Ambiguities in Speaker Reference

Abstract: In the philosophy of language there is a well-known distinction between 'semantic reference' which is a relation between a linguistic expression and an entity, and 'speaker reference' which is a relation between a speaker and an entity. While most studies pursue semantic reference, I will present a theory of 'speaker reference.' I argue that the results of case studies from Saul Kripke (1980), Keith Donnellan (1966), and Richard G. Heck, Jr. (2018), are all explainable with a speaker theory. Further, I argue that 'semantic reference' doesn't really exist unless it is stipulated by a formal model. Consequentially, laypersons cannot have linguistic intuitions about semantic reference. But in contrast, almost everyone has linguistic intuitions about speaker reference, as is discussed. I question the primacy of 'meaning' and whether linguistic entities can have 'meaning' in context. I challenge the 'principle of compositionality.' Finally, I question whether all sentences (in context) are intended to be representational (truth-apt).

Introduction

In the philosophy of language, there is a debate about the status of the semantic reference (i.e. meaning) of proper names. How does the utterance of a proper name in a sentence by a speaker in a context, allow that person to refer to the person whom they are talking about? With the 'semantic reference' approach, when asking this question, it is assumed by theorists that words, phrases, and sentences have 'meaning' and that for each meaningful expression there are correct answers to the question 'What does it mean?' Among the questions asked: (1) How is it that we confer significance upon inherently meaningless linguistic expressions by employing them in linguistic practice? (2) How do the components found in declarative sentences contribute to the meaning (or content) of
the sentences? (3) What is it for a linguistic item to stand for, or represent an object? (4) How do we link a proper name to the named entity to establish its referent? Philosophers seek to explain how the 'meanings' of words and sentences enables natural languages to play a primary (and causal) role in human communication.

Despite its popularity, I argue that the 'semantic reference' approach is the wrong approach to answering questions about reference. Further, I argue that these four standard questions about language are metaphysically inspired and misconceived. While it is understood that formal semantic theories are valuable for creating structures (i.e. definitions, vocabulary, syntactical formation rules, inference rules, semantics) that allow the representation of meaningful grammatical sentences, it is doubtful that semantic theories are relevant towards solving perennial questions of philosophy (e.g. about knowledge, mathematics, metaethics, and speaker reference).

**Formal Semantics and Sentence Meaning**

Formal semantics is standardly defined as the study of the 'meaning' of words and sentences. A common way to explain the meaning of a sentence is to say under what conditions it would be true. Scott Soames (2010) states:

The central fact about language is its representational character. Exceptional cases aside, a meaningful declarative sentence S represents the world as being a certain way. To sincerely accept, or assertively utter S, is to believe, or assert, that the world is the way S represents it to be… For S to be meaningful is for it to represent the world as being a certain way... the systematic study of meaning
requires a framework for specifying the truth conditions of sentences on the basis
of their syntactic structure, and the representational contents of their parts (p. 1).

This standard semantic approach to language is (1) model theoretic, (2) truth-conditional,
and (3) makes use of possible worlds. A model-theoretic theory of semantics maintains
that to know the meaning of a (declarative) sentence is to know what the world would
have to be like for the sentence to be true (implicitly adopting a correspondence theory of
truth). A truth-conditional approach specifies the relationship which sometimes holds
between a sentence and 'the world'. ‘The world’ (or 'universe') is intended to refer to the
vast complex of things and situations that the sentences can be ‘about.’

A ‘compositional theory of sentence meaning’ is assumed, which maintains that
words (or morphemes) are the basic components of sentences, and that the meaning of
sentences depends, systematically, on the meaning of the words (or ‘basic expressions’) combined according to the syntactic rules into larger expressions. Frege (1879) assumed
that various forms of linguistic expression (e.g. proper names, predicates) have 'semantic functions' and may possess 'semantic values' that can mean this or refer to that. Proper
names are represented by singular terms, predicates are represented as unsaturated
concepts, and quantifiers range over a specified domain of entities. Frege (1892) made
the distinction between a 'sign' as having 'a meaning' which is the object that it refers to;
and its 'sense' as the mode of representation of that referent. With this terminology, many
semantic theoreticians, logicians, model theorists, and philosophers are currently engaged
in a debate about the 'nature' of semantic reference, as a part of a theory of meaning.
Alternatively, I skeptically question whether that for words, phrases, or sentences, that there is something that may be referred to as 'its meaning.' In other words, I doubt that physical linguistic entities have 'meanings' that in a context allows a person to use a natural language to communicate thoughts. Similarly, I question whether the meaning of a sentence is composed of the meaning of its parts. The concepts of 'semantic reference,' 'speaker reference,' 'meaning,' and 'compositionality' will be analyzed here.

