was written by someone old enough to have learned some philosophy and who has grasped at least the basics of English syntax. There is, however, a lot that Vic doesn't know. He doesn't know who uttered (2), e.g. he doesn't know John's nationality, where John lives, whether John is a philosophy student, a professor, or has even read one article on philosophy. Vic doesn't know if (2) was meant seriously or ironically. Vic does not know whether John thinks that philosophy is fun relative to other academic subjects, relative to other subjects in the Liberal Arts, relative to hard manual labor, etc. Vic doesn't know the intended audience of (2), e.g. whether it is intended for students, for his friends, for a comedic audience, for his colleagues. Vic doesn't have access to the perceptual environment in which (2) was uttered, and so doesn't know if John is writing the blog in a coffee shop, a university, or in his apartment, and he doesn't know what books or web pages he has open at the time of the utterance. Vic doesn't have knowledge of what has been uttered previously (maybe there were some previous entries that were deleted).

But even in this situation—one where Vic knows so little about the context surrounding an utterance of (2)—, Vic (and millions of other English speakers who visit John's blog) know what (2) means and can use the information they gather from interpreting (2) in subsequent conversations. For example, Vic (i) knows that (2) literally means that *Philosophy is fun*, (ii) Vic can utter a true indirect report of (2) by uttering 'Someone said that philosophy is fun,' and (iii) Vic can communicate the literal meaning of (2) by uttering 'Philosophy is fun' to someone. All of this is possible despite the fact that so little is known about the context in which (2) is uttered!

How does the minimalist explain this? First, remember that minimalism is a thesis aligned with speech act pluralism. Speech act pluralism is the view that each utterance of a sentence expresses (says, claims, asserts) a variety of different propositions. The minimalist contends that the **literal semantic content** of all of the propositions is the content that *overlaps these different propositions*. So, when John uttered 'Philosophy is fun,' what John says, asserts, writes is not expressed by a single proposition but a variety of different propositions. Supposing that John is an undergraduate at Penn State in the philosophy department, we might understand John to have said, written, or asserted any or all of the following:

Philosophy is fun.
Philosophy is fun as an academic discipline.
Philosophy is fun to read.
Philosophy is fun if you are a student at Penn State.
Philosophy is fun to discuss with other philosophy students at Penn State.
Philosophy is fun relative to manual labor.

Minimalism contends that while an utterance of a proposition expresses a variety of different propositions, we ought not to lose sight of what all of these propositions have in common, i.e. the content that they all share in virtue of their relation to the sentence. Namely, the overlap of all these propositions is the proposition *philosophy is fun*. Thus, despite the fact that the utterance 'philosophy is fun' is capable of being enriched in a variety of different ways, and despite the fact that, in another context, the utterance might be enriched differently (e.g. *Philosophy is fun at Syracuse University*), there is an overlap in the different propositions each conveys, and this is *Philosophy is fun*.

Let's turn to the *negative* side of the argument. According to the minimalist, radical contextualists forget about the shared content each utterance has in being an instance of a sentence type. In focusing on the different ways in which the meaning of an utterance can vary from context to context, they lose sight of what is shared or common to all of these utterances, and this renders them unable to explain how it is possible to convey content across contexts. For, according to the radical contextualist, in order to know the literal meaning of an utterance, you need to know a lot of different things. In order to know the meaning of (2), you might need to have an answer to the question: *relative to what is philosophy fun?* In the case of Vic's reading of (2), he does not have this information. He doesn't know if John thinks that *philosophy is fun relative to English* or *relative to Mathematics* or *relative to manual labor*. And, if this type of contextual knowledge is required to understand the meaning of (2), then there is a breakdown in communication between John and Vic (as well as a breakdown between John and all of the viewers who don't know this information). However, in the above case, we do not know very much about the context in which the utterance is used and if the meaning of (2) requires knowing what philosophy is fun relative to, then we don't know what (2) literally means. And so, if communication depends (in some way) upon knowing the literal meaning of an utterance, then since we do not know very much about the context in which (2) is used, John fails to communicate any truth-conditional content (proposition) to Vic.<sup>115</sup> When Vic comes to John's blog, he does not have the adequate contextual knowledge to know what (2) literally means.

To illustrate, suppose Bluto and Popeye are two sailors on a ship. After the ship departs, Popeye utters

<sup>&</sup>lt;sup>115</sup> There is some conflict between different strands of minimalism on this issue. For instance, Stanley and Szabo (2000) argue that domain restrictions on quantifiers should be accommodated within semantic theory by positing a hidden argument place for noun phrases. On their account, the value of this argument place is a contextually-determined domain restriction. Thus, the semantic value of a quantifier is the intersection of the set picked out by the quantifier and the nominal and the set picked out by the contextually-determined domain restriction. So, for example, in the expression 'all the beer is gone,' the literal meaning of 'all the beer' is not all of the beer in the universe but all the beer in the contextually-determined domain (e.g. all the beer in the refrigerator I am currently looking at).

This account differs from the one proposed by Cappelen and Lepore (2004) insofar as the latter restricts the number of context-sensitive terms to those that they take are obviously context-sensitive (see 2004:1). They argue that if we allow the meaning of different utterances of the same quantified noun phrase to shift across different contexts of use, then we fail to explain how language users can say the same thing as a speaker by disquotation or by giving an indirect (yet disquotational) speech report. Thus, while Stanley and associates offer a variety of minimalism in that context-sensitivity of expressions is linguistically-motivated, their position differs from that of Cappelen and Lepore (see 2006:1021-2) who think that one of the principal aims of a semantic theory is to explain how it is possible for different utterances of the same sentence to express the same proposition across contexts.

<sup>(3)</sup> Every sailor waived to every sailor (Stanley and Williamson 1995).

to which Bluto replies 'Yes, every sailor waived to every sailor.' According to Stanley and Szabó (2000:249), the two different utterances of this same sentence can express two different propositions. For example, Popeye's utterance expresses *Every sailor on the ship waved to every sailor on the shore* while Bluto's utterance expresses *Every sailor on the shore waved to every sailor on the ship*. Cappelen and Lepore argue that this form of a minimalist account makes successful cross-contextual communication would require a "minor miracle" (Cappelen and Lepore 2006:1026). Given the richness and influence of

So, generally speaking, minimalists contend that contextualists make a miracle out of cross-contextual communication because they make our ability to understand the literal meaning of an utterance depend too heavily upon our knowledge of the context in which that sentence is used. The utterance expresses, says, asserts, contends some one proposition that is—by the contextualist's lights—only truth conditional or psychologically realistic if it is made more determinate by enriching it with features from the context. However, once enriched, contextualists cannot explain how it is possible to convey meaning from one context into another. In contrast, minimalism accounts for the possibility of communication in cases involving interpreters who are in impoverished (or radically different) contexts by positing an invariant, shared, and minimal content in virtue of having learned a particular language. This invariant, literal content is what minimalists claim is the intersection of what each utterance of the sentence says and is coextensive with a semantic reading of the articulated features in the sentence.

## **3.2. CONTEXTUALIST REBUTTALS**

While the "miracle of communication" argument<sup>116</sup> is thought to undermine the contextualist theory and support a preference for minimalism, this argument has been widely criticized (Wieland 2009; Perini-Santos 2009; Recanati 2010:6-9; Begby unpublished m.s.). In this section, I suggest three ways contextualists respond can (or do) respond to this objection and offer criticisms for each.

With respect to the MOC argument (see above), contextualists have three ways out:

these factors, it is highly improbable that Popeye and Bluto utter the same thing since uttering the same thing requires knowing the diversity of factors in the context. That is, if a speaker and a hearer are in different contexts, then it seems that their ability to collapse upon the same proposition (have the same thought) in two different contexts is in jeopardy. And, if collapsing upon the same proposition expressed by a sentence is a necessary criterion for communication, then the contextualist theory is to be rejected. That is, if the meaning of u1 is relative to an assortment of background assumptions in c1 but not in c2 then cross-contextual communication does not seem possible (Cappelen and Lepore 2005a:182-183). The minimalism of Cappelen and Lepore, by contrast, argues that Bluto and Popeye do communicate on some minimal level. That is, what they literally express is the same even if what they mean (as a result of free enrichment) differs. On some very basic level, they utter the same thing in virtue of the fact that they utter the same sentence-type in the same language. While Bluto may fail to understand what Popeye means by (2), he does not fail to understand the literal meaning of (2) as it is uttered by Popeye.

<sup>&</sup>lt;sup>116</sup> This argument is sometimes called 'the argument from shared content', see (Wedgwood 2007:648).

(1) *The Counterattack*: Deflate the argument by showing that minimalism is equally vulnerable to MOC arguments.
 (2) *The Direct Response*: Reject premise (i) by claiming that contextualism does not require language users to know a great deal about the context in which an utterance occurs. Instead, communication only requires that the speaker and interpreter know a sufficiently similar number of relevant contextual factors. Or, reject premise (ii) by claiming that the truth of contextualism does not imply that language users need to know a great deal about the context in order for communication to be possible. Instead, communication only requires that speaker and interpreter cognize a proposition that has sufficiently similar content.
 (3) *The Bite the Bullet Response*: Deny the possibility of cross-contextual

communication.

The majority of contextualists have tried to respond along the lines of (1) and (2) (see Wedgwood 2007; Wieland 2009; Perini-Santos 2009; Recanati 2010:6-9; Begby unpublished m.s.). According to (1), a version of the MOC argument is not only a problem for contextualism but is also a problem for minimalism. Thus, MOC arguments should not be considered a deciding reason for favoring minimalism over contextualism. According to (2), MOC arguments misconstrue the role context plays in contextualist theories. All that contextualism implies is that language users collapse on a sufficiently similar number of factors that are *relevant*. Thus, we don't need to know everything about the context in which an utterance was used to communicate across contexts, we only need to know the important features that might shape meaning. According to (3), MOC arguments only illustrate the fact that when we find ourselves in diverse contexts, communication is not possible. As good contextualists, we ought to bite the bullet and deny the possibility of communication in cases where individuals do not know the needed contextual factors to enrich the literal content expressed by an utterance. In what follows, I articulate these responses and argue that they are not compelling.

## 3.2.1. OBJECTION #1: THE COUNTERATTACK

The first objection comes from Begby (unpublished m.s.), Recanati (2010), and Wieland (2009, 2010), who argue that the miracle of communication argument does not uniquely apply to contextualism. They argue that the miracle of communication argument runs against minimalism as well. In just a few lines, Recanati (2010:6-7) argues as follows:

*Whenever* the semantic value of a linguistic expression must be pragmatically inferred, the question arises, what guarantees that the hearer will be able to latch on to the exact same semantic value as the speaker? Whether the pragmatic process at stake is saturation or modulation is irrelevant as far as this issue is concerned, so the 'impossibility of communication' argument cannot be adduced in favour of Minimalism against TCP [Truth-Conditional Pragmatics].

Although not explicit, Nellie Wieland (2010:47, 2009) suggests that the MOC argument cuts against minimalism in a similar way. She adopts an onus-switching strategy by claiming that minimalism needs to provide an account of how two utterances of a sentence-type say the same thing. Here is the argument in a nutshell:

(i) If minimalism is true, then in order for communication to be possible, language users need to know that u<sub>1</sub> and u<sub>2</sub> of S say the same thing.
(ii) Communication is possible but language users do not know that u<sub>1</sub> and u<sub>2</sub> say the same thing.
(iii) Therefore, minimalism is false.

Wieland's argument for (ii) is that, without positing semantically relevant contextual elements, there is a lack of evidence showing that  $u_1$  and  $u_2$  of S are semantically identical rather than merely phonetic (or orthographic) duplications. Wieland (2010) has argued that minimalist's proprietary claim to shared content is nothing more than a claim concerning the *phonetic reduplication* of utterances (2010:404; see also Martínez-Manrique and Vicente 2009:23). The mere fact that two utterances look and sound the same is not a sufficient reason for concluding that they share content across contexts. What is required is an explanation for how two utterances that look and sound the same *actually* share the same literal content across contexts. In particular, minimalists need to show how all utterances of a single type express the same single semantically minimal proposition (Wieland 2010:408).

Finally, Begby (unpublished m.s.) attacks minimalism's construal that the minimal semantic proposition is an "essential" component or "starting point" for communication by pointing to examples of successful communication without the use of a minimal semantic proposition (7-8; see also Cappelen and Lepore 2005a:181, 185). Successful communication without literal meaning occurs (i) between language users having different dialects, (ii) in cases involving semantic drift (change in the meaning of a term over time), and (iii) despite aberrant uses of a term by a speaker (e.g. the use of

'nauseous' rather than 'nauseated'). Here is an example of (iii). Suppose that a student says the following to a professor:

#### (2) I am feeling *nauseous* and will not be attending class today.

The professor might correct the student by saying that 'nauseous' is aberrant. The professor tells the student that he should have said that he feels 'nauseated.' This sort of example is, according to Begby, a case of intra-lingual communication without the existence of a shared minimal semantic proposition. The professor is capable of understanding what the student means without subscribing to the aberrant convention governing the meaning of 'nauseous.'<sup>117</sup>

In order to explain these types of communication, Begby contends that minimalists must contend that these users speak *different languages* and this raises the question of how any two language users know that utterances in their language express the same proposition. For Begby, it would be a miracle if speakers of different languages would collapse upon the same proposition without a process of free enrichment. Thus, minimalism makes communication just as big a miracle as contextualism.

## 3.2.2. CRITICISM #1

Recanati's objection can be straightforwardly addressed. What guarantees that A and B will latch onto the same semantic value is that they utter and interpret the same sentence type in the same language. In speaking the same language, each has at their command, a variety of linguistic rules and principles for how to retrieve factors from a context. So, when Nixon uttered 'I am not a crook,' what guarantees that the hearer will be able to latch on to the exact same semantic value as the speaker? Well, it is that there is a rule

<sup>&</sup>lt;sup>117</sup> The position is similar to Heck Jr. (2006), who argues that communication is possible without invoking a common language. Heck writes, "Speakers of different dialects often communicate successfully, and between these dialects there may be significant syntactic and phonological differences, as well as semantic differences at the lexical level: If I may borrow an example from Gabriel Segal, in British English, something is rightly called a 'pie' only if it has a pastry top, whereas in American English, a 'pie' need not have a top at all. That does not imply that Bostonians can't communicate successfully with Londoners. Communication will succeed so long as the parties to a given exchange knowingly agree about what the various sentences uttered during that exchange mean, and such agreement will be common so long as the speakers' dialects do not differ too much in the areas that are typically used for communication between them." (2006:87).

that says when the first-person pronoun is uttered, the hearer is directed to the utterer in that context.<sup>118</sup>

There are three possible criticisms of Wieland's position. First, Wieland's argument misunderstands why the minimal proposition is posited. Part of the minimalist MOC argument is an *inference to the best explanation*. It posits a minimal proposition not because language users consciously know that phonetically-identical utterances u and v of S express the same proposition p but that positing an invariant, shared content best explains how communication occurs in disparate contexts. Minimalists can argue supposing that while we cannot demonstrate that u and v express p, supposing that they do provides the best explanation for our very general linguistic intuitions that two different phonetically-identical utterances say the same thing. In other words, I think that one reason MOC arguments cut so strongly against the contextualist rather than the minimalist position is that (at least in this case) minimalism has commonsense on its side.<sup>119</sup> Contextualists, in involving processing of free enrichment to literal meaning, offer no viable (or better alternative) for how we communicate across contexts (although see some attempts below).

