

Semantic Intentions and Linguistic Structure

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Intention-based semantics is philosophically appealing if one believes two theses:

1. Adequate characterizations of all essential semantic concepts can be given in terms of psychological attitudes.¹
2. An adequate account of psychological attitudes can be given that does not make essential reference to semantic concepts.

Either claim alone would be of interest; the first would provide an important set of generalizations that would constrain any future semantico-psychological investigation, the second would establish psychology's independence from semantics. But neither alone would be likely to persuade you to pursue the Gricean path of nested sequences of definitions adumbrated in Schiffer's paper. I have reservations about both claims, and for related reasons.

*Semantics and semantics** Since I (probably heretically) think of semantics as primarily a branch of science, or at least aspiring to be one, I am not concerned about identity of the properties Schiffer discusses. A few well-supported empirical generalizations would be a long step forward in this field where theories vastly outnumber established generalizations. Yet I do have some question about the *necessary coextensiveness* Schiffer sees between semantics and semantics*. Moreover, we will see later that the issue arises in an unexpected way when we consider the main theses.

Reading closely we see more precisely that what is claimed is that all public language semantical properties are necessarily coextensive with the corresponding public language semantical* properties. The former, public language semantical properties, are stipulated to be properties whose bearers have meaning "in a public language used, inter alia, for communication *in the*

sense in which we humans typically communicate with one another" (p. 127). I suspect that if pressed Schiffer would fill out the italicized phrase (his italics) with an account of communication in terms of intentions to bring about beliefs in the hearer. If so the claim of necessary coextensiveness is true and trivial—otherwise it is unwarranted, at least until we are given an alternative account of communication.

But I am not only worried about the *necessity* of the coextensiveness, I have doubts about the unadorned coextensiveness too.

A. The system of using turn signals on automobiles is a conventional means for meaning that one is going to turn right/left. I don't think that it is a language. Perhaps the qualification "system of marks or sounds" (p. 123) is intended to rule this out, but if so this should be motivated, as should the consequent exclusion of Amslan.

B. The sentence "Ich kenne keinen deutschen Satz." cannot ever practically be used to mean that I do not know any sentences of German, even though I can certainly mean that I do not by other routes. And I believe that the sentence does mean exactly that even though no one ever means* that with the sentence.

C. The usual English utterer of the sentence "How are you?" means* that he wants to initiate a conversation, but I don't think that is what the sentence means.

One reason the promoters of intention-based semantics are often accused (cf. [5]) of conceptual analysis is that they take these and similar criticisms seriously. They try to show that their definitions coincide extensionally, necessarily, maybe even identically, with the ordinary English locutions. An alternative path would be the bolder one of forsaking ties to ordinary English as anything more than suggestive and offering the new definitions as a novel theoretical approach.

Structure What is common to all three of the problematic examples and the many others that can be generated is structure: (A) the system of turn signals lacks it. There are two signals, they have no significant components that can be abstracted and then recombined in different ways to generate novel signals. One cannot even string together a series of signals to mean* that one is going to make two lefts and then a right—the message would not be understood, and one knows that and could thus not intend it. (B) The German sentence has the meaning that it does and consequently is useless² in German because it is composed of words according to a syntactic structure. Both the words and the structure have other instances in the language and the meaning is projectible from those and the regularities that govern them. (Note that one cannot readily state these regularities in semantic* terms since this sentence will offer a counterexample to any straightforward generalizations.)

Intention-based semantics contrasts sharply with referential approaches in that the latter emphasize the reference of individual words as primary and considerations of sentences are secondary, just the opposite of intention-based semantics. The latter also contrasts with Chomskyan or Montague semantics

in assigning at most a late and minor role to structure. Even an approach such as Davidson's (cf. Root and Wallace, pp. 157ff) which emphasizes the sentence as the fundamental linguistic unit of both communication and analysis also emphasizes the fact that sentences of a language are constructed by syntactic means from words.

There has been only one serious attempt to provide an intentionalist account of syntactic or semantic structure: Grice's "Utterer's meaning, sentence meaning and word meaning", and its author has subsequently disavowed it. I include the qualification "serious" because Bennett's *Linguistic Behaviour* includes a section on structure. However, he is considering there how one might discern structure and word meaning in a deliberately simplified language. Suppositions such as "We might find that expression *C* occurs in all and only sentences which mean something about the chief of the tribe" ([1], p. 219) abound. Since I know of no language, expression, and object for which this supposition is true, it seems rather distant from linguistic reality.