**A Critical Analysis: How Do Linguistic Entities Refer to Nonlinguistic Entities?**

Pretheoretically, the very idea of 'semantic reference' seems odd. How is it possible that 'linguistic expressions' (i.e. physically written marks or sounds) refer to items in the world? Is 'reference' something that linguistic expressions can accomplish on their own? It doesn't seem possible that linguistic entities (words, phrases, and sentences) are capable of referring to extralinguistic entities. This skeptical response to semantic reference has been made before. Peter Strawson (1950, p. 326) stated "Referring is not something an expression does; it is something that someone can use an expression to do."

Here are my linguistic intuitions: 'Linguistic reference' doesn't exist outside of definitional stipulations made by semanticists and logicians. Linguistic expressions never refer to anything. Words do not represent things. Words don't have 'meanings.' Predicates cannot 'hold of' certain things. Things don't (literally) fall under concepts. Not all sentences are intended to be representational (and either true or false). Some metaphysical assumptions associated with theories of semantic reference (e.g. about properties, relations) are questionable. The idea that words can possess semantic properties (i.e. a meaning) that when used in a context that can 'connect,' 'attach,' 'point,'
'pick out,' 'hook up,' or ‘lock on’ to reality is weird. This is all metaphorical. It is only with _particular employments_ by persons in concrete contexts, that _words_ (phrases, sentences) are _used_ so as to allow _persons to refer_ to things.

But if linguistic reference isn't literally possible, why do most philosophers believe that linguistic reference is possible? The consensus answer is 'model theory.' What is model theory? Tim Button and Sean Walsh (2018) describe it as follows:

Enter model theory. One of the most basic ideas in model theory is that a structure assigns interpretation(s) to bits of vocabulary, and in such a way that we can make excellent sense of the idea that the structure makes each _sentence_ (in that vocabulary) either _true_ or _false_. Squint slightly, and model theory seems to be providing us with a perfectly precise, _formal way to understand_ certain aspects of _linguistic representation_. It is no surprise at all, then, that almost any philosophical discussion of linguistic representation, or reference, or truth, ends up invoking notions which are recognizably model-theoretic (p. 3, italics added).

This concisely describes how 'linguistic representations' are to be studied.\(^1\) The words and syntax (i.e. structure) of natural language sentences are interpreted (with artificial languages) to explain how the parts of a sentence (e.g. names, predicates, connectives, quantifiers) are systematically composed to make for a truth representational sentence.

\[^1\] This description is consistent with most theoreticians. Kearns (2011) says that “semantics deals with the literal meaning of words and the meaning of the way that they are combined, which taken together form the core of meaning, or the starting point from which the whole meaning of a particular utterance is constructed” (p. 1).
Model theory is described by Button & Walsh (pp. 7-9) as follows: Formal languages can have primitive vocabularies. When developing languages (i.e. a system of linguistic symbols), attention is paid to constant symbols, relation symbols, and function symbols. Constant symbols should be thought of as names for entities. Relation symbols which are also known as predicates, should be thought of as picking out properties or relations. Function symbols should be thought of as picking out functions. With the metaphysical ideas of a non-empty domain, and an abbreviatory system for objects, relations, and functions, Button & Walsh then transition their discussion into the required use of first-order deductive logic. This includes a symbolic abbreviatory system for variables, identity, connectives, quantifiers, and brackets.

But in more detail, how is deductive logic constructed? In the construction of a deductive model, four items are specified: (1) a vocabulary, (2) syntactical formation rules, (3) a set of inference rules, and (4) a semantics. The 'specification' of syntactic and semantic meaning for formal deduction is described by A.P. Martinich (2001) as follows:

A formal grammar consists of two parts: a syntax and a semantics. The syntax itself also consists of two parts: a vocabulary and formation rules. The vocabulary specifies which marks or sounds can appear in sentences. Roughly, the vocabulary consists of words and punctuation marks or whatever would be equivalent to them in the language being treated… The formation rules either generate sentences out of the items in the vocabulary or they describe them. The semantics consists of two parts: a part that specifies the meanings of the simplest elements of the language, and a part that specifies the meanings of the complex
elements of the language. The simplest elements of the language may either be words or sentences, depending on the specific language being studied and the philosophical views of the author of the grammar (p. 7, italics added).

Whether a sentence is true (or false) is said to depend upon the \textit{specifications} in the model (i.e. a possible world) in which it is asserted.

But what is the nature of a \textit{'specification'} within a model? A major problem with the model-theoretic approach is that the epistemic role of the introduction of \textit{stipulative definitions} termed as \textit{'specifications'} is ignored. Stipulations are neither true nor false; but can only be agreed-to. To repeat, we observe a series of stipulations: 1) the stipulated introduction of a \textit{vocabulary} of symbols and definitions about what counts as an individual constant, individual variable, predicate, proper name, sentential connective, punctuation, and quantifier, 2) the stipulated introduction of \textit{syntactical formation rules} (or grammar) that defines how 'well-formed formulas' are to be constructed out of symbols (i.e. a procedure that determines whether a sentence, as a finite strings of words or symbols, is 'meaningful' or not) 3) a set of stipulated truth-preserving \textit{inference rules}, and 4) a \textit{semantics} (e.g. truth-table definitions of connectives, or interpretations using symbolization keys and extensions). On the view here, formal systems are essentially prescriptive (i.e. not truth-apt, and pluralistic) in that they stipulate rules concerning the regimented use of linguistic expressions.

