

## Vague Speaker-Meaning

Stephen Schiffer  
New York University

Assertoric speaker-meaning—henceforth, for present purposes, simply speaker-meaning—is the notion of a speaker’s meaning that such-and-such, as when, for example, in uttering ‘He’s ready’ Jill meant that Jack was ready to go to dinner. It’s the most general kind of assertoric illocutionary act, the genus of which all other kinds of assertoric illocutionary acts—saying that such-and-such, asserting that such-and-such, denying that such-and-such, objecting that such-and-such, telling so-and-so that such-and-such, etc.—are species. The dominant conception of speaker-meaning in both philosophy of language and linguistic semantics is that of a relation, *S meant p*, between a person S and a proposition p that she meant, where a proposition is an abstract entity that has truth conditions, has those truth conditions necessarily, and is mind- and language-independent in that it belongs to no language and wasn’t created by what anyone said or thought.<sup>1</sup> I will call this dominant conception the *propositionalist conception of speaker-meaning* and initially assume *pro tem* that it’s correct. Then I will present an example to be used as an exemplar of vague speaker-meaning and ask what proposition the speaker in that example meant in producing his utterance. That will be an important question to ask because it won’t be possible to find its answer in any published account of speaker-meaning, and this because it’s a striking feature of extant accounts of speaker-meaning—indeed, of virtually every presentation of a foundational semantic theory—that they completely ignore vagueness, even though virtually every utterance is vague. Perhaps the authors of these accounts would say that their ignoring vagueness is a useful idealization akin to Galileo’s ignoring friction in his idealized model of bodies in motion. They might say that, but, as we will see, they would be wrong.

---

<sup>1</sup> For my purposes it doesn’t matter to which kind of proposition—Fregean, Russellian, functions from possible worlds into truth-values, whatever—the propositions we mean are taken to belong, but for simplicity of exposition I will often write as though they are taken to be Russellian propositions, i.e. structured entities whose basic components are the objects and properties our speech acts are about.

## 1 Vagueness and the Propositionalist Account of Speaker-Meaning

Here is an unexceptional example of vague speaker-meaning. Tom is reading in the park when a woman appears, calling ‘Billy, where are you? We have to leave now’. Intending to tell her something she might find helpful, Tom says to the woman ‘A boy was here a little while ago’. We would certainly regard Tom as having told the woman something, and therefore as having meant and said something in producing his utterance. If the woman to whom he spoke didn’t catch his words and asked him what he said, Tom wouldn’t hesitate to say ‘I said that a boy was here a little while ago’, and we, knowing what we do, would accept Tom’s report of what he said as true. We would unhesitatingly take Tom’s utterance to be an act of speaker-meaning. Tom’s utterance was also vague. His utterance was vague because even if it was determinately true or determinately false, it might have been neither; it might have been borderline true/false.<sup>2</sup> It’s three-ways overdetermined that Tom’s utterance was vague, for its contained utterances of ‘boy’, ‘here’, and ‘a little while ago’ were vague, and the vagueness of any one of those utterances sufficed to

---

<sup>2</sup> My use of ‘vague’, ‘determinate’, ‘indeterminate’, and ‘borderline’ throughout this essay is pre-theoretic in that nothing I say will rely on any particular philosophical theory of vagueness but will instead remain neutral on that score. So, for example, as far as this essay is concerned it’s not assumed that ‘It’s indeterminate whether Harold is bald’ entails ‘It’s neither true nor false that Harold is bald’. I will, however, assume that: (i) ‘x is borderline F’ entails ‘It’s indeterminate whether x is F’. (ii) ‘It’s indeterminate whether x is F’ doesn’t entail ‘x is borderline F’. For example, if, as many suppose, it’s indeterminate whether the continuum hypothesis is true, that wouldn’t entail that it was borderline true or even vague. In this essay, however, the only indeterminacy that will be at issue is vagueness-induced indeterminacy, so far all that presently matters ‘It’s indeterminate whether x is F’ is equivalent to ‘x is borderline F’. (iii) If it’s indeterminate whether x is F, then it’s impossible for anyone to know whether x is F. If, for example, it’s indeterminate whether Harold is bald, then nothing can count as one’s discovering that Harold is in fact bald or that he is in fact not bald. If one did come to know that Harold was bald, then one would thereby come to know that it’s not indeterminate whether Harold is bald. (iv) One might wonder what the difference is supposed to be between x’s being F and x’s being determinately F. What, for example, is the difference between *its being true that it’s raining* and *its being determinately true that it’s raining*? If they are two distinct facts, in what can the difference between them consist? Are we to imagine its raining harder if we suppose that it’s determinately true, as opposed to being merely true, that it’s raining? Of course not. It’s not that one might know that Sadie is lethargic and then wonder whether she’s also determinately lethargic. To understand my vagueness-related use of the jargon expressions ‘determinate’ and ‘indeterminate’ it’s enough to know that, while ‘x is determinately F’ entails ‘x is F’, ‘x is F’ doesn’t entail ‘x is determinately F’. For ‘x is not determinately F’ must be consistent with ‘It’s indeterminate whether x is F’, and we don’t want that to entail ‘x is not F’. So we can’t deny that it’s indeterminate whether x is F by claiming that x is F or that x isn’t F, but we can deny it by claiming that x is determinately F or that x is determinately not F. The usefulness of ‘x is determinately F/not F’ resides in its incompatibility with ‘It’s indeterminate whether x is F’.

