

**KNOWLEDGE OF MEANING AND LINGUISTIC  
COMMUNICATION**

# **KNOWLEDGE OF MEANING AND LINGUISTIC COMMUNICATION**

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## Lay Abstract

Natural language semantics is the theory of the information encoded by natural languages. Of all the information a sentence can be used to communicate, which of it is semantically encoded? How can we tell? One method is an argument strategy called the *argument from competence*. Arguments from competence presuppose that semantically competent speakers have knowledge of the information their linguistic expressions encode. On this assumption, we can infer from the information competent speakers do, or plausibly could, possess in virtue of being competent with some expression(s) to the sorts of information we can reasonably call their semantic contents. I discuss one instance of an argument from competence in detail, Kent Bach's argument against the *referential theory of names*. The referential theory holds that proper names *semantically refer* to, or encode information about, their bearers. Bach argues that the referential theory must be false, and a proper name does not encode information about each of its bearers because competent speakers have incomplete knowledge of a name's bearers for most names they use and encounter in linguistic communication. I argue that Bach's argument, and arguments from competence in general, fail because they misconceive the mechanics of linguistic communication and, along with them, the place of speakers' knowledge of semantic information in the hierarchy of cognitive abilities underlying linguistic communication. Such knowledge plays a relatively minor role in linguistic communication, which is largely dependent on the same pragmatic mechanisms underlying non-linguistic communication. I offer an independent argument against the referential theory of names which follows from the essentially pragmatic nature of linguistic communication.

## Abstract

The central question guiding this thesis is, *how do we determine what information is semantic?*

I argue that *the amount of information semantically-encoded is proportional to the role semantic competence plays in linguistic communication*. My reasons for this are meta-theoretical. Natural language semantics is the theory of the information encoded by linguistic expressions. As such, it should proceed in accordance with normal naturalistic inquiry on the model of the core natural sciences. This includes the practice of hypothesizing entities with the goal of explaining otherwise inexplicable phenomena and theoretical virtues like parsimony. These same considerations lead me to reject a standard claim in natural language semantics, that proper names semantically refer to their bearers. My argument proceeds as follows.

Ordinary assumptions about natural language semantics include the assumption that semantics is essentially a theory of truth conditions; and that its tasks, including the analysis of logical properties like validity and consistency, are to be determined *a priori*. In Chapter 1, I argue that these assumptions must be earned, not stipulated, for a natural language semantics understood as a scientific theory of linguistic meaning. Instead, the nature of the semantic properties we ascribe to language should be determined by the explanatory niche they fill, which in turn is determined by the broader theoretical context. I argue that this broader context should be understood as the theory of linguistic communication and the cognitive mechanisms underlying it.

In Chapter 2, I examine one strategy for delimiting the domain of semantic properties, the argument from competence. Arguments from competence infer from the limitations of the cognitive mechanisms devoted to linguistic interpretation to negative claims about what semantic properties cannot be. I take a detailed look at an instance of this strategy, Kent Bach's argument that reference is not a semantic property of proper names.

In Chapter 3, I argue that the viability of Bach's argument, and arguments from competence in general, depends on the role played by semantic knowledge. We can infer to expressions' semantic contents from speakers' knowledge of semantic properties only if that knowledge is necessary for linguistic communication.

In Chapter 4, I argue that, because linguistic communication is ostensive-inferential, not code-based, knowledge of semantic properties is not necessary for linguistic communication. Arguments from competence, including Bach's argument that reference is not a semantic property of name, fail. However, many of the same considerations which lead to this failure point the way to a different argument against the referential theory of names, the argument from methodological semantic minimalism. Methodological minimalism requires us to posit only those semantic properties necessary to explain the phenomena of linguistic communication. Because these phenomena are ostensive-inferential, they depend primarily on pragmatic cognitive mechanisms, and we can explain many phenomena pragmatically, rendering semantic explanation redundant.

In Chapter 5, I apply methodological semantic minimalism to the thesis that reference is a semantic property of proper names.

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## Chapter 1—What information is semantic?

### 1.0 Introduction to chapter

The information contained in speech acts is either semantic or pragmatic. The question motivating this thesis is, *How do we determine which information is semantic?* In this chapter, I introduce some of the key questions and themes to be discussed in addressing this question. There are two routes to the semantic domain. The indirect route, which I discuss in Chapters 2, 3, and 4, is through the linguistic knowledge of competent speakers. The direct route is to posit criteria for separating semantic information from pragmatic information. I discuss the direct route in this chapter. I consider justifications given for two such criteria, context-sensitivity and truth-evaluability, but find them mostly lacking. This discussion raises an important question: Why should we suppose that words have meanings at all? One promising hypothesis is that words must have meanings, i.e. encode information, because we use them to transmit information through linguistic communication. I discuss some general, meta-theoretical considerations which ought to ground a semantic theory understood as a theory of meaning for natural languages (rather than, say, a theory of formal, logical properties like truth and entailment). Meanings are theoretical objects, posited to explain otherwise inexplicable phenomena, including the rapid transmission of information by language. These considerations lead us understand a theory of meaning as one component of a broader theory of the cognitive mechanisms underlying linguistic communication. I conclude with an outline of upcoming chapters.

### 1.1 A world of information

The world is full of information. Out of all the information there is, some is accessible to the human mind. The information accessible to the human mind is, in principle, communicable using language. For any act of linguistic communication, we suppose some of the information to be conveyed, communicated, or otherwise made manifest, by the language itself, and the rest conveyed, etc. through the

various modes and mechanisms of non-linguistic communication which necessarily accompany the utterance of a sentence. A semantic theory of natural language is a theory of the information transmitted by the language itself.

The primary question in semantics is, *which information is semantic?* This question breaks down into two questions. Of all the various kinds of information communicated, which kinds are semantic? And, of all the information surrounding a linguistic utterance, how much of it is semantic? Often, the answers to these questions will depend on each other. For example, one sort of view we'll discuss in this chapter is the view that the semantic content of a sentence token is always a proposition. Some who adopt this view also think that many sentences do not, in and of themselves, express propositions; e.g., that only when uttered in a context does a sentence like "It's raining" express a proposition, because only in a context can the location at which it is raining be specified. If one accepts both these views, then one will take more of the information surrounding utterances of "It's raining" to belong to its semantic content than one who agrees that semantic contents are always propositional but thinks that "It's raining" does, on its own, express a proposition (e.g., Cappelen & Lepore, 2005). Somebody who holds both these views will agree with another who accepts that the semantic contents of sentences are always propositions but denies that "It's raining", as a sentence type abstracted from use, does not express a proposition, about what kinds of information are semantic, but not about how much information is semantic. On another level, they will disagree about what kinds of information are semantic, viz. whether information about location enters the semantic contents of utterances of "It's raining". In Chapter 2, we look at a species of argument which infers from limitations in the cognitive capacities of *prima facie* competent speakers to the claim that semantic contents must be correspondingly minimal, or encode only certain kinds of information.

In this thesis, I treat several notions as co-extensive. As I will use the terms, the *meaning* of a linguistic expression is just the *information* encoded by the

expression; the meaning of an expression or the information encoded are the *semantic contents* of the expression; and both meanings and information (or having meaning and encoding information) are *semantic properties* of expressions. Expressions can have different kinds of semantic properties. The roughest distinction within kinds of semantic properties is the traditional divide between sense, or conceptual meaning, and reference. As I will use the term 'meaning', both sense and reference are kinds of meaning or semantic property. Equivalently, sense and reference are kinds of information, although it is awkward to say that reference itself is (a kind of) information. More naturally, information *about* reference is one kind of semantic property. Rather than saying George Washington himself is part of the information encoded by the name 'George Washington', it is more natural to say that the fact that 'George Washington' refers to George Washington is a semantic property of the name 'George Washington', or comprises (some of) the information encoded by the name.

Categories of kinds of information can be as specific as *information about location for tokens of certain sentence types* and as general as *truth conditions of natural language sentences*. Generally, disagreements about the kinds of information relevant to semantic analysis entail disagreements about how much information is relevant, and vice versa. I won't be too concerned with mapping out the ways these issues interact. I am more interested in the prior questions of why we ought to think that there is semantic information at all and what reasons we should have for claiming some information as semantic, not pragmatic.

## 1.2 The semantics/pragmatics distinction

Debate in contemporary philosophy of language over the question of where and how to demarcate the domain of semantic information has primarily taken the form of a border dispute between two related disciplines, semantics and pragmatics. There are two ways of drawing the semantics/pragmatics distinction. The first way approaches the question directly. From this perspective, there are two kinds or sources of information which contribute to the informational contents of linguistic

utterances: Information which is encoded by the uttered expression (semantics), and information which is otherwise conveyed by the utterance, either by the manner of utterance (tone, volume, prosody, etc.) or the mental state of the speaker (intentions, beliefs) (pragmatics). One of the key tasks of language analysis is to tease apart these two sources of information and describe how they interact to produce the informational contents of utterances.<sup>1</sup>

The second way of drawing the distinction approaches our question indirectly, by turning inward to the minds of language users. Proponents of this approach, such as Borg (2004) and Bara (2010), distinguish different cognitive mechanisms, or systems of mechanisms, called *competences*, which underlie language comprehension and linguistic communication. From this cognitive perspective, there are two kinds of competence underlying linguistic communication, semantic competence, which processes the information encoded in language, and pragmatic competence, which processes non-linguistic information.<sup>2</sup>

The viability of the indirect route through the linguistic knowledge of competent speakers depends on certain assumptions about the nature of languages, both as kinds of metaphysical objects and as objects of theoretical inquiry. The primary question here is whether speakers' mental contents are *determinants* of semantic contents. If so, then in theory we can read off the meanings of English

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<sup>1</sup> By "informational contents of utterances", I mainly have in mind the propositions semantically expressed or pragmatically implicated, but information is not limited to propositions. Nothing in my views hinges on an account of information as essentially propositional. Non-propositional elements of speech acts (e.g. body language and facial expressions, speech pragmatics, speakers' intentional states) help to produce or convey communicated propositions. I consider these elements information as well.

<sup>2</sup> A third way of drawing the semantics/pragmatics distinction conceives of the distinction as one between the abstract modeling of informational contents and the theory of information processing (Scott-Phillips, 2015: xiii). From this perspective, semantics is essentially a model-theoretic analysis of the compositionality of informational contents assigned to (not discovered in) linguistic expressions, and the evaluation of these contents at various formally described contexts of use. Accordingly, all language processing is in the purview of pragmatics, regardless whether it is processing of the information encoded in language or of paradigmatically pragmatic communicative contents, like conversational implicatures. This perspective will receive no further discussion; however, I do consider issues tangential to the third conception of the semantics/pragmatics divide, especially in 1.3 when I discuss the theoretical baggage inherited from formal semantics by natural language semantics.

expressions from the semantic competence of native English speakers (for example).

Much of this thesis concerns the viability of the indirect route to semantic contents. Chapter 2 assumes that we can reach semantic information directly through an inventory of semantic competence, and Chapter 3 evaluates the prospects for this approach. In Chapter 2 I briefly discuss the question of the metaphysics of language, which is directly relevant to whether semantic competence determines semantic contents, and return with explicit discussion of metaphysical issues in 5.5.

First, we consider the direct route by looking at two of the criteria most frequently cited in the search for the semantic domain, the context-insensitivity of linguistic meaning and the truth-evaluability of semantic contents.

### 1.3 What information is semantic?

#### 1.3.1 In search of a criterion for semantic information

My interest in semantic competence is a means to an end. I want to know which information is semantic. The major task in answering this question is to articulate some criteria for dividing the informational contents of utterances into their semantic and pragmatic components.

The roughest criterion for separating semantics from pragmatics is context-sensitivity (Scott-Phillips, 2015: xiii). Most utterances have several layers of meaning which interact with context to varying degrees. Paul Grice's (1989) three-fold distinction between sentence meaning, what is said by the utterance of the sentence, and what is implicated its utterance, is an influential account of the components of utterances' informational contents. *Sentence meaning* is the context-invariant meaning of the sentence type uttered, variously called its *literal meaning* (Bach, 1994), *character* (Kaplan, 1989a), *standing meaning* (Davidson, 1986) or *standing linguistic meaning* (Stanley, 2007b). *Utterance meaning* or *what is said* by the utterance of a sentence is the meaning of the sentence type relativized to the

context of utterance. *Speaker's meaning* or *what is implicated* is the information conveyed above and beyond what is said by the utterance.

Take (1) as an example. Suppose Spike utters (1) at noon on June 6, 2017 in Hamilton:

(1) I am here now.

We can distinguish quite clearly the three Gricean layers of meaning of Spike's utterance, starting with sentence meaning.

*Sentence meaning*: The meaning of (1) as a sentence type is the same no matter where or when it's uttered. It's something like *the utterer of this sentence is located at the place of the utterance at the time of the utterance*. Sentence meaning is context-insensitive. All tokens of a sentence type have the same sentence meaning. Generally, all expression tokens of a certain expression type have the same *expression meaning*. Expression meaning is the most abstract kind of meaning. Expression meaning does not interact with context, though it may mandate circumscribed contextual interactions which determine the semantic contents of what is said by all tokens of the expression type; e.g. as functions from certain predefined contextual parameters to certain kinds of semantic contents (Kaplan, 1989a).

"Mandated" is a term of art. I use it to denote language-context interactions amenable to systematic description at the level of expression types. If some influence of utterances' contexts on their semantic contents is mandated, then it is a property of the expression type of which the utterance is a token that certain, predefined contextual parameters determine the semantic contents of every token of that type. I primarily use "mandated" to describe the context-language interactions of putatively context sensitive expressions, like indexical pronouns, but we can generalize the term and say that the semantic properties of all expression tokens are mandated by the semantic properties of their types. So, if an expression is context insensitive, like 'door' or 'penguin', we can say it is mandated by the word type that every token of 'door' has all and only the semantic properties of the

word type 'door', every token of 'penguin' has all and only the semantic properties of the word type 'penguin', etc.<sup>3</sup>

*What is said:* Often, what is said by the utterance of a sentence is not the context insensitive meaning of the sentence type (its expression meaning). Rarely would somebody uttering (1) intend to assert its sentence meaning. Rather, what is said by Spike's utterance of (1) is much closer to what we would ordinarily take him to be asserting, intuitively, viz. that he, Spike, is in Hamilton at noon on June 6, 2017. But what is said is closely related to expression meaning. Generally, what is said is a function of expression meaning plus certain contextual factors whose relevance is mandated by expression meaning. The explication of the notion of *what is said* is an extremely contentious matter among philosophers of language, and much of the debate about semantics/pragmatics concerns which bits of information are mandated by expression meaning.<sup>4</sup> Sentence (1) gives us a relatively neat example; in this case, the expression meaning of Spike's utterance of (1) mandates that certain values enter into the semantic contents of all tokens of (1), viz. the identity of the utterer, and the time and location of the utterance.<sup>5</sup> The proposition which we would typically expect Spike to communicate by his utterance is a direct function of the expression meaning of his utterance and the context in which it occurs.

*What is implicated:* The information Spike conveys by his utterance of (1) is not limited to what is said by his utterance or the meaning of the sentence uttered. There is (at least) one more layer of meaning to his utterance, *what is implicated* by his utterance. Speaker's meaning, or what is implicated, bears no necessary relation

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<sup>3</sup> Perhaps the reader finds it more natural to say that expression types encode information, but the information encoded by expression types mandates the semantic properties of their tokens. In that case, we might want to distinguish what is semantically mandated by expression types from what is semantically encoded by expression types. Generally, however, I will talk about an expression token's semantic contents as encoded by the expression, regardless whether that information is a property of the expression type or is merely mandated by it.

<sup>4</sup> See Stanley (2007b) for a review of recent debate.

<sup>5</sup> But even this analysis is not uncontroversial. See Predelli (2005) for extended discussion. Also, see Stanley (2007b) for an overview of the debate about the context-sensitivity of what is said.

to expression meaning. Instead, it is completely dependent on the context of utterance. Implicatures are the paradigms of pragmatic information. What is implicated by the utterance tokens of an expression type is never mandated by the semantic properties of the type. By his utterance of (1), Spike might be implying that he won't be there for long, that he's arrived earlier than expected, or anything else, for that matter.

On the context-sensitivity criterion under discussion, semantics is constitutively concerned with those features of contexts of utterance whose relevance to utterances' informational contents is mandated by expression meaning. Depending on how unruly language-context interactions are, the semantic buck might stop at expression meaning (Sperber & Wilson 1995), but typically adherents of the context-sensitivity criterion, e.g., (Soames, 2002) (Salmon, 2004) (Cappelen & Lepore, 2005) argue that at least some contextual interactions are amenable to systematic analysis at the level of types, hence that semantics concerns what is said at least some of the time (along with expression meaning).

Typically, disagreements about *what is said* by an utterance of a sentence come down to disagreements about which kinds of language-context interactions can be captured systematically as properties mandated by expression types. For example, on the standard theory, indexicals and demonstratives vary in how their context insensitive meanings interact with contexts of utterance (Kaplan, 1989a). The way the expression meaning of the pronoun 'I' interacts with a context of utterance doesn't vary; for any context C in which 'I' is uttered, the referent of 'I' is the individual who utters it in C. Some deny that there is any such relationship between demonstrative pronouns, like 'this' and 'that', and their varying contexts of utterance. The referent of 'I' is entirely determined by a rule governing the expression type (given as input to the rule a formal description of the context of utterance), whereas the referent of a token of 'that' depends unsystematically on complex, poorly understood properties of the speaker's mental state of which no such formal description is available. Taking this tack, Kent Bach (1994: 175-194)



argues that the information contributed by the context of utterance, viz. pronoun reference, contributes to the semantic contents of what is said by (2) but not (3) (as uttered by Bach and me, respectively).

(2) I am Kent Bach.

(3) That is Kent Bach.

Because expression meaning mandates a referent for the pronoun for any context in which (2) is uttered, but not (3), Bach takes the referent of 'I' in (2), but not 'that' in (3), to constitute part of "what is said" by our respective utterances (that is, to their respective semantic contents) (Bach, 1994: 175).<sup>6</sup>

Contrast Bach's view with Herman Cappelen and Ernie Lepore's. Bach thinks that how the referent of a context sensitive expression is determined in a context of utterance—whether, e.g., by a predefined mathematical function or the speaker's mental states—makes a difference to its semantic relevance; but C&L disagree (Cappelen & Lepore, 2005: 146-150). The expression meaning of a pronoun may mandate a rule which outputs a referent for every context in which it is uttered, as with pure indexicals like 'I', or it may not, as with demonstratives like 'this' and 'that'—but C&L deny that the manner of reference-fixing for tokens of context sensitive expressions makes a difference to their semantic contents. On their view, what makes an expression token's semantic content sensitive to context is simply that the type of which it is a token is a paradigmatically context sensitive expression, belonging to the "basic set" of "genuinely context sensitive expressions" (Cappelen & Lepore, 2005: 2).<sup>7</sup>

The conflict between Bach's and C&L's views is not a disagreement over whether expression meanings mandate the semantic contents of speech acts, i.e. what is said by utterances of sentences. In this sense, their disagreement is superficial as it relates to the semantics/pragmatics distinction. Bach and C&L

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<sup>6</sup> Bach's claim is that (2) expresses a so-called singular proposition partially constituted by the referent of 'I', viz. Bach, but (3) expresses a general, quantified proposition.

<sup>7</sup> For more on the semantic relevance of the way contents are fixed, see the various threads of debate abundant in the literature on language and mind about the wide context vs. narrow context distinction for semantic and mental contents.

agree that the relevance for semantics of language-context interaction depends on whether it is fixed by the properties of expression types. On the Gricean way of dividing utterances' informational contents, what is important for delimiting the semantic domain is not *how* context-sensitivity is settled, but *when* it is settled, viz. at the level of expression types.

Although it is one of the main battlegrounds in the boundary dispute between semantics and pragmatics, *what is said* is not the right place to start drawing the distinction between semantic and pragmatic information. To choose which contextual features are relevant to determining the semantic contents of utterances and why presupposes a prior criterion. We are after the criteria which determine the semantic relevance of context-sensitivity, not the criteria of context-sensitivity itself.

One such criterion is truth-evaluability. A standard assumption in natural language semantics is that the semantic content of a sentence is its truth condition. In 1.3.2 we begin a survey of six justifications offered for this assumption, two of which are compelling.

### 1.3.2 The truth-conditional tradition

The dominant tradition in natural language semantics, originating most notably with Donald Davidson and Richard Montague in the 1960s, analyses the semantic contents of sentences as their truth-evaluable contents, i.e. the propositions they express or statements of their truth conditions (D. Harris, 2017). Generally, this tradition identifies the semantic properties of an expression with its contribution to the truth conditions of arbitrary compound expressions in which it occurs. Truth-conditional meanings are represented in one of two ways. A proposition is a non-linguistic representation of truth conditions, and a statement of truth conditions is a linguistic representation of truth conditions. I won't discuss the finer differences between propositions and statements of truth conditions in any detail. They are unimportant for present purposes. Following Borg, I use the generic 'truth

condition' to name anything "which (given a context of evaluation) is truth-evaluable in its own right" (Borg, 2004: 5).