The information gleaned from the practice of a supposed 'descriptive semantics' is tempered by the fact that words and sentences don't possess an independent meaning and cannot literally refer. 'Linguistic reference' in a systematic theory (or model) can only be
assigned by a theorist. Model theories and truth-theoretic deductive systems are epistemically divorced from philosophical problems that include speaker intentions and non-truth-apt communication. Although formal theories may describe grammatical sentences, valid deductions, and truths in modeled worlds, they cannot explain what 'speaker reference' is. For this, conceptual analysis is needed.

**Introducing a Theory of Speaker Reference**

A dictionary defines these three related terms:

1. **Refer** is to direct attention, speak of, mention, or allude to.
2. **Reference** is the act of referring, mentioning, or alluding.
3. **Referent** is (a) what is referred to, or (b) the thing that a word stands for.

A theory of 'speaker reference' adopts the 3a sense of reference. On this perspective, it is thought fruitful to describe how persons can use expressions pragmatically (e.g. a proper name, a definite description, a definition) to refer to entities (e.g. a person, a fictional character, a number, a word). This obviously contrasts with the philosophically favored 3b sense described above, where linguistic expressions are said to acquire meaning and have semantic properties in a context that allows linguistic reference.²

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² The concept of ‘speaker reference’ is recognized by Wittgenstein (1953), Strawson (1971), Donnellan (1966), and Kripke (1977, 1980). Ludwig (2007, p. 150) distinguishes between (1) 'speaker reference' (whom S intends to be talking about) and (2) 'semantic reference' (who the name S uses refers to, taken literally in the language that S is speaking). Deutsch (2009, p. 455) says the distinction is "familiar to every philosopher of language and indeed to most philosophers regardless of specialization…".
A Characterization of a Theory of Speaker Reference

What is 'speaker reference'? A theory of speaker reference maintains that it is persons that refer using words. What a speaker's reference is, on occasion of use, depends upon the speaker's intentions. It is persons who use linguistic expressions to refer to various objects (or entities) in a context. It is persons who intend that their utterance to be asserted as 'truth-apt' or not. It answers (1) how do persons use proper names and definite descriptions to refer to various entities, and (2) what do persons mean when making an assertion? A theory of 'speaker reference' is sometimes feared by philosophers because the topic seems to be too detailed, subtle, and pragmatic. Paul Grice's (1989) tedious analyses about speaker meaning may have contributed to this fear. Further, Jason Stanley (2008) claims that the communications-intentions of 'speaker meaning' is to be studied as a matter of pragmatics, not semantics. But on the contrary, the principles of speaker reference, as stated below, are not a complex mix of descriptive pragmatics.

(1) According to a theory of speaker reference, sentences don't literally possess meaning, instead, it is persons who can understand sentence meaning (i.e. propositional content) when using a sentence. With a speaker theory of reference, a well-formed sentence is understood as the basic unit of meaning; not the words that it is built out of. Persons use linguistic expressions in well-formed sentences to (intend to) refer to particular entities in a context. Personal intentions and context allow a speaker (and audience) to identify the referents (and aboutness) of linguistic entities in an utterance.

While semantic reference theories attempt to explain (or eliminate) sentential ambiguity by using formal models, a speaker theory asks, 'What does S mean when
asserting $p$? When we ask 'what does $S$ mean' when asserting $p$, the way to answer this question is obvious. If a listener has doubt about a speaker's reference (or intention) when uttering a complete sentence, an appropriate question should be asked for clarity. For example, if I'm using the name 'Aristotle' and the listener didn't understand which 'Aristotle' I was talking about, I would report as appropriate: e.g. (1) the philosopher, or (2) the former husband of the late Jackie Kennedy. Similarly, if I said that 'there is a bat in the garage' and the listener didn't know if I was referring to a baseball bat or animal, I respond with the appropriate definition. By 'bat' I mean this sense of the word.

(2) For successful speaker reference of a proper name, there is no single or disjunction of descriptions that must be associated with the entity being referred to. Persons successfully use proper names without having descriptions (or a definiens) that applies uniquely to one's referent. For example, if I'm using 'Richard Feynman' in a situation, and the listener didn't understand who I was talking about I could reply that I was talking about a contemporary theoretical physicist. My listener knowing that I'm using a proper name would gain some understanding of the referent from my report of a definiens (i.e. definite descriptions). People succeed in referring to the person Feynman easily, even while knowing very little about him. In most situations, the context of an assertion is enough for a listener to identify the entity being referred to by a speaker. Conversations are rarely impeded by a misunderstanding a speaker's use of proper names.