make Tom's utterance of 'A boy was here a little while ago' vague. And each of those utterances was vague because, even if the application to which Tom put it was determinately correct or determinately incorrect, it might have been neither. I intend Tom's utterance to be an exemplar of vague speaker-meaning. The first big question I will ask is: Supposing the propositionalist account of speaker-meaning is correct, *what proposition did Tom mean in uttering 'A boy was here a little while ago'?*

Since propositions are mind- and language-independent entities, we can't answer this question without taking a stand on the issue of ontic vagueness, or vagueness in the world. That issue is a contest between a view I'll call *no-vagueness-in-the-world* and one I'll call *vagueness-in-the-world*. What exactly is at issue in this contest is itself in need of precisification, but to (what I hope is) a good-enough approximation we may say that *no-vagueness-in-the-world* holds that nothing outside of language and thought can be vague in its own right (i.e. independently of the vagueness of language and thought), while *vagueness-in-the-world* holds that properties and things outside of language and thought may be vague in their own right. As a terminological convenience I'll say that things that aren't vague in their own right are *metaphysically precise*, and that things that are vague in their own right are *metaphysically vague*. A *proposition* is metaphysically precise provided it's necessarily the case that there is a fact of the matter as to what truth-value, if any, it has. If bivalence holds for propositions, then a proposition is metaphysically precise provided it's necessarily the case that it's a fact that it's true or else a fact that it's false. If, as Frege held, presupposition failure can render a proposition neither true nor false, then a proposition is metaphysically precise provided it's necessarily the case that it's a fact that it's true, a fact that it's false, or a fact that it's neither true nor false. And if there are three or more truth-values, then a proposition is metaphysically precise provided it's necessarily the case that there is a fact of the matter as to which truth-value it has. For simplicity of exposition I will assume that metaphysically-precise propositions are bivalent, either true or else false. As a matter of terminology I'll say that if a proposition is metaphysically-precise, then it can't be *metaphysically indeterminate* what its truth-value is, but that will be compatible with its being indeterminate what its truth-value is in an epistemic sense of 'indeterminate', which is to say, the sense that it would have if the epistemic theory of vagueness were correct. A proposition is metaphysically-vague provided it can be metaphysically indeterminate what its truth-value is; in other words, if the proposition can be borderline true/false in its own right, independently of the vagueness of words and concepts. A property is metaphysically precise provided it's necessarily the case that everything is such that it either has the property or else doesn't have it, and a thing that is neither a property nor a proposition—e.g. an apple, a dog, a geographical area, or a period of time—is metaphysically-precise provided it's necessarily the case that it has metaphysically-precise conditions of individuation (so if it's a geographical area it can't be metaphysically indeterminate

what its boundaries are, and if it's a period of time it can't be metaphysically indeterminate when it began or when it ended, or how many seconds or yoctoseconds<sup>3</sup> have passed between the instant of time it began and the instant of time it ended). Anything that isn't metaphysically precise is metaphysically vague.

There is one possible answer to the question of what proposition Tom meant in uttering 'A boy was here a little while ago' with which we needn't be concerned—namely, that for some metaphysically-precise proposition *p*, Tom determinately meant *p* in uttering 'A boy was here a little while ago'. We needn't be concerned with this possible answer because if it were true Tom's utterance wouldn't have been vague. There are four possible answers that are compatible with the vagueness of Tom's utterance that I will consider. The first two are on the side of no-vagueness-in-the-world, the second two on the side of vagueness-in-the-world. They are:

- (A) For some metaphysically-precise proposition *p*, Tom meant *p* in uttering 'A boy was here a little while ago', but it's indeterminate whether or not he meant *p* in uttering that sentence.
- (B) There is no metaphysically-precise proposition that Tom determinately meant in uttering 'A boy was here a little while ago', but there are two or more metaphysically-precise propositions each such that it's indeterminate whether or not he meant it in uttering that sentence.
- (C) For some metaphysically-vague proposition *p*, Tom meant *p* in uttering 'A boy was here a little while ago'.
- (D) There is no metaphysically-vague proposition that Tom determinately meant in uttering 'A boy was here a little while ago', but there are two or more metaphysically-vague propositions each such that it's indeterminate whether or not he meant it in uttering that sentence.

Although (A)-(D) are the only answers I will consider, they are not the only possible answers compatible with the vagueness of Tom's utterance. There are actually infinitely many possible answers that are compatible with the vagueness of his utterance. The prodigious proliferation is due to *higher-order vagueness*. For consider Harold, whom we take to be a borderline case of a bald man, which is to say, nearly enough, that we take it to be indeterminate whether he's bald. Now, the notion of a borderline case is itself vague; so there is the apparent possibility that he is a borderline case of a borderline case of a bald man, or a borderline case of a borderline case of a borderline case of a bald man, or .... (A)-(D) ignore higher-order vagueness;

---

<sup>3</sup> One yoctosecond = one trillionth of a trillionth of a second.

it's when we adjust them to recognize the possibility of higher-order vagueness that we get infinitely many permutations of each of (A)-(D). Take, for example:

(D) There is no metaphysically-vague proposition that Tom determinately meant in uttering 'A boy was here a little while ago', but there are two or more metaphysically-vague propositions each such that it's indeterminate whether he meant it in uttering that sentence.

When we let in higher-order vagueness we get the following permutation of (D):

There is no metaphysically-vague proposition that Tom determinately meant in uttering 'A boy was here a little while ago', but there are two or more metaphysically-vague propositions each such that it's indeterminate whether he meant it in uttering that sentence, or two or more metaphysically-vague propositions each such that it's indeterminate whether it's indeterminate whether he meant it in uttering that sentence, or two or more metaphysically-vague propositions each such that it's indeterminate whether it's indeterminate whether it's indeterminate whether he meant it in uttering that sentence, or ...