A second reason for rejecting Wieland's objection turns less on seeing the MOC as an inference to the best explanation and revolves more around deflating the force of the objection. Consider that Wieland contends that minimalists owe us an explanation of why two phonetically-identical utterances u and v express the same proposition. This sort of demand for an explanation is only reasonable if it is already assumed that in order for communication to occur, language users must consciously know that u and v express the

<sup>&</sup>lt;sup>118</sup> None of this, of course, is to say that communication cannot fail in other ways. For example, an interpreter can fail to understand what Nixon utters by not speaking English, or by failing to hear the utterance correctly (as 'I am not a book' rather than 'I am not a crook'), or by disambiguating incorrectly (e.g. 'I am not a crook' as in *hooked stick*). But provided that he speaker and interpreter understand the meaning of all the terms and the way in which these words are put together, what is to keep the two from collapsing upon some common, shared content?

<sup>&</sup>lt;sup>119</sup> Perhaps another way that minimalists might argue against MOC arguments applying to their theory is by claiming that it is a *brute fact* that identical logical forms express identical semantic content (excluding, of course, those expressions that are specifically designed to rely on context). One consequence of this brute fact hypothesis is that if phonetically identical utterances u and v were to express different literal semantic content, then this difference with respect to the generation of the literal meaning would be reflected in the logical form of the utterances and not in the context in which the utterances are embedded.

same proposition p. The rationale behind this assumption is that if a language-user A hears u in C<sub>1</sub> and then hears a phonetically (and syntactically) identical utterance v in C<sub>2</sub>, then in order for A to know that u and v express the same proposition, A needs to know that the features of C<sub>1</sub> and C<sub>2</sub> influence the literal meaning of u and v in the same way. So, on the contextualist's account, the meaning of 'Philosophy is fun' (said in a context where the speaker thinks that philosophy is a fun subject to study while attending a university) is not the same as 'Philosophy is fun' (said where the speaker thinks that philosophy is fun to study outside of a university setting) since the contextual factors enrich each utterance to express a more determinate and distinct proposition. However, it should be easily seen that this sort of objection just begs the question against the minimalist for it makes the criterion for whether two utterances of the same sentence type express the same proposition depend upon contextualist principles.

A third criticism is a more direct albeit psychological explanation. Minimalists can explain why u and v express the same proposition by pointing to the existence of a cognitive module that is dedicated to processing the literal meaning of sentence types. This level of cognitive processing is not done consciously and so language users tacitly know that u and v express p.

Finally, consider that Begby's cases of temporal drift, aberrant usage, and supposedly cases of intra-lingual communication without the existence of a shared minimal semantic proposition. In response, minimalists are left with three options:

(i) *Different Languages:* argue that language users do communicate but language users are speaking different languages or dialects, or
(ii) *Direct Reply:* argue that language users do communicate and minimal propositions play an important role.
(iii) *Bite the Bullet:* argue that language users do not communicate in these special cases,

Focusing on the example involving the use of 'nauseous,' what is puzzling about this objection is that the professor is able to identify that the correct substitution for 'nauseated' rather than 'nauseous' rather than some other lexical item. How is this possible? According to a non-minimalist position, since the student's utterance involves an unconventional use of a word, the professor (a) works out what the student *means* to

say from the context of use (relatively independent of what the sentence literally expresses), and (b) subsequently corrects the student by claiming that 'Y' rather than 'X' is the conventional way of conveying the intended meaning.

How might the minimalist explain this example? According to Begby, one option open to the minimalism is to argue that language users say the same thing but are speaking different languages, i.e. option (i). Minimalists can say that these are cases where individuals are, in effect, speaking and interpreting utterances in different languages, and the professor's ability to determine what the student means is one of translation. Begby (unpublished m.s.:15) writes that "speakers of different dialects will be speakers of different languages, as will speakers separated by any kind of temporal gulf, as indeed will contemporaneous speakers subscribing to different semantic conventions." However, if this is the case, then there is a version of the MOC argument that runs against the minimalist. Begby (unpublished m.s.:16) writes:

if minimalism were correct, it would be a miracle if speakers of different languages (in the minimalist's technical sense) could hit up the same proposition in the way that communication requires. But such communication occurs routinely, with no intervening miracles. Therefore, minimalism is false.

The idea is that if contextualism fails because language users do not share a context, then minimalism fails because language users do not share a language.

First, it is not clear that this objection threatens minimalism since the minaimlist can appeal to a pre-semantic use of context to determine which language is being used, e.g. English, German, or some variant of English. But, let's accept Begby's analysis that an explanation that makes use of different languages is untenable and try to give a more direct reply, i.e. option (ii). To see how this works, consider that in the example involving the aberrant use of 'nauseous', the professor is capable of understanding what the student says without subscribing to the aberrant convention governing the meaning of 'nauseous.'<sup>120</sup> Notice that Begby differentiates what it means to use a language to *utter* 

<sup>&</sup>lt;sup>120</sup> The position is similar to Heck Jr. (2006), who argues that communication is possible without invoking a common language. Heck writes, "Speakers of different dialects often communicate successfully, and between these dialects there may be significant syntactic and phonological differences, as well as semantic differences at the lexical level: If I may borrow an example from Gabriel Segal, in British English, something is rightly called a 'pie' only if it has a pastry top, whereas in American English, a 'pie' need not

*some sentence* and use a language to *interpret a sentence*. This distinction serves as the crux of all examples because individuals are able to understand a sentence in another's idiolect but they do not disquotationally reproduce the literal meaning in their own. According to Begby, the student and the professor disagree over the meanings of 'nauseous.' The professor can understand what the student says but there is no semantically minimal proposition shared between them, and further, the professor adheres to an altogether different set of conventions governing 'nauseous.'<sup>121</sup>

The situation should not be characterized as two different individuals speaking different languages or adopting different idiolects unless these languages/idiolects relate to speech production. For language users might develop certain norms or rules for speech production but these rules are not applied when governing how they go about interpreting a language. We might then contend that the professor and student use the same language involving a single set of interpretive conventions, but they either (i) have differing attitudes about which conventions are appropriate or (ii) those conventions are more deeply entrenched in one speaker rather than the other. In the first case, the professor is capable of interpreting the utterance as a particular sentence type, is able to cognize the minimal proposition expressed by that sentence type, but completely disagrees that this proposition is the most appropriate way to express said proposition. The disagreement with the means by which the student uses the word 'nauseous' is not a failure to understand what the students says nor does it require a translation of 'nauseous' into 'nauseated'; instead, the professor disagrees that 'nauseous' should be used in place of 'nauseated,' and this is reflected in the professor's speech and his propensity to correct students.

have a top at all. That does not imply that Bostonians can't communicate successfully with Londoners. Communication will succeed so long as the parties to a given exchange knowingly agree about what the various sentences uttered during that exchange mean, and such agreement will be common so long as the speakers' dialects do not differ too much in the areas that are typically used for communication between them." (2006:87).

<sup>&</sup>lt;sup>121</sup> Other cases might be brought in to illustrate the dispensability of a shared semantically minimal proposition for communication. A classic example is from Davidson (2006) who famously argues that there is no such thing as language when conceived of as having an antecedently realized ('prepared'), shared (common to speaker and hearer) and systematic structure. Davidson's argument against the existence of language conceived in this way by using malapropisms, i.e. a class of utterances where the standard interpretation diverges from the intended interpretation. Examples of malapropisms include 'a nice derangement of epitaphs' instead of 'arrangement of epithets', 'for all intensive purposes' instead of 'for all intents and purposes', etc.

In the second case, Begby's suggested solution relies on the distinction between the student-language and professor-language. The difficulty then for the minimalist is to explain, for any given sentence type, which language is being employed. Again, I don't think the professor or student are speaking different languages. Instead, it is more accurate to say that they share the same language, understand the same conventions, but that some of these conventions are more deeply entrenched in their speech production. Thus, the degree to which a linguistic structure is entrenched depends upon how firmly the structure is rooted in a language user's mind. While a linguistic structure's entrenchment is a necessary condition for its conventionality insofar as language users assume, when they use a word, that a linguistic structure will be entrenched in another's mind, a word can still be conventional without being deeply entrenched. In Begby's example, the professor is able to understand the meaning of the sentence because he grasps the convention associated with the word 'nauseous' but he still regards the word as aberrant but because the word is not as deeply entrenched in the language.

This response by the minimalist hints at an important fact about languages. The language in which we use to interpret another's speech is not circumscribed and governed by the rules that we use to govern our own speech nor is it governed by the norms we invoke when judging which utterances are grammatically correct or optimally expressed. Instead, I am arguing that an interpretive language allows for a high degree (but not unlimited) of *semantic variability or tolerance*. Our interpretive language tolerates expressions that we might judge as 'deviant' with respect to the rules governing speech production.

Thus, to summarize, here is a minimalist response. Conventionality does not require univocal adherence. Individuals can cognize various conventions for the purpose of interpreting utterances but avoid adhering to them in speech production. The professor's correction of the student is motivated not by the student's failure to adhere to linguistic convention but because Y is more deeply entrenched than X in the professor's lexicon. Thus, the professor (a) works out what the student *means* to say from an understanding of the conventions governing the use of 'nauseous', and (b) subsequently

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corrects the student by claiming that Y rather than X is the "conventional way" of conveying the intended meaning.<sup>122</sup>

#### 3.2.3. OBJECTION #2: DIRECT RESPONSES

There are two different varieties of what I am calling a *Direct Response* to MOC arguments. In this section, I will first mention one that has been addressed by minimalists in the literature but I will focus my attention on an objection that minimalists have not yet considered.

First, a number of contextualists claim that the truth of contextualism does not imply that language users need to know a great deal about the context in order for communication to be possible. This is because communication only requires that speaker and interpreter cognize a proposition that has *sufficiently similar content* (Bezuidenhout 1997a; Recanati 2004; Carston 2002; Heck Jr. 2002; Sperber and Wilson 1995). On this approach, communication does not require *fine-grained content* to cut across contexts but only *sufficiently similar content* to do so. Bezuidenhout (1997a:198), for example, writes:

I argue that the *de re* thought a speaker expresses and the *de re* thought the listener understands are not the same. Thus there is a question as to the semantic content of the utterance which mediates the communicative exchange between the speaker and listener. What is *its* content? [...] I challenge the claim that we need some common content which allows a role for modes of presentation. I argue instead that we need recognize only speaker-relative content and listener-relative content and a relation of *similarity* holding between these two contents.

Cappelen and Lepore call this sort of objection the 'Similarity View,' and tersely characterize it as follows:

Sentences like 'A said that p', 'A said what B said', 'I agree with what A said', 'I understand exactly what I said', and other such locutions do *not* require for their

<sup>&</sup>lt;sup>122</sup> Perhaps a *third* way to handle these is not to individuate precise languages but to argue that languages are more ambiguous than previously recognized. An *ambiguous language* is a function that assigns finite sets of alternative meanings to sentences (Lewis 1975:14). Language users who differ in dialect, who speak across temporal gulfs, or who subscribe to different conventions in using a syntactic type do not speak a different language but instead speak a single, highly ambiguous language. Minimalism can handle the cases Begby raises just like it handles cases of ambiguity (see Borg 2004:140-146).

truth content *identity* across contexts. All they require is content *similarity* across contexts (2006:1034).<sup>123</sup>

In order to sharpen the Similarity View, let's say that anyone committed to this view is also committed to the following theorem:

'A said that p' means the same thing as 'A said something similar to p.'

Against this view, Cappelen and Lepore level five criticisms (2006:1034-1038, 2005a:125-126; see however Wedgwood 2007:654-659). I mention only a few briefly. First, they are skeptical that there is any notion of 'sufficiently similar content' that will stand up to scrutiny. Second, they argue that the notion of sufficient similar content does not account for the intuition that two different instances of 'Philosophy is fun' say the *exactly* same thing. Third, the similarity view leads to absurdity for consider the following two propositions:

(P) The US has 49 states.(Q) The US has 50 states.

According to a radical contextualist who holds the similarity view, there is no apriori reason why there is not some context where (P) and (Q) express similar content. That is, a radical contextualist who holds the similarity view seems committed to the following:

For some context, A said that 'The US has 49 states' means the same thing as 'The US has 50 states.'

But this seems absurd. And so, if the point generalizes, the similarity view yields all sorts of falsehoods and so won't amount to an adequate response to MOC arguments directed against contextualists.

In this section, however, I want to focus on a second type of direct response. A contextualist can claim that contextualism does not require language users to know a

<sup>&</sup>lt;sup>123</sup> In another work, Cappelen and Lepore (2005:126) characterize this view as follows: "[a]ll we need [for communication to proceed smoothly] is sufficiently similar content. If what A says in context C is sufficiently similar to what B says in context C', then that's enough." Sperber and Wilson (1995:193) write "It seems to us neither paradoxical nor counterintuitive to say that there are thoughts that we cannot exactly share, and that communication can be successful without resulting in an exact duplication of thoughts in communicator and audience. We see communication as a matter of enlarging mutual cognitive environments, not of duplicating thoughts."

great deal about the context in which an utterance occurs. Instead, communication only requires that the speaker and interpreter know a *sufficiently similar number of relevant contextual factors*. This second type of direct response has been put forward by Nellie Wieland (2009, 2010) and Daniel Wedgwood (2007). They argue that the MOC argument against contextualism falsely assumes that communication requires *fine-grained context*. They argue instead that when this assumption is dropped, communication is possible provided these utterances are made in a *sufficiently similar context*. According to Wieland, the miracle of communication argument is only true if contextualists accept the following proposition:

If context itself contributes to the meaning of any given utterance, then it will be impossible to mean the same thing in sufficiently diverse contexts. (2010:405).

According to Wieland, contextualists accept the antecedent but reject the consequent. That is, they claim that the literal meaning of an utterance is determined not relative to every feature of context but *relative to what is relevant or salient in the context*.

For Wieland (2010), what is necessary is not that the *content* be sufficiently similar but that the *contexts* be sufficiently similar. In other words, contextualists do not accept the strong thesis that in order for language users to share literal content across contexts, it is necessary for both language users to have knowledge of every feature of the context in which an utterance is embedded. Instead, they accept the weaker thesis that in order for language users to share literal contexts, it is necessary for both language of the relevant or salient features of the context in which an utterance is embedded. In sum, communication only requires knowledge of some key chunks of context and not each and every grain.

## 3.2.4 CRITICISM #2: SUFFICIENTLY SIMILAR CONTEXT RESPONSE

In uttering the same sentence in two contexts, do we (in some sense) express the same proposition? Can we, barring any obvious context-sensitive expressions, indirectly and disquotationally report what someone says in one context in another context? The minimalist believes that we can for while we express a variety of different propositions whenever we utter a sentence, at least one of the propositions expressed cuts across contexts. In positing such content, we offer an explanation of our actual linguistic practices of being able to communicate across contexts. The contextualist, by contrast, believes that the content of an utterance is importantly tied to context and, in the case we are now considering, only thinks that communication is possible when the different contexts in which an utterance is expressed are *relevantly similar*.

I think there are three reasons to be critical of the contextualist's position. First, it is totally unclear what it means for two contexts to be relevantly similar and so it will be difficult to formulate a clear-cut counter-example that a contextualist cannot respond to by saying 'the example you propose is one where there is relevant similarity in contexts.' Second, while a lack of clarity concerning the notion of *sufficiently similar contexts* makes this view difficult to criticize, this view fails to explain how we *do* convey content across significantly (or relevantly) different contexts. In the case of 'Philosophy is fun,' Vic knows next to nothing concerning the utterance or from uttering a true indirect speech report (e.g. 'someone said that philosophy is fun').