On the speaker theory, a proper name is used to refer to whatever properties the community generally attributes to the entity as contained in the reported definiens of the name, even if those properties are sometimes mistaken or non-unique. The descriptive
information (in a reported definiens) may be vague, open-ended, and subject to factual error. For example, if a person errantly defined "Bono" as 'the English lead singer of the band U2,' a speaker-listener reference to the correct person would likely be successful, even if Bono was born Irish, and not English. It is neither the truth of the description(s), nor the uniqueness of the description(s) in the reported definiens of a proper name, that makes 'speaker reference' successful. With a speaker theory of reference, it is recognized that speaker reference is not always successful, because of cases of misunderstanding or miscommunication.

(3) Similar to proper names, a theory of speaker reference denies that definite descriptions, as linguistic expressions, literally refer to extralinguistic items. For example, it might be said that the description 'the first man on the moon' refers to Neil Armstrong. But it isn't true that this phrase literally refers. It is persons who use this definite description to refer to a person. It is more accurately said that 'the first man on the moon' designates Neil Armstrong in the English language and in the actual world. The linguistic expression, by itself, cannot 'pick out' its referent.

Also, similar to proper names, there may be descriptive errors associated with a definite description. For example, if someone says, 'I'm thinking of a poisonous red and green Christmas holiday plant,' we infer that the speaker is thinking of a 'poinsettia,' and successful speaker reference is achieved. But poinsettias are not poisonous! Instances of successful speaker reference are understood as (pragmatic) situational events. Donnellan (1966) observed that using definite descriptions is a way to get one's audience to identify whatever is spoken of, even if the description is inaccurate.
(4) The theory of speaker reference is classifiable as a 'descriptivist theory,' but it isn't a descriptivist semantic theory of reference. 'Descriptivist theories of semantic reference' are false because it is (errantly) claimed that the x to whom a proper name (as a linguistic expression) refers (in context) is determined by definite description(s) (as linguistic expressions) associated with that proper name (as a linguistic expression).³

In contrast, with a theory of speaker reference, it is claimed that the x to whom a proper name (as a linguistic expression) refers (in context) is determined by descriptions (i.e. a definiens) associated with the proper name, when stated by a speaker as a reportive (lexical) definition in context. The use of a proper name in a context neither functions as being equivalent (or abbreviation) to a cluster of mostly true definite descriptions about the referent nor is the referent of a proper name achieved solely through a historical chain. Both theories falsely assume that there exists a 'reference relation' between 'words' and 'objects.' But this relation doesn't exist. Instead of seeking systematic word reference, philosophers should seek to analyze the concepts and intentions in context(s) and describe how sentences are used by speakers to communicate various intentions.

The Controversy about the Semantic Reference of Proper Names

Kripke's Naming and Necessity (1980) initiated the recent controversy about how proper names allow persons to refer to their designated entities. How does the utterance of a proper name in a sentence by a speaker in a context, allow that person to refer to the

person whom they are talking about? What is the mechanism that explains how the use of proper names allows persons to know of whom they are speaking?

(a) The Description Theory of Proper Name Reference

The traditional explanation going back to Frege and Russell is the 'description theory' of proper name reference. Both theorists thought that there was no fundamental difference between proper names and definite descriptions. Frege used definite descriptions to explain the 'senses' of proper names and Russell claimed that the 'meanings' of proper names were equivalent to (or abbreviate) the descriptions associated with those names by a speaker.

(b) The Causal-Historical Theory of Proper Name Reference

Kripke took a very different perspective about proper name reference. Kripke believes that items are given 'initial baptisms' where a speaker dubs a certain object (or a definite description) with a particular name. Speakers succeed in referring to something because the ordinary use of the name provides a link in a causal chain going back to the initial naming of the object. Speakers and their audiences understand what is referred to from the past use of the name from speakers earlier in the historical chain. According to Kripke, the proper name of a person is 'rigid' in that it designates a unique person that could be imagined existing in other possible worlds. Kripke provides a number of intuitive considerations (e.g. including possible life activities of Godel, Schmidt, and Feynman) to deny that if 'N' is a proper name which is meaningful for S in a context, then there is a cluster of descriptions that S believes to be true of N (e.g. Godel) which allows S to uniquely refer to x (Godel). For Kripke, proper names are not equivalent to a
speaker's associated set of definite descriptions, because these descriptive attributes are non-rigid designators and may be applicable to many items.

(c) An Alternative View: A Speaker Reference Account of Proper Names

As explained, the term 'reference' in a familiar ordinary sense isn't a property of individual linguistic expressions. Reference is a pragmatic notion. A referent is what is referred to by a person. This 'speaker theory' is used to analyze five case study situations.

Case Study #1: Kripke's 'Godel' Reference

Machery, Mallon, Nichols & Stich (MMNS, 2004, 2009) are skeptical of expert intuitive judgments, and in particular about semantic reference judgments. A thought experiment from Kripke (1980) is borrowed by MMNS to make this point:

Suppose that John has learned in college that Godel is the man who proved an important mathematical theorem, called the incompleteness of arithmetic. John is quite good at mathematics and he can give an accurate statement of the incompleteness theorem, which he attributes to Godel as the discoverer. But this is the only thing that he has heard about Godel. Now suppose that Godel was not the author of the theorem. A man called "Schmidt" whose body was found in Vienna under mysterious circumstances many years ago, actually did the work in question. His friend Godel somehow got hold of the manuscript and claimed credit for the work, which was thereafter attributed to Godel. Thus, he has been known as the man who proved the incompleteness of arithmetic. Most of the people who have heard the name 'Godel' are like John; the claim that Godel
discovered the incompleteness theorem is the only thing that they have ever heard about Godel. (2004, p. B6).