Why do we need a theory of meaning for natural languages? And why should we expect that theory to deal in truth conditions? For many theorists, one question answers the other: Meanings just are truth conditions, and semantic theories just are theories of truth conditions.

Accordingly, the first justification for the truth-conditional analysis of meaning is definitional: Semantics just is the analysis of truth conditions. As David Lewis puts it, "Semantics with no treatment of truth conditions is not semantics" (Lewis, 1970: 190). Borg elaborates:

[It is] pretty much constitutive of formal theories of meaning...[that] the semantic content they promise to deliver is truth-conditional or propositional—something which (given a context of evaluation) is truth-evaluable in its own right...To capture the literal meaning of a natural language sentence it is necessary and sufficient to determine its truth-conditional or propositional content (Borg, 2004: 5).

An elaboration of this justification is that natural language semantics is an extension of the project of formal semantics, set out by Frege and taken up by Carnap, Tarski, and others, of codifying the formal properties of artificial or idealized languages, like entailment, consistency, and validity, which require by their nature a truth-conditional analysis. Comments by Borg, Scott Soames, and Davidson are representative of this approach.

It seems that we can assess arguments in natural languages as valid or invalid, yet such assessments *only* make sense if the sentences which form the argument can themselves be the bearers of truth-values (Borg, 2004: 5).

An adequate semantics for a natural language must contain a theory of truth conditions that characterizes logical properties and relations such as logical truth, contradiction, entailment, and consistency (Soames, 1985: 204).

[A] semantic theory of a natural language cannot be considered adequate unless it provides an account of the concept of truth for that language along the general lines proposed by Tarski for formalized languages (Davidson, 1970: 55).

Roughly, the reasoning here is that, since formal analysis of logical properties is constitutive of semantics, and formal properties like entailment, etc. depend essentially on truth conditions, a semantics of natural language must be truth-conditional.

In one sense, this reasoning is unassailable. One can hardly fault philosophers for extending the formal semantic project to natural languages. But is this the way to give a theory of *meaning*?

The second justification for the truth-conditional analysis of meaning, again from Davidson, is its theoretical expediency. Truth conditions get us two for the price of one. Not only does a truth-conditional analysis “[provide] an account of the concept of truth”, which Davidson takes to be a condition of adequacy for any semantic theory, but

...a theory of truth for a language does, in a minimal but important respect, do what we want, that is, give the meanings of all independently meaningful expressions on the basis of an analysis of their structure (Davidson, 1970: 55).

A theory of truth is compositional—the truth conditions of a sentence are a function of the truth-conditional contributions of their constituent expressions plus their syntactic (or logical) form. A theory of meaning must be compositional in the same way to explain natural languages’ infinite supply of meaningful expressions. Davidson’s claim is not exactly that meanings just are truth conditions. Rather, since semantics needs to deliver the truth conditions of sentences anyway, and truth conditions are a sort of content, we can get away with treating truth conditions as linguistic meanings with no added theoretical fat.

Parsimony is a theoretical virtue—a theme I will return to repeatedly—but parsimony alone is not enough. Davidson doesn’t give us a reason to adopt the truth-conditional analysis unless we already accept his condition of adequacy, that a theory of meaning must satisfy the conceptually distinct goal of a theory of truth. Without independent, non-circular justification for his condition of adequacy,

Davidson has not established that truth conditions play the theoretical role(s) we need linguistic meanings to play in a theory of natural language.

A third justification is another variation on the dictum that meanings are truth conditions. It's not just that truth conditions are theoretically expedient. More crucially, *nothing but* truth conditions could conceivably do the job of a theory of meaning.

What *could* a meaning of a sentence be? Something which, when combined with factual information about the world—or factual information about any possible world—yields a truth-value (Lewis 1975: 163; emphasis mine).

That meanings *must be* truth conditions is not self-evident, but we are starting to ask the right questions. What could meanings be? Or, as I will put the question later, what must meanings be that they could be the objects of a scientific semantics of natural language?

We now turn to three justifications for the claim that meanings must be truth conditions because truth conditions satisfy various theoretical needs.

### 1.3.3 The informational contents of truth conditions

We have three more justifications, two compelling, for the truth-conditional analysis of meaning to discuss. We begin with the unconvincing.

What must meanings be if semantics is to be a viable theoretical pursuit? Jason Stanley claims that an adequate semantics must take up native speakers' "robust intuitions about the truth-conditions of [their] utterances" (Stanley, 2007b: 6). In terms of the three-fold Gricean distinction discussed above, Stanley's claim is that semantics primarily concerns truth-conditional analyses of "what is said" by utterances of sentences.

The first reason for this is evidentiary. Stanley argues that the primary (in fact, lone) data for semantics is speakers' intuitions about the truth conditions of linguistic utterances. Speakers' intuitions about "the truth and falsity of what is said by utterances of sentences of their native languages, relative to possible

situations...is the only viable basis for constructing an account of meaning for a natural language” (Stanley, 2007b: 6).

There is no other obvious source of native speaker intuitions that are related to meaning. So if we did not have robust intuitions about the truth-conditions of our utterances, it would not be clear how to test such hypotheses; there would be no firm basis on which to construct a theory of meaning (Stanley, 2007b: 6).

A few remarks on Stanley's argument from incredulity should bring out some important issues to be taken up throughout this thesis.

To begin, what counts as evidence for a theory cannot be stipulated *a priori* (Chomsky, 2000) (Antony, 2003). The evidentiary value of some phenomenon or bit of data is not pre-determined.

Evidence does not come labelled [as such]. It is just evidence, good or bad, compelling or noncompelling, given the theoretical frameworks in which it can be interpreted for the purposes of sharpening or confirming hypotheses (Chomsky, 2000: 55).

Confirmation comes from unexpected places—see Louise Antony on the surprising astronomical significance of 11<sup>th</sup> century Amerindian ceramics (Antony, 2003: 55-58). To rule out the evidentiary value of nearly all available data when dealing with phenomena of human mental nature, especially on vague criteria like “robustness”, is antithetical to genuine theoretical inquiry.

...a “naturalistic approach” to the mind investigates mental aspects of the world as we do any others, seeking to construct intelligible explanatory theories, with the hope of eventual integration with the “core” natural sciences. Such “methodological naturalism” can be counterposed to what might be called “methodological dualism,” the view that we must abandon scientific rationality when we study humans “above the neck” (metaphorically speaking), becoming mystics in this unique domain, imposing arbitrary stipulations and *a priori* demands of a sort that would never be contemplated in the sciences, or in other ways departing from normal canons of inquiry (Chomsky, 2000: 76).

Stanley is guilty of methodological dualism. One of the main themes in this thesis is that the grounds for constructing a theory of meaning cannot be decided in isolation from our broader theoretical commitments.<sup>8</sup>

Furthermore, it is the worst sort of philosophical nonsense to ground a theoretical enterprise *solely* on intuition without so much as a hypothesis about where these intuitions come from and why they are so “robust”.<sup>9</sup> Why put so much faith in speakers’ judgments about truth conditions?

Stanley’s reasoning seems to be this. Just as the modern theory of syntax is built on widely shared intuitions about the grammaticality of constructions like (4) and (5),<sup>10</sup> so must semantics be built on intuitions about the truth or falsity conditions of sentences (relative to possible contexts of utterance) (Stanley, 2007b: 6). How does Stanley’s conjecture fare?

Not well. Grammaticality intuitions are significantly different in complexity than judgments about truth conditions. First of all, grammaticality judgments are simple. There is a consensus among native English speakers about ordinary sentences like (4) and (5).

(4) Mary expects to feed herself.

(5) I wonder who Mary expects to feed herself.<sup>11</sup>

Native English speakers agree that (4) sounds all right and (5) doesn’t. These are not substantive intuitions; they are binary, “yes or no” feelings (Jackendoff, 2011: 195-199). Perhaps there is a similar feeling associated with truth judgments (Jackendoff, 2011: 195-199), but the intuition that (4) is true, provoked by the description of a circumstance in which (4) is uttered, is not the same as the intuition of (4)’s truth conditions. The truth condition of (4) is more complex, something like (6):

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<sup>8</sup> I elaborate on this and other aspects of Chomsky’s methodological comments in 1.4.

<sup>9</sup> I assume robustness concerns things like the stability of individual speakers’ judgments over time and agreement among different individuals.

<sup>10</sup> More accurately, they are “acceptability” judgments (R. Harris, 1993: 183-187), but the distinction is inconsequential. For an overview of this method in linguistics, see Jackendoff, 1994: 44-45.

<sup>11</sup> Examples from Chomsky, 2000: 47.

- (6) 'Mary expects to feed herself' is true if Mary expects to feed Mary and false otherwise.

If intuitions of the truth conditions of ordinary sentences like (4) are anything like (6), then they are more complex than any intuition about truth values. (6) contains multiple logical connectives ("if...then", "and") and predicates ("is true"). The more complex are truth conditions, the more we should expect speakers to diverge on them—unless given an underlying explanation of their source.<sup>12</sup> And the more complex they are, the stronger must be the explanation for their robustness.

Of course, these intuitions are nowhere near as reliable as Stanley thinks, being too dependent on contextual factors. Intuitions are "primed" by context in unpredictable, unsystematic ways (Chomsky, 2000) (Pietroski, 2003: 218-220) cf. (Stanley, 2007b: 20-21).<sup>13</sup> How we judge that some sample of water is H<sub>2</sub>O depends, for example, on where the sample came from and how it's been presented to us. It also depends on the chosen standards of evaluation. Whether someone judges that a sample of water is H<sub>2</sub>O might depend on whether she's doing chemical analysis or just quenching her thirst (Chomsky, 2000: 160-161).

Even if judgments about truth conditions were as robust as Stanley claims, he doesn't give us a clear hypothesis about why that is. Not only are grammaticality/acceptability judgments typically stable and repeatable, but generative grammarians in the tradition of Chomsky and Jackendoff offer an explanation. Generativists posit a mechanism in the native speaker's mind-brain, her *mental grammar*, which is devoted to processing the syntactic properties of linguistic utterances (Chomsky, 1965).

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<sup>12</sup> This observation presupposes that more complexity entails more individual features, and agreement about complex matters therefore requires more individual points of agreement. Unless there is a reason for agreement, then whether two individuals agree about a certain point is unpredictable. The more features there are, the greater the improbabilities pile up that two individuals will agree on everything.

<sup>13</sup> Personally, my own judgments about truth conditions (and truth values) are highly unstable, varying with how a situation is presented, what sort of standards of evaluation are adopted, etc. But this is *not* an endorsement of any pernicious sort of relativism.



Mental grammars are idiolectal developments of the species-wide *universal grammar*. Humans innately possess a universal grammar, a sort of unconscious mental procedure for organizing linguistic data (the corpus of utterances experienced in childhood development) into a mental grammar. A mature speaker's mental grammar is a function of her universal grammar and her linguistic experiences up to a certain age. Each person's mental grammar is capable of representing all (and only) the grammatical sentences in her language. Though the mental grammar is not itself consciously known, its results float to the surface, so to speak, as judgments about the grammaticality/acceptability of sentences. This explains the availability of intuitions to native speakers and their stability through time. After one learns her language, i.e. develops a mature mental grammar, the grammatical properties of her idiolect are fixed.

The notion of a universal grammar also explains why these intuitions are shared among speakers. Mental grammars are tuned to the child's experiences. A person's mental grammar is a function of her universal grammar, which she shares with other humans as a species trait, + her linguistic experiences. The universal grammar extracts regularities in syntactic structures from utterances experienced in development. If two children grow up in sufficiently similar linguistic environments, their experienced utterances having (roughly) the same syntactic properties, they will develop virtually identical mental grammars which therefore agree on the grammaticality of test sentences like (4) and (5).

This is a deeper explanation of agreement than merely saying that speakers agree on grammaticality judgments because they speak the same language. We tend to talk as if linguistic communities are homogenous, e.g. as if English is one language with a unique grammar spoken by hundreds of millions of people. But, as Chomsky (2000) notes repeatedly, what we call English is really a collection of very similar mental grammars of millions of speakers. No two children hear precisely the same set of utterances in their development, so no two children (necessarily) share a mental grammar. However, because speakers in linguistic

communities grow up hearing utterances having very similar grammatical structures, they come to develop (more or less) the same mental grammar.

This is meant to be a general description of the Chomskyan approach to linguistics and does not presuppose the details of any one iteration of Chomsky's own theory. I don't want to overestimate the role of experience in determining syntax. The contentious point here is what makes one grammar (or language) the same as another. On Chomsky's more recent views, syntactical differences tend to be rather superficial, all human languages sharing a basic underlying structure or deriving from variations among a small number of fixed parameters. Depending on how many variables in the universal grammar are to be fixed by experience, two speakers who hear very similar utterances in development may develop precisely the same mental grammar, agreeing on all their grammaticality judgments, or sufficiently similar grammars, agreeing on most their grammaticality judgments.

Stanley's claim—that intuitions about utterances' truth conditions are the primary source of evidence for a theory of meaning, not only for idiolects but for monoliths like "Canadian English"—requires support from a hypothesis analogous to the generative grammarian's. One possibility is that languages are public objects of some sort, and individuals develop their idiolects by learning the properties of these objects. We'll discuss the problems with this hypothesis in Chapters 2 and 5. More plausibly, Stanley could follow Borg (2004), herself taking a lesson from the generative tradition, in positing a component of speakers' mental grammar devoted to processing semantic information (specifically, to processing truth conditions).<sup>14</sup> To Stanley's credit, he does refer to a shared "linguistic capacity", but he doesn't spell this out in any detail (Stanley, 2007b: 1). I explore this possibility in more detail in later chapters.

In summary, Stanley's claim about the evidentiary value of intuitions faces several difficulties, not the least of which is that, *pace* Borg, there's no *a priori*

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<sup>14</sup> This hypothesis would require a story like the generative grammarian's story about the interactions between universal grammar and linguistic experiences. Presumably, however, the notion of a semantic module would form part of the broader theory of universal grammar.

reason to suppose that the analysis of linguistic meaning, must skew truth-conditional. Borg assumes that the semantic component of mental grammar must deal in truth conditions, not because that is the job we need a theory of meaning to do, but because truth-conditional analysis is *a priori* definitive of semantics.

But Stanley is not alone in his conviction. Philosophers commonly allege there to be a strong “intuitive pull towards the idea that sentences encode truth-evaluable content” (Borg, 2004: 5). Unless this intuition serves the goals set out within a broader theoretical framework, it is of limited value.

Fortunately, there are better reasons available. The fifth justification for the truth-conditional account of meaning cites the representational character of truth conditions. As Soames argues,

The reason for focusing on truth conditions arises from the representational character of semantic information. A sentence that represents the world as being a certain way implicitly imposes conditions that must be satisfied if the world is to conform to the way it is represented to be. Thus, the semantic information encoded by a sentence determines the conditions under which it is true. There may be more to semantic information than truth conditions, but there is no information without them (Soames, 1989: 575-6).

This is a substantial point. Semantics exists as a field of inquiry because we have reason to believe that languages encode information. Not all information is representational (see footnote 1), but it is at least plausible that the information encoded by sentences is representational. We expect meaningful (indicative) sentences to tell us how the world is (could be, is purported to be, etc.), and, Soames argues, representations of this kind are, at minimum, truth-conditional.

There are two points here. One is that linguistic expressions encode information. The other is that semantic information is representational, hence truth-conditional. It's an open question whether this information is adequate for characterizing formal properties of sentences and arguments, like validity, etc., but I do accept Soames's argument that the information encoded by certain classes of sentences is truth-conditional, even if not fully truth-evaluable, and that an

expression's meaning is its contribution to truth conditions of the compound expressions it occurs in.<sup>15</sup>

Soames adequately argues the second point, but what about the first? Why should we suppose that language encodes information? Let's revise Borg's earlier remark: Certainly, there is an intuitive pull towards the idea that expressions encode information. But intuition is a starting point, not a justification.

#### 1.3.4 The communication criterion

If semantics is to be a genuine theoretical discipline, we need reason beyond intuition to ascribe meaning to language. The sixth justification for truth-conditional semantics doubles as justification for the general thesis that language encodes information: Expressions must encode information to explain the transmission of information through linguistic communication. A corollary is that speakers must have a mental grasp on the encoded information to explain their comprehension of linguistic utterances.

This claim and its corollary piggyback on the fourth justification we looked at, Stanley's claim that intuitions about utterances' truth conditions are our primary (if not only) semantic data. Stanley's explanation of this claim is to wave his hands at a "linguistic capacity" shared among competent speakers, but the idea, if not the execution, is compelling. But why should we expect semantics to account for phenomena of linguistic communication?

In his own words, Stanley describes semantics as "the project of explaining how extra-linguistic context interacts with linguistic meaning and structure to yield the intuitive truth-conditions of an utterance" (Stanley, 2007b: 7-8). In the terminology introduced earlier, semantics is about the informational contents of linguistic utterances mandated by expression types. Stanley's claim is that the phenomena of linguistic communication require these contents to be cognitively

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<sup>15</sup> We can't characterize meaning as truth-conditional across the board. Indicative sentences are prime candidates for truth-conditional analysis. Questions and commands, less so. Similarly, although they can appear in sentences which do have truth-conditional content, certain words, like conjunctive adverbs ("however", "although", etc.), don't seem to make a truth-conditional contribution to sentence meaning (D. Harris, 2017).

accessible, hence they are utterances' intuitive truth conditions; therefore, semantics requires that there be a complex system of language-context interactions amenable to systematic description at the level of types.

Stanley calls theorists who deny that there could be any such project "pessimists".

On the pessimistic view, there is stability to word meaning and the significance of the syntactic structure of sentences. But in general there is no systematic way of going from the meanings of the words in a sentence and its syntactic structure to the intuitive truth-conditions of its various utterances...[T]he unsystematic way in which the context of discourses affects the intuitive truth-conditions of the utterances that occur in them undermines the search for an illuminating general description of the mapping between utterances and their intuitive truth-conditions (Stanley, 2007b: 8).

As described here, "pessimism" encompasses a broad spectrum of views; from *radical contextualism* to *radical minimalism*. Radical contextualists argue that the extreme context-sensitivity of utterances' truth-evaluable contents precludes a uniquely semantic domain of inquiry (Recanati, 2003). Radical minimalists overcome the problem of systematizing context-sensitivity by rejecting the truth-evaluability criterion (Bach, 2006; 2007). In between is what I call *formal semantic minimalism*. Such minimalists hold that the domain of semantics must include language-context interactions only to the extent that they are mandated at the level of expression types and necessary to generate a truth-evaluable content (Borg, 2004) (Cappelen & Lepore, 2005).<sup>16</sup> The result for both formal and radical semantic minimalists is that utterances' semantic contents generally contain less information than they intuitively communicate.

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<sup>16</sup> The cited authors disagree about what divides truth-evaluable, i.e. fully propositional, contents from non-truth-evaluable contents. For example, C&L think that "Bert's ready" expresses a proposition, and the same one in every context, viz. the "minimal proposition" *that Bert's ready*. Borg represents the more common view, that the type "Bert's ready" does not express a proposition on its own. Rather, if tokens of "Bert's ready" are to be truth-evaluable, then context must provide a grammatical object denoting what Bert is ready for. Tokens of "Bert's ready" therefore express different propositions in different contexts in a systematic way which must be accounted for by a semantic theory.

The result of such “pessimistic view[s]” is that the information contained in an utterance of “Bert’s ready” is less than the proposition intuitively communicated by the utterance, *that Bert is ready for his walk*. This result is problematic: “If any version of the pessimistic view were correct, significant facts about linguistic communication would be inexplicable” (Stanley, 2007b: 8). The correct semantic theory must explain the phenomenon of information transmission through linguistic communication.

Stanley argues that (i) language must be information-rich, and (ii) that this information must take the form of utterance truth conditions mandated by the semantic properties of expression types. Stanley’s argument for (i) is that sentences must encode lots of information because we use them to convey lots of information. His argument for (ii) is more complex. As he says,

A conversation involves acquiring and conveying information about the world, immediately and without much conscious reflection. Our linguistic capacity thereby enables us to engage in complex cooperative activities that require rapid information flow between large numbers of people (Stanley, 2007b: 1).