The third criticism is that contextualism leads to a number of inconsistent results. To see this point more clearly, first, consider the following two criteria that the contextualist offers as an alternative:

Same Saying Criterion: If  $C_1 \neq C_2$ , then  $u_1$  means that p and  $u_2$  means that p if and only if  $C_1$  and  $C_2$  are relevantly similar. Indirect Speech Reporting Criterion: If  $C_1 \neq C_2$  and  $u_1$  is an utterance of S in  $C_1$  that expresses p, then  $u_3$  uttered in  $C_2$  is a true disquotational speech report of  $u_1$  if and only if  $C_1$  and  $C_2$  are relevantly similar.

Second, consider the following scenario:

 $u_1$ : 'Liz is tall'  $u_2$ : 'Liz is tall'  $C_1$ : a context where John has a daughter, Liz, who is in third-grade and is on the third-grade basketball team;  $C_2$ : a context where John has a daughter, Liz, who is in third-grade and is on the fourth grade basketball team. Suppose Vic utters  $u_1$  in  $C_1$ . According to a contextualist who contends that 'tall' is a context-sensitive expression, Vic has expressed the proposition that *Liz is tall for a third-grader on a third-grade basketball team*, while if Vic uttered  $u_2$  in  $C_2$ , Vic has expressed the proposition that *Liz is tall for a third-grader on a fourth-grade basketball team*. In the above case, however,  $C_1 \neq C_2$ ,  $C_1$  and  $C_2$  are relevantly similar, but  $u_1$  and  $u_2$  don't have the same meaning.

The same holds true for the Indirect Speech Reporting Criterion for if John hears Vic utter  $u_1$  in C<sub>1</sub> and then reports this in C<sub>2</sub> by saying the following:

*u*<sub>3</sub>: 'Vic said that Liz is tall.'

then,  $C_1 \neq C_2$  and  $u_1$  is an utterance of S in  $C_1$  that expresses p,  $C_1$  and  $C_2$  are relevantly similar, but  $u_3$  uttered in  $C_2$  is *not* a true disquotational speech report of  $u_1$  since  $u_3$  does not express the proposition that *Vic said Liz is tall for a third-grader on a third-grade basketball team* (which, according to the contextualist is what Vic uttered as  $u_1$ ) but *Vic said Liz is tall for a third-grader on a fourth-grade basketball team*.

The point then is this: making the condition of successful communication contingent upon two utterances of the same sentence being uttered in *relevantly similar contexts* is vague, counter-intuitive, and leads to contradiction.

Putting these criticisms aside, we might also insist that, given some articulation of what it means for two contexts to be relevantly similar, contextualists still make a miracle out of cases where individuals communicate across sufficiently diverse contexts. There are a couple ways out for the contextualist.

(1) *The Bite the Bullet Response*: Deny the possibility of communication by claiming that a failure of communication corresponds with the intuitions of language users about communication across diverse contexts.
 (2) *The Direct Response*: Claim that while this result does not correspond with the intuitions of language users about communication across contexts, language users are mistaken in thinking that they do communicate when contexts are sufficiently diverse.

Neither response is particularly attractive. With respect to (1), the contextualist might contend that two utterances of a sentence in sufficiently diverse contexts do not express

the same proposition, language users do not communicate in this scenario, and that a failure of communication accords with the intuitions of language users. Nellie Wieland (2010:47), for example, claims that "[w]hat we know when we reflect on our own linguistic practices is that inter-contextual reports that do not invoke a relevant degree of the original context cause communication breakdowns." In support of this claim, Wieland (2010:47-48, some modification) writes,

Imagine again that I am in a context with Lepore and looking in the kitchen for an apple to eat. I am hungry, and want a tasty red apple. The lights are out but I can just barely see an apple on the shelf that Anne has put there. I ask Lepore if the apple is red because I can't see it. He utters  $(u_2)$  [Anne said the apple is red]. Biting into the apple I discover a mouthful of fungal-diseased apple. Disgusted I say, "Dammit, Lepore, you knew I was looking for an apple to eat and there you go reporting minimal semantic content!" How does the reader know that I am looking for a red apple in the sense used in *C1* [In the sense of having red skin] and not the sense in *C2* [In the sense of having a red core from a fungal disease]? I established the context: I said I was hungry, and hungry humans don't like diseased applies. I provided enough context to frame the relevant meaning of the color predicate.

This response is not particularly informative for surely Lepore can reply. 'You asked if the apple was red and I told you that Anne said the apple is red.' Surely, Wieland can charge Lepore with failing to understand what *she meant* or failing to understand what she was trying to accomplish in *asking* if the apple is red, and we can even claim that Lepore is responsible if Wieland gets ill from eating a fungal apple. But, can we claim that Lepore's failure to understand what Wieland is trying to ask amounts to failing to understand what her utterance literally means, i.e. a failure to know a shared langauge? I don't we can for while Lepore may have difficult grasping Wieland's particular intentions in uttering a sentence in a particular context does not entail he does not grasp the literal meaning of the utterance.

A contextualist that takes strategy (2) says that language users are fundamentally mistaken about their beliefs concerning communication across sufficiently diverse contexts. That is, while a speaker and hearer believe they are collapsing upon the same proposition p, what really occurs in cases of diverse contexts is that the speaker expresses r and the hearer interprets q. Since the response clearly runs against intuitions, what

available evidence is there to support this hypothesis? The evidence cannot come from how the literal meaning of S is contextually enriched—for instance, if in a similar context, A enriches S as expressing p and B enriches S as q, then this is evidence that the literal meaning of S is not the same for A and B—since various enrichment procedures are sensitive to perspectival factors.

## 3.2.5. OBJECTION #3: DENY THE POSSIBILITY OF COMMUNICATION

No theorist has tried to bite the bullet and deny the possibility of communication in order to save contextualism (see Cappelen and Lepore 2005a:126-127).<sup>124</sup> Cappelen and Lepore (2005:126), however, speculate on how a radical contextualist might do so:

A Radical Contextualist might, of course, just bite the bullet and say something like: 'Look: There's no way to secure successful communication across contexts. When people find themselves with different background assumptions, different audiences, different perceptual conditions, it is difficult, very difficult indeed, to latch on to the exact same propositions. Is that such a big deal?'

They offer two responses to this bullet-biting strategy. First, they argue that this is not a bullet they are willing to bite because we do really communicate and understand what other people are saying. Second, they argue that biting this bullet leads to absurdity. For suppose you are asked to bite a bullet in the following way:

You ought to bite the bullet for when individuals find themselves embedded in different contexts, there is no guarantee of successful communication since the literal meaning of an utterance depends upon a process of free contextual enrichment.

If this is a bullet you are really willing to bite, then you ought, in some measure, be unsure about what bullet you are actually being asked to bite. That is, since asking

<sup>&</sup>lt;sup>124</sup> However, some have interpreted the MOC argument as representing minimalism's demand that shared content must be *guaranteed* for communication. For example, Daniel Wedgwood (2007:655) writes that "C&L's [Cappelen and Lepore's] position rests on the idea that anything short of a guarantee of shared content is disastrous for communication, so the validity of their arguments ultimately depends on the truth or otherwise of this idea." He argues that if minimalist criticisms of contextualism (specifically relevance theory) are to have any weight, they cannot merely be in opposition to the possibility of sharing content, since relevance theory contends that there is a reliable but fallible means to get at meaning. Instead, minimalists must understand their arguments as rejecting any theory that cannot guarantee complete content sharing (see Wedgwood 2007:660).

someone to bite a bullet is itself context sensitive, there is no guarantee you even understand what a bullet-biting proposal even means.

#### **3.3.** CONCLUSION

In this section, I argued that one reason for favoring minimalism over a radical version of contextualism is that the positing of a minimal proposition that cuts across diverse contexts is the best explanation for how communication occurs. In contrast to minimalism, contextualism—in its commitment to the view that knowledge of contextual factors plays a role in the determination of literal meaning—cannot adequately explain cross-contextual communication and seems to make communication a miracle.

## 4. ARGUMENT #3: FALLBACK CONTENT

Previously, I noted three different ways that a minimalist can be committed to the existence of a minimal proposition. There is a strong commitment to the logical and serial priority in its order of interpretation; there is a moderate commitment to the logical necessity but not the serial priority of a minimal proposition; and, finally, there is a weak commitment to its existence as a form of content that emerges in unique circumstances involving either a lack of contextual information or strong disagreement about the context. In the previous sections, I argued that (i) since semantic processing is modular, one ought to be strongly committed to the existence of a minimal proposition and that (ii) even if one is skeptical about the existence of a cognitive module dedicated to syntacticsemantic processing, since minimal propositions are necessary for the possibility of cross-contextual communication, one ought to at least have a moderate commitment to a minimal proposition. In this section, I argue that even if a minimal proposition is not explicitly (or even tacitly) cognized by the speaker or hearer in every context of use, there is still some minimal proposition that they could always entertain but it just so happens that they don't entertain this proposition because language users tend to be more concerned with what a speaker means rather than what he or she says. However, just because the literal semantic content of an utterance takes a backseat to speaker meaning does not mean that it has no function in linguistic activity. I argue that, in certain circumstances, minimal propositions play a role as fallback content, a maximally context-

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insensitive content that speakers can appeal to when characterizing what they are committed to in virtue of the words they use and the way in which they are put together.

On this approach, the role of the minimal proposition is not to explain the content first cognized in the bottom-up generation of meaning nor is it a layer of content posited to preserve the possibility of communication across context but it instead plays a critical role in clarifying what language users are committed to in virtue of the words they use.<sup>125</sup>

#### 4.1 WHAT IS FALLBACK CONTENT?

In the previous sections, minimal propositions have been defined as the literal interpretation of a syntactic form. It was claimed that this proposition was not only necessary for cognizing language and for communicating but also that it is an initial building block in the communication of speaker meaning. In this section, minimal propositions are still regarded as an important piece in the characterization of language and in communication but their role is significantly reduced. Namely, minimal propositions serve as a sort of non-cancellable, **fallback content**, viz., truth-conditional content expressed by utterances of sentence types that cannot be denied (without contradiction) by their speakers.

In order to get a clearer understanding of fallback content, it is first necessary to explain the notion of cancellability. The notion of cancelability is most prominently associated with Grice, who used it to identify conversational implicatures. Grice (1989a:44) writes:

You will remember that a putative conversational implicature that *p* is explicitly cancelable if, to the form of the words the utterance of which putatively implicates that *p*, it is admissible to add *but not p* or *I do not mean to imply that p*, and it is contextually cancellable if one can find situations in which the utterance of the form of words would simply not carry the implicature.

<sup>&</sup>lt;sup>125</sup> In addition, I think that fallback content approximates the content delivered as a result of following the linguistic direction principle (M1), it is resistant to the import of speech act content (linguistic intuitions) on literal semantic content (M2), and yet nevertheless expresses a proposition.

Thus, according to Grice, various forms of enrichment are *cancellable* by an explicit or contextual denial.<sup>126</sup> To illustrate, take the following sentence:

(1a) I've had breakfast.

In certain contexts, this sentence is likely to implicate the following proposition:

(1b) I've had breakfast today.

where *today* is a UC and the result of a process of free contextual enrichment. This enrichment, however, is explicitly cancelable by inserting *but not p* in (1a):

(1c) I've had breakfast *but not today*.

Further examples include:

- (2a) He's a good writer.
- (2b) He's a good writer but a terrible philosopher.
- (2c) He's a good writer, and I do not mean to imply that he is a bad philosopher.
- (3a) He ran to the edge of the cliff and jumped.
- (3b) He ran to the edge of the cliff and jumped off the cliff.
- (3c) He ran to the edge of the cliff and jumped, but he did not jump off the cliff.
- (4a) John has three cats.
- (4b) John has *exactly* three cats.
- (4c) John has three cats, but he does not have exactly three.

(5a) A: I'm out of petrol. B: There is a garage around the corner.

- (5b) A: I'm out of petrol. B: There is a garage around the corner, and it's open.
- (5c) A: I'm out of petrol. B: There is a garage around the corner, but it's not open.

In (1b)–(5b), there is a non-linguistically directed contextual enrichment from (1a)–(5a) respectively. Each of these contextual enrichments, however, is cancellable or denied (without contradiction) by (1c)–(5c) respectively. From these and other examples, we can generate a method for filtering out contextual enrichments, namely, if we let P and Q be

<sup>&</sup>lt;sup>126</sup> For an example of explicit cancellation, consider the proposition "John has three cats" might implicate the proposition *John has exactly three cats*, but this is cancellable by the utterance "John has three cats *but not exactly three*." For an example of a contextual cancellation, consider suppose Frank utters "John has three cats" and Frank is surrounded by a number of cats in John's house. See (Grice 1989a:44-46; Carston 2002:135-136).

sentences in English and q the proposition literally expressed by Q in context C<sub>1</sub>, both tests can be more precisely stated as follows:

(ECT): If an utterance of P conversationally implicates q in C, then an utterance of 'P but not Q' cancels the speaker's commitment to q. (CCT): If an utterance of P conversationally implicates q in C, then there exists a context where an utterance of P does not commit the speaker to q.<sup>127</sup>

With a general test available for filtering out contextual enrichments, there is a way to extract those enrichments that are not contained in the logical form of the sentence but are the result of an inference from the sentence and conversational norms (relevance, quality, etc.) found in the context. With this in mind, one way of characterizing the semantically minimal proposition is that the content that is left after a full cancellation test has taken place. Since contextual enrichments are identifiable and capable of being filtered out by testing to see whether *but not p* or by modifying the context in a way that the enrichment is denied without contradiction, *the minimal proposition is the content that is non-cancellable*. In short, the minimal proposition corresponds to the content of a sentence that cannot be cancelled without contradiction.

Why, in this context, might it be important to have a notion of fallback content? One role that it seems to play is that it allows for distinguishing between two different commitments a language user has: (i) those necessary to be a speaker of a language and (ii) those one has a conversational participant. Take, for example, an utterance of (1a) after John has been asked whether or not he wants to go to breakfast. To his interpreters, John's utterance conveys that *John has had breakfast today* and *John does not want to go to breakfast*. However, these commitments are made, on the assumption that John has certain conversational goals, namely to make his utterance informationally relevant or pertinent to the question. While such goals are important for communicational efficiency, they are not necessary criteria like using a grammar or abiding by conventions governing the interpretation of semantic primitives. John can rebuff his interpreters' inferences that he has had breakfast today and that he does not want breakfast by denying their

<sup>&</sup>lt;sup>127</sup> The formulation of these two tests is drawn from Blome-Tillmann (2008:157).

inferences and making his commitments more explicitly: 'I've had breakfast before, but not today. Yes, I do want to get some breakfast in the next hour.'

Using the notion of fallback content, it is not altogether clear, however, how to determinate minimal content. One way to do this is to treat (1a), (2a), (3a), and (4a) as not needing any further paraphrase or any form of free enrichment. Thus, the sentence 'John has three cats' expresses the proposition *John has three cats simpliciter*. This option, however, is problematic for cases like (1a) which seems to require a relativization to specific times and (4d) which requires a decision about whether or not John has exactly three cats or at least three cats. Thus, a second option is to treat non-cancellable content as what is *logically entailed* by a proposition. Thus,

- (1d) John had breakfast at *some time*.
- (2d) John is a good writer.
- (3d) John ran to the cliff and jumped.
- (4d) John has at least three cats.