MMNS surveyed various populations of ordinary language users and asked them: When John uses the name 'Godel,' is he talking about: (A) the person who really discovered the incompleteness of arithmetic or (B) the person who got hold of the manuscript and claimed credit for the work?  

In specifying the options (A) and (B) it is presumed that option (A) is a response that assumes a *descriptivist theory* of proper name reference, where someone who uses the name 'Godel' (in fact) really refers to Schmidt, because Schmidt is the unique person satisfying the description 'the man who discovered the incompleteness of arithmetic.' Option (B) is deemed a Kripkean causal-historical response to proper name reference, where Godel, in hypothetical fact, isn't identical to the person who discovered the incompleteness theorem. The authors maintain that there are apparently strong culturally variable intuitions to these cases. The East Asian respondents favored the so-called 'descriptivist' response (A); while American respondents favored (B). Because there are varying intuitions about reference, the authors ultimately suggest that philosophers should cease to use 'expert intuitions' about case studies to defend a theory of reference.

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Notice that participants are explicitly asked about 'John's use' of the name 'Godel' in this situation, which leaves open a 'speaker reference' option about who *John was referring to*, as well as about a generalized linguistic intuition about the *function (or standard use) of a proper name* in a context.
But what if the descriptivist' and 'causal' theories are both substantially in error? If philosophers are arguing over two misguided theories about 'linguistic reference' (and the compositional principle of meaning) it seems natural that there will be explainable differences in thought-experiment intuitions (since both theories are mistaken).

Let's add the speaker theory response to the two suggested options. How in the utterance of a proper name does the speaker (John) succeed in referring to an object (Godel)? The answer, as stated above, is simply this: in contexts where a proper name reference is in question, a speaker states a reportive (or lexical) definition (or a series of definite descriptions) describing what one is talking about, as a response for disambiguation.

With respect to how proper names (i.e. linguistic expressions) are used to refer to entities in the Godel example: option (B) is favored here from the perspective of a speaker theory of reference. On a speaker theory of reference when John uses the name 'Godel,' he is talking about: (B) the person who got hold of the manuscript and claimed credit for the work which is the product of a community's reportive definition of who Godel is: 'Godel' is 'the person who discovered the incompleteness theorem.' Even if the proper name definiens of 'Godel' is true of someone else, as a linguistic community, Godel is the man believed/reported to have discovered incompleteness (even if he didn't).

In contrast, there is a plausible theory of speaker reference explanation for why Asian respondents predominantly chose option (A). Their choice of (A) indicates that they may believe that John (when using the name 'Godel') is thinking about the real discoverer of the incompleteness theorem (regardless of name). When using the name,
Godel, John is primarily thinking about the genius of its inventor (and not about a thief). Here the focus (i.e. interest, intention) is on the referent of the definite description (i.e. 'discoverer of the incompleteness theorem') regardless of (inconsequential, contingent, maybe misspelled) proper name. This explanation has been suggested by others.

Lessons from the Godel Case

In "Speaker's Reference and Cross-Cultural Semantics," Machery, Sytsma, and Deutsch (MSD) (2015) acknowledge a common criticism of the previous Godel survey question was that it was ambiguous with respect to speaker's reference and semantic reference. MSD attempt to eliminate the ambiguity by refining a new case question to seek semantic reference intuitions only. They seek to develop a Godel question that allows persons to "express genuine intuitions about the semantic reference of 'Godel'" (p. 67). But their refined question (discussed below) returned the same divergent results as before. Does this reaffirm their original conclusion that there is cultural diversity in the (intuitions about) semantic reference of proper names? Probably not. What if respondents have no intuitions about semantic reference?

Certainly, most respondents are unfamiliar with Western philosophy's preoccupation with 'linguistic expression' reference issues. I suggest that there is no ambiguity among respondents between 'semantic reference' and 'speaker reference' intuitions, because speakers do not have 'semantic reference' intuitions. Some philosophers believe that laypersons cannot reliably answer questions about semantic reference, because of a 'semantic-speaker' reference ambiguity. Rather than this alleged ambiguity, I maintain there are only cases of 'speaker reference' ambiguity.
Richard Heck, Jr (2018) in "Speaker's Reference, Semantic Reference, and Intuition," concurs that there is no reason to believe that ordinary speakers grasp the distinction between semantic reference and speaker's reference (pp. 261-262). He states that MSD's refined question has failed to eliminate ambiguity. Heck concludes that "attempts to eliminate the ambiguity have been unsuccessful and are arguably futile, since the notion of semantic reference is deeply theoretical and may not even be available to ordinary speakers" (p. 266). Attempts to measure folk intuitions (if intuitions are relevant at all) about semantic reference are irrelevant to philosophical argument.5