Stanley supposes that linguistic communication proceeds by the transmission of information through encoding and decoding each other’s sentences (plus or minus some pragmatic inferences in cases of non-literal or indirect speech)—an assumption we will challenge in Chapter 4. Because linguistic comprehension depends on encoding and decoding utterances of sentences, the information encoded by expressions must be cognitively accessible to speakers upon reflection if they are to understand linguistic utterances. Because speakers reliably have access to utterances’ truth conditions through intuitions, but no other such semantic intuitions, the information encoded in language must be utterances’ information-rich truth conditions.<sup>17</sup>

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<sup>17</sup> Cappelen and Lepore also adopt the truth-evaluability criterion for reasons related to linguistic communication. C&L think that the notion of propositional content is necessary for communication: “the proposition semantically expressed is our minimal defense against confusion, misunderstanding, mistakes and it is that which guarantees communication across contexts of utterance” (Cappelen & Lepore, 2005: 185).

Stanley therefore concludes that language must encode richly detailed information about the world, and that linguistic understanding proceeds by extracting this information from utterances through one's "linguistic capacity". As it happens, because of wonky views about semantic methodology, Stanley thinks this information must come in the form of utterances' intuitive truth conditions.

### 1.3.5 Information and communication

It is one hypothesis that words and phrases encode information, and another that semantic information is truth-conditional. Two reasons for these views are compelling. First, meaning is the information encoded in linguistic expressions; this information is representational, and representations are essentially truth-conditional (Soames, 1989). Second, linguistic communication is the transmission of information from one person to another, and this is possible only if we suppose that the information communicated is encoded in the language itself (Stanley, 2007b)—whatever form that information must take.

We have been looking for a criterion to distinguish the information encoded by linguistic expressions (their semantic contents) from other, pragmatic factors.

Although I disagree with the details of his account, Stanley provides us with a useful criterion: The amount and kinds of information we must ascribe to linguistic expressions depends on the role of semantic information in linguistic communication.

## 1.4 Theoretical considerations for the theory of linguistic meaning

Natural language semantics seeks a theory of linguistic meaning. In this chapter, we've found several important lessons which should guide us in our search for this theory.

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However, we have no reason to think that a theory of communication needs to *guarantee* communication as a *minimal condition* of adequacy. There are a lot of moving parts to communication, and there's no reason to think that a theory of these parts and their interaction must build in a guarantee of success. If the "guarantee of communication" plays a role in a theory of communication, it is as a regulative ideal—it is what happens when *everything* goes right.

We ought to approach semantics as we would any other scientific, theoretical enterprise. While the theory of meaning might coincide with the theory of truth conditions and related, logical properties, this is not to be settled *a priori*. We should seek to discover, not stipulate, the nature of semantic properties. Nor should a theory of meaning depend on intuition: "It is not the business of the sciences to express the content of ordinary discourse about anything, physical or mental" (Chomsky, 2000: 91).

Rather, the methods guiding semantic discovery should be continuous with the general methodology of the natural sciences. Supposing language and meaning to be essentially mental phenomena, we should investigate them as we would any other phenomenon.

[A] "naturalistic approach" to the mind investigates mental aspects of the world as we do any others, seeking to construct intelligible explanatory theories, with the hope of eventual integration with the "core" natural sciences" (Chomsky, 2000: 76).

Methodological naturalism is business as usual in the sciences. Stanley's conception of semantics as the codification of utterances' intuitive truth conditions therefore falls outside the bounds of the "normal canons of inquiry" (Chomsky, 2000: 76).

What belongs to the normal canons of inquiry? Let me highlight just a few of the theoretical goals and virtues of naturalistic methodology. Chomsky has already mentioned the goal of integration with the other sciences, what E. O. Wilson calls "consilience". Consilience is "the linking of facts and fact-based theory across disciplines to create a common groundwork of explanation" (Wilson, 1998: 8), producing a system of "interlocking...causal explanation across disciplines" (Wilson, 1998: 359).

Certain principles, sometimes called theoretical virtues, govern scientific theorizing. Two are parsimony and explanatory power. Standard operating procedure in the natural sciences is to posit the existence of entities having certain properties which explain otherwise inexplicable phenomena. The requirement for



theoretical simplicity leads us to posit only those entities necessary to explain the phenomena. What counts as explicable or inexplicable phenomena, or even as phenomena of interest to scientific inquiry, depends on the assumptions of the theoretical framework through which one is viewing things. Theory choice is governed by explanatory power. When the broader theoretical context changes, typically due to unforeseen empirical discovery, so may the explanatory power of posited entities change. Not only must our theories aim to explain, not merely describe, phenomena, but we should choose the theory which offers the best explanation.

How do these lessons apply to the theory of linguistic meaning? We ought to conceive the theory of linguistic meaning as continuous with other scientific inquiries, with an eye to integration with the natural sciences. The contents of a semantic theory are therefore not to be settled *a priori*. Instead, we should take the thesis that language encodes information as a hypothesis. Accordingly, meanings are theoretical posits which earn their place in the theory of language by their explanatory power. Meanings should do no more than we need them to do. To avoid redundancy in explanation, we should ascribe only that information to expressions insofar as it explains otherwise inexplicable (on present assumptions) phenomena.

A theory of meaning should *do* something, fill some unexploited theoretical niche. What we need it to do, and where the explanatory gaps are, depends on the theoretical framework we adopt and our auxiliary assumptions. What assumptions should guide us in developing a theory of meaning? To begin with, natural languages are natural phenomena, an evolved biological property of *homo sapiens*. Evolved for what?

There are two answers to this question. Either language evolved to improve communication or it evolved to improve thought.<sup>18</sup>

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<sup>18</sup> A third option is that the essential features of language didn't evolve at all, but came about by a single mutation. See Jackendoff & Pinker (2005) for discussion.

What belongs to our linguistic capacity depends on the function it serves. What is language's function? The first hypothesis is that language's "appearance is connected with the social nature of human beings...[and] developed because it was the most promising means for the realization of smooth and successful communication, which would thus appear to be its basic function" (Bara, 2010: 3). The second hypothesis is "that language emerged as an aid to the formulation of priorly existing thought, and that it was subsequently exploited in a parasitical fashion to satisfy the needs of communication" (Bara, 2010: 3). Jackendoff elaborates:

Did language arise in our distant ancestors primarily as an enhancement of communication, or as an enhancement of thought? (More properly, were the reproductive benefits conferred on our ancestors by having language primarily due to their ability to communicate or due to their ability to think?) We can't go back there and find out. Nearly everyone assumes that the primary advantage was in communication. But Noam Chomsky, never to be taken lightly, has argued that communication had little to do with it. For him, the primary innovation was structured thought. What he calls "externalization"—the ability to speak one's thoughts out loud—was a later development. But for him, "externalization" includes pronunciation, which provides the very "handles" [the conscious manifestation of unconscious cognitive processes] that make rational thinking possible. So, on the present story, he's got to be wrong. My inclination is to think that the language faculty developed in the service of enhancing communication, but the immediate enhancement of thought was a huge side benefit (Jackendoff, 2011: 222 footnote 1).<sup>19</sup>

We have no need to enter this debate. I assume that the features of language and our linguistic capacity are designed to facilitate communication. While there is no guarantee that a given feature of language which now serves a communicative function evolved for communication, we are *prima facie* warranted in explaining the features of language and language cognition as features designed by evolution to enable linguistic communication.

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<sup>19</sup> Of course, things are not as simple as a binary choice between two distinct, linear causal paths, one describing the development of communication and another the development of thought (Bara, 2010: 3-5; Ch. 6 *passim*). See Bloom & Pinker (1990) and Jackendoff & Pinker (2005) for useful outlines of the debate.

In short, I suggest we view the theory of linguistic meaning in the context of a broader theory of communication. And I think Stanley is right. We need to posit linguistic meanings to explain certain communicative phenomena, including the transmission of information using language. The best reason we have for supposing that language encodes information about the world is that our knowledge provides us with access to information through communicating with others. Stanley supposes that language must do most of the work. We communicate so much information so efficiently by exploiting our shared knowledge of the information-rich semantic contents of natural language. As I stated above, Stanley's supposition is plausible only on the assumption of an incorrect model of linguistic communication, but the larger idea is good: The amount and kind of information we ascribe to language depends on the role language plays in the communication of information.

In summary, we have theoretical and empirical reasons to assume that the features of language are designed for facilitating communication; that among these features are meanings (semantic properties, semantically encoded information, or what have you); and that the capacity for linguistic communication requires language users to represent these properties in their minds. Methodological considerations require us to limit the nature of the posited semantic entities, including the capacity for linguistic cognition, to what is needed for explaining the phenomena of linguistic communication and comprehension.

These considerations also lead us to suppose that language and language cognition are closely intertwined. If so, the study of language cognition might open a backdoor into the domain of semantic information.

## 1.5 Looking ahead

Here's how we will carry these issues forward in the following chapters.

*Chapter 2:* I discuss one strategy for delimiting the domain of semantic information, the argument from competence. Arguments from competence infer from what can or cannot reasonably be represented in speakers' semantic

competence to the negative conclusion that some expression or expression class lacks a certain (kind of) semantic property. I assume that semantic competence is a matter of knowledge, but arguments from competence do not require this cognitivist assumption. They require only the assumption that the domain of semantic competence for a language is just its semantic properties. I analyse in detail one argument from competence, Kent Bach's argument against the thesis that reference is a semantic property of names.

*Chapter 3:* I discuss several issues relevant to evaluating arguments from competence and various objections. I argue that the viability of arguments from competence depends on the role of semantic competence in the capacity for linguistic communication. The strongest objection is that arguments from competence give undue importance to semantic competence's role in making linguistic communication cognitively possible.

*Chapter 4:* Speakers' capacity for linguistic communication depends on certain cognitive structures called *competences*. Semantic competence is situated in a hierarchy of communicative competences. Its role in linguistic communication, hence its place in the hierarchy, depends on the mechanics of linguistic communication. I delineate several levels of competence underwriting capacities for linguistic and non-linguistic communication, focusing on the information-processing mechanisms, semantic competence and pragmatic competence. The role of semantic competence, understood as knowledge of linguistic properties, depends on the mechanics of linguistic communication. I outline two competing models of communication, the *code model* and the *ostensive-inferential model*. Human communication, linguistic and non-linguistic, operates according to the latter model, entailing that semantic competence is unnecessary for either mode of communication and pragmatic competence is sufficient to explain the possibility of linguistic communication.

Arguments from competence are right to ascribe semantic properties to expressions based on the role of semantic competence in communication, but they

presuppose incorrectly that semantic competence is necessary for linguistic communication and therefore directly evaluable through speakers' actual, not idealized, linguistic capacities. Since semantic competence is not necessary for linguistic communication, arguments from competence fail.

I conclude the chapter by incorporating these other insights into a view called *methodological semantic minimalism*, which holds that we need not posit information-rich semantic contents, because we can explain much of information transfer through non-linguistic mechanisms of communication.

*Chapter 5:* Arguments from competence fail because the ostensive-inferential nature of linguistic communication severs the necessary connection between semantic competence and linguistic communication. Therefore, Kent Bach's argument that proper names do not semantically refer to their bearers fails. However, some of the same considerations motivating arguments from competence compel a different argument for this thesis. Methodological semantic minimalism requires us to ascribe only those semantic properties necessary to explain linguistic communication. Since we can explain all acts of reference using proper names pragmatically, we need not suppose that proper names encode information about reference.

I conclude with some brief comments on the metaphysics of language.

## Chapter 2—Arguments from competence

### 2.0 Introduction to chapter

A standard assumption in natural language semantics is that language encodes information. But what information? Presumably, the information encoded by a sentence is among the information it is ordinarily used to convey. Which circumstances are ordinary? One common answer is that those circumstances are ordinary in which the sentence is used to convey its literal meaning (see, e.g., Soames, 2002: 56-63). This line of reasoning results in a rather empty notion, that the information encoded by a sentence is its literal meaning.

Without a prior hold on the notion of literal meaning, we're no closer to answering our initial question: What information, out of all the information it can be used to convey, does a sentence encode?

A sentence as simple as 'Dogs sleep' can be used, in principle, to communicate information as complex as can be grasped by the human mind. For any sentence, a situation can be contrived in which an utterance of that sentence conveys anything imaginable. We desperately need a heuristic or criterion for separating what is semantically encoded by an expression from all the information conveyable by uttering it. In this chapter, I examine one tool for sifting through this information, the *argument from competence*.

### 2.1 Arguments from competence

#### 2.1.1 The argument from competence (general form)

Philosophers of language often talk about something they call *semantic competence*. Because they differ among their various metaphysical and semantic commitments, they often disagree about the precise nature of semantic competence (see 2.1.2). But most agree that speakers possess semantic competence only if they bear a certain relation(s) to the semantic properties of their language.<sup>20</sup>

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<sup>20</sup> A notable exception is Scott Soames. See comments below in 2.1.2 and 3.1.

Those who accept this principle make available to themselves an argument strategy I call the *argument from competence*. The general form of arguments from competence is as follows:

*Argument from Competence (AC-General)*

- (7) (a) If a linguistic expression (or expression class)  $e$  in a language  $L$  has semantic property(s) (or type of property)  $p$  then [a speaker  $S$  is semantically competent with respect to  $e$  and  $L$  only if  $S$  bears the appropriate relation(s)  $R$  to  $p$ ].
- (b) This condition (in square brackets) is unacceptable.
- (c) Therefore,  $e$  lacks property  $p$  in  $L$ .

Logically, the argument is quite simple. All it supposes is that a necessary condition for an expression's possessing a semantic property is that competent speakers be related to it in some suitable way. For any instance of an argument from competence, the grounds for the unacceptability of this condition should depend on the kind (or amount) of information under consideration. In the abstract, if there are grounds for rejecting this condition, then it is possible for a speaker to be semantically competent with a certain expression without bearing the right relationship to the purported semantic property.

### 2.1.2 Semantic competence

Arguments from competence turn on the premise that, for any semantic property  $p$  of an expression  $e$  in a language  $L$ , semantically competent speakers (relative to  $e$  and  $L$ ) must bear some appropriate relationship,  $R$ , to  $p$ . Call  $R$  the *competence relation*. The general form of an argument from competence does not specify what kind of relation  $R$  is or must be. Broadly speaking,  $R$  can be understood as either internal or external to the speaker's mind.

Internally, the relation might be cognitive, as in (SC-Knowledge):

(SC-Knowledge) Semantic competence with an expression  $e$  in  $L$  is knowledge of  $e$ 's semantic properties.<sup>21</sup>

Externally, it might be metaphysical:

(SC-Metaphysical) Semantic competence with  $e$  in  $L$  is bearing the right causal relationship to the entities in  $e$ 's extension.

Or (partially) social:

(SC-Social) Semantic competence with  $e$  in  $L$  is either satisfying (SC-Knowledge) or (SC-Metaphysical) or belonging to a linguistic community some of whose members satisfy (SC-Knowledge) or (SC-Metaphysical).

The most natural interpretation of “semantic competence” is cognitivist, such that  $R$  is (SC-Knowledge) and semantic competence is something like *knowledge of* or *mental representation of*. But arguments from competence don't require, however incongruous the terminology becomes, that semantic competence be understood in terms of speakers' mental representations. Metaphysical externalists, like Putnam (1975b), deny that speakers' minds are relevant at all to their semantic competence, taking  $R$  to obtain only when speakers bear certain causal relationships to the external entities which are their expressions' semantic properties. Social externalists, like Putnam (1970), Burge (1979), and Kripke (1980), are more permissive. They neither require that the semantically competent individual possess knowledge of or bear direct causal connection to their expressions' semantic properties, only that she belong to a linguistic community some of whose members do satisfy either (SC-Metaphysical) or (SC-Social).

Ultimately, what really matters in formulating the argument is that (SC) holds true:

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<sup>21</sup> A note on “knowledge”: The use of “knowledge” to describe speaker's mental representations of linguistic properties is controversial. A few caveats: Semantic knowledge is not (necessarily) propositional. Semantic knowledge is not (necessarily) factive. Semantic knowledge is not (necessarily) conscious, and the same goes for mental representations generally.



- (SC) The domain of semantic competence for an expression  $e$  in a natural language  $L$  is just  $e$ 's semantic properties in  $L$ , where the semantic properties of  $e$  in  $L$  are just those assigned to it by the correct theory of meaning of  $L$ .<sup>22</sup>

One way of rejecting an argument from competence is therefore to reject that relation  $R$  has any bearing on semantic competence. Soames makes this move, claiming that “one should not look to semantics for an account of semantic competence” (Soames, 1989: 591). Soames's comment is a non-sequitur. If semantic competence bears no relation to the contents of a semantic theory, then it is not semantic.

I assume that semantic competence does depend on relation  $R$ . Furthermore, I assume cognitivism as the correct notion of semantic competence. My initial justification for adopting (SC-Knowledge) is definitional. In the context of a theory of linguistic meaning, “semantic” denotes semantic properties and relations to semantic properties. Competences are internal, systems of cognitive mechanisms and mental representations. Therefore, semantic competence is the internal representation of semantic properties, or the cognitive mechanisms which process semantic representations.<sup>23</sup>

Other previously discussed considerations also rule out alternatives to (SC-Knowledge). Most notably, the naturalistic orientation of semantic inquiry requires us to look for explanations of human behaviour in the biological mechanisms inherent in the species (Chomsky, 2000: Ch. 6). This is not to say that (SC-

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<sup>22</sup> I can know what one word or sentence means but not another. I think it makes good sense to relativize competence to individual expressions or classes of expressions, e.g. the predicate ‘red’ or the class of predicates. Here's an argument.

Nonsynonymous expressions have different semantic properties, and semantic competence is, or depends on, a relation to semantic properties. Bearing a relation to one (kind of) property does not necessarily entail a relation to others. So, a speaker may be semantically competent with one expression but not another (or expression class, if different expression classes have different kinds of semantic properties, as, e.g., proper names and predicates do in possible worlds semantics).

Generally, the claims that I am semantically competent with  $a$  but not with  $b$  are conceptually distinct. Whether this is a distinction with a difference for a semantic theory is another issue.

<sup>23</sup> See Chapter 4 for further discussion of the nature of competences.

Metaphysical) and (SC-Social) cannot have any interesting theoretical role, only that their place is not in the theory of linguistic meaning (Chomsky, 2000: 148-163).<sup>24</sup>

## 2.2 Bach's argument from competence

### 2.2.1 Introduction to section

One property essential to the externalist picture of semantics is reference. Reference is essential to connecting language with the world.

Reference is a paradigmatic semantic property, but not all reference is semantic. Reference may be either linguistic, occurring in the course of a linguistic utterance; or non-linguistic, occurring in the course of a non-linguistic communication act. All non-linguistic reference is pragmatic, following from the intentional states of speakers and other contextually-embedded features of communication, but linguistic reference may be either semantic or pragmatic or both. Semantic reference is linguistic reference which follows from linguistically encoded properties. In total, there are three possible kinds of reference: semantic-linguistic, pragmatic-linguistic, and pragmatic-non-linguistic. We will limit our discussion to the expression class of proper names.

The primary question about the semantics of proper names concerns reference: Does 'Justin Trudeau' refer to Justin Trudeau, or is it merely used to refer to him in the course of speech acts? In an argument from competence we will look at in some detail, Kent Bach argues that they are merely used to refer. More precisely, he argues that linguistic reference with proper names is never semantic, only pragmatic. If there is a sense in which 'Justin Trudeau' refers to Justin Trudeau, it is a theoretically uninteresting sense, parasitic on the theoretically interesting case of pragmatic reference in which someone *uses* 'Justin Trudeau' to refer to Justin Trudeau (Bach, 2008: 14).

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<sup>24</sup> Arguments from competence are quite common, and can be found in various of the sources already cited (especially in the papers defending semantic externalism). For an argument along the same lines as Bach's, see Recanati (1993: Ch. 8). See Davidson (1965) for an argument from competence aimed at the meta-semantic level.

After discussion of the *referential theory of proper names*—the thesis that (non-empty) proper names semantically refer to their bearers—I present Bach's argument from competence against the referential theory. I discuss each premise of his argument, unpacking some of their key assumptions along the way. Whether Bach's argument stands or falls depends partly on the acceptability of these assumptions. I discuss some objections, but mostly leave it to the reader to decide. There are bigger fish to fry, anyhow. Discussion of Bach's argument raises general objections to all arguments from competence. We discuss these in Chapter 3.

### 2.2.2 The referential theory of proper names

I begin discussion of Bach's argument by detailing his target, the *referential theory of proper names*. A *referential theory* of proper names is any semantic theory which entails that (non-empty) proper names, like 'Sherlock Holmes', 'Muhammed', 'John Ritter', 'Boeing', 'Sally Struthers', 'Bert', 'Prince Rogers Nelson', 'Halifax', etc., semantically refer to their bearers. Intuitively, the question whether names semantically refer asks something like this: Does it make a difference to the meaning of 'Sherlock Holmes'—abstracted from "the slippery, pragmatical pig of moment-to-moment language-making" (R. Harris, 1993: 248)—that there is no such man? If so, then the name is referential in a sense relevant to cognitivists who adopt (SC-Knowledge) as the correct notion of semantic competence.<sup>25</sup>

We begin by making the distinction between semantic and pragmatic reference more precise. I am primarily concerned with semantic and pragmatic reference insofar as they are species of linguistic reference, but what we say about pragmatic-linguistic reference applies to pragmatic-non-linguistic reference with little change in detail.