The propositions expressed by these paraphrases are not cancellable for while it is not contradictory to say the following:

(4c) John has three cats, but he does not have exactly three.

It clearly is contradictory to try and cancel (4d), i.e.

(4e) John has three cats but not at least three cats. Contradiction!

Likewise,

(1e) John has had breakfast *but John has not had breakfast at some time*.
Contradiction!
(2e) John is a good writer, *but he is not a good writer*. Contradiction!
(3e) John ran to the cliff and jumped, *but he did not run to the cliff and jump*.
Contradiction!

Thus, one way of characterizing the minimal proposition is as the non-cancellable (or fallback) content expressed by a sentence-type uttered in context. Further, the cancellation test thus distinguishes what language users are committed to in virtue of uttering a sentence and what they are committed to in virtue of certain conversational

practices and norm that govern speech communities. The cancelability/non-cancelability distinction thus serves to mark a distinction between minimal and more pragmatically enriched propositions.

#### **4.2 Objections**

Problematic to the use of the cancellation test is that there are two principal objections to using whether or not certain content is cancellable in order to filter out enrichments that are not contained in the literal content expressed by the sentence. The first objection is that the content expressed by certain semantically minimal proposition is subject to cancellation (Carston 2002:138; Martínez-Manrique and Vicente 2009:13). That is, the cancellation test is ineffective because it overdetermines the content that is regarded as implicature by allowing for the cancellation of content that is supposed to be a part of the literal semantic content.

Consider the following utterance:

(5a) You are not going to die.

Martínez-Manrique and Vicente (2009:13) argue that it is possible to cancel the minimal reading of (5a). They write:

The minimal proposition conveyed by the sentence is typically regarded as something akin to 'you are immortal', while the contextually appropriate proposition (the 'implic*i*ture', in Bach's terms) is that 'you are not going to die (from that cut)'. On the one hand, it is possible to cancel the 'you are immortal' reading just by adding what has been left implicit in the original scenario, namely 'from that cut'.

Thus, they take the free contextual enrichment of (5a) to be:

(5b) You are not going to die from that cut.

and think that the minimal content of (5a) is the following:

(5c) You are immortal.

They think that this minimal content of (5a) expressed as (5c) is cancellable by way of adding what is implicit in the original scenario, i.e. (5b). If this is the case, then the

cancellation test fails at filtering out contextual components so as to get at the literal content of the sentence because it also cancels minimal content.

Similarly, Carston (2002:138), in considering the following triad:

(78a) He is in the grip of a vice.(78b) Part of Peregrine's anatomy is held fast in a clamping device.(78c) He is in the grip of a vice but no part of Peregrine's anatomy is caught in a clamping device.

argues that (78c) cancels the minimal proposition supposedly expressed by (78a), which is paraphrased by (78b).

The second objection to the use of the cancellation test is that it undermines the cancellation of implicatures because some non-linguistically-directed enrichments are *not cancellable*. Weiner (2006:128) writes:

There are cases in which the cancellability test fails. Even though the speaker's utterance of A implicates B, uttering something like 'A but not B' would not commit her to A without committing her to B. Indeed, in these cases the putative cancellation merely strengthens the implicature.

In support of this position, Weiner offers two cases where attempts to explicitly cancel the implicature fail to do so, and, even more, intensify the implicature.

*The Train Case:* Suppose that Alice and Sarah are in a crowded train; Alice, who is obviously able-bodied, is sprawled across two seats, and Sarah is standing. Sarah says to Alice, 'I'm curious as to whether it would be physically possible for you to make room for someone else to sit down.' The implicature is that Alice should make room. [...] Suppose now that Sarah adds, 'Not that you *should* make room; I'm just curious.' This has the form of an explicit cancellation of the implicature. Nevertheless, this implicature is not cancelled (Weiner 2006:128).

Weiner thus claims that Sarah's uttering of (6a) commits her to (6b) and she cannot cancel the implicature of (6b) by uttering (6c).

(6a) I'm curious as to whether it would be physically possible for you to make room for someone else to sit down.

(6b) You should make room for someone else to sit down.

(6c) I'm curious as to whether it would be physically possible for you to make room for someone else to sit down, *but I do not mean to imply that you should make room for someone else to sit down*.

Weiner argues that attempts to explicitly cancel the implicature only *reinforce* it more deeply. That is, it only reinforces Sarah's commitment that Alice should move. Consider now the second case:

*The Sex Pistols Case*: When the Sex Pistols sing 'God save the Queen', they flout a maxim akin to the first maxim of Quality for expressive utterances, 'Do not express a sentiment that you do not feel'. An ordinary patriotic citizen of the United Kingdom might sincerely express patriotism by singing 'God save the Queen', but the Sex Pistols obviously don't mean it; their utterance conveys something like 'Down with the Queen'. The next line of the song is 'We mean it, man'. This has a form of cancellation of the implicature, by instructing the listener to take the previous sentence literally. But in fact it merely intensifies the hostile sentiments expressed, by flouting the same maxim again. (Weiner 2006:128-129)

Weiner thus claims that John Lydon's singing of (7a) commits him to (7b) and he cannot cancel the implicature of (7b) merely by singing (7c).

(7a) God save the Queen.(7b) Down with the Queen.(7c) God save the Queen, but I do not mean to imply down with the Queen.

In the end, Weiner claims that since the explicit putative cancellation is also subject to conversational maxims, the mere form of *but not p* or *I do not mean to imply that p* are not sufficient to cancel certain implicatures.

## 4.2.1 MINIMALIST RESPONSES

In review, there are two objections to using the cancellability test to filter out contextual enrichments. The first, proposed by Martínez-Manrique and Vicente (2009) and Carston (2002), argues that *even* minimal content is cancellable and so the cancellation test fails because it cancels what it shouldn't. The second, proposed by Weiner (2006:128), argues that some enrichments are not cancellable and so the cancellation test fails because it cancel what it should.

In response to the objection from Carston (2002), note that that (78c) involves a denial of the semantic content expressed in (78a) as (78b). However, note that (78a) is ambiguous since 'He is in the grip of a vice' is ambiguous between *Some part of John's* 

*body or clothing is caught in a vice* and *John cannot remove a certain kind of bad character trait* (see Grice 1989 [1975]:25). Thus, there are two issues that need to be sorted out. First, there is the contextualist objection that ambiguity underdetermines literal meaning and it is only by appealing to contextual factors that this anything like an utterance's literal meaning can be supplied. Second, there is the more pertinent objection that the minimal content of a proposition can be cancelled.

The second objection presupposes that (78b) is part of the content of (78a) even though (78a) is ambiguous between two different propositions. I think that Carston's objection does not show that we can reject the minimal content of (78a); it is instead a denial of one way of disambiguating (78a). It is thus consistent to say that the cancellation test only occurs *after* terms have been disambiguated. That is, take the following proposition:

(8a) He ran a marathon.

Since "ran" is ambiguous, it is not clear which one of the two propositions (8a) expresses:

 $(8a_1)$  John organized, timed, and obtained sponsors for, the race.  $(8a_2)$  John physically ran the race.

Thus, the literal meaning of (8a) is underdetermined with respect to  $(8a_1)$  and  $(8a_2)$ . If this is the case, the cancellation test is designed, not to weed out structural or lexical ambiguity nor to precisify vague terms, but to filter out contextual enrichments that are not found in the sentence. Thus,



Once the disambiguation occurs, the force of Carston's objection disappears.<sup>128</sup>

Turning now to the second objection, the main thrust of Weiner's argument is that ironic or sarcastic utterance of P, which implicates q, followed by an ironic or sarcastic utterance of the *explicit* cancellation *but not q* does not cancel q. Instead, as the Train Case and the Sex Pistols Case shows, irony and sarcasm serve to *reinforce* the implicature. However, whether or not an implicature can be explicitly cancelled only forms one part of the cancellation test. As Blome-Tillmann (2008:159) has argued, what Weiner does not show is that (i) these implicatures cannot be cancelled *contextually* and (ii) assuming that there are contexts where P does not implicate q, then it seems plausible that there are contexts where P implicates q but q is explicitly cancellable.

To see this objection more clearly, consider again the triad of propositions from the *Train Case*.

(6a) I'm curious as to whether it would be physically possible for you to make room for someone else to sit down.

(6b) You should make room for someone else to sit down.

(6c) I'm curious as to whether it would be physically possible for you to make room for someone else to sit down, *but I do not mean to imply that you should make room for someone else to sit down*.

Weiner has argued that the explicit cancellation in (6c) reinforces rather than cancels the implicature in (6b). However, it seems as though this implicature could be cancelled if (6a) were uttered in the following context:

*Nerve Agent Context #1*: Suppose that a nerve agent has populated the city. Many individuals show temporary signs of being able-bodied, but the agent is known to produce blotchy skin and temporary paralysis. Suppose that Sarah has done

(1a) You are not going to die.

<sup>&</sup>lt;sup>128</sup> I am less convinced that I have a good reply to Martínez-Manrique and Vicente (2009). However, consider the following sentences where (1a) is the utterance, (1b) is the minimal reading, and (1c) is a cancellation of the minimal content expressed by (1b):

<sup>(1</sup>b) You are immortal

<sup>(1</sup>c) You are not going to die from that cut.

One way to respond is to deny that (1b) is the correct reading of (1a). What (1a) really says is that *you are not going to die simpliciter*.

extensive research on the agent, is wearing a uniform indicating her credentials, and she also notices that Alice's skin is extremely blotchy.

Notice that in the *Nerve Agent Context*, the implicature in (6b) is cancellable contextually. Even further, Blome-Tillmann (2008:159) argues that given the fact implicatures can be identified with the contextual cancellation test, a version of the explicit cancellation test can also be preserved. Consider the following case:

*Nerve Agent Context #2*: Suppose that there exists a *rare* nerve agent. Individuals infected by the agent show signs of being able-bodied, but the agent is known to produce blotchy skin and temporary paralysis. Suppose that Sarah has done extensive research on the agent, is *not* wearing a uniform indicating her credentials, and she also notices that Alice's skin is extremely blotchy.

Given the above context, now imagine the following conversation:

Sarah: I'm curious as to whether it would be physically possible for you to make room for someone else to sit down. Alice: What's that supposed mean. Are you implying that I should move? Sarah: *No, not at all.* I've been doing a research on a rare nerve agent and you seem to show all of the symptoms.

In the above example, notice that Sarah is able to explicitly cancel the implicature.

Thus, while Weiner is right to point out that an explicit denial of an implicature only serves to reinforce that implicature, his objection does not undermine the general method of testing for implicatures. Weiner's objection to the use of the cancellation test is ineffective because it narrows the method of cancellation test to explicit cancellations within a single context, but what the above examples show is that filtering out non-linguistically-directed contextual ingredients is not merely a process of explicitly denying the implicature from within a single context.<sup>129</sup>

<sup>&</sup>lt;sup>129</sup> In response to the second objection, Borge (2009:151) argues that Weiner needs to assume that "a sarcastically uttered cancellation of a conversational implicature counts as an (attempted) cancellation." But, in the Sex Pistols Case, the Train Case, and the utterance where a mother says to her child 'You are not going to die' are not genuine cancellations. According to Borge, "to cancel a conversational implicature is a speech act" and Lydon (in the Sex Pistols case) does not perform such an act by simply uttering 'We mean it, man'.

## 4.3. CONCLUSION

In this section, I argued that minimalism is consistent with the fact that language users (or contextual circumstances) can filter out various contextual enrichments of a proposition and supply a proposition's literal semantic content. In contrast to content that can be filtered out by a cancellation tests, minimal content is content that cannot be denied without contradiction. Since contextualism rejects the existence of a minimal proposition, it must show that cancellation tests are ineffective, but I have argued above that contextualist objections are not convincing.

# 5. THREE ARGUMENTS FOR SEMANTIC MINIMALISM

In the previous chapter, I have argued that minimalism is capable of responding to a variety of objections. In this chapter, I have argued that there are three, independent arguments for semantic minimalism.

Level of	Description of	Argument	Description of Argument
Commitment	Minimal		
	Proposition		
strongest	logically and	Semantic	minimalism but not
	serially prior	Modularity	contextualism is consistent
			with modular linguistic
			processing.
moderate	logically but not	Miracle of	minimalism but not
	serially prior	Communication	contextualism has trouble
			explaining cross-contextual
			communication where contexts
			are sufficiently diverse.
weakest	neither logically	Fallback Content	minimalism better explains the
	nor serially prior		distinction between what a
			speaker is committed to in
			virtue of the sentence he/she
			utters and what a speaker is
			committed to in virtue of
			his/her beliefs about the world.

The *Argument from Semantic Modularity* set out from the claim that the mental machinery of language users is both sensitive and dedicated to certain formal features found in orthographic and phonetic input. This mental machinery operates on these

features to generate the literal semantic content of an utterance, i.e. a minimal proposition. Minimal propositions are not only necessary for determining speaker meaning-insofar as implicatures inferences from context and literal meaning-but are serially prior in the generation of speaker meaning. Since this mental machinery is consistent with minimalism but not with contextualism, it was argued that minimalism is preferred. Further, this argument gave some account of the relation semantic facts have to psychological facts. The Miracle of Communication Argument pointed out that minimal propositions are necessary for making sense of cross-contextual communication. If it is supposed that context always plays a role in the interpretation of the meaning of a sentence, then communication across diverse contexts appears to be a miracle. Since minimalism claims that minimal propositions are contextually-insensitive, minimalism is consistent with the claim that we do, in fact, communicate across diverse contexts. Finally, the Argument from Fallback Content claims that by using Grice's cancellation test, we can isolate minimal propositions from enriched propositions. While neither necessary for communication nor serially prior in the generation of contextually-enriched propositions, the isolated minimal proposition plays an important role as a type of *fallback content*—the proposition that a language user is committed to in virtue of the sentence the he/she uttered and not the proposition that he/she is committed to in virtue of conversational norms.

# CHAPTER 5 PEIRCE'S SUPPOSED CONTEXTUALISM

## **1. INTRODUCTION**

In previous chapters, I argued for treating our understanding of the literal meaning of a sentence as a formal, mostly context-insensitive process. In chapter 3, I argued that various objections by contextualists to this position are not persuasive and in chapter 4 I presented three independent reasons why this theory is preferable to contextualism. In this chapter, I consider how the contextualist-minimalist debate has played out in the philosophy of Charles S. Peirce and in Peirce scholarship. The organization of this chapter is as follows. Section 2 argues that a consideration of a Peirce's view on the above debate is important both within Peirce scholarship proper and within the broader debate between contextualism and minimalism. Section 3 reviews three arguments put forward by Peirce scholars which claim that Peirce was a contextualist. I argue that these arguments are not convincing and leave open the possibility that Peirce was a minimalist. In section 4, I present two additional arguments for contextualism that Peirce considered but argue that they too leave open the possibility of a Peircean minimalism. Finally, in section 5, I provide a sixth—and what I take to be the strongest—argument for a Peircean contextualism.

This chapter offers three contributions to contemporary research. First, in considering six different arguments proposed by Peirce (three of which have not appeared in the literature before), it advances contemporary scholarship by presenting Peirce, not merely as a precursor to Morris in the development of the semantics-pragmatics distinction, but as a highly original and critical thinker on the topic. Second, many of the arguments that Peirce considers anticipate those that are currently taking place in the analytic philosophy of language. This suggests that Peirce's work is highly relevant to
contemporary analysts working on the problematic semantics-pragmatics divide. Third, and finally, Peirce's consideration of the semantics-pragmatics distinction is noteworthy in that his perspective is distinctively *semiotic*, whereas the lean of contemporary analysts is highly *linguistic*. This feature of Peirce's consideration of the problem is striking in that it makes the semantics-pragmatic divide a more general (and complex) problem that encompasses not only language but any use of signs. And, this semiotic perspective is important for it offers minimalists an argumentive maneuver against contextualists.<sup>130</sup>

# 2. WHY PEIRCE?

Before addressing the theses articulated above, it is first necessary to address a preliminary objection:

Why would anyone consider Peirce in the context of this topic?