Nevertheless, I will continue to ignore higher-order vagueness and thus continue to take (A)-(D) as the only answers we need to consider to the question: Supposing that the propositionalist account of speaker-meaning is correct, what proposition did Tom mean in uttering 'A boy was here a little while ago'? For once we finish our critical examination of (A)-(D) it will be clear that we have no need to consider the permutations of those four possible answers induced by higher-order vagueness. So the big question now is whether any of (A)-(D) can survive scrutiny.

*Re (A) [For some metaphysically-precise proposition  $p$ , Tom meant  $p$  in uttering 'A boy was here a little while ago', but it's indeterminate whether he meant  $p$  in uttering that sentence]. If it's indeterminate whether such-and-such is the case, then it's impossible for anyone to know whether such-and-such is the case. But how can there be any proposition that Tom meant in uttering 'A boy was here a little while ago' if it's impossible for him or anyone else to know that he meant it? Yet (A) would be true if the epistemic theory of vagueness were true, for that theory expounds the thesis that "the proposition a vague sentence expresses in a borderline case is true or false, and we cannot know which."<sup>4</sup> There are issues about how we should understand the ignorance about borderline cases epistemicism requires, and I'll have a little to say about that presently, but even*

---

<sup>4</sup> Williamson (1997: 921).

without resolving those issues we can know that (A) is false if we can know that there couldn't have been a metaphysically-precise proposition that Tom meant in uttering 'A boy was here a little while ago', and I believe we can know that in the following way.

The vagueness of Tom's utterance, we have noticed, was three-ways overdetermined: by the vagueness of his utterance of 'boy', the vagueness of his utterance of 'here', and the vagueness of his utterance of 'a little while ago'. Consequently, if Tom meant a metaphysically-precise proposition in uttering 'A boy was here a little while ago', then it must also have been the case that:

- (1) for some metaphysically-precise property  $\phi$ , Tom expressed  $\phi$  with the token of 'boy' he uttered (if we pretend that 'male' and 'human being' express metaphysically-precise properties and that there is a metaphysically-precise moment at which a person comes into existence, then  $\phi$  might be the property of being a male human being whose age in milliseconds  $\leq 531,066,240,000$ );<sup>5</sup>
- (2) for some metaphysically-precise area  $\alpha$ —i.e. area that has metaphysically-precise boundaries, and thus comprises a metaphysically-precise number of square millimeters, and a metaphysically-precise location relative to Tom's location—Tom referred to  $\alpha$  with 'here';
- (3) for some metaphysically-precise period of time  $\pi$ , Tom referred to  $\pi$  with 'a little while ago', where in order for that to have been the case there must have been instants of time of 0 duration  $t, t', t''$ , and real numbers  $n, n', n''$ , such that (i)  $t$  was the instant  $\pi$  began, (ii)  $t'$  was the instant  $\pi$  ended, (iii)  $t''$  was the instant of time a "little while" before which Tom was saying the boy was in  $\alpha$ , the metaphysically-precise area to which Tom referred with 'here', (iv)  $n$  is the precise number of milliseconds between  $t$  and  $t'$ , (v)  $n'$  is the precise number of milliseconds between  $t''$ , the instant of time from which all measurements of time relevant to the reference of 'a little while ago' emanate, and  $t$ , the instant of time such that if the boy's appearance in  $\alpha$  was so much as one yoctosecond before  $t$ , than it was too long before  $t''$  to count as "a little while ago," and

---

<sup>5</sup> As an expository convenience, instead of saying e.g. *Tom expressed  $\phi$  with the token of 'boy' he uttered* I'll say *Tom expressed  $\phi$  with 'boy'*, where that will be shorthand for the longer way of speaking. Likewise *Tom referred to  $\alpha$  with 'here'*, for example, will be shorthand for *Tom referred to  $\alpha$  with the token of 'here' he uttered*.

(vi)  $n''$  is the precise number of milliseconds between  $t''$  and  $t'$ , the end of  $\pi$  and thus the instant of time such that if the boy's appearance in  $\alpha$  was so much as one yoctosecond after  $t'$ , then it was too soon before  $t''$  to count as a "little while ago."

We can show that Tom didn't mean any metaphysically-precise proposition in uttering 'A boy was here a little while ago' if we can show that any one of (1)-(3) is false. I think we can show that each of (1)-(3) is false. I'll begin with (2) since it seems to be the simplest of the three requirements. There are at least the following reasons why Tom couldn't have referred to a metaphysically-precise area with 'here'.

(i) Acts of speaker-reference are *intentional* acts in that, if for some S, o and x, S referred to o with x, then S uttered x with those o-directed intentions that are constitutive, or at least partly constitutive, of her referring to o with x, and if S has the concept of speaker-reference, then, in the normal case, she intended to refer to o with x. Tom's utterance was a normal case, but it ought to be obvious that there was no metaphysically-precise area to which Tom intended to refer when he produced it, nor would he have thought there was any need to refer to such an area. We should expect a fuller description of the imagined scenario to include the fact that when he uttered 'A boy was here a little while ago', Tom was confident that he was saying something true because he was confident that a human male child no older than six was within four meters of him no more than ten minutes before he spoke. Tom gave no thought to which of the uncountably many metaphysically-precise areas containing the boy was the one he wanted to make a statement about, because there was no metaphysically-precise area about which he wanted to make a statement. Careful and considerate speakers try not to use a vague term unless they are confident that their use of it would be recognized as correct, but they have no reason to consider what would have to have been the case for their use of the term to have been borderline correct, or just barely correct or incorrect. Tom, if he understands it and has his wits about him, ought to be rendered speechless by the question "Exactly which area did you intend to refer when you uttered 'here'?" Nor did Tom think there was any need to refer to any particular area that contained the boy, for he would think he succeeded in giving the woman the information he intended to give her if, as a result of his utterance, she believed that a boy was at a location within the vicinity of Tom which made his utterance true, and that didn't require her to think that any particular area in which the boy was contained was the area to which Tom referred in producing his utterance.