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<sup>25</sup> I can't resist throwing in this beautifully overwrought phrasing from Randy Allen Harris's history of Chomskyan linguistics, *The Linguistics Wars* (1993).

The distinction between semantic and pragmatic species of linguistic reference has its roots in Keith Donnellan's (1966) distinction between referential and attributive uses of definite descriptions. On one version of Donnellan's distinction, my utterance of 'The discoverer of special relativity failed math' refers to Albert Einstein in that 'the discoverer of special relativity' picks out the unique individual who satisfies the description, i.e. who was the discoverer of special relativity, namely Einstein. In such a case, we say that 'the discoverer of special relativity' refers to Einstein *semantically*—it is part of what the description *means*, as an expression in English, that it should pick out the unique individual who discovered special relativity. My utterance might also be used to convey a different historical falsehood about another individual, say Niels Bohr. Suppose I think that Bohr discovered special relativity. Following Donnellan, we might then say that my utterance of 'the discoverer of special relativity' refers to Bohr—not because Bohr satisfies the description, but because I intend to direct your attention to Bohr and assert of him that he failed math. That is, I refer to Bohr *pragmatically*.

Saul Kripke extended Donnellan's distinction to proper names (Kripke, 1980: 25, footnote 3; developed in Kripke, 1977). I adapt his example slightly. Suppose you and I observe our neighbor down the street doing yard work. I say to you, "Jones looks tired." He's slumped over his rake in dramatic fashion, so naturally you agree. However, as it turns out, the man raking leaves is Smith, not Jones. In some sense, Kripke says, I have succeeded in referring to Smith, the man raking leaves, with my utterance of 'Jones'. But 'Jones' doesn't thereby *mean* Smith. Rather, 'Jones' refers *semantically* to Jones, and I refer to Smith *pragmatically* by my use of the name on this occasion.

Kripke's example makes the semantic/pragmatic reference intuitively clear, but its implications for a *theory* of semantic reference depend on how we conceive of semantic properties.<sup>26</sup> There are two ways of conceiving of semantic properties,

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<sup>26</sup> A note on terminology. Kripke calls what I've called semantic and pragmatic reference, respectively, "semantic reference" and "speaker's reference" (Kripke, 1977). I eschew the latter

corresponding to the distinction drawn by Nathan Salmon between the *speech-act centered* and *expression centered* conceptions of semantics. Salmon explains:

On the *speech-act centred conception* of semantics, semantic attributes of expressions, like a singular term's designating an object, or a sentence's containing or expressing a proposition—somehow reduce to, are to be understood by means of, are derived from, or at least are directly determined by, the illocutionary acts performed by speakers in using those expressions, or perhaps the illocutionary acts that would normally be performed in using those expressions (Salmon 2004: 344).

The principal rival to the speech-act centred conception of semantics is what I call the *expression centred conception*. According to this alternative conception, the semantic attributes of expressions are not conceptually derivative of the speech acts performed by their utterers, and are thought of instead as intrinsic to the expressions themselves, or to the expressions *as* expressions of a particular language (and as occurring in a particular context). The expression-centred conception takes seriously the idea that expressions are symbols, and that, as such, they have a semantic life of their own (Salmon 2004: 345).

Corresponding to Salmon's two conceptions of semantics are two ways of drawing the semantics/pragmatics distinction (cf. Bach, 1994: 137). Both begin from the datum that, when speakers use 'Jones' in accordance with its meaning, they use it to refer to Jones, not Smith. This is (part of) what Kripke's example is supposed to illustrate. The difference between the two comes from differing conceptions of the relation between meaning and use.

The first way of drawing the distinction corresponds to the speech-act centered conception. On this conception, 'Jones' refers semantically to Jones but not Smith because "the illocutionary acts that would normally be performed in using" 'Jones' use it refer to Jones, not to Smith. The second, expression-centric

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term because I distinguish linguistic and non-linguistic species of reference, the pragmatic sub-species of both being essentially identical.

A bit of argument for this claim: Kripke's example shows that it is incidental to linguistic reference whether the expression uttered actually refers to the intended referent. If the particular expression uttered is incidental to pragmatic-linguistic reference, then what reason do we have to think any utterance is necessary for reference to occur at all? Theorists differ on how stringent are the conditions for pragmatic reference—compare Bach (2008) and Heck (2014)—but, very roughly, I pragmatically refer to *x* when I succeed in directing your attention to *x*, and I can direct your attention to *x* with only a suggestive glance. Just as I can communicate without speech, I can refer without language.

version of the distinction takes the locution “‘Jones’ refers to Jones” literally, attributing reference to the expression itself. In Salmon’s evocative phrasing, reference belongs to the “semantic life” of the name.

I think arguments from competence generally depend on an expression-centric conception of semantic properties.

The speech-act-centered conception renders arguments from competence inert. It must conceive of the relation between meaning and use in one of two ways. Either the meaning of an expression is something like a statistical average of its uses, or it is a direct function of use. The latter case is untenable. It entails that what a sentence means is just what it is used to mean, so that there are no stable linguistic meanings. Knowing the semantic properties of an expression would amount to understanding the speaker’s meaning for any occasion of use; by hypothesis it would depend on wholly pragmatic competences. Along with stable meanings go arguments from competence, but at the cost of semantic anarchy.

The statistical average view fares no better. ‘Jones’ refers to Jones because speakers tend to use ‘Jones’ to refer to Jones. But, if they were to begin using ‘Jones’ to refer to Smith, ‘Jones’ would come to semantically refer to Smith. On this view, arguments from competence are either a blunt instrument for knocking down semantics altogether or they are totally impotent to circumscribing the semantic domain. From our adopted cognitivist perspective, semantic competence is defined as mental representation (“knowledge”) of the semantic properties of linguistic expressions.

If meaning is essentially a statistical abstraction from use, then what an expression means is just what it has been used to mean in the majority of utterances. Knowing the semantic properties of an expression would therefore require access to some statistical analysis of the expression’s uses. Statistical analysis requires data. But what data? Consider two possible data sets. If a speaker’s data is limited to the corpus of utterances in her experience, semantic competence is likely a trivial accomplishment and arguments from competence will always fail. If data is

required from beyond the speakers' experienced corpus, then semantic competence requires impossible knowledge. Since arguments from competence infer from the lack of such knowledge to the lack of some semantic properties, every claim that *e* means *p* becomes susceptible to an argument from competence.<sup>27</sup>

Arguments from competence must assume a sharp conceptual distinction between what an expression means and what a user of the expression actually communicates by her use. In short, they must suppose that words "have a semantic life of their own". The expression-centric conception of semantic properties supposes meanings to be stable from utterance to utterance, fixed independently of variations in use. The meaning of a term must be established early on in its usage, but once its meaning is established, its semantic properties are fixed (Kripke, 1980). If 'Jones' has been established to refer to Jones, then uses of 'Jones' to refer to Smith—no matter how frequent—do not alter the original meaning of 'Jones'. At best, a new name, or a second meaning of the first name, is established.

Arguments from competence must assume the expression-centric conception of semantic properties. The expression-centric conception allows us to say that a speaker can be familiar with linguistic expressions and even use them without knowing what they mean. Knowledge of meaning is something above and beyond use.

I characterize semantic reference as follows. 'Prince' is a semantically referring term because its meaning is constituted by the fact that it is related, or purports to be related, to a certain individual, namely The Purple One. The same goes, of course, for more common names. What 'John' means depends on who John is. In general, an expression *e* *semantically refers* to an individual *x* if the semantic properties of *e* depend on *e*'s bearing some relation to *x* in virtue of which it is said that *e* *itself* refers to *x*. Specifying for proper names, we'll say that a name *N*

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<sup>27</sup> It also supposes that speakers already use sentences to communicate successfully, without knowing how else they are used, so knowledge of their semantic properties is not necessary for linguistic communication. I think this supposition is correct for reasons unrelated to the expression-based/speech-act-based distinction. See Chapter 4 for argument.

semantically refers to  $x$  if, for any utterance of  $N$  at a time  $t$  by a speaker  $S$ ,  $N$  refers to  $x$  at  $t$  regardless whether  $S$  pragmatically refers to  $x$  at  $t$ . In contrast, a speaker may use  $N$  to refer *pragmatically* to an individual  $x$  at  $t$  regardless whether  $e$  itself refers to  $x$ .

The expression-centred conception of semantic properties actually compels a stronger notion of semantic reference. It makes a metaphysical assumption about the bearers of semantic properties. What Salmon says that semantic properties belong to the “semantic life” of an expression, he means that they are semantic properties primarily of abstract linguistic objects called *types*. Expression tokens therefore have their properties solely in virtue of their being tokens of a given type. If reference is a property of types, then not only does  $N$  refer to  $x$  at  $t$  independently of the circumstances of  $S$ 's speech act (the content of her referential intention, etc.), but it refers to  $x$  independently of  $S$ 's uttering anything at all.<sup>28</sup>

### 2.2.3 Bach's argument against the referential theory of names

Having unpacked the thesis it's supposed to refute, we can now look at Bach's argument itself. Informally, the argument is as follows.

Suppose that names semantically refer to their bearers. It is a consequence of the referential theory that any name having multiple bearers is “ambiguous in as many ways as it has bearers” (Bach, 2002: 82). Accordingly, unspectacular sentences like (8)-(10),

(8) Springfield is overrun by bears.

(9) I'll call Maria myself.

(10) Melania hides.

have as many meanings as there are individuals named ‘Maria’ (or ‘Melania’) and towns named ‘Springfield’.

So what? Bach claims that,

If a name's having many bearers were a semantic fact, then understanding (8)-(10) fully, as sentence types in all their supposed senses, would require

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<sup>28</sup> It follows that every case of semantic reference is either also an instance of pragmatic reference or occurs independently of any act of referring—see 5.3.



knowing that it has all these bearers (and understanding an utterance of such a sentence would involve disambiguating the name) (Bach, 1994: 137).

If so, then “being ignorant of all the towns named ‘Springfield’ or all the people named ‘Maria’ [or ‘Melania’] is a deficiency in linguistic knowledge” (Bach, 2002: 82). “Surely linguistic competence with a name does not require that;” therefore, we should reject referential theories of proper names (Bach, 1994: 137).<sup>29</sup>

I reconstruct Bach's argument as follows:

*Bach's Argument from Competence (AC-Bach)*

- (p1) Proper names either refer semantically or are used to refer pragmatically (or both).
- (p2) If proper names are semantically referring terms, then shared names are ambiguous.
- (p3) If a name N is ambiguous, then semantic competence with N requires “knowing who all the bearers of N are” (Bach, 1982: 381).
- (p4) This condition is unacceptable.
- (c1) Therefore, proper names do not semantically refer.
- (c2) Rather, they refer only pragmatically.

We've already discussed p1. Before turning to discussion of p2-p4, note some preliminary issues.

First of all, note Bach's terminology. Bach calls knowledge of semantic facts, which I've defined as semantic competence (under the cognitivist conception), “linguistic competence” and “linguistic knowledge”. This discrepancy in usage is interesting for reasons which will become clear when we discuss the role of semantic knowledge in the broader system of communicative competences (Chapter 4). The interesting question is not whether Bach is concerned with semantic competence as the cognitivist understands it—he clearly is. Rather, it is whether semantic competence is necessary for linguistic communication. This question looms large when evaluating arguments from competence.<sup>30</sup>

Second, note that we're dealing with an argument from competence which is aimed at refuting a claim about a class of expressions—the class of proper

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<sup>29</sup> I've substituted my own examples for Bach's and emended the quotations accordingly.

<sup>30</sup> See Chapter 3.

names—but which reasons from premises about the competence conditions for individual members of that class. In other words, it infers from the properties of members of a class to the properties of the class itself. There are two assumptions here.

I've already justified the first assumption in footnote 22 above. I assume that it makes sense to talk about the competence conditions, not just for a language, but for individual words and classes of words in the language. Not only must there be something called “competence with ‘John’”, etc., but there must also be competence with proper names in general. In principle, I see no problem with this. We can stipulate that *nominal competence*<sup>31</sup>—semantic competence with the expression class of proper names—is just that part of semantic competence relevant to using and understanding proper names. It's an empirical matter whether nominal competence is different from the competence conditions for other expression classes, but there's no problem in using a special term to pick out whichever components of semantic competence are responsible for proper names.

The second assumption is that what holds for “ambiguous” names—that their competence conditions under referential theories are unacceptable—also holds for “unambiguous” names having only one bearer. If it's somehow unreasonable that I should keep track of all the bearers of a name as common as ‘John’, then it's just as unreasonable that I should keep track of the one bearer of

‘Barnaby Marmaduke Aloysius Benjy Cobweb Dartagnan Egbert Felix Gaspar Humbert Ignatius Jayden Kasper Leroy Maximilian Neddy Obiajulu Pepin Quilliam Rosencrantz Sexton Teddy Upwood Vivatma Wayland Xylon Yardley Zachary Usansky’<sup>32</sup>

It would be arbitrary to accept that Bach's argument proves that “ambiguous” names don't semantically refer but maintain that uniquely borne ones do.<sup>33</sup> If the

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<sup>31</sup> See Bach (2002) and Gray (2015) for further discussion of semantic competence with proper names in referential and non-referential theories.

<sup>32</sup> The name is the (adopted) legal name of a real, presumably insufferable, person: <http://www.dailyrecord.co.uk/news/uk-world-news/im-barnaby-marmaduke-alloysius-benjy-1091948>.

<sup>33</sup> Nonetheless, some do argue for versions of this claim—see discussion of Kaplan and Devitt below.

argument from competence works against one name, it works against them all, and, by extension, the expression class as a whole.

#### 2.2.4 Theories of proper names

We now turn to premises p2 and p3, followed by a preliminary discussion of p4. As I said earlier, my focus is on unpacking the premises' underlying assumptions, not defending them, though I will occasionally note where I think an assumption is warranted. As stated above, premise p2 is

(p2)            If proper names are semantically referring terms, then shared names are ambiguous.

p2 says that it is a consequence of the referential theory of proper names that a proper name having more than one bearer is ambiguous. For example, since John Lennon and John Elway are both named 'John', the name 'John' is ambiguous. Generally, the premise says that the referential theory of names entails that any name which has  $n$  bearers is ambiguous  $n$ -wise.

There are several ways of having a referential theory of proper names. Is p2 true for all versions of the referential theory? We need to survey the theories of proper names available on the market. The possible theories of proper names can be delineated by two criteria: Do names semantically refer? And, do names refer directly or indirectly?

Proper names either semantically refer or they don't. There are two major kinds of referential theory, Fregean and direct reference theory. If names semantically refer, then their reference is either indirect, mediated by conceptual content, or unmediated and direct. Fregean theories hold that a name's reference is necessarily mediated by an individual concept attached to a name (its 'sense') which determines as the name's referent the unique individual satisfying the concept. On the Fregean view, 'Taylor Swift' refers to Taylor Swift by picking her out as the unique individual who satisfies a certain description, say 'the highest-earning female musician in 2016'.

Direct reference theories (DRTs) can be defined in opposition to the Fregean theory by their rejection of senses. A theory of proper names is a DRT if it accepts that proper names are semantically referring terms but denies that their reference is mediated by a reference-determining sense; however, DRTs generally do not necessarily deny that names have conceptual contents, only that a name's conceptual content is sufficient to determine its referent. Accordingly, there are two species of Direct Reference Theory, Millian and non-Millian. Millianism is the thesis that the only semantic property a name has (if any) is its referent. Millians, like Salmon (1990) and Scott Soames (1989, 2002), deny that proper names can have any conceptual content at all.<sup>34</sup>

Therefore, there are three kinds of referential theory of proper names, Fregean, Millian DRT, and non-Millian DRT.

### 2.2.5 Are shared names ambiguous?

Bach appears to think that it is a consequence of all three species of referential theory that names having multiple bearers are ambiguous (Bach, 1994: 137). This is not entirely accurate. We have reason to accept this a consequence for Fregean and Millian theories (given certain other assumptions), but non-Millian versions of DRT appear to avoid it.

The only sort of non-Millian DRT theory of ordinary (i.e. non-partially descriptive) names I've come across is the indexical theory of names. On the indexical theory, the conceptual content attached to a proper name is only sufficient to refer to its bearer in a context of utterance. For example, the conceptual meaning of the name type 'John' could be the predicate "the individual called 'John'". On the indexical theory, 'John' refers in a context C to the individual who satisfies the description in C (i.e. the man named John) (Burge, 1973) (Recanati, 1993: 140-143). The virtue of indexical theories is that indexicalized names only refer in

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<sup>34</sup> Soames (2002: Ch. 5) does adopt a non-Millian (but still DRT) view of partially descriptive names, like The Empire State Building and The Lake of the Ozarks.

context; therefore, proper names, like indexical expressions generally,<sup>35</sup> can refer semantically to more than one individual without entailing an ambiguity. For the same reasons we don't consider indexical pronouns, like 'I', ambiguous, we can't call shared proper names ambiguous on the non-Millian DRT either.<sup>36</sup>

For these reasons, Bach's argument rightfully concerns only the Fregean and Millian species of referential theories. Fregeans are especially vulnerable to the argument; however, the Fregean theory has been something of a non-starter since Kripke's attacks in *Naming and Necessity* (1980). Since Bach is more concerned with refuting DRT anyhow, I will address most of my discussion to Millian interpretations of p2 and p3.

Regarding p2, the question is, given that proper names are Millian semantically referring terms, what further assumptions are required to justify the claim that names shared *n*-wise are ambiguous *n*-wise? What kind of thing must shared names be if this the case? More to the point, what kind of thing must they be such that they place an unacceptable demand on semantic competence?

We're supposing that semantic competence with an expression is knowledge of its semantic properties. As I've argued, it makes sense to talk about

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<sup>35</sup> I don't actually think indexicals—or any expressions—semantically refer, but I won't tug at that thread here.

<sup>36</sup> It is worth noting, however, that, even if indexicalized names are not ambiguous, where ambiguity is understood as having multiple, distinct conceptual contents, the indexical theory faces other difficulties. Either indexical theories of names do not differ from the view that reference is only ever pragmatic (i.e. they're not indexical theories at all), or they multiply communicative intentions beyond necessity (Bach, 2008).

A non-referential relative of the indexical theory is the predicate theory of names. The predicate theory denies, along with the indexical theory, that reference is a semantic property of name types, but it goes further, denying also that names tokens semantically refer in context. In other words, rather than saying names semantically refer but only in context, predicate theorists that names are only ever used to refer pragmatically. (I return to this point in Chapter 4. For recent discussion of predicate theories, see Bach, 2015, and various other cited publications; see also Fara, 2015.)

Compare the indexical theory with the predicate theory of names. Both indexical and predicate theories take proper names to have conceptual contents, something like *being the bearer of N*, but indexical theorists go further and say that these conceptual contents mandate semantic reference in a context C to the bearer of N in C. However, since every instance of indexical reference is also an instance of pragmatic reference, an indexical theory offers no explanatory advantage over the predicate theory.

semantic competence with respect to particular expressions. Speakers either are or are not semantically competent with 'David Letterman'. A speaker either knows what 'David Letterman' means (what its semantic properties are) or not.

This much seems clear: If part of the meaning of 'David Letterman' is that it refers to the retired talk show host, then semantic competence requires that speakers somehow mentally represent this fact to themselves. Now, what if two people answer to the name? One, the former host of Late Night on CBS, and another, a relatively anonymous farmer in Ohio. Suppose I only know of the former man. Am I somehow lacking in my knowledge of the name 'David Letterman'? Only if the comedian David Letterman and the farmer David Letterman have the same name. In a completely obvious sense, they do. Their names are spelled the same. They are pronounced the same. Neither man would be blamed for mistaking a call for the other as a call for himself. But it's not sufficient that their names share certain physical or formal properties. These facts must entail something about their semantic properties.

The question of ambiguity relevant to Bach's argument from competence is whether the semantic property of referring to the TV host and the semantic property of referring to the farmer are both properties of the same expression. Only then does it become necessary for semantic competence with the TV host's name that one also know about the farmer. In fact, if one and the same expression semantically refers to two people, then each must be aware of the other if he is to be semantically competent with his own name. We can respond to this rather bizarre consequence in one of two ways.

One, bite the bullet and grant that semantic competence does require this. If the TV host has never heard of the farmer, then his semantic competence with his own name is deficient. The right way to proceed from here would be to minimize the role of semantic competence in language use and understanding. Perhaps semantic competence does require this, we would say, but that's okay because we don't require semantic competence.