There are a couple of answers to this question. First, Peirce<sup>131</sup> is frequently mentioned in accounts of the genesis of pragmatics. It is often the case that the minimalism-contextualism debate is framed by a short historical account of how early philosophers understood the semantics-pragmatics debate. A typical example is (Szabó 2006:364-5) who reviews three different ways that the semantic/pragmatic divide has been drawn in the literature. Szabó and others link Peirce to the *Semiotic Conception* of the semantics/pragmatics divide. His principal contribution to the topic seems to be his influence upon Charles Morris (1955 [1938], 1946), who is credited for first putting forward the distinction in his contribution to the *International Encyclopedia of Unified Science*. A number of other analysts working within the context of contemporary analytic discussion on the semantics-pragmatic interface refer to him with some amount of regularity (e.g. Horn and Ward 2006:xi; Recanati 2006:443), but their discussion and engagement with Peirce's work is extremely brief, uncritical, and they occasionally misspell his name as 'Charles Pierce.' Some Peirce scholars have been critical of too

<sup>&</sup>lt;sup>130</sup> In previous chapters, I have referred to this maneuver as *The Broad Language Reply*.

<sup>&</sup>lt;sup>131</sup> Abbreviations for Peirce's work follow these conventions: CP#.# = (Peirce 1960); HPPS:#: (Peirce 1985); EP1:# = (Peirce 1992a); EP2:# = (Peirce 1998); SS:# = (Peirce 1977); RLT:## = (Peirce 1992b); W#.# = (Peirce 1982-2000); R#:# = (Peirce 1963-1966, 1966-1969, 1967, 1970). In addition, rejected manuscript pages will have an 'x' after the manuscript page number.

closely associating Morris's behavioristic (stimulus-response) understanding of semiosis with Peirce's broader, scientific study of signs (e.g. Pietarinen 2004:300; Nöth 2011). Thus, one reason for considering Peirce in relation to this topic is that he has been and continues to be credited for how semantics/pragmatics distinction was initially drawn. Clarifying the precise nature of this divide is important both historically and for articulating what is at stake in the debate.

A second reason for the relevance of considering Peirce in relation to this topic is that there has been growing interest among Peirce scholars about the role extralinguistic context plays on the determination of the literal semantic content. For example, Risto Hilpinen (1992:478) notes that "[o]ne of the most interesting insights of Peirce's theory of the proposition was his observation that the identity of the proposition uttered on a certain occasion is often determined by the context of utterance." This makes Peirce's work stand out in two, seemingly conflicting ways. On the one hand, in insisting upon the role context plays in determining meaning, some Peirce commentators have stressed Peirce's characterization of meaning as one that departs from modern *formal* semantic theories. For example, according to Helmut Pape (1999:594; cf. CP3.419), Peirce's theory is one where "linguistic meaning is radically context-dependent because [...] it is related to our perceptual ability to sense and to select what is immediately experience without our active contribution." This leads Pape to contrast a purely formal approach to semantics that is regarded as acontextual and a Peircean approach where linguistic meaning is considered to be irreducibly dependent upon context (see Pape 1999:605-611).

On the other hand, Peirce is sometimes characterized not as offering a theory that radically contrasts formal approaches to meaning but a more robust, *yet still formal*, theory since his attempts to characterize language from a formal point of view are not separated from an appreciation of the role context plays in interpretation of linguistic utterances.<sup>132</sup> On this approach, the contrast between formal and non-formal approaches

<sup>&</sup>lt;sup>132</sup> For an example of trying to partition context from semantic theory is Carnap who, in his *The Logical Syntax of Language* (1937:168), writes that unlike logical and scientific languages, natural language contains "sentences whose logical character [...] depends not only upon their syntactical structure but also upon extra-syntactical circumstances." By contrast, scientific and logical languages are capable of having a pure semantics that contain, Carnap writes, "*no expressions dependent upon extra-linguistic factors*."

to meaning is overstated given that the formal semantic theories being contrasted are *context-free* theories that assume that for any sentence in a natural language, you can provide a corresponding description of what that sentence which does not rely upon the context. As I have argued earlier, it is possible for a formal semantic theory to make room for context sensitivity provided this is sensitivity is triggered by certain syntactic features of the sentence, the lexicon, or some other sign.

More explicitly in connection with the contextualism-minimalism debate, Daniel Rellstab (2008:318, 2010:192-194) has claimed that Peirce would have rejected literalist (or minimalist) theories of semantic content because Peirce was cognizant of the pervasive feature of indexicality and of ironic uses of language. Indexicality is such a pervasive feature in Peirce's work that Rellstab (2008:322) classifies Peirce's position as a precursor of "radical pragmatics" or "radical contextualism."<sup>133</sup> But, even though Rellstab ties Peirce to radical contextualism and to a rejection of the code-theory of sentence meaning and communication,<sup>134</sup> Rellstab argues that Peirce's work does not follow anti-formalist trends of radical pragmatics but bears a close similarity to Discourse Representation Theory.

A final example of how Peirce is positioned in the minimalist-contextualist literature is found in Winfried Nöth's (2011) attempt to articulate the semiotic precursors of modern pragmatics in Peirce's semiotic theory. Nöth (2011) claims that Peirce would have rejected many of the distinctions undergirding the semantic-pragmatic interface debate by rejecting the view that utterances have a semantic or conventional meaning. Rather than meaning being determined by conventional rules or a speaker's intentions, Peirce argued that meaning is determined by the habits and the common ground of language users, as well as the collateral experience surrounding an utterance. Other examples include Peirce's relation to the work of Paul Grice and relevance theory (Pietarinen 2004, 2005b), Bergman's work on Peirce's theory of communication (Bergman 2002, 2009), Peirce's contributions to speech act theory (Brock 1981; Nöth

<sup>(1937:168).</sup> For a criticism of this feature in Carnap's work, see Yehoshua Bar-Hillel (1970 [1963]:123). See also (1954:366).

<sup>&</sup>lt;sup>133</sup> Rellstab (2008:322) calls the position "radical pragmatics" which is a different name for the radical contextualist position.

<sup>&</sup>lt;sup>134</sup> This latter rejection involves a link to Sperber and Wilson's inferential or computational model of communication (Sperber 1994; Sperber and Wilson 1995; Wilson and Sperber 2004).

2011), rhetoric (Colapietro 2007), phonology, grammar, and semantics (Shapiro 1983), and other topics concerning semantics and discourse. Thus, a second reason for the relevance of considering Peirce in relation to this topic is that there has been growing interest among Peirce scholars concerning this explicit debate and the resolution of the debate has its connection to a number of other topics in scholarship on Peirce.

Third, and finally, contrary to what some have claimed, <sup>135</sup> Peirce seems to have made all of the right conceptual distinctions that would allow for him to have a position on this topic (see Pietarinen 2004:310-311). That is, it is important to make a number of distinctions (e.g. between sentence meaning, literal meaning, speaker meaning, etc.) that are central to clarifying the problem and to determine whether or not Peirce made these distinctions as well. In the remainder of this section, I argue that Peirce was very cognizant of various levels of meaning, and thus conclude that there is no bar keeping him from entering the contemporary debate. Case in point is that Peirce distinguished between propositional content and speech act content. In fact, Peirce antedates speech act theorists by delineating the propositional content of a linguistic utterance from speech act content. That is, more than fifty years before Austin, Searle, and speech act theory arose, Peirce delineated a host of concepts central to speech act theory, including the crucial distinction between the proposition content and the speech act content of an utterance.<sup>136</sup> For example, in the unpublished and undated manuscript titled "On the Logical Nature of the Proposition" (R792 [n.d.]), Peirce comments on how statements are frequently confused not only with propositions, but also with assertions. Peirce writes,

Mrs. Franklin's pointing out, in her lucid manner, that one and the same proposition may receive many forms of statement rejoices me, not only as a logician, but as a lover of logical English. A statement is, properly, an act or the result of an act performed with a proposition. But the word 'statement' is not only, as Mrs. Franklin says, often applied to the proposition itself, but this noun, as well as the verb 'to state,' are currently still worse abused to signify an act or the product of an act performed with a statement (in the proper sense). Namely, in

<sup>&</sup>lt;sup>135</sup> For example, Herbert Clark (1996:159-160) writes that "Peirce also didn't distinguish between the type of thing a symbol (like "give" or "bird") could potentially signify and the type of thing a person actually uses it to signify on a particular occasion. Peirce was missing several distinctions that were made only fifty years later."

<sup>&</sup>lt;sup>136</sup> Thibaud (1997:271, 307n) claims that Peirce's distinction between propositional content and assertion is analogous to the one drawn by Frege (1972 [1879]:111-112) and one unrecognized by Russell (1956b).

such lingo 'statement' and 'state' are synonyms of assertion and assert. (R792:1 [n.d.]).

Although Peirce did not go on to explain his own theory of the proposition in the above manuscript, he thought that these distinctions "are not 'minor points' in logic." (R792:1 [n.d.]). What is important to recognize is that Peirce understood the *proposition* that an utterance expresses to be distinct from what one does with (the speech act) the proposition (i.e. not a statement) and distinct from the effect of the speech act (i.e. not an assertion). In his 1903 *Syllabus*, Peirce reiterates this distinction more vividly when he writes the following:

To fix our ideas let us set down the proposition 'Tully has a wart on his nose'. That is a proposition whether it be true or not, whether anybody asserts it or not, and whether anybody assents to it or not. For an act of assertion supposes that, a proposition being formulated, a person performs an act which renders him liable to the penalties of the social law (or, at any rate, those of the moral law) in case it should not be true, unless he has a definite and sufficient excuse; and an act of assent, is an act of the mind by which one endeavors to impress the meaning of the proposition upon his disposition, so that it shall govern his conduct, including thought under conduct, this habit being ready to be broken in case reasons should appear for breaking it. Now in performing either of these acts, the proposition is recognized as being a proposition whether the act be performed or not. Nor can a sound objection be grounded on the fact that a proposition is always understood as something that *might be* assented to and asserted (R478:58-59 [EP2:278, 1903, *Syllabus*]).

In distinguishing the proposition expressed by an utterance and the assertory or speech act content, Peirce claimed that the proposition can be interpreted independent of the *act* of utterance itself. Peirce writes that the "proposition need not be asserted or judged. It may be contemplated as a sign capable of being asserted or denied. The sign itself retains its full meaning whether it be actually asserted or not" (EP2:292-293 [CP2.252; R540, 1903, *Syllabus*]).

Peirce continually insisted upon the distinction between a proposition and an assertion, as well as delineating propositions from a variety of other illocutionary acts. He writes that one and the same proposition can be affirmed, denied, judged, doubted, inwardly inquired into, questioned, wished for, asked for, commanded, taught, and merely expressed (see EP2:312 [NEMIV:248; R517, 1904]). Peirce claimed that assertion

"is not mere saying, but is *doing*" (CP5.546), argued that "the act of assertion is an act of a totally different nature from the act of apprehending the meaning of the proposition" (CP5.30), that affirmation "is not a pure act of signification" but performative insofar as it "is an exhibition of the fact that one subjects oneself to the penalties visited on a liar if the proposition asserted is not true" (CP2.337). As a performative, Peirce defined affirmation as "an *act* of an utterer of a proposition to an interpreter, and consists, in the first place, in the deliberate exercise, in uttering the proposition, of a force tending to determine a belief in it in the mind of the interpreter" (EP2:312-3 [NEMIV:249; R517, 1904], my emphasis).

Thus, in short, there are three reasons why Peirce's work ought to be considered relevant to the contemporary debate between minimalists and contextualists. First, Peirce has had a historical influence on the origination of the debate and continues to be present in many of the contemporary discussions on the topic. Second, Peirce's position on the topic is of interest (directly and indirectly) to Peirce scholars. Third, there is no conceptual bar keeping Peirce from having a unique position on the matter.

# 3. THREE ARGUMENTS FOR A PEIRCEAN CONTEXTUALISM

In this section, I articulate three arguments put forward in the literature that claim there is good reason to associate Peirce with the contextualists. I argue that these claims are not plausible and there is good reason to regard them as inconclusive. A number of Peirce scholars have interpreted Peirce as being a precursor to some sort of contextualism, e.g. Radical pragmatics (Rellstab 2008:322, 332; cf. Recanati 2006), Discourse-Representation theory (Sowa 1997:432-436; Pietarinen 2010:350; Rellstab 2008:333, 2010:195n5; cf. Kamp and Reyle 1993), Default semantics (Rellstab 2008:332; cf. Jaszczolt 2005), Relevance theory (Pietarinen 2004:309-310, 2005a, 2005b, 2006; Rellstab 2008:332; cf. Barwise and Perry 1999 [1983]).<sup>137</sup> Linking Peirce to contemporary forms of contextualism has been supported by three arguments:

<sup>&</sup>lt;sup>137</sup> For an overview of these theories and their relation to contextualism, see chapter 2.

(i) the *Indexical Argument*, (ii) the *Argument from Indeterminate Word Meaning*, and (iii) the *Argument from Interpretants*.

#### **3.1. THE INDEXICAL ARGUMENT**

The *Indexical Argument* is found in (Rellstab 2008, 2010). Initially, the *Indexical Argument* took the form of a contrast between Kaplan's and Peirce's analysis of indexicals. According to Kaplan (1989b), indexical expressions—in being functions from context to semantic content—are claimed to have a constant character but variable semantic content. This is because while the *character* of indexicals is antecedently fixed by linguistic conventions, the semantic content of these expressions will vary depending upon the context in which they are uttered. According to Rellstab (2008:320), Peirce's approach differs insofar as indexicals encode "restrictions" or "guidelines" that aid interpreters in the active process of identifying the objects of indices. This line of reasoning is condensed in a later essay by Rellstab (2010:193-194), where he reasons as follows:

If every sentence contains indices, and if interpreters must actively resolve the indices of the sentence by way of finding the objects meant in order to interpret the sentence as so connected with the object [...], then a sentence becomes only meaningful when interpreted by an interpreter and when applied in a specific context.

Thus, the *Indexical Argument* appears to be that Peirce is a contextualist because of the following argument:

(i) All sentences that are capable of expressing a proposition contain an index or indices.

(ii) Indices are contextually-sensitive and require interpreters to resolve the referents of these indices.

(iii) The resolution by interpreters is not a syntax-driven procedure as minimalists contend but an active, process of free contextual enrichment as contextualists contend.

(iv) Therefore, Peirce's allegiances are with contextualists rather than minimalists.

