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This paper connects a dominant approach to studying natural language semantics with a fundamental thesis about how people think - and talk - about

about particular objects simply because are appropriately involved in the production of the thinking or talking. I argue that accepting the Process View about thinking and talking leaves practitioners of the formal approach with an unwanted artificiality in their semantic theorizing. Thus, they have strong motivation to accept the Determination View instead. But this commits them to a substantive view about human cognition, which is in need of defense. Though there is not space here to make a full case against the Determination View, I will close the paper by sketching a general problem it faces. The message to take from the paper is that this problem about the nature of turns out to matter for the kinds of inquiry into natural language that can fruitfully be pursued.

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The formal approach aims to explain how it is possible that human beings learn, speak, and understand their languages. The strategy is to explain this phenomenon in terms of people's mastery of finite lexicons and finite sets of grammatical rules, using the tools of model theory. As Brendan Gillon has put it, the aim is "to do for the expressions of a natural language what model theory does for the notation of logic: given an assignment of values to the minimal constituents, to assign a value to the complex expression."

A critical assumption of this formal approach is that both the assignment of values to minimal expressions and the rules for assigning values to complex

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expressions on the	basis of their consti	tuent expressions	are invariant acro	ss people's

language. Rather, semantics is responsible to our intuitions about the meanings of and about the truth conditions of

Any semantic facts about

This way of understanding speaker's reference connects it to a non-linguistic, purely cognitive relation to an object. This is the relation of thinking about an object, or, to use Keith Donnellan's (1966) term, having an object in mind. Intending, in a given utterance, to refer to a particular object is just a matter of one's utterance being generated in a certain way by one's thinking about, or having in mind, that object. One's thinking about that object will in turn have been generated by one's interaction with that object or its effects.

A good way of thinking about the Process View is as analogizing referring to vision and other perceptual processes. Just as a person a particular object because of the role that object plays in her visual process, so she to a particular object because of the role that object plays in what might be called her "referential process".

If the formal approach thinks of in this Process way, it takes on what might be called a "Partial Determination View" of . On this view, one way of referring to things using language is by having what you are referring to determined by the conventional meanings of the expressions you use. That is semantic reference Another way of referring to things using language is to have your thinking about them generate intentional utterances, in this process-given, way. That is speaker's reference.

A different way of understanding speaker's reference leads to what might be called a "Full Determination View" of reference in general. On this view, just as the meaning of an expression may determine a referent, so a speaker's intention, through its descriptive content (for instance, in the above example, ), may determine a referent. The expression used may determine the same referent as the speaker's intention, or they may determine different referents. But both referents are

determined by the speaker invoking a property - through linguistic meaning or through conceptual grasp - that is uniquely instantiated by the referent. The view that a speaker's ability to speaker-refer to an object relies on her conceptual identification of it goes hand in hand with the view that her ability to think about the object also relies on such conceptual identification. For it is implausible that a speaker might think about an object (without identifying it conceptually) but not be able to refer to it (assuming she has language).

My aim here is not to argue that Kripke viewed speaker's reference in one way or the other. What I want to ask is: how anyone broadly working within the formal approach regard speaker's reference? Should they have a Partial or a Full

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Determination View of reference in general? I am going to suggest that they have strong motivation to accept a Full Determination View. In this way, the formal approach to natural language semantics is tied to a substantive view about how human beings cognize particular objects.

## T l wi P ilD i i Viw

Suppose someone working with the formal approach adopts a Partial Determination View. On this view, it is accepted that to the question of how people refer to things in language is a answer. Very roughly, things impinge causally upon people through perception (whether directly or indirectly), leading to their thinking about those things, perhaps remembering those things, and as a result uttering certain expressions, where their understanding of the conventional use of the expressions they use together with the linguistic and epistemic situation of their audience causes them to utter those expressions rather than others. We classify their utterances as intentional, and as being done with the intention of referring to the objects that got the chain started - the objects to which their utterances are downstream reactions. All we mean by this, though, is that the speaker responded with an utterance to a thinking event whose origin involved one object rather than another. This is a process of reference, and things come to be referred to by setting in motion (in a certain way) such a process.

Although this answer is rough and the details need filling in, it is the framework for a to the question of how people refer to things using language. It

sketches the role that people play in reference, the role that expressions play, and the role that referents play. If this answer were filled in, no question would remain about how people use expressions to refer to things. In particular, there would be no need to postulate any determination of reference external to this of reference.

In light of this, the prospect of now isolating a feature of the process - the expression used - and asking what determines independently of the process seems unnecessary. The question about reference has already been answered - or at least, a framework for answering it has been set out. One may certainly a notion of "semantic reference" as what is determined by the meaning of the expression used. But in doing so, one recognizes that this determination does not figure in the full explanation of how people use expressions to refer to things. Semantic reference becomes a theoretical notion introduced for the purpose of fitting reference into modern semantic theory's favored approach to understanding language use: in terms of invariant features of a lexicon and a grammar.

By accepting a Process View even of "speaker's reference," one admits - at least implicitly - that one's contrasting notion of "semantic reference" does not track - or even attempt to track - the way that people actually use language to refer. The formal approach ends up irresponsible to the intuitive data about linguistic reference. This seems a bad result for a project that is motivated by the attempt to understand how people manage to use and understand natural language.

For this reason, the formal approach is pushed toward a Full Determination
View of reference. I have argued that if there is a correct

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attribution of a property is not what determines what one refers to, but a step in the process of referring to an object that gets started when the object comes into a position to be referred to. This is analogous to the way in which seeing an object involves the formation of a retinal image. The retinal image does not determine what one sees (e.g. by being a perfect representation of a single particular object) but is a step in the process of seeing an object that has come into position to be seen.

These brief considerations supporting the idea that reference is prior to attribution are not conclusive. Among other matters, they do not address motivations for the opposite view, that attribution is prior to reference. One motivation, what Barry

cognition, or whether we go to them, via our concepts. In the 1970s, Kripke and Donnellan presented strong intuitive arguments that objects can come to us in cognition even when we lack the conceptual resources to get to them. It should not go without remark that the formal approach to studying natural language is closely aligned with the opposite view.