Two, we could deny that this is a requirement for semantic competence, leaving us to find a way to say that 'David Letterman' as it refers to the TV host and 'David Letterman' as it refers to the farmer are not the same expression, that the semantic properties of one name are not the semantic properties of another, despite the identical physical properties of their tokens.<sup>37</sup>

Call the former strategy the *homonymy view* (Recanati, 1993: 143-146). The homonymy view denies that shared physical characteristics are sufficient for two tokens to belong to the same expression type. Just because the two Davids have superficially similar names, it doesn't mean that they have the *same* name in the sense of interest to semanticists. Recall that, on the Millian theory, (non-empty) names have no more properties than their physical characteristics and their semantic reference. If we want to maintain the Millian view, we therefore need to deny that the type/token distinction exhausts the realm of linguistic entities. Michael Devitt (1976, 1981) and David Kaplan (1989b, 1990) have both tried to escape the ambiguity consequence on a technicality, by positing another level of linguistic abstraction above types. One sort of abstract entity is the name shared by same-named individuals, but, at another level of abstraction, names are proprietary entities. Because they claim that only the latter bear referential properties, Kaplan and Devitt can deny that the same linguistic entity refers to more than one individual.

The alternative is the *ambiguity view*. On this view, expression tokens are grouped into types solely by their physical characteristics, i.e. the formal patterns representing unique sounds or inscriptions (Bach, 1994: 137-8), and the type/token distinction is exhaustive. Expressions must be individuated either by their physical properties, their syntactic properties, or their semantic properties. Since names are syntactically simple, and the only semantic property they can have is reference, tokens of names *qua* Millian singular terms must be grouped together either by their

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<sup>37</sup> Another alternative, suggested by Nick Griffin (personal correspondence), is to relativize semantic competence to contexts. I discuss this objection below.

referents or their physical properties. If by reference, then tokens of different names for the same individual would be tokens of the same name type; e.g., 'Marilyn Monroe' and 'Norma Jeane Mortenson' would be tokens of the same name. Assuming this is unacceptable (as it surely is), Millian name tokens can only be grouped into expression types by their common physical characteristics. The semantic properties of Millian names must therefore be conceived primarily as properties of expression types, where types are individuated by the physical (phonetic and orthographic) properties of their tokens.

Unless we accept the ambiguity view, all Bach's argument proves is that 'David Letterman' as it refers to  $x$  and 'David Letterman' as it refers to  $y$ , where  $x$  is not identical to  $y$ , are not tokens of the same name. On a version of Bach's argument from competence directed at Millianism, p2 therefore requires us to make two assumptions:

Assumption 1: Linguistic items are exhaustively divided between types and tokens.

Assumption 2: Expression types of proper names are individuated solely by the physical characteristics of their tokens.

These two assumptions are not sufficient to make p2 plausible in a way that causes trouble for semantic competence. We need the name 'David Letterman' not only to be shared by each man, but to refer to each of them at the same time. We must distinguish ambiguity from indexicality in order to show that shared names refer to all their bearers at the same time, and not just to different bearers in different contexts.<sup>38</sup>

On the Millian theory, the semantic content of a proper name is just its bearer.<sup>39</sup> This must be reflected in the semantic contents of sentences containing proper names. A corollary of Millianism is that sentences containing proper names

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<sup>38</sup> We're assuming the Millian theory of proper names. As we've already distinguished Millianism from indexical theories of names, the rest of 2.2.5 amounts to an elaboration and clarification of this point in the context of an argument from competence.

<sup>39</sup> An alternative formulation of Millianism is that the only information semantically encoded by a name is that it refers to a certain individual(s).



(and other semantically referring terms) have singular ('Russellian') propositions as their meanings. Sentences like

(11) Andrew likes elephants.

(12) Maria prefers pugs.

are said to express *singular propositions*. Millians and other direct reference theorists conventionally represent singular propositions as ordered  $n$ -tuples of individuals and properties: (11) expresses the singular proposition  $\langle$ Andrew, liking elephants $\rangle$ , and (12) expresses the singular proposition  $\langle$ Maria, preferring pugs $\rangle$ .

Singular propositions are individuated by their constituents.  $\langle$ Andrew, liking elephants $\rangle$  and  $\langle$ Andrew, liking coffee $\rangle$  are different propositions because, while they contain the same individual, they predicate different properties of him; and  $\langle$ Maria, liking elephants $\rangle$  and  $\langle$ Andrew, liking elephants $\rangle$  are different propositions because, while they contain the same property, they predicate it of different individuals. Since 'Andrew' is a shared name, the sentence type represented in (11) must express multiple singular propositions, one containing the author of this paper, another containing Andrew Jackson, and so on. If there are  $n$  individuals named 'Andrew', it follows that (11) semantically expresses  $n$  propositions.<sup>40</sup> The question with respect to p2 is, where  $n > 1$ , does this constitute an ambiguity in the sentence type (11)?

Not yet. A sentence capable of expressing more than one proposition is not necessarily ambiguous. On the classical, Kaplanian analysis of indexicals, the sentence type (1), 'I am here now', can express as many propositions as there are possible referents for each of the indexical expressions in the sentence;<sup>41</sup> however, (1)'s character—the meaning of the type itself—is univocal. An important difference between ambiguous sentences and indexical sentences is that the latter may express only one proposition in a context. 'I am here now' expresses (at most)

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<sup>40</sup> Assuming that 'liking elephants' is univocal.

<sup>41</sup> More precisely, the number of propositions expressible by an indexical sentence is the product of the total number of possible referents for each indexical in the sentence, assuming that the sentence contains no syntactic or semantic ambiguities.

just one proposition for every possible context of utterance. We must distinguish ambiguity from indexicality by specifying that a sentence type is ambiguous only if it expresses more than one proposition in the same context. So, if (12) is ambiguous, it expresses the proposition <Maria Bamford, preferring pugs> relative to the actual world  $w$  and the present time  $t$ , but it also expresses <Maria Sharapova, preferring pugs> in  $w$  at  $t$ . So, relative to  $w$  and  $t$ , the sentence type is ambiguous.<sup>42</sup>

Another way of putting the difference between ambiguity and indexicality is to say that tokens of ambiguous expressions express multiple propositions, whereas tokens of indexical expressions only express one proposition. I adopt this latter conception in discussing the issue in later chapters.

By extension, a proper name is ambiguous just in case it makes more than one contribution to a sentence's semantic contents in the same context. With this third assumption,

Assumption 3: An ambiguous expression has multiple meanings in the same context.

we have a principled way of distinguishing shared names from uniquely borne names and indexicals. Furthermore, given Assumptions 1-3, p2 of Bach's argument against the referential theory (relativized to Millianism) does follow: Shared proper names are ambiguous insofar as they refer semantically at all.<sup>43</sup>

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<sup>42</sup> I describe contexts in terms of worlds and times because that's all that's needed to make the point, but certainly they may be individuated by more parameters than these. Ultimately, contexts just need to be individuated such that no two sentence tokens are uttered in the same context.

<sup>43</sup> This same line of reasoning applies to the Fregean theory. In the Fregean theory as well as the Millian theory, the semantic referents of a name multiply with its bearers, and there is a direct correlation, to put it crudely, between the amount of information a semantically competent speaker must keep track of and the number of individuals it refers to. Here's a brief argument that shared names are ambiguous on the Fregean theory as well. The argument also accepts Assumptions 1-3.

Fregeans hold that (non-empty) proper names have two sorts of semantic property, sense and reference. The sense of a name is something like an individual concept or set of properties which uniquely determine a particular individual as the name's referent. Fregeans are distinguished from DRT theorists in that they hold reference to be mediated necessarily by sense. The Fregean picture is thereby complicated in two ways. First, different people, or the same person at different times, may associate different senses with the same name. The same individual uniquely satisfies many descriptions; hence, many descriptions lay equal claim to being the sense of her name. Second, since a sense determines a unique individual as its referent, a name must have at least as many senses as it has referents. Setting aside the first complication, it follows that Fregean names have as many

### 2.2.6 *Knowledge of reference*

Moving on to premise p3, which states that the ambiguity of shared Millian proper names entails a concomitant requirement on semantic competence with proper names.<sup>44</sup>

The core of an argument from competence is the identification of the domain of semantic competence (relative to a language L) with the semantic properties of L's expressions. Bach's argument from competence against the referential theory of proper names presupposes a certain relation between these two domains, specified by (SC-Knowledge).

(SC-Knowledge) Semantic competence with an expression *e* in L is knowledge of *e*'s semantic properties.

The easiest way to reject Bach's conclusion is therefore to reject (SC-Knowledge) by denying that there is any necessary connection between the mental representations attached to a speaker's words and the meanings the correct semantic theory of her language would assign them. As I argued above in 2.1.2, there's little reason to deny (SC-Knowledge). The real issue is whether semantic competence *qua* semantic knowledge plays any role in linguistic competence.

What kind of a condition on semantic competence with names, understood as knowledge of semantic properties, does p3 prescribe? p3 asserts that a condition I call *knowledge of reference* is a necessary condition for semantic competence with proper names. As Bach puts it, *knowledge of reference* requires that

(KR) Semantically competent speakers (with respect to a name N) must "know who all the bearers" of N are.

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senses as they do referents. When we acknowledge the first complication, names turn out to have even more senses than they do bearers, but this added ambiguity is superfluous for Bach's argument from competence.

<sup>44</sup> With Assumption 3 in mind, we should restate p2 as follows:

(P2\*) If a name N is ambiguous (in context C), then semantic competence with N in C requires knowing who all the bearers of N are (in C).

In my discussion of this premise, I leave the context-relativity of ambiguity in the background. I address relativizing languages and competences to contexts of utterance in Chapter 3.

(KR) is imprecise. What might *knowledge of reference* amount to? Even granting (SC-Knowledge), there are some issues to clear up. First, two questions about Bach's formulation. What does it mean to "know who"  $x$  is, where  $x$  is the bearer of  $N$ ? And what does it mean to know who "all the bearers" of  $N$  are?

What is the epistemology of "knowing who"? What do I know when I "know who" David Letterman is? Do I know who he is if I know his face but not his name? Obviously, that won't do for present purposes. Competence as understood in (KR) requires that one's knowledge of name bearers be connected to one's representation of the name itself. What if I could match the name with some but not all the appropriate descriptions (former host of the Late Show, etc.)? These are difficult questions. They introduce epistemological and metaphysical issues about personal identity, essences, perceptual knowledge, etc., unrelated to present concerns (for discussion, see Boer & Lycan, 1986).

I think we can minimize the "knowing who" condition without deflating Bach's argument, by allowing that knowing who somebody  $x$  is *qua* bearer of the name  $N$  requires no substantive knowledge about the  $x$ . Suppose that knowing who  $x$  is reduces to some very minimal knowledge about  $x$  which need not equip one to identify  $x$  except by enumeration, i.e. as some  $x$  such that  $x$  is named  $N$ , and by discrimination, i.e. to know that  $x$  is not  $y$ , where  $x$  and  $y$  are both bearers of  $N$ . In other words, if there are two individuals,  $a$  and  $b$ , both named  $N$ , then knowing who the bearers of  $N$  are is just knowing that there is an  $a$  named  $N$  and there is a  $b$  named  $N$  and that  $a$  is not  $b$  (or just that there are two bearers of  $N$ ).

A related question concerns how to understand what is required for "knowing who *all*" such individuals are. Does this require knowing that  $a$  and  $b$  are the only bearers of  $N$ ? Does p3 imply that nominal competence requires knowing of  $N$ 's bearers that they are all its bearers?<sup>45</sup> I think not. On pain of regress, it cannot be a semantic property of  $e$  that some set of properties exhausts  $e$ 's semantic

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<sup>45</sup> Generally, does (SC-Knowledge) require knowing of  $e$  that  $e$ 's semantic properties that they are all its semantic properties?

properties. Since semantic competence is knowledge of semantic properties, we cannot require knowing that one's semantic knowledge is exhaustive as a condition of semantic competence.

These qualifications suggest a revised version of (KR), adjusted to sentences containing proper names

(KR\*) For any sentence S in a language L containing a shared name N, a speaker A is semantically competent with respect to S if and only if, for every proposition P and every proposition Q expressed by S, (i) A knows that S means that P, (ii) A knows that S means that Q, and (iii) A knows that P is not Q (all of which assumes that she understands the rest of the expressions in S, that these expressions are univocal, and that S is not syntactically ambiguous).<sup>46, 47, 48</sup>

On the amended condition, given that the sentence

(13) Julie is from Manitoba.

semantically expresses one proposition for each bearer of the name 'Julie', and the number of bearers of 'Julie' > 1, knowing what (13) means requires knowing each

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<sup>46</sup> Nothing in my formulation of (KR) or (KR\*) hinges on the issue of knowledge *de re* vs. knowledge *de dicto*. If the reader prefers one over the other, she should feel free to substitute for any of (i)—(iii) an analogous condition prescribing knowledge *de re*. The same goes, *mutatis mutandis*, for the question in footnote 45.

<sup>47</sup> More or less the same condition would justify p3 in a version of (AC-Bach) applied to Fregeanism.

<sup>48</sup> Nick Griffin has objected (personal correspondence) that (KR\*) is impossible to satisfy, since any sentence could be made to express any proposition (hence every S would express an infinite number of propositions, enumeration of which is practically impossible). I take this opportunity to repeat Salmon's notion of the *expression-centred conception of semantics* discussed in Chapter 1. This is essentially a metaphysical thesis about the relation between linguistic expressions and their semantic properties. In its strongest form, it states that an expression has a determinate range of semantic properties and it has those semantic properties independent of use. The expression-centred conception does not preclude the possibility that a sentence can be made to express any (and every) proposition by multiplying ambiguities, but I don't see how one should wish to maintain both views at once. The expression-centred conception also speaks to another objection, that (KR\*) ought to be relativized to contexts. The objection is that a sentence only expresses a proposition in a given context. This means either that only sentence tokens express propositions or that sentence types are to be individuated relative to contexts. The former interpretation clashes with the expression-centred conception. The latter can be answered by conceiving of ambiguity in terms of expressions whose tokens express multiple propositions.

of the propositions it expresses and having the ability to discriminate these propositions from one another, e.g., that propositions <Julie Andrews, being from Manitoba> and <Julie Lavigne, being from Manitoba> are different meanings of the same sentence. (According to (KR\*), all this requires is knowing that (13) expresses two propositions). Because singular propositions are individuated by their constituents, (KR\*) requires the ability to enumerate all the referents of 'Julie'.

Finally, there's the question of how to derive (KR\*) from (SC-Knowledge). Does (SC-Knowledge) on its own license (KR\*)? It seems we need more than just (SC-K) to justify the completeness condition that semantic competence with N requires knowledge of *all* the bearers of N. I see no reason *a priori* to suppose that speakers with incomplete knowledge are not partially competent. Why not suppose degrees of competence? Someone who knows some but not all of N's bearers is proportionally semantically competent with N. If that's the case, do arguments from competence fall apart? I'll discuss this objection below.

For now, there are at least a couple ways of deriving (KR\*) from (SC-Knowledge) without assuming that any degree of semantic competence requires complete knowledge. First, we might view (KR\*) as a generalization of a specification of (SC-K) to proper names: (SC-K) tells us that we need to know the semantic properties of expressions. On the assumption of Millianism, the semantic properties of a proper name are exhausted by its bearer (or the fact that it refers to its bearer). Semantic competence with N therefore requires knowing who the bearer of N is; generalizing, it requires know who the bearer of N is for every bearer of N. Second, we might read the premise as stating a condition specific to ambiguous expressions. For example, p3 might express a condition of semantic competence with ambiguous expressions that competent speakers should have available to them upon reflection an expression's different possible disambiguations.

I think this second reason is closest to what Bach has in mind. What role does disambiguation, a *prima facie* pragmatic process, play in measuring speakers' abstract knowledge of semantic properties? We'll begin to address this issue, along

with others raised in discussion of Bach's argument from competence, in section 3.3.<sup>49</sup> I conclude the chapter by addressing p4, the unacceptability of *knowledge of reference*. I use this discussion to introduce issues relevant to evaluating arguments from competence to be taken up in Chapter 3.

### 2.3 Why is *knowledge of reference* unacceptable?

Premise p4 of Bach's argument says that *knowledge of reference* is an unacceptable condition on semantic competence. Why?

First, we might argue that it implies a paradox: The conditions for semantic competence for the most common proper names are the most difficult to meet. The objection is that a name as common as 'John' should be easy to use. But this is not necessarily paradoxical. Putnam (1970) argues that the amount of semantic information for which speakers are responsible is proportional to the frequency of the term's usage within their linguistic community. In short, it just isn't obvious *a priori* that frequency should be negatively (or positively) correlated with ease of acquisition.

Second, a weaker construal of p4 is just that *knowledge of reference* is implausible. In most cases, nobody could ever satisfy it, so we ought to reject it. A related, third point is that it is empirically false. In reality, *prima facie* semantically competent speakers fail to satisfy *knowledge of reference*. This last point is clearly question-begging as stated. We can make it more respectable, though.

Why should we want to claim that ordinary speakers are semantically competent? Presumably because they get by just fine with the semantic knowledge they do have, and the semantic knowledge they have is not exhaustive *knowledge of reference*.

This raises an important point. Why should we expect arguments from competence to deliver claims about the actual semantic properties of expressions?

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<sup>49</sup> On this note, compare our formalization of Bach's argument from competence with (AC-General). The original form of an argument from competence (AC-General) collapses premises p2 and p3. Strictly speaking, we could run an argument from competence against proper names without discussing their ambiguity but, as we'll see in Chapter 3, ambiguity is important for Bach's justification of p4, the unacceptability of (KR\*).

One could respond to any argument from competence by biting the bullet and claiming that the relevant condition on semantic competence does hold. The correct response is not to reject the referential theory of names, but to deny that *knowledge of reference* is necessary for using proper names in linguistic communication. Generally, we can suppose that semantic competence requires knowledge of all an expression's semantic properties, but simply deny that such knowledge is necessary for using language and understanding others' utterances.

The lesson here is that arguments from competence require a direct line from semantic competence to linguistic communication. If we are to infer from the knowledge of language which speakers actually have to the language's semantic properties, then that knowledge must play a crucial role in making linguistic communication possible.



## Chapter 3—Evaluating arguments from competence

### 3.0 Introduction to chapter

At the end of Chapter 2, we raised an important point for evaluating arguments from competence. Cognitivism-based arguments from competence infer from the lack of knowledge of some property(s)  $p$  by some *prima facie* semantically competent speaker to the conclusion that  $p$  is not a semantic property. But why suppose the speaker is semantically competent? Why not suppose that she is only partially semantically competent, that maximal semantic competence *does* require knowledge of all a name's bearers, but linguistic communication does not require (maximal) semantic competence?

In this chapter, I argue that Bach's argument from competence, and arguments from competence generally, succeed only if two things are true. The first condition is (14), the completeness condition.

- (14) For all semantic properties  $p$ , knowledge that an expression  $e$  has  $p$  (that  $e$  means  $p$ ,  $e$  encodes information about  $p$ , etc.) is a necessary condition for semantic competence with  $e$ .<sup>50</sup>

The second is (15), the communication condition,

- (15) Semantic competence with  $e$  (of any degree) is a necessary condition for linguistic communication using  $e$ .<sup>51</sup>

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<sup>50</sup> Another way of putting (14) is this:

- (14\*) For all semantic properties  $p$ , knowledge that an expression  $e$  has  $p$  is a maximal condition for semantic competence with  $e$ .

(14) and (14\*) differ in that (14\*) recognizes degrees of semantic competence, and takes complete knowledge of  $e$ 's semantic properties to be necessary only for the maximal degree of competence; whereas (14) takes semantic competence to be all-or-nothing, requiring complete knowledge of  $e$ 's semantic properties for any semantic competence at all.

<sup>51</sup> The version of (15) corresponding to (14\*) would be,

- (15\*) Maximal semantic competence with  $e$  is a necessary condition for linguistic communication using  $e$ .

While (15) is assessable by speakers' actual knowledge, I can think of no such way to directly evaluate (15\*).

As I will argue in Chapter 4, (15) is false. Semantic competence of any degree is unnecessary for linguistic communication.<sup>52</sup> This alone leads arguments from competence to failure; however, even if (15) were true, (14) is still false. In this chapter, I argue as follows: Suppose (15) is true. If we assume (14), then complete knowledge of *e*'s semantic properties is necessary for communication using *e*; but communication using *e* is possible without complete semantic knowledge. Since (15) is true by hypothesis, (14) is false: Complete knowledge of semantic properties is not necessary for linguistic communication with that expression.

It follows that *knowledge of reference*, the condition that speakers must know who all the bearers of a name are to be semantically competent with that name, is false.

Before arguing against (14) and (15), we consider a string of objections to arguments from competence unrelated to questions about the role of semantic competence in linguistic communication.

### 3.1 Rejecting cognitivism

Bach's argument from competence assumes the "cognitivist perspective" on semantic competence,

according to which knowledge of language is knowledge of a body of (largely unconscious) rules and principles that assign representations and meanings [i.e. their semantic properties] to the physical forms of signs (be they phonetic, visual, or tactile) (Larson & Segal 1994: 11).