The crucial question in deciding the legitimacy of this argument concerns (iii), i.e.

whether sentences with lexical indices require the *active, context-ruled* working out of their interpreters (by a process of free contextual enrichment) or whether the active working out of the referents of these indices is compatible with a formal approach to literal meaning. To support the former position, Rellstab points to R409 ([1893] The Essence of Reasoning, *Grand Logic*) where Peirce distinguishes between different types of linguistic indexicals: (1) personal indicatives (I, thou, we), (2) direct indicatives (this, that), (3) relative pronouns (he, she, it, they, which), (4) adverbs and prepositions. Rellstab argues that the meaning of each of these different types of expressions critically depend upon the context in which they are uttered and require that the interpreter take an active part in examining the context in order to determine their meaning. But, taking a closer look at R409, Peirce's answer to the above question is less than clear-cut. While Peirce is emphatic that interpretation by hearers is essential to linguistic understanding, he is less clear on *what kind of meaning* this active investigation involves. For example, with respect to understanding demonstratives, he writes:

Nor does *this* or *that* tell to what they refer. They only warn the hearer he must use his power of observation to find out *what is meant*. (R409:96).

There are two points to make with respect to this claim. First, Peirce says that active interpretation by language users is needed to determine *what is meant* by an utterance and not what the *utterance says*. Although it is not decisive that Peirce is making a distinction between the meaning of the sentence-relative to the context and speaker meaning, it remains an open possibility that determining what a speaker means when she utters a sentence requires interpreters to examine features of the context that cannot be accounted for in a formally-driven way but determining the literal meaning of an utterance is a formally-driven process.

Second, while Peirce is committed to lexical indices requiring interpretation from hearers, he seems to indicate that understanding the meaning of an index can be a *passive* exercise. That is, Peirce seems to allow for such passive rule-driven interpretation when he distinguishes between two different senses of what it means for indicative "to show" their referents. Peirce writes:

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But two totally different things are confounded in all words meaning to show. One is monstration [...], to stick out or to make stick out by thinking; as when a temperance lecturer *shows* people the evils of dram-drinking by brining the details before their imagination. [...]. The other kind of *showing* leaves the person shown to see the why and wherefore if he can; the shower is nothing but a guide-post, *pointing* out the way which the pointee can investigate for himself, or else obey unconditionally and with *docility* the  $\delta\iota\kappa\eta$  he is taught. I am inclined to think that the historic legitimacy, if traced back far enough, is in favor of using *indicative* in the very way which I propose, whether legitimately or illegitimately, to use it. (R409:99).

In the above passage, Peirce indicates that it is not the case that in order to understand the literal meaning of an indexical expression, language users must actually investigate (or search the context for) the *intended* referent. Instead, Peirce notes that language users cognize the meaning of an index insofar as they understand that it *points the way* to the referent. Thus, from the mere fact that the interpreters are an essential ingredient in determining the meaning of an utterance does not link Peirce decidedly to a contextualist account for (i) free contextual enrichment might be necessary for what a speaker *means* and not way he *says* and (ii) Peirce allows for a level of meaning where the semantic values are supplied by a rule-driven process.

Thus, Rellstab's argument is somewhat of a non-starter since it does not show that our understanding of what an indexical expression means cannot be understood in terms of the function it serves in pointing out a referent. Both minimalists and contextualists agree that the process of actually determining the particular referent of an indexical expression is a pragmatic ability that requires an appeal to context, but what distinguishes the contextualist from the minimalist is that minimalists, in ascribing to the linguistic-direction principle, think that the resolution of contextually-sensitive expressions is directed by linguistic, syntactic, or context-independent constructions. Peirce's analysis of lexical indices (personal indicatives, direct indicatives, etc.) in R409 is not evidence for contextualism but is consistent with the minimalist's agenda to formalize how context-sensitivity plays a role in determining literal semantic content. For instance, *first-person pronouns* are indices, are regarded as contextually-sensitive by minimalists and Peirce, and both seem to think that interpreters are constrained in their interpretation by conventions associated with the meaning (or character) of the lexical index. Thus, the mere fact that indexicals are contextually-sensitive and require interpreters to observe

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features of the context in order to resolve the referents of these indices does not make Peirce a contextualist.<sup>138</sup>

Further, the mere fact that language has an underlying formal structure does not commit Peirce to adopting either minimalism or contextualism. In fact, Rellstab has argued that one of the major merits of Peirce's view is that it illustrates how a Peircean contextualism does not require a complete abandonment of a formal treatment of language. His suggestion is that a Peircean contextualism bears affinities to Discourse-Representation Theory (DRT).<sup>139</sup> However, I think this affinity is rather limited due to the fact that DRT is primarily concerned with the interaction of logical form and *linguistic* context, while Peirce was equally interested with the role of pronouns upon *extra-linguistic context*.<sup>140</sup> In claiming that the function of pronouns is to indicate what type of contextual factors are needed to make an utterance significant, Peirce took pains to classify various types of pronouns according to the sort of contextual information they required. While Peirce classified a variety of indexical expressions, I focus upon three types: (i) personal indicatives (I, thou, we), (ii) direct objective indicatives (this, that), and (iii) relative indicatives (he, she, it, they, which). But, Peirce differentiates personal indicatives from *relative* indicatives by claiming that there are systematic conventions governing how to match personal indicatives to features external to the utterance. For example, in the case of the use of the first-personal pronoun, Peirce claimed that 'I' and 'you' are directives, rules, or functions that take contexts as arguments and yield a

<sup>&</sup>lt;sup>138</sup> One reason for thinking that Peirce should be understood as a minimalist is that he thinks that the function of an index is to direct interpreters to the referent and because Peirce took great pains to show how a variety of lexical indices—whose semantic values are contextually supplied—are directed by a linguistic, syntactic, or context-independent construction. For example, concerning pronouns, Peirce writes that

*Example 5.* Pronouns are words whose whole object is to indicate what kind of collateral observation must be made in order to determine the significance of some other part of the sentence. "Which" directs us to seek the quaesitum in the previous context; the personal pronouns to observe who is the speaker, who the hearer, etc. The demonstrative pronouns usually direct the sort of observation to the circumstances of the utterance (perhaps to the way a finger points) rather than to the words. (R318:066; EP2:406 [1907]).<sup>138</sup>

In the above example, Peirce notes that the relative pronoun 'which', the personal pronouns 'I' and 'you', and demonstratives like 'that' and 'this' provide indications function to indicate what collateral information is required.

<sup>&</sup>lt;sup>139</sup> For more on Discourse-Representation Theory, see chapter 2.

<sup>&</sup>lt;sup>140</sup> Rellstab notes this when he writes that "Peirce's EG [existential graphs] are pragmatic through and through. Peirce was interested in showing how the meaning of a sentence and the situation of use interact."

corresponding member of the context (the speaker and the hearer, respectively) as values. However, while personal indicatives rely upon contextual factors *external* to the linguistic context, *relative* indicatives, by contrast, direct language users to features *internal* to the linguistic context of an utterance. Peirce writes,

*Relative* pronouns direct us to observe, not outward objects, but the words that have been used, and then meanings. Relative indicatives are absolutely essential to a logical language; and there are more of them than grammarians notice. Thus, *this* and *that* are more commonly relatives than direct indicatives. *He, she, it, they*, are almost always of that nature. (R409:101-2 [1893],§62 of Chapter VI. The Essence of Reasoning, *Grand Logic*).

Or again,

"Which" directs us to seek the quaesitum in the previous context; the personal pronouns to observe who is the speaker, who the hearer, etc. The demonstrative pronouns usually direct this sort of observation to the circumstances of the utterance (perhaps to the way a finger points) rather than to words. (EP2:406 [1907).

Thus, in contrast to DRT, Peirce believed that semantic features that depend upon either the linguistic or extralingusitic contexts can be directed by a linguistic, syntactic, or context-independent construction. And, in sum, neither the active resolution of lexical indices by interpreters nor certain perceived affinities with DRT show that Peirce advocated a form of contextualism.

#### 3.2. THE ARGUMENT FROM INDETERMINATE WORD MEANING

One popular argument for contextualism is the argument from indeterminate word meaning. The general thrust of the argument is that if words are indeterminate without some form of free contextual enrichment, then the interpretation of utterances of sentences fail to even express literal semantic content (truth conditions), and so minimalism radically underdetermines literal meaning. The basic idea is that determining the literal meaning of a sentence cannot be achieved by decoding words and composing them according to syntactic rules because this process yields *no definite proposition* or truth-conditional content. Instead, the meaning of words must be adjusted, 'modulated,' or freely enriched by drawing upon the context.<sup>141</sup> A classic example involves the use of adjectives. For example, color terms like 'red' apply differently depending upon the object they are being applied to. So, for example, the conditions under which a table is red are different from conditions under which a vase is red, which are different under which a bird is red.<sup>142</sup> Lahav writes,

Consider the adjective 'red.' What it is for a bird to count as red is not the same as what it is for other kinds of objects to count as red. For a bird to be red (in the normal case), it should have most of the surface of its body red, though not its beak, legs, eyes, and of course its inner organs. Furthermore, the red color should be the bird's natural color, since we normally regard a bird as being 'really' red even if it is painted white all over. A kitchen table, on the other hand, is red even if it is only painted red, and even if its 'natural' color underneath the paint is, say, white. Moreover, for a table to be red only its upper surface needs to be red, but not necessarily its legs and its bottom surface. Similarly, a red apple, as Quine pointed out, needs to be red only on the outside, but a red hat both inside and outside, and a red watermelon is red only inside. For a book to be red is for its cover but not necessarily for its inner pages to be most red, while for a newspaper to be red is for all of its pages to be red. For a house to be red is for its outside walls, but not necessarily its roof (and windows and door) to be mostly red, while a red car must be red in its external surface including its roof (but not its windows, wheels, bumper, etc.). A red star only needs to appear red from the earth, a red glaze needs to be red only after it is fired, and a red mist or a red powder are red not simply inside or outside. A red pen need not even have any red part (the ink may turn red only when in contact with the paper). In short, what counts for one type of thing to be red is not what counts for another. Of course, there is a feature that is common to all the things which count (nonmetaphorically) as red, namely, that some part of them, or some item related to them, must appear wholly and literally redish [sic]. But that is only a very general necessary condition, and is far from being sufficient for a given object to count as red (Lahav 1989:264).

In Peirce scholarship, the argument can be found in (Rellstab 2010; Nöth 2011). For them, propositions are only achieved by appealing to contextual factors, conversational norms, and through coordination with one's interlocutors (see Rellstab 2008:323-324). Rellstab's (2010:194) version of this argument runs as follows:

(i) Terms qua symbols are general.

<sup>&</sup>lt;sup>141</sup> See (Recanati 2004:131; Ruhl 1989:85-89). Ruhl (1989:85) writes that modulation is any use of language that modifies what language (independent of context) contributes.

<sup>&</sup>lt;sup>142</sup> See (Travis 1997, 1981:16, 2000; Lahav 1989:264; Crary 2007:75-77; although see Agler 2011b).

(ii) The exact meaning of symbols depends upon how they are used in a specific situation.(iii) Without free contextual enrichment, the meaning of a symbol is indeterminate.(iv) Therefore, Peirce is a contextualist.

Evidence for (iii) is found, according to Rellstab (2010:194), in Peirce's claim that terms (or symbols) like 'red' are subject to growth, transformation, and mutability given the context in which they are used (see EP2:264 [1903]). In addition, Rellstab claims that the argument from indeterminate word meaning is directly supported by a passage from Peirce's 1905 *Monist* essay "Issues of Pragmatism" (EP2:346-359, CP5.438-463, P1080). The passage reads:

In another sense, honest people, when not joking, intend to make the meaning of their words determinate, so that there shall be no latitude of interpretation at all. That is to say, the character of their meaning consists in the implications and non-implications of their words; and they intend to fix what is implied and what is not implied. They believe that they succeed in doing so, and if their chat is about the theory of numbers, perhaps they may. But the further their topics are from such presciss, or "abstract," subjects, the less possibility is there of such precision of speech. In so far as the implication is not determinate, it is usually left vague; but there are cases where an unwillingness to dwell on disagreeable subjects causes the utterer to leave the determination of the implication to the interpreter; as if one says, "That creature is filthy, in every sense of the term" (EP2:351 [1905]).

First, does the growth of the literal meaning of words support the claim that wordmeaning is indeterminate and thus support a reading of Peirce as a contextualist? On the one hand, this depends upon whether "the growth of symbols" is consistent with their being a context-independent meaning that remains throughout the symbol's development. In some places, Peirce seems to think that a symbol *can* grow while its essential meaning can remain unchanged. He writes,

The body of the symbol changes slowly, but its meaning inevitably grows, incorporates new elements and throws off old ones. But the effort of all should be to keep the *essence* of the every scientific term unchanged and exact; although absolute exactitude is not so much as conceivable. (EP2:264 [1903], R478 *Syllabus*).

Certainly, all that the above passage shows is that while it might be ideal for there to be a static, unchanging essence for each term, it does not show that Peirce was committed to the view that such an unchanging essence exists for each term. However, other passages suggest that non-indexical expressions do have a context-invariant meaning. For example, in R409:96, Peirce contrasts the context-sensitivity of lexical indices from non-indexicals:

A word is the same word every time it occurs and if it has any meaning [it] has always the same meaning; but *this* or *that* have different applications every time they occur.

But, even given this point, it is not clear why the growth of a term or change in a term's meaning over time ought to conflict with minimalism for minimalists can offer a variety of different ways to accommodate changes in a language, e.g. by positing ambiguity. This brings me to my second point. Does Peirce's claim that the implications of words are not determinate support the view that word-meaning is indeterminate and thus support a reading of Peirce as a contextualist? Notice again in the above quotation from Peirce's 1905 "Issues of Pragmatism" that Peirce distinguishes between the *implications* and *nonimplications* of a word. This is important because if Peirce is saying that the *implications* of linguistic expressions cannot be antecedently fixed, then this is not evidence that Peirce is a contextualist. The debate between contextualism and minimalism is not about the role context plays in determining the implications, conversational implicature, or speaker meaning of certain linguistic expressions. Minimalists and contextualists alike agree that that determining what a sentence or word *implies* is a highly pragmatic, global, context-driven, abductive, and defeasible affair (Recanati 2004:54; Cappelen and Lepore 2005a:4-5). The point of disagreement concerns whether the *literal* semantic content requires an appeal to a non-linguistically-directed (pragmatic) process. In the above passage, Peirce says that when the *implications* of a word are not determinate, and then that the interpretation of what an indeterminate word or sentence means is a cooperative enterprise, but Peirce is reticent about the non-implications of words. The former position is consistent with both minimalism and contextualism while the latter position leaves open the possibility that Peirce would have accepted minimalism.

#### 3.3. THE ARGUMENT FROM INTERPRETANTS

The argument from interpretants is a third argument for a Peircean contextualism. This argument comes from Peirce's classification of interpretants into the emotional, energetic, and logical in the 1907 multi-layered essay "Pragmatism" (R318 [1907], cf. EP2:398-433). According to Rellstab (2010:195), we ought to associate the emotional interpretant "with the lexical and grammatical meaning of words and syntactic constructions of natural language sentences." This view accords with that of Michael Shapiro (1983:54), who contends that Peirce's immediate interpretant is the effect of a sign without consideration of collateral experience (Shapiro 1983:54).<sup>143</sup> This aspect of interpretation is only a possibility waiting to be actualized in some actual interpretation. *Actual interpretation* occurs when there are energetic interpretants and logical interpretants. The former, Rellstab claims involves the free contextual sharpening of word-meaning or "modulation," while the latter involves resolving indices by picking out the referents of pronouns, proper names, and so on.