(ii) We refer to things in order to make known to our hearers what we are talking about. In a normal case, such as Tom's, a speaker can't refer to a thing if she knows that her hearer wouldn't be able to know to what she was referring. Tom would know that even if there were a metaphysically-precise location to which he wanted to refer, his hearer would have no way of knowing which of the uncountably many eligible metaphysically-precise areas was the one to

which he was referring. Given that, he couldn't have intended to refer to any metaphysically-precise area.

(iii) There is a deeper explanation of why Tom couldn't have referred to any metaphysically-precise area. The statement

There is a metaphysically-precise area  $\alpha$  such that Tom intended to refer to  $\alpha$  with 'here',

if true, ascribes to Tom an intention that is *de re* with respect to an unspecified area  $\alpha$ , and just as one can have a belief that is *de re* with respect to a thing under one way of thinking of it but not under another, so one can have an intention that is *de re* with respect to a thing under one way of thinking of it but not under another. Let  $\alpha^*$  be any metaphysically-precise area in the vicinity of Tom. What way of thinking of  $\alpha^*$  might Tom have under which it would be possible for him to intend to refer to  $\alpha^*$  with 'here'? He has no perceptual way of thinking of  $\alpha^*$  that would do the job, and it's very difficult to see what knowledge by description of  $\alpha^*$  he might have that would enable him to intend to refer to  $\alpha^*$  under it.<sup>6</sup> It seems impossible to think of any kind of way of thinking of a metaphysically-precise area that would yield a way of thinking of  $\alpha^*$  under which Tom might have *any* intention or belief that was *de re* with respect to it. In short, it seems that there couldn't have been anything about any particular metaphysically-precise area that would explain what made it, rather than any of the uncountably other metaphysically-precise areas that differed only imperceptibly from it, the area to which Tom referred with 'here'.

I conclude that there was no metaphysically-precise area to which Tom referred in uttering 'A boy was here a little while ago', and that entails that there was no metaphysically-precise proposition that Tom meant in uttering 'A boy was here a little while ago'. So (A) is false. The same sort of considerations used to show that Tom couldn't have referred to a metaphysically-precise area with 'here' can also be used to show that he couldn't have referred to a metaphysically-precise period of time with 'a little while ago'. In fact, given the complexity of what would have to be the case in order for Tom to have referred to a metaphysically-precise period of time (see above pp. ...), it should be more intuitively obvious that he couldn't have referred to a metaphysically-precise period of time than it is that he couldn't have referred to a metaphysically-precise area. So that's another way to show that there couldn't have been a metaphysically-precise

---

<sup>6</sup> If  $\alpha^*$  could be secured as the referent of the token of 'here' Tom uttered without his having any intention that was *de re* with respect to  $\alpha^*$ , then perhaps Tom could have intended to refer to  $\alpha^*$  under the description *the area to which the token of 'here' I uttered refers*. Yes, *but* (1) it's impossible to see what factors could determine that reference if they didn't require Tom to have *any* intention that was *de re* with respect to  $\alpha^*$  and (2) it's as difficult to see what feature just one of uncountably many indiscriminable metaphysically-precise areas could make it alone the referent of the token of 'here' as it is to see what feature could make it alone the one to which Tom referred with that token of 'here'.

proposition which Tom meant in uttering ‘A boy was here a little while ago’, and therefore another way to show that (A) is false.

Can the same sort of considerations used to show that Tom couldn’t have referred to a metaphysically-precise area with ‘here’, or to a metaphysically-precise period of time with ‘a little while ago’, also be used to show that Tom couldn’t have expressed a metaphysically-precise property with ‘boy’? I believe so, but it’s a little trickier to show this. We can see why it’s trickier in the following way.

Some theorists would say that the vagueness of ‘boy’ is no barrier to the truth or knowability of claims such as

(i) The meaning of ‘boy’ = the property of being a boy

or

(ii) ‘Boy’ is true of a person iff he is a boy

For, they would say, the vagueness of the right-hand side occurrence of ‘boy’ in (i) and (ii) is simply the vagueness of the word—viz. ‘boy’—referred to on the left-hand side, so that the vagueness of the one balances out the vagueness of the other. Suppose that is right, that the epistemic theory of vagueness is true, and that the property of being a boy is metaphysically-precise, so that, in addition to (i) and (ii) being true, a statement like the following is also true:

(iii) The property of being a boy = the property of being a male human being whose age in milliseconds  $\leq$  531,066,240,000.

Let’s pretend that the statement like (iii) that is true is (iii) itself. Then (i) and (ii) would be equivalent, respectively, to

(iv) The meaning of ‘boy’ = the property of being a male human being whose age in milliseconds  $\leq$  531,066,240,000

and

(v) ‘Boy’ is true of a person iff he is a male human being whose age in milliseconds  $\leq$  531,066,240,000.