The condition on semantic competence with proper names, *knowledge of reference*, amounts to a consequence of the cognitivist conception of semantic competence.

(SC-Knowledge) Semantic competence relative to an expression *e* of a language L is constituted by knowledge of *e*'s semantic properties in L.

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<sup>52</sup>Briefly, the argument is this: Human linguistic communication is ostensive-inferential; therefore, the cognitive mechanisms necessary for linguistic communication are entirely pragmatic, and semantic competence of any degree is unnecessary for linguistic communication. Semantic competence *enhances* linguistic communication, but does not make it possible.

Is (KR) (and related principles, like (KR\*)) a trivial consequence of (SC-Knowledge)? That is, does (SC-K) require complete semantic knowledge, or does the completeness condition come from elsewhere? If the latter, then perhaps semantic competence is a matter of degree. In this case, a corollary of (SC-Knowledge) is that an expression's semantic properties are those properties which are represented in the mental grammar of all maximally competent speakers. Cognitivism, if adopted as a theory of semantic competence, entails that there is a complete overlap between the domain of a semantic theory of L and the contents of a maximally competent L-user's semantic competence. In other words, there is no semantic property which is not represented (consciously or otherwise) in the mind of the (idealized) maximally competent speaker. Or, if competence is simply either/or, then semantic properties are just the contents of semantic competence.

Accordingly, the most straightforward way of blocking Bach's argument against the referential theory of proper names is to reject cognitivism. Soames is representative of this route:

Semantic claims about the expressions of a language are not claims about the individual psychologies, or states of mind, of language users; rather, they are social claims about the conventions and commonalities found in a linguistic community (Soames 2002: 71).

Soames has advanced a battery of arguments against cognitivism which I won't rehearse here (see Soames, 1985: 210-7; 1989; 2015: 43-5, 85-95). Very briefly, Soames rejects (SC-Knowledge) because, he argues, it is neither necessary nor sufficient for successful linguistic communication that the linguistic activities of speakers be mediated by knowledge, tacit or otherwise, of what their words mean. While competent speakers do acquire, as a matter of course, knowledge of the propositional contents of sentences (and expressions' contributions to truth-evaluable contents generally), this knowledge is not necessary for linguistic communication. Very young children use and understand simple sentences, but we do not suppose the child to know that that the sentence she understands has a certain proposition as its meaning, nor to possess the concepts fundamental to such

knowledge, like *meaning* or *truth*. Nor does knowing that a certain sentence, “S means that P”, where P denotes a proposition, is true necessarily allow one to know what S itself means. For S might be a sentence in a language one doesn't speak. Soames takes this point to generalize across the board: As a rule, he concludes, “understanding an expression is not, in general, having knowledge of its semantic properties. Rather, understanding is having the ability to use the expression in conventionally expected ways (Soames 2015: 45).”

I'm skeptical that the notion of “conventionally expected use” makes sense without presupposing something about semantic properties, but Soames's positive view is irrelevant. He agrees with Bach on one point, that it is possible to use and understand utterances of proper names even if one lacks knowledge of their semantic properties (i.e. reference); but they disagree that this point generalizes to all expressions and all semantic properties. Bach accepts, but Soames rejects, that knowledge of semantic properties is generally necessary for linguistic understanding. The difference is this: Although he rejects *knowledge of reference* as a condition of linguistic competence, because Soames rejects cognitivism he need not follow Bach in rejecting the referential theory of proper names.

It should be noted that Soames's arguments do not necessarily imply that the cognitivist account of semantic competence is false, only that semantic competence so understood cannot underlie ordinary linguistic understanding. I agree with Soames that knowledge of semantic properties is not necessary for linguistic communication, but I think the right move is to minimize the role of semantic knowledge in communication, not dispense with it altogether.

Semantic competence, understood as knowledge of semantic properties, does play a role—it is a maximal condition of communicative competence.<sup>53</sup>

### 3.2 Objections from narrowing the domain

Arguments from competence depend on the premise that the proposed domain of semantic properties for a language L stretches beyond the limits of semantic

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<sup>53</sup> For discussion of this point see Chapter 4.

competence in L. One way of rejecting the conclusion of an argument from competence is therefore to narrow the scope of L for which speakers are semantically responsible. Perhaps, we might suggest, semantic competence requires only partial knowledge of the language, or competence is actually competence-in-context, thereby eliminating the need for knowledge of contextually-irrelevant factors like who *else* bears a certain proper name. Alternatively, we might narrow languages themselves such that speakers are responsible for their whole language, or competence *is* context insensitive, but languages themselves are smaller, more manageable bodies of information.

The first series of objections from narrowing the domain of competence supposes that languages have certain metaphysical properties. Essentially, it supposes that languages are big, public objects (Recanati, 1993: Ch. 8). Bach makes this assumption, supposing that the language spoken by English speakers in Canada is the same language spoken by English speakers in New Zealand, the French spoken by French speakers in the Gambia is the same language spoken by French speakers in France, etc. Therefore, the pool of name-bearers for a language is so large that names often occur many thousands of times over and across unwieldy geographies.

Bach also assumes that competence conditions are determined relative to these monolithic languages. The first sort of objection claims that, even if we accept Bach's metaphysical picture, we can avoid his conclusion by relativizing semantic competence conditions to narrower slices of language. I adapt this point from Kripke (1980:8). The objection is that we are responsible only for knowing dialects of these monolithic languages. Semantic competence is to be measured relative to one's proximal, not global, social community. By limiting the size of linguistic communities, the pool of name-bearers is limited. One is therefore more likely to be sufficiently acquainted with all the bearers of a name, making it more plausible that *prima facie* competent speakers do in fact satisfy *knowledge of reference*. On

the other hand, if speakers don't know all the bearers of a name in their community, it is more plausible to claim that they are lacking in important linguistic knowledge.

An extreme version of this objection relativizes competence conditions to the speaker herself (i.e. to her idiolect), rather than her linguistic community. The names belonging to a speaker's idiolect will overlap more or less with the group of individuals with whom she is suitably acquainted, making satisfaction of *knowledge of reference* trivial. Another alternative along these lines, suggested by Nick Griffin (personal correspondence), relativizes semantic competence to contexts of utterance. Semantic competence requires appropriately using and understanding expressions in context. Suppose there are two individuals named N, *x* and *y*. Being semantically competent in a context C with N is a matter of knowing who bears N in C. If *x* is the relevant N-bearer in C, then semantic competence with N in C requires knowing only who *x* is.

In another context, C\*, where *y* is the relevant N-bearer, being semantically competent with N in C\* is a matter of knowing who *y* is. Even though N has the semantic property of referring to both *x* and *y* in each of C and C\*, semantic competence requires only knowing who the relevant individual is in the context. From Bach's perspective, I think the problem with this is that *knowledge of reference* stops being a condition on knowledge of language and now concerns one's ability to recognize properties in the world. Knowledge of language and the application of linguistically-encoded information are different, although related, capacities. The former, Bach could claim, is context-insensitive but the latter is not. In response, we could argue, as Marconi (1997) does, that there is no strict division between worldly knowledge and semantic knowledge; in which case arguments from competence again lose their impact.

A related objection agrees that semantic competence is context invariant, but takes reference to be a semantic property of names only in contexts. N refers to *x* but not *y* in C, and N refers to *y* but not *x* in C\*. Semantic competence does require *knowledge of reference*, but since reference only ever occurs in context, the problem

of “knowing who all the bearers are” is defused. This objection is essentially that proper names have an indexical quality. The indexical view indeed eliminates the problem posed by shared names for semantic competence (see 2.2.5), but at a cost. The indexical theorist must explain why it is preferable to suppose that a name *N* semantically refers to its bearers, but only in context, rather than that *N* does not semantically refer at all. Why not just say that the speaker of *C* uses *N* to refer to *x* but not *y* and the speaker of *C\** uses *N* to refer to *y* but not *x*. Why add semantic reference when pragmatic reference already does the job? As far as I can see, the indexical theory offers no explanatory advantage over non-referential theories (see 5.3).

This last objection introduces us to the next sort of response to arguments from competence. The second series of objections we'll look at rejects the metaphysical view of languages as monolithic, public objects. The objection supposes that we can reduce the demands of *knowledge of reference* indirectly, narrowing the scope of semantic competence by narrowing languages themselves. If semantic competence is competence in a language *L*, then what kind of thing *L* is directly affects how speakers can (or can't) bear competence relations to *L*. Depending on what *L* is, semantic competence in *L* might be trivial, in the case of idiolects, or practically impossible, in the case of linguistic monoliths.

One such objection comes from the perspective of linguistic individualism and internalism. On this view, languages are nothing more than idiolects (individualism), and idiolects are represented in the speakers' mind (internalism). There is no public object *English*, only communities of people whose idiolects are sufficiently alike to allow linguistic communication, and who, for various historical, social, and political reasons, we call “English speakers” (see 1.3.3). On the view that the only languages are idiolects, the expressions of a speaker's language are necessarily represented in her mind along with their semantic properties. The crucial inference on cognitivist versions of arguments from competence goes from the hypothesis that an expression *e* has semantic property *p*

to the consequence that if a speaker *S* is semantically competent with respect to *e*, then *S* has a mental representation of *p*. But on the idiolect view, one is semantically competent simply in virtue of attaching any semantic representations to one's expressions. This response therefore blocks the inference to the negative conclusion that *e* cannot mean *p* and arguments from competence fail.

Although the idiolect view appears to drain arguments from competence of their force, I can think of one way to make them consistent with metaphysics of nothing but idiolects. It amounts to another version of the objection from narrowing the scope of semantic competence. However, it appears hopelessly arbitrary. Suppose that the norms of semantic competence are independent of the metaphysical status of the bearers of semantic properties. For instance, what I speak is *my* language, and what you speak is *your* language, but whether either of us is semantically competent depends on how well our idiolects match up with some external standard. In my idiolect, "Snow is white" means that snow is white, but in your idiolect it means that grass is green. Neither is "right" or "wrong" in isolation, only in relation to the standard. The question becomes, whose idiolect forms the standard? If there are only idiolects, then either idiolects set their own standards for evaluation of semantic competence or the standard of evaluation is one idiolect or another. By hypothesis, there is no standard by which to judge one idiolect better than another on semantic terms, so any outside standards imposed on semantic competence cease to be semantic.

Because of the arbitrariness of judging idiolects against each other, arguments from competence benefit most from a metaphysics of languages as public objects. Such objects are either abstract objects, existing independently of the minds of language users (Katz, 1981), or they supervene on the mental states of language users. The first option leaves it unexplained how speakers could learn languages without positing a faculty of intellectual intuition, and it is metaphysically distasteful anyhow. The second option is unclear. Why should we suppose both that there are idiolects and that public languages supervene on



idiolects? And why suppose that semantic competence is a matter of knowing the latter? Everything that the notion of a public language in this fashion has to recommend it can be accomplished by a pragmatic theory of meaning coordination among speakers (see Ludlow, 2014 for discussion of this latter point).

One last way of avoiding the conclusion of an argument from competence is a version of the bullet-biting strategy mentioned in 2.2.7. If we distinguish gradations of semantic competence, from minimal to maximal competence, we can accept *knowledge of reference* as a condition of semantic competence, but merely a maximal one. In other words, knowing who all the bearers of a name are *is* a condition merely of an idealized or “complete” semantic competence. When first discussing the bullet-biting strategy, I concluded that it compels us to deny that semantic competence is necessary for the capacity for linguistic communication. Similarly, on this objection to the argument from competence, we must deny that *maximal* semantic competence is a necessary component of this capacity.

These last points deserve extended discussion.

### 3.3 An alleged second consequence of the referential theory of names

In Chapter 2, we examined Kent Bach's argument from competence against thesis (SR).

(SR) (Non-empty) proper names semantically refer to their bearers.

Bach claims that (SR) entails two consequences

understanding [any sentence containing a shared proper name] fully, as a sentence type in all its supposed senses, would require knowing that it has all these bearers (and understanding an utterance of such a sentence would involve disambiguating the name) (Bach, 1994: 137).

In Chapter 2, I discussed the first consequence, that (SR) entails that semantic competence with N requires knowing who bears N, at length. The second condition, which I'll call *disambiguation*, is expressed as the requirement “understanding an utterance of [a sentence containing a shared proper name] would involve disambiguating the name”. Since the issues concerning *knowledge of reference* and

*disambiguation*, as conditions of semantic competence, generalize, respectively, to all kinds of semantic properties and to ambiguous sentence generally, I address my comments to these more general issues.

Why should we suppose that *disambiguation* holds? If it does hold, why is it a problem?

Let's adopt the following informal definition of ambiguity. A sentence S is ambiguous just in case tokens of S semantically express  $n > 1$  propositions (2. 2..5). Assume that semantic competence with a sentence is necessary for understanding utterances of that sentence. Here is a rough set of necessary conditions for "understanding an utterance [of a sentence]" of my own design, limited to cases of literal assertion.

Plausibly, literal assertion is any communication situation in which

- (i) a speaker A utters a sentence S
- (ii) S semantically encodes proposition(s) P,...,Q
- (iii) A intends to assert (at least) one of P,...,Q

Suppose that S semantically expresses only one proposition, P; then S is unambiguous. When A literally asserts that P by her utterance of S to an audience B, B understands A's utterance only if (i)-(v) are satisfied, taking (iv) and (v) as follows:

- (iv) B knows that S semantically encodes that P
- (v) B knows (believes, suspects, etc.) that A intends to assert that P

So far, on the assumption that understanding requires semantic knowledge, (i)-(v) don't strike me as implausible.

Bach's claim is that understanding utterances of ambiguous sentences imposes further conditions. On the informal definition of ambiguity adopted above, S\* is ambiguous whenever tokens of S\* semantically express more than one proposition. Say tokens of S\* semantically express both that P\* and that Q\* (and nothing more); then S\* is ambiguous. Bach's claim is that *disambiguation* requires B to select the proposition(s) that A literally asserts from all the propositions

semantically expressed by S\*. More precisely, supposing A utters S\* to literally assert that P\* (and only that P\*), B understands A's utterance only if (vi) and (vii) are satisfied along with (i)-(v):

(vi) B knows that S\* semantically encodes that Q\*

(vii) B knows (believes, suspects, etc.) that A does not intend to assert that Q\*.<sup>54</sup>

Take utterances of (10) as an example.

(10) Melania hides.

Suppose that 'Melania' has two bearers and no more (and that 'hides' is univocal and (10) contains no syntactic ambiguities). If *disambiguation* holds, then understanding an utterance of (10) by which it is asserted *that Melania Trump hides* requires knowing that (10) semantically expresses both *that Melania Trump hides* and *that Melania Hotu hides*, as well as knowing (believing, etc.) that the former proposition is intended and the latter proposition is not.

Does her husband go through this process when he asks the Secret Service what Melania does all day? Surely not—yet even he understands some things.

Bach's claim is that *disambiguation* follows from the premise that shared names are ambiguous, but these considerations cast doubt on this. Generally, I don't think understanding any single utterance of an ambiguous sentence S\* requires anything more than understanding (literal) utterances of an unambiguous sentence. In both cases, I understand the speaker if I grasp the intended proposition semantically expressed by the uttered sentence. If B knows that S\* expresses P\*, but not that S\* expresses Q\*, then B understands any utterance of S\* in which A intends to assert that P\* (and only that P\*).

The difference between utterances of S and S\* is this: If B understands one literal assertion of S, he is equipped to understand all literal assertions of S; whereas understanding one literal assertion of S\* does not guarantee B that he will

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<sup>54</sup> Iterate (vi) and (vii) for sentences semantically expressing more than two propositions.

understand every literal assertion of S\*. But that doesn't mean B doesn't understand *some* utterances of S\*.

What lessons should we draw from all this? First, unless we assume that understanding one utterance of a sentence requires the capacity for understanding all possible utterances of that sentence, *disambiguation* is false: Disambiguation is not necessary to understand utterances of ambiguous sentences.

To disambiguate in Bach's sense, one must know for every proposition semantically expressed whether it is one the speaker intends to assert. Therefore, *disambiguation* requires complete semantic knowledge. At best, then, disambiguation is necessary for some idealized form of understanding which *does* guarantee understanding of all possible utterances of ambiguous expressions. Perhaps complete semantic knowledge is necessary for maximal understanding; but, if communication (at least in cases of literal assertion) requires no more than (i)-(v), it follows that complete semantic knowledge is not necessary for successful communication using ambiguous sentences.

This reasoning leads us to the most important point in the chapter. Earlier in the chapter, I claimed that arguments from competence generally succeed only if the ability to use and understand language requires complete semantic knowledge. In other words, (14) and (15) cannot both be true.

- (14) For all semantic properties  $p$ , knowledge that an expression  $e$  has  $p$  is a necessary condition for semantic competence with  $p$ .
- (15) Semantic competence with  $e$  is a necessary condition for linguistic communication using  $e$

The arguments made against *disambiguation* generalize to show (14) to be false.

Principle (14) tells us that possession of any semantic competence at all with  $e$  requires complete knowledge of  $e$ 's semantic properties. Combined with (15), this entails that complete knowledge of  $e$ 's semantic properties is a necessary condition for linguistic communication using  $e$ . But that's clearly not the case. I can communicate with ambiguous sentences without knowing that they are ambiguous.

Supposing ambiguities to be no different from other cases in which expressions have multiple semantic properties, this suggests that communication in general is possible without complete semantic knowledge.

Now, suppose instead that we take an alternate form of (14) which recognizes degrees of competence.

(14\*) For all semantic properties  $p$ , knowledge that an expression  $e$  has  $p$  is a maximal condition for semantic competence with  $e$ .

Identifying maximal competence with complete semantic knowledge, this same reasoning proves that maximal semantic competence is not necessary for linguistic communication.

Here's the problem for arguments from competence: If maximal semantic competence is unnecessary for linguistic communication, how can we delimit the domain of semantic properties by looking to the actual capacities of language users? Once this connection is severed, it is open to the semanticist to maintain both that knowledge of some property  $p$  is a necessary condition for semantic competence with  $e$  and, nonetheless, that  $e$  semantically encodes  $p$ . Proponents of the referential theory of names may claim that complete *knowledge of reference* holds true, allowing for reference to be a genuinely semantic property without falling prey to arguments from competence.

### 3.4 The role of linguistic communication in assessing arguments from competence

Suppose that *disambiguation* isn't false. Then understanding the utterance of an ambiguous sentence does require choosing the intended disambiguation from among the propositions semantically expressed by the utterance token. This is a partially pragmatic process, but it depends on semantic knowledge of ambiguity. If there is nothing more to linguistic communication than understanding linguistic utterances and producing understandable ones, then linguistic communication in general depends on semantic knowledge.

However, as we've seen, complete knowledge of semantic properties is unnecessary for linguistic communication. This seriously weakens the viability of arguments from competence. But the argument strategy is still useful, if less powerful, if semantic competence of *any* amount plays a necessary role in linguistic communication. The viability of arguments from competence therefore depends on the role of semantic competence in linguistic communication.

In Chapter 4, we take up the mechanics of linguistic communication and the cognitive capacities underlying it.

## Chapter 4—Semantic competence and linguistic communication

### 4.0 Introduction to chapter

Let's return to the main question of this thesis: Why should we want to say that natural language expressions encode information? One hypothesis is that we need to posit semantic contents to explain the transfer of information by linguistic communication. How much information is encoded, and of what kind, therefore depends on how linguistic communication works.

Arguments from competence delimit the domain of semantic properties by citing the limits of speakers' cognitive capacities. In Chapter 3, we saw that this strategy is viable only if knowledge of semantic properties is necessary for linguistic communication. Again, this depends on the mechanics of linguistic communication.

In this chapter, we look at the cognitive mechanisms underlying linguistic and other forms of communication. I propose that semantic competence belongs to a hierarchy of cognitive systems collectively called *communicative competence*. I discuss two models of linguistic communication, the *code model* and the *ostensive-inferential model*. These models assume that different competences, semantic competence and pragmatic competence respectively, are necessary for the possibility of linguistic communication. I assume that the ostensive-inferential model is the correct model of human linguistic communication, from which it follows that semantic competence is not necessary for linguistic communication. I argue that we need only posit minimal semantic contents in order to explain the proportionally minimal role of semantic competence in linguistic communication.

### 4.1 Communicative competence

What kind of cognitive architecture underlies linguistic communication?

In Chapter 1, we discussed humans' shared "linguistic capacity" in the form of a mental grammar, an internal set of representations and procedures for

processing and interpreting linguistic utterances. We have good reason to suppose that the features of a mental grammar are designed by evolution to facilitate linguistic communication. I adopt the term *linguistic competence* for this capacity for linguistic communication.