To summarize, the intention-based semantic theorists' definition of sentence meaning makes no use of, and in no way either requires or reflects, the fact that in actual human languages sentences are composed of meaningful elements that occur with certain regularities in many other sentences. Each sentence from their point of view could be composed of elements that do not recur in any other sentence. Or all sentences might consist simply of various numbers of repetitions of a single element that itself had no significance. (As in the Paul Revere language*, one if by land, two if by sea.)

Infinity and learnability Schiffer's account in this paper, unlike the quasi-Gricean account in Bennett's *Linguistic Behaviour*, seems to be committed to the finitude of the totality of English* sentences. Clearly there is an upper bound (though it is unclear what it is) somewhere below 10^6 such that if σ contains more than that many letters it is not "practicable for a member of *G* to mean* that *p* in uttering σ " for it is impracticable to utter a σ longer than 10^6 letters, let alone to expect that a hearer could process the utterance. I say that Schiffer "seems to be committed" to this, for I am uncertain exactly how to read the qualification "If it is possible for him to mean* that *p* in *o*". Perhaps the result is not forthcoming because one cannot mean* the relevant *p*, perhaps the belief that would, on alternative accounts, be expressed by the sentence of length 10^6 letters would itself be a belief that eludes human comprehension. This would show that the too-long sentence would satisfy clause (a) of the definition vacuously by falsifying the antecedent of the conditional. But this does not save the sentence, for to be a conventional device* in English* for meaning* something it is also required that it satisfy (b), that the conditional (a) be mutual knowledge among English* speakers. And if it is beyond human comprehension to decipher σ it is beyond human comprehension to mutually know a conditional containing σ and two occurrences of a sentence *p* equivalent to it.

I do not take the resulting finitude of English* as a refutation of the view. The infinitude of the set of English sentences is a matter of theoretically mediated belief that is not without its doubters (cf. [8]). I suspect that the main reason many philosophers and linguists find the infinitude thesis so

plausible is that it provides a quick refutation of some obviously incorrect analyses. For example, Davidson [2] deployed a learnability argument against one of Quine's analyses of belief sentences. In this analysis the problematic resistance to substitution of coextensive terms was avoided by postulating that the terms did not occur. Thus "John believes Sam is taller than Bill", is to be understood as containing a subject and a simple indecomposable verb "believes-Sam-is-taller-than-Bill" according to the Harvard-hyphen-hypothesis.

Against this Davidson argued that since there are infinitely many belief sentences this implies that the language learner would have to learn infinitely many semantically distinct predicates, something that is alleged to be beyond the capacity of finite beings. Both the claim of sentence infinitude and the claim about the limited semantic capacities of finite creatures are highly theoretical claims whose statements are problematic, not to mention their proofs. While it is nice if you are going to give a cardinality argument to have one with some margin for error, these arguments sacrifice something in the clarity and plausibility of their premises.

A less fancy argument for the general conclusion of the compositional character of human languages can be obtained from lower cardinalities. Teach someone 100 nouns, 50 transitive verbs, an article, and some phrase structure rules (active and passive simple sentence formation) and he can produce and understand about 10^6 sentences. Compositionality predicts and partially explains this. Moreover, the intelligibility of a given belief report to a subject is highly correlated with his comprehension of the words that one naively thinks occur in the report. So we can happily place the conclusion of compositionality on more solid ground than the theorized infinity. People learn to use human languages by learning a relatively small number of words and syntactic principles.³ (Small relative to the number of sentences they understand.)

Structure and intentions The foregoing discussion of structure is not a digression or diversion—one of the significant features of human language use is the occurrence of sentences novel to both speaker and hearer. In these cases the speaker's belief that the hearer will come to believe that the speaker has the relevant belief cannot depend on past occurrences of *that* sentence within their experience. Instead the speaker is relying on assumptions about how both speaker and hearer will project syntactic and semantic regularities from their diverse histories of linguistic experience.