Rellstab's argument has two principal steps. In the first step, Rellstab details three different types of interpretants. I find this step somewhat uncontroversial and so do not pause to discuss it here. In the second step, Rellstab claims that two different *free* contextual processes correspond to two different types of interpretants: the *energetic interpretant* of a sign is similar to Recanati's notion of modulation (free contextual enrichment) while the second is that the *logical interpretant* is similar to the resolution of indices (see Rellstab 2010:195; cf. Rellstab 2008:325-326; Recanati 2004). It is the second step that I find controversial. According to Recanati (2004:133-135), 'modulation' is a semantically-relevant, top-down, non-linguistically-controlled contextual process. As noted above, a word is 'modulated' when language users adjust the meaning of a word to fit the context, situation, or discourse topic. For example, the use of the adjective 'red' will vary depending upon the object to which it is applied, and the word 'cut' will differ depending upon whether a cake is being or cut or whether a lawn is being cut (see Searle 1980; cf. Recanati 2004:133). On Rellstab's interpretation

<sup>&</sup>lt;sup>143</sup> That is, the only requisite experience requires is not with what the sign denotes per say, but with semiotic system in which the sign is a part. In contrast, the dynamic interpretant of a sign is sensitive to collateral experience (see Shapiro 1983:55).

of Peirce, energetic (or dynamic) interpretants require an appeal to collateral experience (or context) in just this way; we need to appeal to how the word interacts with the context in which it is uttered to understand the sense of the word.

The major problem with Rellstab's analysis is that he does not show that the requirement of collateral experience for energetic interpretants is *semantic* rather than *pre-semantic* or *post-semantic* (see Perry 1998). A minimalist might agree with Peirce that a dynamic or energetic interpretant crucially involves collateral experience but that this experience functions in a pre-semantic way. To put this point in clearer focus, contrast the contextual processes required to resolve *ambiguity* versus those required to resolve *indexicality*. Take, for example, the following set of utterances:

(1) Where is a good *bank*?

- (2) John forgot how *good* beer tastes.
- (3) Liz saw her *duck* under the table.<sup>144</sup>
- (4) *I* ate a hamburger.
- (5) John gave *her* a present.

In (1)–(3), we draw upon the context in order to determine which word, structure, or meaning is being used. In the case of (1), context is drawn upon to determine which one word—sharing the same orthographic and phonetic features—is being used. In the case of (2), context is drawn upon to determine whether 'good' is being used as an adjective or adverb. In the case of (3), context is drawn upon to determine whether 'duck' is a noun or verb. Notice, however, that in (1)–(3), it is not the case that the very meaning of the expressions in (1)–(3) depend upon context in order to fulfill their functions. That is, contextuality is not internal to the meaning of these expressions but is instead external, i.e. drawn upon to select a specific word, structure, or meaning that shares the same orthographic or phonological appearance. In contrast to (1)–(3) are indexicals (4) and anaphora (5). In contrast to cases of syntactic and semantic ambiguity, context is required to resolve the meaning of indexicals and anaphora because these expressions depend upon context in order to fulfill their functions.

<sup>&</sup>lt;sup>144</sup> These examples are from Perry (1998:2-3)

Pre-semantic	Semantic
Semantic ambiguity, syntactic	
ambiguity, language	
resolution	
	Indexicals, anaphora

The debate between minimalists and contextualists concerns whether extralinguistic context makes a non-linguistically-controlled *semantic* contribution. Since this is the case, in order for Rellstab to link Peirce to the contextualist position, it is not sufficient to show that collateral experience is required to resolve the meaning of a word or determine the referents of indexicals since minimalists agree that context plays a role in resolving various forms of ambiguity.

# 4. NON-SENTENTIAL ASSERTION AND UNARTICULATED CONSTITUENTS

A number of additional arguments that have been put forward by contemporary contextualists against minimalists were anticipated by Peirce. This is a striking historical fact has gone unnoticed by contemporary contextualists working on the semanticspragmatics problem. In this section, I briefly outline two such arguments (one from nonsentential assertion and the other from the presence of unarticulated constituents), point to places where Peirce makes similar arguments, and then argue that these do not conclusively support a Peircean contextualism. Ultimately, I argue that Peirce's semiotic perspective on the debate offers minimalists a unique way of warding off some additional contextualist objections and it widens the debate by placing it on semiotic rather than linguistic tracks. By expanding what types of signs go into expressing a proposition, minimalists are able to maintain their commitment that the literal meaning of a sentence gets expressed by the syntactic and lexical features expressed by a sentence.

#### 4.1 THE ARGUMENT FROM NON-SENTENTIAL ASSERTION

One way that the debate between minimalists and contextualists takes shape is with respect to elliptical speech. One contextualist line of argument claims that it is possible to make assertions without uttering a complete sentence. This is only possible if language users engage in a process of free contextual enrichment since a literal reading of the features articulated by the sentence fall short of being propositional. That is, elliptical speech is capable of expressing a proposition but does so only by drawing upon the context in a way that is not traceable back to the sentence's logical form. I call this line of argumentation *The Argument from Non-Sentential Assertion*. Stainton (1994, 1995, 1997, 1998, 2005) has argued that one apparent linguistic phenomenon that suggests that extra-linguistic context plays a role that is *not* traceable back to the logical form of a sentence is sub-sentential or non-sentential assertion.<sup>145</sup> *Non-sentential assertion* is a form of sub-sentential speech whereby a speaker performs a speech act (an assertion) without uttering a complete sentence, i.e. without uttering an expression with a clausal structure containing at least a noun phrase and a verb phrase.<sup>146</sup> Here is an example from Stainton (2005:384):

Meera was spooning out strawberry jam onto her toast, and produced (or, more safely, appeared to produce) the phrase 'Chunks of strawberries'. Anita nodded, and (seemingly) added 'Rob's mom'. It appears that Meera asserted something like *This jam contains chunks of strawberries* while Anita asserted something like *Rob's mom made it*. In both cases, they appear to have made true statements while using something sub-sentential.<sup>147</sup>

There are at least three things of note concerning the above example. First, the phrases in question are examples of sub-sentential speech since 'chunks of strawberries' does not contain a subject. Second, the non-sentential phrases do not appear to be embedded in a larger linguistic structure from which a missing element can be supplied by a semantic or syntactic rule. The phrases 'chunks of strawberries' is in a 'discourse initial' position, i.e. it lacks an explicit linguistic antecedent that could somehow function in the production of a sentential unit. Third, a proposition (truth-conditional content) and the illocutionary

<sup>&</sup>lt;sup>145</sup> For more on the syntactic ellipsis hypothesis, see Morgan (1973) for a positive evaluation, but confer (Yanofsky 1978; Napoli 1982; Barton 1989, 1990; Stainton 1993; Dalrymple 2005) for negative responses to this position.

<sup>&</sup>lt;sup>146</sup> Alternatively put by Stainton (1995:281) "Speakers can make assertions by uttering ordinary, unembedded, words and phrases." Or, more exactly, Stainton (1995:285) writes, "Speakers can make assertions by uttering formatives which: (a) are members of, or are headed by, a lexical category; (b) are assigned to non-propositional semantic types; and (c) do not exhibit illocutionary force."

<sup>&</sup>lt;sup>147</sup> Another example from Stainton (1995:281): "One can easily imagine someone, say Andy, approaching an apple cart and producing the word "red" on its own, not within any sentence, thereby making an assertion." Another more ubiquitous example of such non-sentential assertion are assertions made in null subject languages, i.e. languages that allow for independent clauses that do not explicitly mention a subject. The lack of an explicit subject pronoun in Spanish—for example, 'Vamos a la playa': [We] go to the beach—suggests that speakers can make assertions without uttering full sentences. Other linguistic evidence includes the use of null pronouns (Carnie 2002:255-273).

force of the utterance is, nevertheless, recoverable by its interpreters. Thus, the phrase 'chunks of strawberries' is not a complete sentence, is not embedded in a larger linguistic structure, yet language-users are able of recover the proposition *This jam contains chunks of strawberries*.

Minimalists argue that forms of elliptical speech can be addressed without appealing to a process of free contextual enrichment to bring the expression to the status of a proposition. (Stanley 2007a), for example, argues that cases of non-sentential assertion can be understood either as (i) cases of syntactic ellipsis or (ii) only *apparent* cases of assertion. In what follows, I point to a way in which Peirce adopts a strategy similar to (i), i.e. that many cases of apparent non-sentential assertion turn out to be sentential assertions provided the question is approached from a semiotic perspective. However, I argue that Peirce's strategy differs from contemporary minimalist strategies in that said cases are sentential not for *syntactic* reasons but for *semiotic* ones.

Peirce appears to have considered the argument from non-sentential assertion as well. Consider the following passage from Peirce's 1902 entry for 'Subject' in *Baldwin's Dictionary*:

When a baby points at a flower and says, "Pretty," that is a symbolic proposition; for the word "pretty" being used, it represents its object only by virtue of a relation to it which it could not have if it were not intended and understood as a sign. The pointing arm, however, which is the subject of this proposition, usually indicates its object only by virtue of a relation to this object, which would still exist, though it were not intended or understood as a sign. But when it enters into the proposition as its subject, it indicates its object in another way. For it cannot be the subject of that symbolic proposition unless it is intended and understood to be so. Its merely being an index of the flower is not enough. It only becomes the subject of the proposition, because its being an index of the flower is evidence that it was intended to be (1902b:609).

In the above passage, Peirce's primary point is that communicative intentions are needed if an index is to function as the subject of a proposition. However, what this passage also indicates is that language users are capable of expressing propositions without either (i) uttering a lexically complete sentence and (ii) without previous lexical data that might make this example a case of syntactic ellipsis.<sup>148</sup>

Thus, one reason we might consider Peirce as a contextualist is because understanding the literal meaning of an utterance is not merely a matter of interpreting syntactic and morphological information but a matter of interpreting this information in relation to non-morphological information, e.g. pointing fingers, gestures, tone of voice, etc. In other words, Peirce's broader semiotic considerations treat language understanding as a complex and interlocking process that takes different types of signs as input and yields semantic values as output.

To consider this more closely, take the baby's utterance:

(1) Pretty

With the help of a pointing finger in context, (1) gets enriched as (2) below:

(2) [That flower is] pretty.

In the above example, language users hear (1) in context and obtain (2) by supplementing (1) with information that is found in the context but unarticulated by the speaker.

I don't find this line of reasoning persuasive for it assumes that what goes into the production of the sentence (and what are the essential elements of a language) are just the morphological units and their underlying syntactic structures. This is an overly *linguistic* view of the debate between minimalists and contextualists. Another way of thinking about Peirce's approach to language is that he took a highly *semiotic* approach to language. That is, Peirce did not confine his interest to determining the literal semantic content of merely *linguistic* expressions but took the form of a sentence as consisting of not only lexical items and their syntactic structures but also conventionalized (but non-lexical) indices. What is interesting about this approach is whether in the expression of a

<sup>&</sup>lt;sup>148</sup> Another example of syntactic ellipsis from Peirce, and how Peirce viewed it from a distinctly semiotic perspective, comes from his entry on 'Subject' in *Baldwin's Dictionary*, Peirce writes: "A proposition may be defined as a sign which separately indicates its object. For example, a portrait with the proper name of the original written below it is a proposition asserting that so that original looked." In this example, we find that a mere name put near a picture can express a proposition.

proposition, every relevant semantic constituent gets *articulated* by some antecedently codified sign-system and *not* whether every meaningful constituent gets articulated by *words* in syntactic structures. On this approach to the debate, pointing fingers, arrows, and gestures indicating some object—while not found in a lexical database like a dictionary or a book on grammar—are a part of a language (broadly construed).<sup>149</sup>

From this wider perspective on language (one that includes indexical units), the real logical structure of (1) is the following:

(1a)  $\bigcirc$  is pretty.

Whereas (1) is non-sentential with respect to English, (1a) might be classified as fully articulating the proposition *that flower is pretty*. Thus, while (1) is a genuine case of non-sentential assertion, it is not evidence for the existence of a process of free contextual enrichment (a purely pragmatic process). It is a sentence that is *partially* articulated by lexical items and *partially* articulated by non-lexical indices.

In sum, one response to the Argument from Non-Sentential Assertion is that apparent cases of non-sentential assertion are *only apparent* because of a limited perspective on what is articulated by a speaker. By incorporating a wider array of signs into what is articulated by a speaker, language users actually *literally express* a lot more than contextualists give them credit for. And so, cases of non-sentential do not commit Peirce to a type of contextualism largely because what goes into determining the logical form of a sentence is not exclusive to symbols in a particular language. To press this point even further, a minimalist adopting a semiotic perspective on this issue might even argue that language users can express propositions without even uttering any of the traditional phonetic or orthographic that compose a language. That is, they can express a proposition—and hearers can recover its meaning—without "saying" anything. To see this more clearly, consider the following example of a case of syntactic ellipsis:

<sup>&</sup>lt;sup>149</sup> Peirce notes in R409:101 that "most languages are miserably poor in these pronouns [demonstratives like 'this' and 'that'], because in talk people use gestures. Only the Eskimo, who is too much wrapped up to gesticulate, and who talks half the year in the dusk, has demonstratives, not only for things near and things far, but also for things above and things below, things to the right and things to the left, things to the north, south, east, and west, things seaward and things landward."

John: Where is the coffee maker? Vic: [The coffee maker is] over there.

In the above example, the noun phrase is recovered syntactically. Now considered the example below:

John: Where is the coffee maker? Vic: [The coffee maker is]

In the above example, every piece of the sentence is generated either by a syntactic process or by the use of a conventional (but non-lexical) index even though no words are spoken.

4.2 UNARTICULATED CONSTITUENTS AND WEATHER REPORTS

Consider the following sentence:

(1a) John kicks.

Contextualists argue that (1a) underdetermines the literal meaning in context, e.g. what (1a) would literally express in an appropriately specified context is something like one of the following:

- (1b) John kicks [Mary].(1c) John kicks [the ball].(1d) John kicks [the model].
- (1d) John kicks [the rock].

The contextualist argues that, in the case of (1a), there is a constituent missing, i.e. no unit in the sentence designates what John kicks, but that the object that John kicks should be specified if (1a) is to express a truth-evaluable entity. According to contextualists, the unarticulated constituent is supplied by language users enriching (1a) by bringing contextual factors to bear on it. However, minimalists argue that there is a way to capture the literal meaning of (1a) by using features found in the logical form of (1a). For example, Emma Borg argues that a transitive verb like 'kicks' is a two-place relation whose logical form is: *x* kicks *y*. Borg (2004:226) writes: Then, if we get a surface level description of a sentence utilizing this expression, but with only one argument place explicitly filled (e.g. 'John kicks'), the syntactic level description of that sentence will nevertheless supply the second argument place, with an existentially bound variable acting as a placeholder, yielding 'John kicks something' or ' $(\exists x)$  John kicks *x*.'

Thus, by expanding the notion of the logical form of a sentence to include sub-syntactic features available in lexical entries, the minimalist can successfully ward off the charge that sentences require free contextual enrichment.

However, it is contentious whether every example can be handled in this way. For example, unarticulated constituents seem to be found in sentences that report weather (2), adjectives that require comparison classes (3), sentences that have terms for geometrical shapes (4), and so forth.

- (2) It's raining [in San Francisco]
- (3) John is tall [for a child].
- (4) France is [roughly] hexagonal.

Contextualists argue that (2) literally expresses that *it is raining at some contextuallysupplied place and time* whereas minimalists contend that (2) simply expresses the proposition that it's *raining simpliciter* or *it's raining somewhere* (see Perry 1998, 1986; Pagin 2005; Zhang 2011). For example, Zhang (2011:109) writes,

On a rainy Saturday morning in Palo Alto, Perry's younger son, knowing his father was going to play tennis with friends, looked out the window and said:

(2) It is raining [in Palo Alto].