The term “linguistic competence” is a technical term originating in Chomsky (1965). My use does not exactly line up with Chomsky's. For him, linguistic competence is the cognitive system devoted to processing linguistic information abstracted from any considerations of use and, especially, use for communication. My use of “linguistic competence” is more inclusive, denoting not only the Chomskyan notion, but also the various pragmatic systems that interact with Chomskyan linguistic competence to enable communication. In this sense, my use of “linguistic competence” is more akin to Chomsky's “linguistic performance” (Chomsky, 1965). However, I do take up essentially the same notion of *competence* as Chomsky, understood as a cognitive mechanism or system devoted to a certain kind of mental capacity or activity, describable in abstraction from other cognitive mechanisms. The difference between my use and Chomsky's concerns what is properly linguistic. I take both the pragmatic and semantic components of communicative competence to contribute to linguistic competence.

Linguistic competence is the system of cognitive mechanisms which enable linguistic communication. In Chapters 2 and 3, we discussed one component of linguistic competence, semantic competence, in detail. Semantic competence is the sub-system of linguistic competence comprising knowledge of semantic properties. On my understanding, linguistic competence also includes mechanisms for phonological and syntactic processing, which together with semantic competence comprise *grammatical competence* (i.e. mental grammar). The other major component of linguistic competence is *pragmatic competence*, which subsumes mechanisms for Theory of Mind (meta-psychological mechanisms for recognizing and reasoning about others' mental states) and global reasoning capacities.



Together, linguistic competence and the mechanisms for non-linguistic communication comprise *communicative competence*. The same pragmatic mechanisms which enable linguistic communication also enable non-linguistic communication, hence pragmatic competence forms part of both linguistic and non-linguistic communicative competences. The grammatical component of linguistic competence is therefore unique among the components of communicative competence in being devoted to processing language and linguistically-encoded information. Semantic competence is the sub-component of grammatical competence devoted to processing linguistically-encoded information.

Semantic competence therefore plays a unique role in explaining linguistic communication. As Jason Stanley notes, linguistic communication “involves acquiring information about the world, immediately and without much conscious reflection,” allowing for “rapid information flow between large numbers of people” (Stanley, 2007b: 1). We need to suppose that at least some of this information is encoded in the contents of semantic competence. But how much?

I argued in Chapter 1 that it is a theoretical matter, rather than, say, a matter of intuition, how much of the burden of explaining information transmission we should place on the semantic component of linguistic competence. This depends on the role of semantic competence in enabling linguistic communication.

## 4.2 The mechanics of communication

### 4.2.1 Modeling communication

The kinds of mechanisms operative in the full range and complexity of linguistic communication are not at issue. They are semantic (more broadly, grammatical) and pragmatic. The question is what kinds of role they play in linguistic competence. Depending on what the mechanisms of linguistic communication are, one or the other plays a necessary role, the other merely an enhancing role.

There are two viable options for modeling human linguistic communication, the *code model* and the *ostensive-inferential model* (Sperber & Wilson, 1995: Ch.

1) (Scott-Phillips, 2015: 13). There are two major differences between these models.

The first major difference between the two models is that “[t]hey are made possible by different internal mechanisms” (Scott-Phillips, 2015: 12):

That is, the mechanisms that are causally responsible for the existence of each type of communication are different in each case: associations on the one hand, metapsychology on the other. Put in different but equivalent terms, the difference between these two types of communication is that in one, the signaler encodes the content [the information she wants to communicate], while in the other she provides evidence that she has a communicative intention to express some specific content (Scott-Phillips, 2015: 12).

In this passage, Scott-Phillips highlights several important notions, of which I’ll mention two.

One is the notion of the “internal mechanisms” underlying different modes of communication. These internal mechanisms are what I’ve called *competences*. I’ve highlighted two sorts of competence, semantic and pragmatic. . Semantic competence is the mechanism which stores mental representations of expressions’ semantic properties from which it assigns interpretations to utterances. The metapsychological mechanisms Scott-Phillips mentions, which allow a speaker to think about her interlocutor’s mental states, including the latter’s own representation of the speaker’s mental states, belong to *pragmatic competence*. Each model of communication assigns different explanatory priorities to the semantic and pragmatic components of linguistic competence

Another important notion is the idea that a certain “internal mechanism” can be “causally responsible for the existence of” a certain mode of communication. That one sort of competence is causally responsible for linguistic communication does not imply that the other sort plays no role, only that it is not necessary for the bare capacity for linguistic communication. A mechanism which makes a mode of communication  $x$  possible is what I call a necessary and minimal (or *minimally necessary*) condition for  $x$ . A mechanism which makes  $x$  powerful, improves the

quality of  $x$ , enhances the success rate of  $x$ , etc., is what I call a *maximal condition* for  $x$ . The code and ostensive-inferential models understand different components of linguistic competence to be minimally necessary for linguistic communication. On the code-model, semantic competence is the *sine qua non*, that without which there could be no linguistic communication; pragmatic mechanisms fulfill only maximal conditions. The ostensive-inferential model entails just the opposite: The cognitive mechanisms minimally necessary for linguistic communication are pragmatic; semantic competence merely improves the quality of communication (cf. Scott-Phillips, 2015: 16).

The second important difference between the two models is that they imply quantitative differences in how we answer the question, *what information is semantic?* My reasoning is as follows: Methodological considerations compel us to attribute to expressions as semantically-encoded only the information necessary to explain their role in linguistic communication, which in turn depends on the role of semantic competence in linguistic communication. Because they assign different explanatory priorities to semantic and pragmatic competences, the code and ostensive-inferential models compel different conclusions about the information-richness of semantic properties. I develop this view, which I call *methodological semantic minimalism*, in greater detail in 4.3.2.

What follows is my interpretation of Sperber & Wilson's (1995) account of the code and ostensive-inferential models of communication, heavily influenced by Scott-Phillips's (2015) exegesis. I assume that the ostensive-inferential model is the model of linguistic and non-linguistic communication. I won't argue for this—what I want to do is compare the ostensive-inferential model with the code model and show how they entail different hierarchical arrangements among communicative competences.

#### 4.2.2 The code model

The code model is a general model of communication employed across all varieties of organism and communication modality.<sup>55</sup> Code-based communication requires three components: a “transmitter who encodes information into a signal”, the “physical transmission of a signal”, and a “receiver who decodes the signal to recover the information encoded by the transmitter” (Beattie & Ellis, 1986: 4).

[C]ommunication occurs when one organism (the transmitter) encodes information into a signal which passes to another organism (the receiver) which decodes the signal and is capable of responding appropriately (Beattie & Ellis, 1986: 3).

Codes can take various forms, from animal calls (Beattie & Ellis, 1986: 1-4, 8-15) (Scott-Phillips, 2015: Ch. 1-2 *passim*), to bio-chemical cues (Scott-Phillips, 2015: 5-6). Codes are pairings of signals with information, and code-based communication succeeds when communicators match the transmitted signal with its paired information.

Things are much the same for linguistic communication. The code model conceives of language as the medium of linguistic communication. Language, on this account, is essentially a code which pairs expressions with their meanings, e.g. sentences with propositions. A speaker who wants to communicate some piece of information matches the information with the appropriate linguistic signal, viz. a sentence which encodes that information in her language. The speaker transmits the information by uttering the sentence, and communication succeeds when her audience perceives and properly decodes the utterance by matching the sentence uttered with the appropriate piece of information.

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<sup>55</sup> The same goes for the ostensive-inferential model. The code model is the standard model for explaining animal communication behaviours (see sources cited above). The ostensive-inferential model has a narrower application, limited most likely to human linguistic and voluntary non-linguistic communication (Scott-Phillips, 2015: 90-95).

### 4.2.3 Semantic competence and the code model

On the code model, communication succeeds so long as the signal's transmission is not destroyed by environmental noise (Beattie & Ellis, 1986: 3) (Sperber & Wilson, 1995: 4-5) and speaker and hearer use the same code (or sufficiently calibrated codes) (Beattie & Ellis, 1986: 4) and. The model conceives of language itself as the primary mode of information transmission in linguistic communication. Pragmatic effects enhance or cancel out semantic contents, but the effectiveness of pragmatics in linguistic communication depends on the (conceptually) prior transmission of semantic information through language.

Speaker and hearer communicate primarily by encoding and decoding information in linguistic utterances. If a speaker A wants to communicate a proposition P to a hearer B, then A needs to find a sentence S, where S is a sentence type individuated from other types by its phonological properties, which encodes P (or the information represented by P). A's attempt at communication is successful only if B perceives A's utterance of S and decodes it, extracting from it the information *that P*. The primary cognitive mechanism underlying linguistic communication is therefore a speaker-hearer's ability to match expressions with the information they encode.

The common way of characterizing this ability is to say that the speaker knows a language. But what is really known? One view conceives of languages as (perhaps infinite) sets of pairings of expressions with their meanings. If we are going to attribute knowledge of language to speakers, this won't do—especially if that knowledge is to play a causal role in linguistic comprehension. No human can have infinite knowledge. Knowledge of language is better understood as a generative procedure for producing the meanings of arbitrary compound expressions based on the meanings of their semantic primitives. It is sufficient for semantic competence that a speaker has knowledge of a set of independently meaningful semantic primitives plus a finite set of axioms which recursively assign

a meaning to every well-formed construction on the basis of its syntactic (or logical) structure (Davidson, 1965).<sup>56</sup>

We can now state more precisely the main cognitive mechanism posited by the code model to underlie linguistic communication. What makes linguistic communication possible is speakers' mental representation ("knowledge") "of a body of (largely unconscious) rules and principles that assign representations and meanings to the physical forms of signs (be they phonetic, visual, or tactile)" (Larson & Segal, 1994: 11). This is just what I've called *semantic competence*.

In short, the code model entails that semantic competence is a minimally necessary condition for linguistic competence.

#### 4.2.4 The ostensive-inferential model

The standard assumption among language theorists is that linguistic communication is code-based (see citations throughout Scott-Phillips, 2015: Ch. 1); however, the best explanation available is that it is not code-based, but rather ostensive-inferential, not code-based.<sup>57</sup> The minimally necessary conditions for ostensive-inferential communication are pragmatic, not semantic. The code model entails that the pragmatic mechanisms in fact essential for linguistic communication are only incidental to its success. Pragmatic mechanisms, like Theory of Mind and global inferential capacity, allow a speaker to project herself into the mind of her audience, designing an utterance which will convey most easily to him the thought she wants to communicate. These same mechanisms allow the hearer to project himself into the speaker's mind and reason about how the utterance is intended to be interpreted.

The code model does not rule out the role of meta-psychology and inductive inference in the success of linguistic communication. Communication does not cease to be code-based if it utilizes mechanisms other than procedures for encoding/decoding. What distinguishes the code model from the other model we'll

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<sup>56</sup> Equivalently, we can conceive of semantic competence as a function which takes sentences as inputs/outputs and computes their meanings as outputs/inputs (Chomsky, 1965, 2000).

<sup>57</sup> See Sperber and Wilson (1995) and Scott-Phillips (2015) for arguments for the ostensive-inferential nature of linguistic and non-linguistic communication.

look at, the ostensive-inferential model, is that it assumes that these other mechanisms are *unnecessary* for communication to succeed in the first place.

On the code model, language is the *sine qua none* of linguistic communication. It is the medium through which communication takes place; without semantic competence, there can be no linguistic communication. The ostensive-inferential model reverses this. *On the latter model, the* essentially pragmatic mechanisms of meta-psychology and inductive inference described above are necessary (and sufficient) for the very possibility of linguistic communication.

Now I give a general account of the ostensive-inferential model suitable for describing both linguistic and non-linguistic communication. I fill in the details specific to linguistic communication afterwards.<sup>58</sup>

The medium of ostensive-inferential communication is, for both linguistic and non-linguistic communication, the speaker's intentions and the evidence she provides for them in the form of perceptible gestures and utterances. Rather than encoding information in a signal which reliably indicates her thought contents, a speaker communicates by providing her audience with clues, indirect evidence, about the information she wants to communicate to him, what Sperber & Wilson call her *informative intention* (Sperber & Wilson, 1995: 54-60). She does this by providing direct evidence of the mere fact that she wishes to communicate, her *communicative intention* (Sperber & Wilson, 1995: 60-64).

A speaker (generally, agent in communication situations) communicates by expressing her communicative intention in a manner which both indicates *that* she wants to communicate and provides her audience with the necessary information to infer *what* she wants to communicate. The audience's job is to recognize the speaker's communicative intention and infer the content of her informative intention from the manner in which she expresses it. The speaker's job is more

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<sup>58</sup> I follow Scott-Phillips's (2015) simplified account of the ostensive-inferential model, leaving out many of the details of Sperber and Wilson's original model, which are inessential for my purposes.

complicated. Since ostensive-inferential communication does not rely on previous associations between signal and meaning (i.e. a code), each communicative act must be designed for the specific context of utterance. The task of expressing a communicative intention requires the speaker's communicative behavior to be ostensive, stylized in a way that "signal[s] its own signalhood" (Scott-Phillips, 2015: 8). Furthermore, the ostensive way the speaker expresses her communicative intention must provide her audience with sufficient evidence to infer her informative intention. This requires the speaker to reason about how her behaviours can be expected to be interpreted by her audience, and it requires the hearer to reason about how the speaker expects her behaviour to be interpreted. Both these processes require the abilities to represent others' mental states to oneself and draw inferences. These are paradigmatic pragmatic competences.

Let's see how this works in an example (adapted from Sperber & Wilson, 1995: 48-50).

Suppose Mary and Peter are sitting on a park bench. Peter leans back, altering Mary's view. Peter's movement is stylized; there's more to it than there normally would be if Peter were merely adjusting his posture (Sperber & Wilson, 1995: 49). That is, Peter's leaning back is an ostensive behaviour. The result of Peter's movement is that Mary now sees things she hadn't seen before. In S&W's terminology, Peter's behaviour makes certain things *manifest* to Mary. Suppose one fact now manifest to Mary is that a reviled mutual acquaintance, William, is fast approaching. Peter expects that moving in this way will reveal William to Mary—that's his reason for leaning back in the first place. Peter also expects Mary to recognize his intention to draw William to her attention from the manifestly intentional nature of his movement. Furthermore, he expects that all of this should make clear to Mary that he is trying to communicate and provide her with the tools to infer the information he wants to communicate, viz. that they should leave quickly to avoid William.



How does Mary get from noticing Peter leaning back to understanding what he wants to communicate? If Peter has made his gesture sufficiently noticeable, then when Mary sees it she should realize that Peter wishes to communicate. The gesture itself reveals a piece of information, that William is coming, and is therefore evidence of Peter's intended message. Here we have in one gesture two sorts of evidence, direct evidence *that* Peter intends to communicate and indirect evidence of *what* Peter intends to communicate. Mary's job is to recognize that Peter's gesture is communicative and to infer what he's communicating from the evidence it provides.

On the assumption that Peter's gesture is relevant to determining his message and that he therefore expects it to readily provide Mary with the evidence she needs to infer his meaning, Mary must search her mind for information she believes Peter expects to be readily available to her. On its own, this assumption narrows the field of possibly relevant information to what Mary believes is mutually manifest to herself and Peter. More precisely, the relevant information is what Mary believes Peter to believe to be mutually manifest to both of them.

The relevant information is a complex series of recursive hypotheses about Peter's mental states. It includes Mary's beliefs that Peter expects that leaning back will reveal William to Mary, that Peter expects Mary to know he expects this, that Mary knows that Peter expects this (and so on). Furthermore, if Mary doesn't get along with William and Peter knows this, Mary might also believe that Peter expects her to recall this fact, and so on. Because she knows all this, and expects Peter to know all of this (and to expect that she expects this), the ostensive nature of Peter's gesture makes all this information manifest to Mary. The mere act of Peter's leaning back has given her the data necessary to infer what he wants to communicate.<sup>59</sup>

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<sup>59</sup> This formulation in terms of mutual knowledge is problematic, for reasons given by Sperber & Wilson (1995: 15-21), but these problems don't arise here.

On the ostensive-inferential model, linguistic communication works in precisely the same way as non-linguistic communication. Suppose that, instead of leaning back, Peter utters, (16):

(16) William's coming.

The mechanics of communication are the same as before. Peter has produced a behaviour which indicates that he wants to communicate—the highly-organized pattern of sounds he makes is not likely accidental (Bara, 2010: 4), nor is it intrinsically functional. That is, Peter's utterance of (16) is ostensive; it expresses his communicative intention in the same way that his silent gesture did in the previous example. Just as before, the same behaviour which provides direct evidence of Peter's communicative intention also provides Mary with the indirect evidence she needs to infer his informative intention. If Mary knows what information (16) encodes, she has a powerful source of evidence for Peter's informative intention.

Suppose, however, that Mary and Peter don't speak the same language, or that she couldn't make out what he said, or any other situation in which she does not decode the semantic content of his utterance of (16). On the ostensive-inferential model, communication is linguistic regardless whether the semantic evidence is decoded. The same verbal utterance provides many kinds of evidence, not merely semantic evidence. Speech necessarily includes various pragmatic aspects (prosody, tone of voice, etc.) which provide information about the speaker's informative intention. Mary might use this non-semantic information to infer Peter's message. Suppose that Mary doesn't speak English, but she recognizes the foreboding tone of Peter's utterance of (16). The effect is the same: She understands that Peter wants to leave, and she complies. Even though Mary has not decoded Peter's utterance—she has no idea what (16) means—she has successfully inferred his informative intention from the evidence provided by his utterance of (16).

The only difference between linguistic and non-linguistic communication, on the ostensive-inferential model, is in the quality of evidence. In the non-

linguistic example, successful communication depends on several factors: Mary must notice the ostensive nature of his gesture, see William approaching, think of what is mutually known between she and Peter, etc. So much depends on Peter's carefully choosing and executing a gesture which brings all of this to Mary's attention. Though we can imagine a scenario in which any piece of information can be communicated non-linguistically, non-linguistic evidence is quite limited in its expressive power. It depends, for instance, on the occurrence of an opportunity to exploit some contextually available information which provides a clue to one's informative intention. Language overcomes these obstacles. Not only is language, by its nature, ostensive—every utterance is *prima facie* evidence of an attempt to communicate—but it is also intrinsically meaningful—it encodes information. The semantic contents of expressions are therefore a powerful source of evidence for the thoughts a speaker wants to communicate, making linguistic communication spontaneous and expressive in a way unimaginable for non-linguistic communication.

#### 4.2.5 Pragmatic competence and the ostensive-inferential model

The ostensive-inferential model demotes language from its lead position in the code model, as the medium of linguistic communication, to a supporting role, as merely one form of evidence among others.

The cognitive mechanisms underlying non-linguistic communication are meta-psychological and inferential. These mechanisms interact in complex ways. Meta-psychology allows a speaker to think about what information is readily available to her audience, and to gear her communication acts (including linguistic utterances) so that this information is made manifest by recognition of the mere fact that she is attempting to communicate; and it allows her audience to reverse-engineer her communicative intention to arrive at the content of her informative intention. Inferential capacity allows a hearer to infer the speaker's informative intention from the evidence he has gathered through meta-psychological reasoning,

and it allows the speaker to engineer an ostensive behaviour which makes this data available.

#### 4.2.6 Conditions of successful communication

The code model of human communication falsely takes semantic competence to be essential for linguistic communicative competence, in the sense that without semantic competence no linguistic communication is even possible. On this model, semantic competence is minimally necessary for linguistic communication. The ostensive-inferential model is the correct model of human linguistic and non-linguistic communication. On this model, however, semantic competence is not even necessary for linguistic communication. It is only a maximal condition for linguistic competence.

The minimally necessary conditions for non-linguistic communication are pragmatic. This is to be expected. The interesting, perhaps unexpected lesson is that the same is true for linguistic communication. Pragmatic competence is all that one needs in order to engage in successful acts of linguistic communication. Semantic competence does not make linguistic communication possible. It merely increases its expressive power. Semantic competence makes one fit for the complete range of human communication activities, but it does not make any one kind of communication possible. Instead, the minimally necessary cognitive conditions for both linguistic and non-linguistic forms of communication are pragmatic.

### 4.3 From semantic competence to semantic contents

#### 4.3.1 Why do arguments from competence fail?

Arguments from competence fail because they presuppose a false model of linguistic communication. Only if knowledge of expressions' semantic properties were necessary for linguistic communication would we be able to directly assess the semantic competence of language users from their actual linguistic behaviour. In fact, however, linguistic communication is ostensive-inferential, depending not on semantic competence but on general, pragmatic mechanisms common with non-linguistic communication. Therefore, arguments from competence fail.

### 4.3.2 Methodological semantic minimalism

Arguments from competence fail because the ostensive-inferential nature of linguistic communication bars us from directly assessing the contents of speakers' semantic competence through their language use. However, I argue that there is a line to be drawn, indirectly, from the facts of linguistic communication to the contents of semantic competence, and from here, to the semantic contents of language.