For the linguistic act to succeed both speaker and hearer must have made similar projections about word meaning and syntactic structures. And unless the intention-based semantics can provide an analysis of these it will fail to account for linguistic use except for the repetitions of familiar sentences. (And it is even unclear how it would account for those in detail.) The absence of any such account is not an argument that it is impossible to construct one but the inductive evidence from the attempts so far suggest a negative conclusion (cf. [5] and [3]).

Presumably the account would proceed in terms of the speaker believing that the hearer believes that the word "armadillo" bears an appropriate relation in English to armadillos and similarly for other words, and the speaker must

believe that the hearer will interpret the utterance as an English utterance. Since no intention-based semantic theory has been given yet, I do not know how to fill in "the appropriate relation" more concretely—two candidates that come to mind are "means" and "refers to". But whatever goes into that place in the sentence must presumably be a semantic term. Can that semantic term be replaced by the corresponding semantic* term as is required by the reducibility thesis?

I doubt that it can, for I doubt that the average English speaker who believes that "armadillo" means armadillo, believes that "armadillo" means* armadillo. To believe the latter requires understanding and finding plausible the intention-based semantics*. Or, more pointedly, take an unaverage English speaker such as Paul Ziff who strongly *disbelieves* that "armadillo" means* armadillo, since he does not accept the intention-based semantics claim about the conventionality* of language (cf. [7]).

I suspect that Schiffer may have anticipated this objection and that this is why he hoped to show that semantic and semantic* properties are identical. But even he does not claim that, and mere necessary coextensiveness is insufficient to warrant the claim that a belief report involving "means" and one obtained from it by replacing "means" by "means*" are necessarily the same in truth value. (We would be in an amusing situation if he were right about both the necessary coextensiveness and the identity of belief, for then we would all believe his theory, even though we would deny it.) Someone could believe that a sentence of predicate logic is derivable as a theorem and disbelieve that it is valid if they are ignorant of the completeness proof that establishes the coextensiveness of theoremhood and validity.

A concluding remark on the eliminability of semantics from commonsense psychology The following is not an argument against intention-based semantics but an indication of a general reason why I believe the elimination of semantics thesis that accompanies it is false: while I find neither sentential nor propositional theories of belief entirely adequate, there is some truth to them. In many cases the state that is being portrayed in a belief report can only be fully identified by reference to language. For someone who has never been anywhere near China and speaks no Chinese, the belief that Peking is in China is typically achieved only through the mediation of language. By that I do not mean merely that one learns this fact through language, but that there are virtually no behavioral dispositions that would identify the internal state that do not involve linguistic items. And it is via the meaning of these linguistic items that we fix the content of the belief. This point is related to earlier ones in that it is the social aspect of language use, the fact that languages are used by an indefinitely large number of different persons, and that it can be used through the understanding of semantic principles, that gives semantics a character that eludes reduction to what past speakers and hearers intended. The languages* of intention-based semantics seem to be impoverished approximations of languages with their rich compositional structure. It is undoubtedly true that we would have no language without prelinguistic thoughts, beliefs, and desires, but there are many thoughts that cannot be thought without language and which are not reducible to the prelinguistic.⁴

NOTES

1. I use "psychological attitudes" for belief, desire, and the like since I think they are neither propositional nor sentential attitudes. These and other doubts about belief are not relevant to the issues at hand, but are articulated in [4].
2. Useless except for jokes, philosophical remarks, and the like.
3. The fact that language is largely compositional does not imply that it is always compositional. There are some phrases that are learned in their entirety and the meanings of individual words abstracted later, if at all.
4. It is worth noting that Schiffer's argument that belief cannot be reduced to meaning and desire is fallacious. In order to make the claim that T and T^* are logically equivalent he must assume that $M = (\exists \Omega)T(\Phi, \Psi, \Omega)$ is a necessary truth, presumably because it is a definition. But then we can consider the relation between

- a. $(\exists \Phi)(\exists \Psi)(\exists \Omega)T(\Phi, \Psi, \Omega) \ \& \ M = (\exists \Omega)T(\Phi, \Psi, \Omega)$
- b. $(\exists \Phi)(\exists \Psi)T^*(\Phi, \Psi)$

and his argument that the entailment between (a) and (b) is lost by existential generalization fails. This does not show, of course, that his claim that belief cannot be so reduced is false. I am indebted to Richard Warner for this point, and for helpful discussions of the paper in general.

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