Now, according to the epistemic theorist, in order for (iii), (iv), and (v) to be compatible with the vagueness of ‘boy’ it would have to be impossible for anyone to know any one of them, for if they could know any one of them then it couldn’t ever be indeterminate whether a human male was a boy, since it would always be in principle possible to determine whether or not a male human was a boy by computing the number of milliseconds that have passed since he was born. But the unknowability of the truths (iv) and (v) wouldn’t render the truths (i) and (ii) unknowable, for just as one can know that George Eliot wrote *Middlemarch* but not know that Mary Ann Evans wrote *Middlemarch*, even though George Eliot was Mary Ann Evans, so, it might be said, one can know (i) and (ii) even if it was impossible for one to know (iii), and therefore impossible for one to know

(iv) and (v). The upshot of this would be that, if the epistemic theory is true, then the difficulty in a speaker's meaning a metaphysically-precise proposition in producing a vague utterance arises only for vague utterances that include utterances of vague expressions such as 'here' and 'a little while ago', but not for utterances of vague terms like 'boy' whose meanings (we might suppose) are metaphysically-precise things or properties. That line of thought, then, is why showing that Tom couldn't have expressed a metaphysically-precise property with 'boy' is trickier than showing that he couldn't have referred to a metaphysically-precise area with 'here' or to a metaphysically-precise period of time with 'a little while ago'.

In fact, however, the line of thought is specious; Tom's utterance of 'boy' really is in the same boat as his utterances of 'here' and 'a little while ago'. If 'boy' did mean the property of being a boy, then it would be easy for Tom to intend to express the property of being a boy with the token of 'boy' he uttered. But 'boy' can't mean the property of being a boy, and what prevents there being a metaphysically-precise property that Tom expressed with 'boy' is on all fours with what prevents him from referring to a metaphysically-precise area with 'here' or to a metaphysically-precise period of time with 'a little while ago'. This is due to a feature of every vague expression which precludes any kind of thing or property from being the meaning of any vague expression, a feature which shows that *none* of (i)-(v) is compatible with the vagueness of 'boy', even if the epistemic theory is true. That feature is one I call *penumbral shift*.<sup>7</sup> Penumbral shift doesn't per se show that speakers don't mean metaphysically-precise propositions in acts of vague speaker-meaning, but it does show that Tom's utterance of 'boy' makes it no less difficult for him to have meant a metaphysically-precise proposition in uttering 'A boy was here a little while ago' than does his utterance of 'here' or of 'a little while ago'.

Penumbral shift is a feature of every vague expression, but to economize on words I will explain it only with respect to vague predicates like 'boy', 'violinist', 'mathematician', 'communist', and 'triangular' which, unlike such vague predicates as 'local', 'ready', 'tall' or 'intelligent', are apt to be regarded as having constant characters if vagueness is being ignored. I'll refer to such vague predicates as *predicate\**. Now, every token of a *predicate\** has a *penumbral profile*, and two tokens of a *predicate\** have the same penumbral profile just in case if either token is true/false of a thing, then likewise for the other; if either token is such that it's indeterminate whether it's true/false of a thing, then likewise for the other; if either token is such that it's indeterminate whether it's indeterminate whether it's true/false of a thing, then likewise for the other; and so on. Then we may say that penumbral shift (when restricted to *predicate\**) is the fact that *the penumbral profiles of tokens of a predicate\* may shift somewhat from one token of the predicate\* to another*; that is to say, two tokens of a *predicate\** may have somewhat different

---

<sup>7</sup> Schiffer (2010) and (2016).

penumbral profiles. The “somewhat” qualification is important. For example, if Clyde is a man whose scalp is as hairless as a billiard ball and on whose scalp no hair can grow, then every token of ‘bald man’ must be true of Clyde, but if Clyde is blessed with a head of hair like the one Tom Cruise appears to have, then every token of ‘bald man’ must be false of him. At the same time, penumbral shift makes it possible for there to be three tokens of any predicate\*, one of which is true of the thing to which it’s applied, another of which is false of the thing to which it’s applied, and still another of which is such that it’s indeterminate whether it’s true of the thing to which it’s applied. Here are three examples:

- At a party George is asked whether Henrietta came to the party with anyone, and he replies, gesturing at a certain man, ‘She came with that bald guy’. That utterance would most likely be accepted in the context in which it occurred as true, even if it somehow transpires that the man in question shaves his scalp but wouldn’t be said to be bald if he let his hair grow out. In another conversation, however, in which the discussion is about hereditary baldness, someone might correct a remark about the same man by saying, ‘No; he’s not bald; he just shaves his scalp’, and that utterance, in that context, would very likely count as true. In still another context the question is raised whether a man who shaved his scalp would be bald if no one would take him to be bald if he stopped shaving his scalp and let his hair grow out, and in that context it might be true to say, ‘That’s undetermined by the use of “bald” in everyday speech; such a man would be neither determinately bald nor determinately not bald’.
- In a community in which people typically marry before the age of twenty, an utterance of ‘He’s a bachelor’ may count as true when said of an unmarried eighteen-year-old male, whereas in a conversation among New Yorkers, where for both men and women the average age for a first marriage is between thirty and thirty-five, an utterance of ‘He’s a bachelor’ would most likely not count as definitely true when said of an unmarried eighteen-year-old male, and may even count as false.
- An utterance of ‘Mary is getting married to a boy from Boston’ would count as false if the male whom she is about to marry is fifty-two years old, but is apt not to count as false if he is twenty-seven years old. At the same time, if every one of the seven male professors in one’s

department is over forty except Henry, who is twenty-seven, an utterance of ‘Six men and one boy are professors in my department’ would count as a misuse of ‘boy’. The boys’ clothing section in a department store isn’t where a normal-size eighteen-year-old American male would go to buy clothes, but if Jack is an eighteen-year-old high school student who is the star of his school’s boys basketball team, an utterance of ‘Jack is the tallest boy on the team’ would count as true if he is the tallest person on the team.