Disinterest in Speaker Theories

'Speaker reference' is recognized by Kripke (1977, 1980, p. 25 fn. 3, p. 85 fn. 36). Kripke's response is that his interest is just in describing how proper names (as words) refer within a compositional theory of semantic reference. Kripke simply isn't interested in speaker reference. Similarly, experimental philosophers, Nichols, Pinillos, and Mallon _________

5 Ludwig (2007) says that it is a misguided assumption that survey responses are expressions of semantic intuitions; "all the surveys show is that philosophically untutored subjects do not all give the same responses to the scenarios involving the reference of proper names..." (p. 152). The ambiguity of Mallon et al.'s experiment is emphasized by Deutsch (2009). Deutsch says that perhaps “… John intends to be referring to the man who really discovered the incompleteness when he uses ‘Godel.’” It seems safe to suppose that some… reactions were pragmatically driven intuitions about speaker’s reference. At very least, there is no reason to think that all of Mallon et al.’s respondents’ reactions were semantically driven intuitions about semantic reference” (pp. 456-457).
(2016), are disinterested in theories of speaker reference, stating that it is a "prima facie limitation" of experimental studies if they invite judgements concerning speaker's reference (p. 150). Under the primacy of the 'principle of compositionality' as a condition for sentence meaningfulness, many philosophers continue to pursue theories to support either a descriptivist or a causal-historical theory of 'proper name' reference.

But what if the principle of compositionality is false? What if, as argued above, it is false that various forms of linguistic expression (e.g. proper names, predicates, definite descriptions, sentence) have 'semantic functions' and may possess 'semantic values' that can mean this or refer to that? What if it is false that all sentences are representational and have truth-values? What does a semantic theory of meaning, accomplish? What does the 'principle of compositionality' do for us theoretically? Can it be challenged?

The Principle of Compositionality Can Be Challenged

The compositional truth-functional theory of sentence meaning maintains that words are the basic components of sentences, and that the meaning of sentences depends (systematically) on the meaning of the words that they are composed of. Frege adopted this principle to describe how it is possible that an unlimited number of complete thoughts could be expressed by a natural (or artificial) language. Frege thought that the principle was neither metaphysical nor psychological. It was just a principle needed to explain how thoughts can be expressed using a language. It was a fact about how people could produce an unlimited number of sentences out of a minimal vocabulary and a minimum of syntactic and inference rules.
Soames (2003) defends the principle of compositionality with virtually the same reasoning. He says that linguistic meaning is systematic. The meaning of a complex expression is determined by the meanings of its parts. Models explain and predict what sentences are meaningful and why. If this were not so, we could not explain how language users are routinely able to understand new sentences that they have previously encountered. In order to account for this fact, we need a theory of meaning of an individual expression that makes clear how it is able to systematically contribute to the meanings of larger linguistic compounds that contain it (pp. 128-129). It is just taken for granted by Soames, that a theory of meaning must be able to explain how it is that we can use old words to convey new meanings which have never previously been conveyed.

But is the principle of compositionality empirically true? Do ordinary language sentences have meaning because of their formal syntax and semantics? On the contrary, it is very clear that persons normally learn sentence use, grammar, and semantic rules informally. Children learn a language when engaging with adults, reading stories, and playing interactive games with vocal instructions. The understanding of word meanings follows from a familiarity of their ordinary use and self-interpretation, pedagogy, or dictionary. When learning a language by immersion it seems that sentence meaning (a complex structure) is understood without conscious attention to the individual words and syntactic conventions that give a sentence its structure. Sentence use follows from imitation of other users. Well-formed sentences are the basic units of meaning; not the words that they are built out of. Understanding sentence meaningfulness comes prior to learning the rules of formal compositional syntax and semantics.
The notions of subject, predicate, and sentential structure are learned only after one has a good grasp of natural language. The learned rules of syntax and semantics of a natural language may guide a person to form grammatical sentences, but there is no evidence that these compositional rules guide one to meaningful sentences. The meaning of a complex expression (for persons) is not determined by its syntax and the semantic referents of its parts, but instead by its content, contextual pragmatics, and a person's background beliefs.

Even if the principle of compositionality isn't empirically true, is it still a fruitful assumption for analyzing the functions of natural (and artificial) language sentences? It doesn't seem helpful. It seems more natural (and fruitful) to conceive of this relationship the other way around. To repeat, it seems that a sentence's meaning (i.e. significance or intelligibility) and the intentions of users start first, and sentence meaning (intelligibility) and word meaning follow derivatively. We use sentences to make empirical claims, normative assertions, various mathematical assertions, aesthetic judgments, and kinds of definition. The principle of compositionality is of no help in describing the epistemology and apparent differences in (speaker) meaning when asserting these kinds of sentences.