To explain language use and comprehension, we hypothesize that the human mind contains a system of cognitive mechanisms which facilitate linguistic communication, called linguistic competence. Linguistic communication makes use of both semantic knowledge and pragmatic mechanisms, so linguistic competence includes semantic competence and pragmatic competence. The mechanisms underlying non-linguistic communicative competence are wholly pragmatic, and these same pragmatic mechanisms help facilitate linguistic communication. There is overlap between linguistic competence and non-linguistic communicative competence. Furthermore, pragmatic competences, which includes mechanisms for global inference and social cognition, overlaps with non-communicative mechanisms.

Communicative competence is a hierarchical system, belonging to a larger hierarchy of competences for both communicative and non-communicative functions. I have argued that the hierarchical organization of communicative competence depends on which competences are necessary to ground the possibilities of linguistic and non-linguistic communication and which merely enhance these capacities. The structure of communicative competence therefore depends on what the correct model of linguistic communication is.

Human communication, including linguistic communication, operates on ostensive-inferential mechanisms. On the ostensive-inferential model, pragmatic competence is necessary and sufficient for minimal linguistic competence, and semantic competence is only necessary as a maximal condition for linguistic

competence. In other words, we need semantic competence to communicate well, but strictly speaking it is not necessary for (admittedly primitive forms of) linguistic communication.

The ostensive-inferential nature of communication entails that most cognitive effort in language use is expended by the pragmatic mechanisms which underlie both non-linguistic communication and some non-communicative processes. Naturalistic methodology requires us to limit the properties and entities we posit to the bare minimum necessary to explain the phenomena of linguistic communication. As a rule, therefore, when positing specialized cognitive mechanisms, we should aim for the most parsimonious explanation, hence the least amount of new structure necessary to do the job (Chomsky, 1995). Since the mechanisms constitutive of pragmatic competence are generalized, “all purpose” mechanisms co-opted for communication, and such mechanisms are all that is necessary to make linguistic communication work, it follows that we need only posit a minimal semantic competence to explain the expressive power of linguistic communication.

Furthermore, if it is true that the domain of semantic properties for a language L is determined by the contents of native L-speakers' semantic competence, then the minimal notion of semantic competence entails a minimal notion of semantic properties. Just as we need not suppose that semantic competence handles the majority of information-processing in linguistic communication, we need not endow linguistic expressions with information-rich semantic contents in order to explain the transmission of information through linguistic communication. Call this view *methodological semantic minimalism*.

#### 4.3.3 A note on the correct model of linguistic communication

Were the code model of linguistic communication correct, such that language is the primary means of information transmission, then the same considerations which lead us to posit minimal semantic competence would require that we posit information-rich semantic contents instead. But language is not the primary means of information transmission, not even in linguistic communication.

My particular formulation of methodological semantic minimalism presupposes that the ostensive-inferential model is the correct way of understanding linguistic communication. However, the reader need not agree to accept my reasoning. Methodological semantic minimalism can be stated independently of any commitment to a particular model of linguistic communication.

Methodological semantic minimalism is just the claim that we should posit only the amount and kind of semantic information necessary to explain the phenomena of linguistic communication. Because they assign different kinds of explanatory role to linguistically-encoded information, the code and ostensive-inferential models require quantitatively and qualitatively different hypotheses about semantic information.

## Chapter 5—The argument from methodological minimalism

### 5.1 Introduction to chapter

One of my primary tasks in this thesis has been to lay the groundwork for my defence of a refrain common among pragmatically-inclined philosophers of language: *Words don't refer, people do.*<sup>60</sup>

What further argument is needed? It's just obvious! Words just aren't the kind of thing that could refer. People are. QED.

As satisfying a defence this is to the naturalistically-inclined metaphysician, it is hardly the point on which to rest my case. If metaphysical naturalism—the view that what exists is in principle subject to investigation by the methods of natural science—has any value as a heuristic for philosophizing, it is as an optimistic extension of its methodological cousin.

Methodological naturalism requires us to approach the question of reference differently. The better way to ask the question is,

*Does semantic reference explain anything that pragmatic reference cannot?*

In other words, do we gain any ground in the theory of meaning by supposing that reference is a property which words can have somehow independently of what particular people do with them on particular occasions?

If not, then semantic reference is a theoretical extravagance and should be cast out from the theory of linguistic meaning.

### 5.2 Setting up the argument

In this section I remind the reader of a few key concepts discussed in past chapters. First, I distinguish between two species of reference, linguistic reference and non-linguistic reference. Reference is linguistic if and only if it is either pragmatic, occurring in the course of a speech act, or semantic, following from the semantic

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<sup>60</sup> This claim is endorsed by Strawson (1950), Pietroski (2003: 222), Bach (2008: 3), to name just a few. It is repeated, but not endorsed, by Stanley (2007b: 2).



properties of expression types. While linguistic reference can be either semantic or pragmatic, non-linguistic reference, including things like pointing and suggestive glances, is necessarily pragmatic. I will argue in 5.3 that all putative cases of semantic linguistic reference are either also cases of pragmatic reference or metaphysically spooky cases of reference without referring.

Finally, I am committed to building a theory of meaning in accordance with naturalistic methodology. Accordingly, I value certain theoretical virtues. Briefly, a theory of linguistic meaning should posit only those objects or properties necessary for explanation of otherwise inexplicable linguistic phenomena. Our explanations should be conceptually and ontologically parsimonious, and we should do our best to develop theories which are (eventually) reconcilable with the broader theoretical landscape. This means that we should conceive of semantics as one component of a biological theory of human cognitive capacities (Chomsky, 2000).

With these points in mind, I present a new argument for the conclusion of Bach's failed argument from competence: Reference with proper names is always pragmatic and never semantic.

### 5.3 The argument from methodological semantic minimalism

My position is this. It is a mistake to think that an adequate theory of linguistic meaning must view reference as an inherently linguistic property. Talk of semantic reference confuses the role played by natural language semantics in explaining communication. To the extent that semantics forms one component of a larger theory of human communication, semantic reference is explanatorily unnecessary and metaphysically costly. Natural language semantics should therefore dispense with talk of reference.

The main claim I need to argue for is that semantic reference doesn't explain anything pragmatic reference already does. Let's return to the origin of the distinction between semantic reference and pragmatic reference (for proper names).

Saul Kripke has described an example in which a proper name *N* is used with the intention to refer to the man *x* who is its bearer, but in fact the man referred to in the speech act is a different man, *y*, whose name is not *N*. Kripke's conclusion is that *N* itself semantically refers to *x*, but the speaker refers to *y* pragmatically using *N* (Kripke 1980: 25 n3; 1977).

So, according to Kripke, my mistaken use of 'Jones' to refer to Smith is an instance both of semantic reference (to Jones) and pragmatic reference (to Smith). But what if I hadn't been mistaken, and the man I was talking about was indeed Jones? Do I still refer to Jones pragmatically? In this case, there are two instances of reference to Jones, semantic and pragmatic.

On the referential theory of proper names, the meaning of 'Jones' itself is sufficient to guarantee that the intended individual is referred to, because 'Jones' itself refers to Jones. In such cases, my pragmatic intention to refer to Jones is inert (cf. Kaplan 1989a: 561). Only in unusual cases do referentialists want to say that reference is pragmatic, e.g., when a speaker is misinformed about who her referent is, or when she purposely misidentifies him.<sup>61</sup> This seems backwards to me.

The referentialist's claim is that semantic reference is always sufficient to secure reference to an individual *x* (if *x* exists), and pragmatic reference is necessary to refer to *x* only when semantic reference to *x* fails (i.e. just in case the semantic referent is not *x*). But the only difference between the two 'Jones' cases that I can see—the case in which Jones is incorrectly identified and the case in which he is correctly identified—is the identity of the individual. All the relevant parts of the speech-acts themselves are the same. In each case, (i) a speaker *S* utters "Jones", (ii) *S* intends to refer to a particular individual *x*, where *x* is the man raking leaves, and (iii) *S* believes that *x* is Jones. In both cases, referentialism entails that the name 'Jones' refers to Jones independent of (ii) and (iii).<sup>62</sup> Where the two cases differ is

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<sup>61</sup> Kaplan also cites pragmatic reference as necessary for "dubbings", the introduction of an expression as a proper name for a particular individual (Kaplan 1989a: 561).

<sup>62</sup> In fact, if we take the "semantic life" notion of semantic reference seriously, then 'Jones' refers to Jones independently of (i).

only that, in one case, S's belief that  $x$  is Jones is true, and in the other, S's belief that  $x$  is Jones is false.

The proponents of the referential theory must explain why, despite the fact that an intention to refer occurs in both sorts of case, S's pragmatic reference to Jones is superfluous in the 'Jones'-Jones case, but necessary (and sufficient) for reference to  $x$  in the 'Jones'-Smith case. If pragmatic reference is necessary and sufficient to identify the intended referent in the one case, there's no reason that the fact that S's belief about  $x$ 's identity happens to be true should preclude that pragmatic reference is also necessary and sufficient in the other case.

Semantic reference therefore appears otiose in the theory of speech acts (involving proper names). And at the same time, it presents puzzling explananda. For one, not only does referentialism entail that semantic reference to an individual  $x$  occurs independent of any intention to refer to  $x$ , it also entails that  $x$  is semantically referred to independent of any intention to refer at all. So, utterances of idiomatic expressions containing proper names (e.g., 'Jesus Christ!' or 'Bob's your uncle') are *prima facie* cases of semantic reference.<sup>63</sup>

The referentialist should want to explain cases like these away. I suspect that her answer would inevitably defer to the utterer's lack of a referential intention—but then why should an intention to refer (or lack thereof) be important here but otiose in more common cases?<sup>64</sup>

Even more puzzling is semantic reference outside of speech acts. This notion only makes sense on an expression-centric conception of semantic

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<sup>63</sup> Unless we want to say that names are type-ambiguous. (See footnote 65.)

<sup>64</sup> Referentialists, like Kaplan (*op cit.*), distinguish between two sorts of intention. One is the pragmatically relevant intention to refer to a targeted individual. The other is the intention to use an expression in accordance with its conventional use. The referentialist might object that, for idiomatic uses of proper names, we ought to expect that a referential intention is lacking. This response only works if there are two conventions, one literal and referential, and another idiomatic and non-referential.

A more straightforward version of this response ascribes a type ambiguity to certain proper names. The explanation would be that tokens of a name like 'Jesus Christ' could belong to one of two semantic types. One type has the semantic property of referring to Jesus (if anyone), and the other lacks this property. See Schoubye (2017) for a proposal of this sort.

properties. On this conception, the semantic properties of expression tokens are completely mandated by the properties of their types, and types have their properties independently of the uses to which their tokens are put. Semantic reference is primarily a property of expression types. Tokens of a semantically referring name refer to  $x$  only in virtue of being tokens of a type which has the property of referring to  $x$ . Necessarily, types are never the contents of speech acts. If a name type has the property of referring, then it must have that property independent of uses of the name to refer. The referential theorist therefore incurs the metaphysical debt of explaining metaphysically spooky phenomena like reference without referring and abstract objects with intentional properties.<sup>65, 66</sup>

My complaint against semantic reference is this: Because pragmatic reference is sufficient to secure reference to an intended object, semantic reference is never necessary for referring in ordinary cases. Not only that, but semantic

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<sup>65</sup> Soames (2015) confronts the same puzzle with respect to propositions with interesting results.

<sup>66</sup> I anticipate an objection: There is a tension between wanting to maintain the expression-based conception of semantic properties and doubting that abstract objects can have intentional properties. Representing something is an intentional property, and the expression-based conception of semantics depends on the claim that expression types themselves have representational properties (insofar as semantic information is representational—see discussion of Soames in 1.3.3). I'm not yet sure how to deal with this objection, but a few thoughts come to mind.

We might revise my complaint. Rather than the problem being intentionality *simpliciter*, perhaps it's a problem with encoding representations of particular individuals. Perhaps expression types should be modelled generally as predicates. A semantically referring term is an expression whose meaning is constrained by its referring to a particular individual. In contrast, while predicates have representational properties, the meaning of a predicate  $p$  is not constrained by the class of individuals  $C$  that satisfies  $p$ . Rather,  $C$  is constrained by  $p$ . In other words, what a predicate means is independent of which things satisfy it, whereas the meaning of a proper name is tied, on the referential theory, to the individual it names. Perhaps this might remove some of the opposition between supposing that languages encode information but denying that language can have genuinely intentional properties like reference, since the intentionality of predicates is only “quasi-representational”.

Other alternatives include biting any number of bullets, e.g., denying the expression-based conception of semantics and looking for another explanation of the objective (*qua* intersubjective) properties of linguistic meaning (Ludlow, 2014; also, see 5.4 below); maintaining the expression-based conception but finding a way of individuating linguistic items other than type-token (Devitt, 1976; 1981) (Kaplan 1989b, 1990); or simply accepting spooky occurrences of semantic reference outside of linguistic utterances.

I lean toward reconceptualising expression types as mental objects belonging to the actual structures of speakers' minds, combined with the denial of semantic reference as a property of expression types.

reference introduces puzzling cases where common sense would seem to deny that any reference occurs at all. Certainly, as Salmon says, the semantic properties of an expression may diverge systematically from actual uses of the expression (Salmon 2004: 345), but they also need to explain something about communication which cannot be explained otherwise. According to methodological minimalism, we need only ascribe those semantic properties to expressions necessary to explain their role in communication. Pragmatic reference is all we need to explain the relevant phenomena; therefore, we should cast semantic reference out of the theory of linguistic meaning.

#### 5.4 Moving forward from the argument from methodological semantic minimalism

I think the notion of semantic reference has no place in a theory of linguistic meaning, but I don't pretend to have refuted the referential theory of proper names, nor referentialism in general. This line of reasoning does strike me as more plausible than Bach's argument from competence, and it is supported by (what seems to me) a reasonable account of what we should expect from a semantic theory of natural language, *methodological semantic minimalism*.

Moving forward, the argument from methodological minimalism requires support from a positive semantic theory of proper names, which must then run the gauntlet of semantic puzzles for referring terms. At the same time, the original motivations for referentialism must be answered or explained away. Referentialism is supposed to answer two related questions (among others): (1) *How can our words be about the world?* (2) *How do different individuals succeed in referring to the same one thing despite being in different contexts and different epistemic states?* The first question is essentially a question about the nature of semantically encoded information. It requires us to explain word-world relations in a way that allows us to "reach" the world through knowledge of words. To the extent that (1) raises an essentially metaphysical worry, rejecting semantic reference in favour of pragmatic reference reduces a question about the intentionality of abstracta to the existing

problem of explaining the intentionality of thought. As we will discuss in the next section, we can quell this worry further by adopting a conceptualist metaphysics of language.

The second question is one of the central issues motivating philosophical theories of language. It is essentially a question of how speakers with different mental contents can communicate objective information about the world (see footnote 17). If we are really worried about there being real metaphysical connections between the words we utter and the things we are talking about when we utter them,<sup>67</sup> then a promising answer to (2) has already been suggested by Kripke (1980)—again influenced by Donnellan—in his causal-historical picture of reference. On Kripke's view, I succeed in referring to an individual  $x$  with which I am not acquainted by using its name  $N$  with the intention of using it in the same way it was used by the person who introduced it to me, and so on, such that a causal chain exists between my utterance of the name and the original use of  $N$  to refer to  $x$  directly (as an object in perception referred to pragmatically by ostension). Every use of  $N$  with the same kind of intention is therefore causally linked to  $x$ . Again, removing reference from the semantic domain changes (2) from a question about the intersubjectivity of expressions' semantic properties to a question of the intersubjectivity of intentional objects (i.e. how can different people think about the same object?).<sup>68</sup> Causal-historical chains provide the same metaphysical grounding for psychologically distinct acts of mental reference to a single object as they do for distinct acts of linguistic reference to one and the same object, but without ascribing intentionality to abstract objects. Again, a problem for semantics reduces to a problem for the philosophy of mind.

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<sup>67</sup> I don't share this worry. If we succeed in talking about the same things, it's through a process of pragmatic coordination between idiolects, not a shared public language which encodes metaphysical connections to worldly objects.

<sup>68</sup> For stimulating discussion of both these issues, see part 1 of Bach (1994). For extensive engagement with the literature on semantic puzzles from an anti-referentialist standpoint, see part 2 of the same book, as well as Bach (2002).

## 5.5 The metaphysics of language

In Chapter 1, I discussed two ways of reaching the informational contents of linguistic utterances as two perspectives on the semantics/pragmatics distinction. Call these the content-based and competence-based perspectives. The content-based perspective directly distinguishes semantically-encoded information from information which is merely conveyed pragmatically. The second perspective, the competence-based perspective, approaches the division between semantic and pragmatic informational contents indirectly, by positing cognitive mechanisms which process information from linguistic and non-linguistic sources. Can we reconcile the two perspectives? Do semantic mechanisms process all and only semantic information, and pragmatic mechanisms all and only pragmatic information?

What's necessary for this "backdoor" approach to semantic contents is that the domains of semantics and semantic competence are co-extensive. We can put the question in two ways. Normatively, as a question about the evaluative standards for semantic competence: Is the domain with respect to which semantic competence in a language *L* is evaluated just the domain of semantic properties of the expressions in *L*? Empirically, as a question about the cognitive structures of the human mind: Is there a cognitive module (belonging, perhaps, to an idealized *L*-user) which computes, for any *L*-input, all and only the semantic properties of the input expression? If the answer to either question is yes, then the domains of semantics and semantic competence must line up. If not, then there is no straightforward way of delineating the semantic domain by reference to the features of linguistic communication and language cognition. The same bit of information can be viewed as semantic or pragmatic, depending on our interests.

The normative approach has problems, some of which we've discussed in earlier chapters. The core of the problem is that it either imposes arbitrary standards for semantic competence by standardizing one idiolect over all others, or it requires some notion of languages as public objects. In either case, the direction of fit for

semantic competence is that competence is gained by assimilating outside knowledge. This leaves open the possibility that speakers have just not assimilated all the semantic knowledge there is.

Semantic competence is most relevant to delimiting semantics if the boundaries of L-speakers' semantic competence actually *determine* the semantic properties of expressions in L. The flavour of the issues here is captured in the opposition between Conceptualism and Platonism about languages and linguistic properties (see Katz, 1985a for multiple perspectives). Platonists, like Jerrold Katz (1971, 1981, 1985b) and Scott Soames (1984), believe languages and their properties to be abstract objects, such that the theoretical study of languages and linguistic properties (e.g. syntax) is essentially divorced from the psychology of language users. Platonists argue that what goes on in the heads of language users is irrelevant to a theory of meaning (Soames, 1985, 1989). Platonism's rival is Conceptualism, the *locus classicus* of which is Chomsky (1965). Conceptualism is the view that languages are mental objects, and that the contents of the minds of language users are the only way of defining linguistic properties.

The debate between the two camps largely centers on metaphysical issues concerning the ontological status of languages. From the point of view of linguistic Platonism, Conceptualism rests on a confusion:

Platonism draws a fundamental distinction between the knowledge speakers have of their language and the languages that speakers have knowledge of. The distinction is simply a special case of the general distinction between knowledge and its object. No one confuses psychological theories of how people make inferences with logical theories of implication, or psychological theories of how people perform arithmetical calculations with mathematical theories of numbers. Yet, in the exactly parallel case of linguistics, conceptualists do not make the distinction, conflating a psychological theory of how people speak and understand speech with a theory of the language itself (Katz, 1985b: 193).

Platonists deny that what is in the mind of a language user bears on the structure and meanings of her language; rather, languages are abstract objects, and linguistics



is a mathematical (a priori) science.<sup>69</sup> By contrast, Conceptualists take linguistic competence—the functional components of language cognition—to be constitutive of language, ontologically and as an object of inquiry.

I prefer the Conceptualist position, and it is the ontology of language most conducive to arguments from competence and methodological semantic minimalism. If the Conceptualist is correct, the cognitive mechanisms underlying language use and linguistic communication *are* determinants of semantic properties. The realm of semantic information is thereby limited not only to what can plausibly fit into the mind of the language user, but what is actually in her mind. We should therefore be able to read off the theory of linguistic meaning from an inventory of semantic competence.

An account of semantic contents should readily follow from Conceptualism. But it doesn't. Why not? Semantic competence is designed for linguistic communication. We should therefore assess semantic competence through speakers' actual capacities for linguistic communication. However, the ostensive-inferential nature of linguistic communication severs any direct connection between the transmission of information by competent speakers through linguistic communication and the contents of their semantic competence. Information transmission depends on largely pragmatic, not semantic, abilities.

We only have indirect access to semantic competence. I have suggested that the route to semantic contents should nonetheless go through semantic competence, ascribing semantic properties in direct proportion to the minimal role played by semantic competence in linguistic communication.

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<sup>69</sup> Part of the reasoning behind this view is that paradigmatically semantic properties, like entailment, consistency, etc. are inadequately instantiated in speakers' minds (Soames, 1985). But the onus is on Platonists, and formal semanticists generally, to show that these are the properties which a theory of linguistic meaning for natural languages must account for.

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