Now we can see why, owing to the vagueness of ‘boy’, penumbral shift makes it impossible for any of (i)-(v) to be true. It precludes

- (i) The meaning of (the predicate-type) ‘boy’ = the property of being a boy

from being true because:

- 1) Necessarily, the just-displayed *token* of (i) is true only if, for some property  $\phi$ ,  $\phi$  is the referent of the token of ‘the property of being a boy’ in that token of (i), and the predicate-type ‘boy’ means  $\phi$ .
- 2) Necessarily, if a property  $\phi$  is the meaning of a predicate-type F, then F has a constant character and  $\phi$  is the content of every token of F.
- 3) Necessarily, if a property  $\phi$  is the content of every token of a predicate F, then there aren’t simultaneously two tokens of F one of which is true of a thing, the other of which isn’t true of that thing.
- 4) If a predicate F is subject to penumbral shift, then there can be two simultaneous tokens of F one of which is true of a thing, the other of which isn’t true of that thing.
- 5) ‘Boy’, being vague, is subject to penumbral shift.
- 6) So, no token of (i) can be true.

A similar argument shows that penumbral shift also precludes any token of

- (ii) ‘Boy’ is true of a person iff he is a boy

from being true. From here it should be easy to see that each of

- (iii) The property of being a boy = the property of being a male human being whose age in milliseconds  $\leq 531,066,240,000$ .
- (iv) The meaning of ‘boy’ = the property of being a male human being whose age in milliseconds  $\leq 531,066,240,000$ .
- (v) ‘Boy’ is true of a person iff he is a male human being whose age in milliseconds  $\leq 531,066,240,000$ .

is also incompatible with the fact that ‘boy’, being vague, is subject to penumbral shift. None of this shows that penumbral shift is *per se* incompatible with the epistemic theory of vagueness. It only shows that penumbral shift is incompatible with a version of the epistemic theory which holds that some property is the meaning of ‘boy’. The upshot of all this as regards the hypothesis that Tom meant a metaphysically-precise proposition is that, whether or not the epistemic theory is true, the problem that his utterance of ‘here’ or ‘a little while ago’ makes for the proposal that Tom meant a metaphysically-precise proposition in uttering ‘A boy was here a little while ago’ is equally made by his utterance of ‘boy’. For if Tom meant a metaphysically-precise proposition, then there was a metaphysically-precise property that Tom expressed with ‘boy’, and now that we see that that property can’t be the meaning of ‘boy’, it will be just as difficult to see how just one of the nearly identical metaphysically-precise properties in contention—e.g. *the property of being a human male whose age in milliseconds  $\leq 531,066,240,000$* , as opposed, say, to *the property of being a human male whose age in milliseconds  $\leq 531,066,239,000.07$*  or *the property of being a human male whose age in milliseconds  $\leq 531,066,240,000.8$* —could be determined to be the metaphysically-precise property expressed by Tom’s uttered token of ‘boy’ as it was to see how just one of the metaphysically-precise areas in contention could be determined to be the metaphysically-precise area to which he referred with the token of ‘here’ he uttered.

I conclude that we know that there was no metaphysically-precise proposition that Tom meant in uttering ‘A boy was here a little while ago’, and therefore know that (A) is false.

*Re (B) [There is no metaphysically-precise proposition that Tom determinately meant in uttering ‘A boy was here a little while ago’, but there are two or more metaphysically-precise propositions each such that it’s indeterminate whether he meant it in uttering that sentence].* We know from the discussion of (A) that there was no metaphysically-precise proposition that Tom meant in uttering ‘A boy was here a little while ago’, and if we *know* that, then it’s determinately the case. Therefore, it’s not the case that there are myriad metaphysically-precise propositions each such that it’s indeterminate whether Tom meant it in uttering ‘A boy was here a little while ago’, for the considerations adduced to show that (A) is false also show that every metaphysically-precise proposition is such that Tom determinately did *not* mean it. Therefore, (B), as well as (A), is false.

*Re (C) [For some metaphysically-vague proposition  $p$ , Tom meant  $p$  in uttering ‘A boy was here a little while ago’].* This answer presupposes vagueness-in-the-world; according to it Tom’s utterance was vague because he meant a metaphysically-vague proposition in producing it. Many philosophers will doubt (C) because they doubt whether the notion of metaphysical vagueness can be made coherent. Here is how David Lewis expressed his own frustration with the idea that there are metaphysically vague things:

I doubt that I have any correct conception of a vague object. How, for instance, shall I think of an object that is vague in its spatial extent? The closest I can come is to superimpose three pictures. There is the multiplicity picture, in which the vague object gives way to its many precisifications, and the vagueness of the object gives way to differences between precisifications. There is the ignorance picture, in which the object has some definite but secret extent. And there is the fadeaway picture, in which the presence of the object admits of degree, in much the way that the presence of a spot of illumination admits of degree, and the degree diminishes as a function of the distance from the region where the object is most intensely present. None of the three pictures is right. Each one in its own way replaces the alleged vagueness of the object by precision. But if I cannot think of a vague object except by juggling these mistaken pictures, I have no correct conception.<sup>8</sup>

That objection to vagueness-in-the-World is certainly discussable, but in order to give the propositionalist account of speaker-meaning its best run for the money, I will for present purposes assume that vagueness-in-the-world is at least coherent. My question, then, concerns the plausibility of (C) on the assumption that there are metaphysically-vague properties, areas, periods of time, and propositions. The answer to my question, I submit, is that (C) isn't plausible even on that assumption: it's shown to be false by exactly the same sort of considerations that showed (A) to be false.