**Case Examples and Evidential Support for a Theory of Speaker Reference**

To extend the theory about speaker reference in ambiguous cases of reference, I present four additional case studies. In these case studies it is shown how a speaker's interest (and intentions) determine what is being referred to. Our attention is directed to natural languages and about what is communicated (and what is intended) among users of a language. Cases of ambiguity can be explained by a theory of speaker reference.
Case Study #2: Donnellan's 'Champagne' Reference

This well-known example from Donnellan (1966, p. 287) can be interpreted to distinguish two kinds of speaker reference; between 'referential speaker reference' and 'attributive speaker reference' when using definite descriptions:

Suppose one is at a party and, seeing an interesting-looking person holding a martini glass, one asks, "Who is the man drinking a martini?" If it should turn out that there is only water in the glass, one has nevertheless asked a question about a particular person, a question that is possible for someone to answer. Contrast this with the use of the same question by the chairman of the local Teetotalers Union. He has just been informed that a man is drinking a martini at their annual party. He responds to his informant, "Who is the man drinking a martini?" In asking the question the chairman does not have some particular person in mind about whom he asks the question; if no one is drinking a martini, if the information is wrong, no person can be singled out as the person about whom the question was asked.

Donnellan's example characterizes two ordinary speaker uses of definite descriptions:

Referential speaker reference: A speaker S uses a definite description to enable one's audience to identify a particular x (even if the description is incorrect). (This is illustrated with the first 'spectator's martini question').

Attributive speaker reference: A speaker S uses a definite description to state something about whatever (indefinite) items possesses the attributes of the definite description (even if there is nothing that satisfies the description). (This is illustrated with the second 'Teetotaler's martini question').
A key lesson that can be learned from Donnellan's linguistic case study, is that it makes it clear how *speakers* refer to entities, and *linguistic expressions* (e.g. definite descriptions) in a context do not always referentially 'pick out' what is being talked about. Instead, it is *persons* who can *use* definite descriptions pragmatically in a context to *refer* to entities.

**Case Study #3: Kripke's 'Raking Leaves' Reference**

Kripke (1977, 1980) provides the following example that further illustrates the difference between a 'speaker's referent' and a 'semantic referent':

Two people see Smith in the distance and mistake him for Jones. They have a brief colloquy: "What is Jones doing?" "Raking the leaves." "Jones" in the common language of both, is a name of Jones; it *never* names Smith. Yet, in some sense, on this occasion, clearly both participants in the dialogue have referred to Smith, and the second participant has said something true about the man he referred to if and only if Smith was raking the leaves (whether or not Jones was). (1980, p. 25, fn. 3).

Kripke's linguistic analysis of this situation is that when the men use the name "Jones" in this case, the *semantic referent* is Jones, but the *speaker's referent* is Smith to the question of "to whom are you referring?"

Kripke's admission of Smith as being the speaker's referent is intuitively correct. It is clear that the two people observing x raking the leaves are talking about x, who is in fact Smith, even if they believe that it is Jones. Similar to Donnellan's example, where a mistaken definite description doesn't impede a speaker's reference to a particular man, this second case is an example where a mistaken proper name doesn't impede the
speakers' reference to a particular man. The notion of what a 'speaker's referent' is, as illustrated in this example, is quite clear.

But is there really (i.e. actually) a semantic referent in this example? The question about 'semantic reference' is about who the name S uses refers to, taken literally in the language S intends to be speaking. Kripke believes that when the men use the name 'Jones' in this case, the semantic referent is Jones, but the speaker's referent is Smith. How is this true? How does Jones become the semantic referent? How can linguistic expressions (proper names, definite descriptions, predicates) refer to, or connect to non-linguistic entities? Our answer to the question of 'How do proper names (as linguistic expressions) refer?' is: 'They don't refer.' Again, the only notable qualification, is that 'semantic reference' may be achieved by formal model stipulation.

**Case Study #4: Heck's 'Professional Baseball Player' Reference**

Heck provides two case studies that are revealing about the nature of speaker reference. The first case example (p. 255) is this:

Grace is a ten-year girl who lives at the Laughing Pines apartments with her family. Grace is obsessed with baseball. And all summer long now, her neighbor Bob has been regaling her and some of the other kids with stories about how he used to be a professional baseball player. In fact, however, and unbeknownst to Grace, Bob never even played amateur baseball. He just enjoys the company of the children and is, perhaps, a bit delusional. By coincidence, however, there is an elderly woman, Lily, who also lives at Laughing Pines and who played for
several years in the All-American Girls Professional Baseball League. Grace though, has never met Lily.

With this example, Heck asked approximately forty students the following question:

When Grace uses the phrase "the baseball player who lives at Laughing Pines," is she talking about:

(A) Bob, who never played professional baseball? Or

(B) Lily, who did once play professional baseball?

Not surprisingly, response (A) was the strong (nearly unanimous) answer. On the speaker's reference theory, the referent of the definite description is Bob.