[...]. One of the constituents of the sentence expressed, identifying the location of the rain, is unarticulated. It is unarticulated in the sense that no morpheme in the sentence designates the place. But the place where it is raining, say Palo Alto, should be specified in order to get a truth evaluable entity to Perry's son's statement.

With respect to an example like the one above, Peirce appears to be of the mind that there a variety of sentences that contain unarticulated constituents that cannot be captured by the linguistic direction principle. Peirce writes, If, for example, a man remarks, "Why, it is raining!" it is only by some such circumstances as that he is now standing here looking out at a window as he speaks, which would serve as an Index (not, however, as a Symbol) that he is speaking of this place at this time, whereby we can be assured that he cannot be speaking of the weather on the satellite of Procyon, fifty centuries ago (CP4.544).

There are two ways of reading this passage. On a contextualist reading, it looks as though (2) contains an unarticulated constituent and so the place where it is raining, say Palo Alto, is supplied by freely drawing upon features from the context. However, on a more semiotic reading that expands the notion of the logical form to include not only features of lexical units but also conventionalized indices (like pointing fingers, gestures, staring, etc.), the underlying structure of (2) is something closer to the following:

(2') (2'); it is raining.

Unlike (2), which seems to fall short of a proposition, (2') is fully propositional.

#### 5. PEIRCE'S CONTEXTUALISM: THE ARGUMENT FROM FICTION

In the previous sections, I have articulated five arguments for a Peircean contextualism. Each of these arguments, I have argued, is inconclusive. In addition, I argued that Peirce's distinctly semiotic perspective on the contextualist-minimalist debate offers minimalists certain resources to fend off two types of contextualist objections. Thus far, it seems as though that Peirce, while having anticipated many of the contemporary twistsand-turns of the semantic/pragmatic debate, never settled on a conclusion. However, despite this expanded notion of logical form that includes non-lexical indices, there are a number of passages where Peirce seems to explicitly say that the context fills in things left unsaid by the sentence. Thus, in this final section, I suggest a sixth, and what I take to be the strongest argument for considering Peirce as a contextualist. In particular, Peirce often seems to claim that language users rely upon the circumstances (or environment) in which a sentence is expressed in order to determine whether or not the sentence is to apply to a *real* or *fictional* domain. In short, the cases that seem to most strongly suggest a Peircean contextualism are those that involve *quantifier-domain restriction* and *fictional discourse*.

Peirce was explicit that various linguistic descriptions could not indicate whether the domain in which an expression applies is the actual world or some fictional domain. In order to indicate whether a speaker is referring to the real world or a world of fiction, Peirce thought various indices were necessary. Peirce writes,

Designations are absolutely indispensible both to communication and to thought. No assertion has any meaning unless there is some designation to show whether the universe of reality or what universe of fiction is referred to. (CP8.368*n*, R142 [1899-1900]).

And, again,

The question has often been disputed whether Hamlet was mad or not. This shows how necessary it is to indicate that the real world is meant if it be meant. Now reality is altogether dynamic, not qualitative. It consists in forcefulness. Nothing but a dynamic sign can distinguish it from fiction. It is true that in no language I ever heard of is there any particular form of speech to show that the real world is spoken of. But that is not necessary, since *tones* and *looks* are amply sufficient to show when the speaker is in earnest. These tones and looks act dynamically upon the listener, and cause him to attend to realities. They are therefore the indices of the real world. (R804:22x [n.d.], my emphasis).<sup>150</sup>

Thus, Peirce was of the mind that context plays an important role in determining whether or not a proper name refers to a *fictional object* or an actual object (see Agler 2011a:612-616). In the above example, Peirce argues that a speaker's *tone of voice* or *facial expressions*, or some sort of gesture (like a pointing finger) function to select the domain of discourse. In other cases, Peirce seems to indicate that even in the absence of any explicit indices, the circumstances in which an expression is uttered plays a semantic role by determining whether any referents in the sentence are *real* or *fictional*. Consider the following examples. First, in Peirce's 'Subject' entry for the *Baldwin Dictionary*, he writes,

<sup>&</sup>lt;sup>150</sup> The case of Hamlet's madness is a favorite example of Peirce's (see Peirce 1902a:96; CP2.337; CP2.342; CP4.43; CP4.172; CP8.129; EP2:493; R300:59 [1905]).

In like manner, all ordinary propositions refer to the real universe, and usually to the nearer environment. Thus, if somebody rushes into the room and says, "There is a great fire!" we know he is talking about the neighbourhood and not about the world of the Arabian Nights' Entertainments. It is the circumstances under which the proposition is uttered or written which indicate that environment as that which is referred to. But they do so not simply as index of the environment, but as evidence of an intentional relation of the speech to its object, which relation it could not have if it were not intended for a sign. (Peirce 1902b:609).<sup>151</sup>

Second, Peirce claimed that context was indispensible to quantified noun phrases for determining the domain of discourse, especially for determining whether the referent of a proposition is fictional or actual. Peirce writes,

It should be mentioned that though a sign cannot express its Object, it may describe, or otherwise indicate, the kind of collateral observation by which that Object is to be found. Thus, a proposition whose subject is distributively universal (not plural or otherwise collectively universal), such as "Any man will die," allows the interpreter, after collateral observation has been disclosed what single universe is meant, to take any individual of that universe as the Object of the proposition, giving, in the above example, the equivalent "If you take any individual you please of the universe of existent things, and if that individual is a man, it will die" (EP2:408 [1907]).

In the above passage, Peirce claims that collateral observation has a role in that it functions in selecting the domain of discourse over which quantified noun phrases operate.<sup>152</sup> But, again, notice that Peirce claims that it functions to determine "what single universe is meant." This leaves open the possibility that the process of free enrichment is involved in determining the universe that the speaker *means* to refer to but does not play a role in determining the literal meaning of the utterance.<sup>153</sup>

<sup>&</sup>lt;sup>151</sup> When we express a proposition in words we leave most of its singular subjects unexpressed; for the circumstances of the enunciation sufficiently show what the subject is intended" (EP2:209 [1903]).

<sup>&</sup>lt;sup>152</sup> Two different utterances of the sentence type 'any man will die' are liable to yield two different propositions. For if the sentence is uttered and the domain of discourse is the universe of existent things, then the expression essentially says: take any individual in the universe of existent things, if that individual is a man, it will die. Whereas, if the domain of discourse is a universe of fiction, where all men happen to be immortal, then it quantifies over an entirely different range of objects.

<sup>&</sup>lt;sup>153</sup> The same is true for indefinite descriptions for Peirce claimed that indefinite descriptions were quantified noun phrases. He writes, that the "words called "indefinite pronouns" are really expressive of the manner in which the subject may be selected." (R409:103 [1893], §62 of Chapter VI. The Essence of Reasoning, *Grand Logic*). Further, he provides examples involving indefinite descriptions where he claims that the whole signification of the description depends upon context (e.g. EP2:405-406 [1907]).

# 6. CONCLUSION

Peirce is a complex character. On the one hand, his pioneering advances in mathematical logic and the sciences might suggest a commitment to an extremely formalist view of language. On the other hand, his non-reductive attitudes toward science, communication, and his highly phenomenological way of doing philosophy lend support to a more contextualist picture. What we get instead is a figure whose inquiries brought out various unrecognized features of the formal features of language yet whose attitude toward what constitutes this underlying form was highly expansive and inclusive.

In the previous sections, I have argued that most of the arguments for a Peircean contextualism are inconclusive at best. These are summarized below.

Arguments for a Peircean Contextualism	
Argument Type	Proof of contextualism?
The Indexical Argument	No
Argument from Indeterminate Word Meaning	No
The Argument from Interpretants	No
The Argument from Non-Sentential Assertion	No
The Argument from Unarticulated Constituents	No
The Argument from Fiction	No

The sole function of the object [of a sign] is identification; by which I mean that if any part or concomitant of the sign specially or separately represents the object rather than the meaning, it is to show that not any other than this very object is that to which the sign refers; so that either both the utterer (or putter forth) and the interpreter must be already familiarly acquainted with the object and each well understand that the other is so at the time of the communication of the sign, (as when we talk of the universe or of the prehistoric) or else the object must be exhibited (as in a geometrical diagram, or a snipping from a textile fabric,) or else the interpreter's attention must be forcibly drawn to the object (as by the gleam of a light-house, or by a driver's shout of "hi, there!") or else directions must be given for acquiring sufficient acquaintance with the object for its identification, (as when we talk of "the second cataract of the Nile,") or else the object must remain indefinite (as when Longfellow taught the world that 'All things are not as they seem'). (R318:0238 [1907]).

Third, as noted earlier, one of Peirce's most insightful contributions to the contextualist-minimalist debate is that the problem should not be viewed merely from a *linguistic* level but also at a *semiotic* level. One consequence of such an expanded consideration is that our focus is redirected from whether or not every extralinguistic effect is traceable to the syntactic features of a particular natural language to the more general problem of whether or not every extralinguistic effect is traceable to some articulated semiotic feature. More concretely, this means that the range of data that we are to consider is much broader. To illustrate, Peirce claimed that while the diagram below suggests a wheel without any indication as to whether or not it is a copy of an actually existing object or it is a fictional object, it fails to convey any information (see EP2:7 [R404, 1894]).

Ultimately, I argued that the textual evidence does not straightforwardly (and unequivocally) support a Peircean contextualism.

# CHAPTER 6 MINIMALISM: A CONCLUSION

The aim of this dissertation has been to defend formal approaches to semantic theorizing from the objection that it is necessary to freely enrich the utterance of a sentence with features from the context. My effort to save the possibility of such a theory has resulted in defending pragmatic minimalism. At root, minimalism is a theory about the role context plays in determining the literal semantic content of an utterance. It is not a theory about the specific nature of semantic content; it is not a theory about a particular formal semantic theory, and it is not a theory concerning the role context plays in determining speaker meaning.

At first glance, minimalism is likely to smack readers as highly implausible and unintuitive for the natural attitude toward the view is the outcry that *context matters to meaning!* Indeed it does! But, minimalists do not deny this. What they do is posit a layer of meaning that plays a crucial role in the processing of language (in a cognitive module), in cross-contextual communication, and as a type of content we can fall back upon when individuals enrich our utterances in ways we neither see fit nor intended.<sup>154</sup> What they do not do is try to take home the whole prize by giving a complete account of the role context plays in all aspects of communication. Minimalism is certainly compatible with the position that communication is a global, context-rich, and complex activity that always involves more than the mere understanding of the literal meaning of an utterance. It is compatible with the view that when an individual utters a sentence, she can and does convey far more than what she says and indeed far more than what she understands herself to intend. It is compatible with such views but it does not lose sight of the role logical form plays in language processing, what is common to different utterances of the

<sup>&</sup>lt;sup>154</sup> Furthermore, such a layer plays a pivotal role in explanations of certain systematic and creative features of language.

same sentence, and the fact that communication involves conversational norms that enhance the speed, efficiency and convenience of communication but some language users might opt out of for a more literal reading of their utterances.

As I have argued in this dissertation, minimalists do think that context matters for communication and the determination of meaning for minimalists readily acknowledges a variety of different phonetic, grammatical, pragmatic, and even semantic roles that context plays. The primary difficulty a minimalist faces is showing that the semantic role of context is governed by linguistic principles in a way that delivers a theory capable of expressing propositional (truth-conditional) content and that is psychologically realistic. This theory consisted of the following three claims:

(M1) a commitment to the linguistic direction principle,
(M2) a commitment to a division between the literal semantic content and speech act content, and
(M3) a commitment that a context-insensitive approach to meaning produces an adequate semantic theory.

According to (M1), whenever the literal semantic content of an utterance depends upon the context in which a sentence is uttered, there will be a feature in the sentence that directs language users to the context. Our understanding of a language depends upon context but it does so in a systematic and organized way. In chapter 4, I argued that if it failed to depend upon context in this sort of way, our linguistic understanding would not be modular, cross-contextual communication would be impossible, and there would be no such thing as fallback content. But, there is good evidence supporting a cognitive module dedicated to processing syntactic and semantic information independent from pragmatic information, we intuitively think that cross-contextual communication is not only possible but does occur, and we routinely come face to face with frustrating interlocutors who cause us to backtrack to a more minimal content.

According to (M2), the literal semantic content of an utterance is determined independently of our everyday, consciously-held linguistic intuitions about what we literally say, assert, claim, state, etc. In chapter 3, I examined the contrary position that the content generated by a minimal theory is too meager to fit into a larger story about human cognition and communication and that literal meaning is sensitive to our linguistic intuitions. In that chapter, I argued that this sort of constraint on semantic theories is not plausible for using our linguistic intuitions about how determinate a proposition needs to be, what counts as literal versus non-literal speech, or concerning correct indirect speech reports do not provide a reliable guide to determining when and where context influences semantic content. I have argued that too heavy a reliance on this data is problematic for these intuitions tend to always be cut with non-linguistic material. When we evaluate the speech acts of language users, we find ourselves consumed with the purpose of the utterance in context. In chapter 4, I offered an alternative account of how semantic facts relate to our psychology. The psychological facts upon which semantic theory depend are *not* readily apparent or available to normal language users who are more consciously concerned with and geared toward what speakers are trying to communicate. Minimal propositions turn out to be psychologically realistic and play a role in a broader story about human cognition and communication but their role is *tacit* rather than *explicit* since they are grasped by their users *en route* to determining what speakers are trying to communicate.

According to (M3), the minimalist claims that for well-formed sentences, straightforwardly reading off features of the sentence without relying upon linguistic intuitions produces a proposition (truth-conditional content). In chapter 3, I examined the contrary position that the content generated by a minimal theory is insufficient since, contrary to the minimalist's view, non-sentential assertions express complete propositions and certain sentences require free (non-linguistically-directed) contextual enrichment in order to represent propositions at all. In that chapter, I argued that by drawing upon the underlying syntactic-lexical features of the utterance and in expanding our notion of what gets articulated by defining language more broadly, sentences that seemingly fail to express propositions turn out to, in fact, express them. Our understanding of what is expressed by a sentence is not simply the orthographic or phonetic features of an utterance but also our understanding of the utterance's underlying syntactic-lexicallogical features as well as the presence of conventionalized gestures, looks, or tones that are a part of a broader construal of language. In chapter 4, I offered two additional arguments that potentially increase the plausibility of there being minimal propositions. First, I argued that a semantically minimal proposition is the best explanation for the

existence of cross-contextual communication. If we do in fact communicate across contexts then we need some minimal core that is safe from contextual intrusions. Second, I argued that it is plausible to posit the existence of a semantically minimal proposition to explain the content that a language user would fall back upon if she underwent a process of endless implicature cancellations.

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David W. Agler

EDUCATION	
The Pennsylvania State University, University Park, PA	
Ph.D. in Philosophy	2012
Dissertation: "Pragmatic Minimalism: A Defense of Formal Approaches to Semantics"	
Indiana University-Purdue University Indianapolis (IUPUI), Indianapolis, IN	
M.A. in Philosophy	2010
Thesis: "Vagueness and Its Boundaries: A Peircean Theory of Vagueness"	
Indiana University-Purdue University Indianapolis (IUPUI), Indianapolis, IN	
B.A. in English	
B.A. in Philosophy	2004

### PUBLICATIONS

### (BOOKS)

1. An Introduction to Symbolic Logic: Syntax, Semantics, Proof (2012, forthcoming). Rowman & Littlefield

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3. "Peirce and the Specification of Borderline Vagueness" (2013, in press). Semiotica.

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#### VITA