The hypothesis that Tom meant a metaphysically-*precise* proposition in uttering 'A boy was here a little while ago' entails that he expressed a metaphysically-precise property with 'boy', referred to a metaphysically-precise area with 'here', *and* referred to a metaphysically-precise period of time with 'a little while ago'. The hypothesis that Tom meant a metaphysically-*vague* proposition in producing his utterance entails only that he expressed a metaphysically-vague property with 'boy', referred to a metaphysically-vague area with 'here', *or* referred to a metaphysically-vague period of time with 'a little while ago'. For example, it's compatible with Tom's having meant a metaphysically-vague proposition that he expressed a metaphysically-vague property with 'boy' but referred to a metaphysically-precise area with 'here' and to a metaphysically-precise period of time with 'a little while ago'. At the same time, as we have seen, we can't account for the vagueness of Tom's utterances of 'here' and 'a little while ago' if he referred to metaphysically-precise things with those expressions, so in fact the only way he could have meant a metaphysically-vague proposition that was compatible with the vagueness of his

---

<sup>8</sup> Lewis (1999a: 170).

utterances of ‘boy’, ‘here’, and ‘a little while ago’ is if he expressed a metaphysically-vague property with ‘boy’, referred to a metaphysically-vague area with ‘here’ and to a metaphysically-vague period of time with ‘a little while ago’. The upshot as regards (C) is that we can see that it’s false by seeing that Tom couldn’t have referred to any metaphysically-vague area for the same reason, *mutatis mutandis*, that he couldn’t have referred to any metaphysically-precise area. The fundamental reason Tom couldn’t refer to any metaphysically-precise area is that he had no way of thinking about any such area under which he might intend to refer to it, and this because each such area was for him indistinguishable from the uncountably many precise areas that differed from it only in some imperceptible way. The same is also true of the uncountably many metaphysically-vague areas in Tom’s vicinity (if there are such things). For example, there will be two such areas  $\alpha_1$  and  $\alpha_2$  such that if any location is determinately in  $\alpha_1$ , then it’s also determinately in  $\alpha_2$ , and vice versa, the only difference between the areas being that there are locations such that while it’s indeterminate whether they are in  $\alpha_1$ , it’s merely indeterminate whether it’s indeterminate whether they are in  $\alpha_2$ , and that’s not a difference that would enable Tom to intend to refer to either area, for he would still have neither a perceptual nor descriptive way of thinking of either area under which he could have any *de re* propositional attitudes about it. If there are metaphysically-vague things or properties, they are every bit as finely individuated as any metaphysically-precise thing or property.

*Re (D) [There is no metaphysically-vague proposition that Tom determinately meant in uttering ‘A boy was here a little while ago’, but there are two or more metaphysically-vague propositions each such that it’s indeterminate whether he meant it in uttering that sentence]. (D) stands to (C) as (B) stands to (A). We know from the discussion of (C) that there was no metaphysically-vague proposition that Tom meant in uttering ‘A boy was here a little while ago’, and if we know that, then it’s determinately the case. Therefore, it’s not the case that there are two or more metaphysically-vague propositions each such that it’s indeterminate whether Tom meant it in uttering ‘A boy was here a little while ago’, for the considerations adduced to show that (C) is false also show that, if there are metaphysically-vague propositions, then every metaphysically-vague proposition is such that Tom determinately did *not* mean it. Therefore, (D), as well as (C), is false.*

## **2 Some Effects of Vague Speaker-Meaning**

So, I submit, none of (A)-(D) survives scrutiny. None survives scrutiny because in each case we see that, for every proposition  $p$ , Tom determinately didn’t mean  $p$ . That result also shows that any permutation of any one of (A)-(D) induced by higher-order vagueness must also be false. Tom’s utterance is an arbitrary example of vague speaker-meaning, and since virtually every

utterance is vague, virtually every utterance is an instance of vague speaker-meaning. If there was no proposition that Tom meant in producing his utterance, then speakers virtually never mean propositions when they speak. Let's explore some consequences of this under three headings: *speaker-meaning*, *propositional attitudes*, and *semantics*.

## ***2.1 Speaker-Meaning (and Propositional Speech Acts Generally)***

The dominant conception of speaker-meaning is as a relation between speakers and the propositions they mean. This conception collapses in the face of vague speaker-meaning, if what I've argued in the preceding section is correct. This doesn't mean that an utterance such as