**Case Study #5: Heck's 'Neighbor' Reference**

The second case example from Heck is the following which is a variant of Kripke's 'raking leaves' case (p. 260):

One day, Alex and Toni were hanging out on their deck when they saw a person next door doing something in the yard. "What's Smith doing?" Alex asked. "I think he's skimming the pool," Toni said. Unbeknownst to Toni and Alex, however, it wasn't Smith at all but someone else, Jones, whom Smith had hired, and who happened to look a lot like Smith.

The question asked, a variant of MSD's new experimental question (2015, p. 69) is:

When Alex says: "What's Smith doing?" regardless of whom Alex might intend to be talking about, whom is Alex actually talking about?

(A) The hired pool person, or (B) Their neighbor.
In a survey of 43 of Heck's students: 23 students answered (A) and 20 students answered (B). There was no statistical difference.  

Heck states that if the students had interpreted the question as one about 'semantic reference,' more would have answered (B) that Alex was actually talking about their neighbor (named Smith). As it is, he believes that his students were puzzled by the question. There is an ambiguity. But what is the ambiguity? Heck thinks it involves whether one is concerned about 'speaker's reference' or 'semantic reference,' and ordinary speakers don't understand semantic reference. The attempt at isolating semantic intuitions, with a revised Godel question (and in this Neighbor case study) fails. Heck believes that there is a nature to 'semantic reference' and this is what philosophers should study, independent of (irrelevant) layperson intuitions. Heck is ultimately skeptical about the relevancy of experimental survey questions to answer deeply theoretical questions about semantic reference. Like Heck, I agree there are no implicit (or explicit) layperson intuitions about 'semantic reference' and that any attempt to determine them is irrelevant. Unlike Heck, though, I'm keenly interested in the relevance of layperson intuitions about 'reference' (as studied here) as contributing to an understanding of speaker reference and explaining possible ambiguities of speaker reference.

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6 Heck imitates MSD's (2015. p. 69) revised question of the same form: "When John uses the name 'Godel,' regardless of whom he might intend to be talking about, he is actually talking about: (A) the person who really discovered the incompleteness of arithmetic; or (B) the person who got hold of the manuscript and claimed credit for the work."
With a speaker reference analysis of the Neighbor case, there are *two* possible *speaker referents* in this case, which leads to an ambiguity, which results in a statistical deadlock in this case. In order to answer, whom is Alex talking about, when he asks, "What's Smith doing?" we need to know whether Alex is asking "what is the hired pool person doing" while directly focused upon Jones, or whether Alex is concerned about the status of his beloved neighbor (i.e. Smith). Whoever is the (actual) referent of "What's Smith doing?" (Jones or Smith) is contingent on Alex's interests. When asking "What's x doing?" Alex would (actually) be talking about the hired pool person that he is perceiving (i.e. Jones) if he is *most interested* in asking 'what is that person doing?' On the other hand, if Alex was more concerned about what Smith (their neighbor) is doing, then he is talking about (and referring to) Smith, and his belief that Smith is skimming the pool is false. A speaker theory explains the ambiguity without concern for semantic reference.

In these five cases studies, we have used a theory of 'speaker reference' to explain possible ambiguities of speaker reference and clarify our linguistic intuitions about the function (and standard use) of proper names and definite descriptions.

**Conclusion**

In this essay I have clarified 'speaker reference.' I'm skeptical that *linguistic expressions* can mean this or refer to that. With a theory of speaker reference, it is persons who use syntactically complete *linguistic expressions* (i.e. sentences) to refer, to describe, to prescribe, and to define (in various ways). Contrary to Soames, not all meaningful declarative sentences are 'representational' and are tied to (possible) truth. For example, stipulative definitions, moral assertions, sufficient evidence claims, and the
axioms of formal systems are (plausibly) not literally true or false. The content of these kinds of sentences can only be 'agreed-to' among persons. Consequently, the 'correctness' of these propositions is dependent upon acceptance by particular persons. Besides 'descriptive' declaratives there seems to exist 'prescriptive' declarative assertions.

In advocating a theory of speaker reference, I'm not implying that 'semantic theories' should be discarded. Model theories (involving reference, meaning, and modality) are valuable for creating structures that explain the structure of well-formed sentences (that are meaningful or intelligible to persons in context) and the validity of deductive arguments. But such theories are not relevant for answering substantial questions in philosophy; such as for example, the debate about 'realism' in mathematics.

Mathematical realists believe that mathematics is 'about' a realm of objective abstract objects. In opposition, anti-realists understand the practice of mathematics as a 'stipulative enterprise' as illustrated with the construction of formal systems. Structures are specified (or interpreted) by 'stipulative definitions' that are agreed-to; but are not literally true or false. An axiomatic system is not a system of statements about a subject matter, but a system of statements of a 'relational structure.' It is concluded that semantic reference is found in artificial languages, but not in natural languages.
References


Nichols, Shaun; N. Angel Pinillos; and Ron Mallon. 2016. 'Ambiguous Reference.' *Mind* 125: 145-175.