In uttering 'Phil and Barbara have three kids', Sid meant that Phil and  
Barbara have three young goats

can't be true, but it does mean that, whether or not it's true, its 'that'-clause doesn't refer to any proposition. Might things other than propositions be the things we mean, say, and tell people, and, possibly, the things to which 'that'-clauses refer? The answer, I believe, is no. If there are such things as the things we mean, then those things must have, or be capable having, truth-values, and if those things aren't propositions, things that *are* contents, then they must be things that *have* content, linguistic entities of some kind, mentalese sentences, perhaps, or, more plausibly, public-language sentences or utterances (think of Donald Davidson's "paratactic" theory of saying-that). The options the sententialist has for accommodating Tom's act of vague speaker-meaning will be counterparts of the propositionalist's options (A)-(D), and the same considerations that falsify (A)-(D) will also falsify their sententialist counterparts. We can see this in the following way. Let's pretend that Tom's utterance of 'A boy was here a little while ago' was vague only because his utterance of 'here' was vague. Then, given that pretense, (B) would say that (a) there was no metaphysically-precise proposition that Tom determinately meant in uttering 'A boy was here a little while ago', but there were two or more metaphysically-precise propositions each such that it was indeterminate whether Tom meant it in uttering that sentence and that (b) what explained (a) was that there was no metaphysically-precise area to which Tom determinately referred with 'here', but there were two or more metaphysically-precise areas each such that it was indeterminate whether Tom referred to it with 'here'. The sententialist counterpart of this response won't hold that there were two or more sentential entities each such that it was indeterminate whether Tom meant it in uttering 'A boy was here a little while ago', but will instead find a sentential entity to be the thing Tom meant and then locate the indeterminacy in the part of it that requires reference to an area. For example, let's suppose the sententialist says that the thing Tom meant was the token he uttered of 'A boy was here a little while ago'. Then her counterpart to (B)—call it (B<sub>σ</sub>)—will say that, while no metaphysically-precise area was determinately the referent of the uttered

token of 'here', two or more metaphysically-precise areas were each such that it was indeterminate whether it was its referent. Now we can see that (B<sub>σ</sub>) is defeated in the same sort way (B) was defeated. (B) was defeated by the fact that every metaphysically-precise area was such that Tom determinately did *not* refer to it with 'here'. It's plausible that that also defeats (B<sub>σ</sub>) because it's plausible that an area couldn't be such that it was indeterminate whether it was the referent of Tom's uttered token of 'here' unless it was indeterminate whether Tom referred to it with that token of 'here', and, as already noticed in fn. 6, if one supposed that indexical reference wasn't determined by a speaker's referential intentions, it would still be as difficult to see what feature just one of uncountably many indiscriminable metaphysically-precise areas could make it alone the referent of the token of 'here' as it is to see what feature could make it alone the one to which Tom referred with that token of 'here'. I conclude that, while there are true reports like the one displayed just above, neither speaker-meaning nor any other other "propositional" speech act is a relation to anything. (I'll presently have something to say about the challenge this conclusion poses.)

## 2.2 *Propositional attitudes*

The dominant view of propositional attitudes is that they are...well, *propositional* attitudes. The dominant view of believing, for example, is that it's a relation between a believer and a proposition she believes. But if the considerations adduced to show that there was no proposition that Tom meant in producing his utterance really do show that, then they also show that vague propositional attitudes aren't relations to propositions. This is an important point. Other philosophers have made their own trouble for the view that communication involves a speaker's uttering words that encode the proposition she wants to communicate, and that her attempted communication is successful just in case her hearer successfully decodes the encoded proposition. But the philosophers who have argued against this view of communication have held that, while successful communication doesn't consist in a hearer's entertaining or believing the very same proposition that is the content of the belief the speaker expressed in producing her utterance—i.e. the believe that was the proximal cause of her utterance—it does consist in a certain similarity-relation's obtaining between the proposition the speaker believed and the one the hearer entertained or believed as a result of the speaker's utterance. That was the view to which Frege was giving voice when he wrote:

In the case of an actual proper name such as 'Aristotle' opinions as to the sense may differ. It might, for instance, be taken to be the following: the pupil of Plato and teacher of Alexander the Great. Anybody who does this will attach another sense to the sentence 'Aristotle was born in

Stagira' than will a man who takes as the sense of the name: the teacher of Alexander the Great who was born in Stagira. So long as the reference remains the same, such variations of sense may be tolerated, although they are to be avoided in the theoretical structure of a demonstrative science and ought not to occur in a perfect language.<sup>9</sup>

But if what I have been arguing is on the right track, not only was there no proposition that Tom meant in uttering 'A boy was here a little while ago', there were also no propositions that were the contents of the beliefs and intentions that led him to utter that sentence. This should be clear, for if what I said about Tom's utterance of e.g. 'here' was correct, the reason he couldn't refer either to a metaphysically-precise or to a metaphysically-vague area with 'here' is that there was nothing about any area of either kind that could explain how Tom could have an intention or belief that was *de re* with respect to it. At the same time, to redirect to propositional-attitude reports a point already made about speech-act reports, it's true that what led to his utterance was his knowing that a boy had been in his vicinity a little while before he spoke, and that he said what he did to the woman to whom he spoke because he wanted to share that knowledge with her. It's just that, although the propositional-attitude report I just made in writing the preceding sentence is true, neither its 'that'-clause nor the occurrence of 'that knowledge' in it refers to a proposition.

### 2.3 Semantics

How do the conclusions so far reached affect what we should say about the nature and determinants of the semantic properties of linguistic expressions? As I remarked at the beginning of this essay, extant accounts of the nature and determinants of the semantic properties of linguistic expressions make no attempt to accommodate the vagueness of vague expressions but instead completely ignore their vagueness, even though virtually every sentence we utter is vague. I will briefly sketch one such theory and ask how the results so far reached bear on it. Then I will ask if any other theory that ignores vagueness would fare any better. The sketch is as follows (in presenting it I won't be speaking in *propria persona* but in the voice of someone who holds the theory).

A language, as we learned from David Lewis,<sup>10</sup> is a certain kind of abstract object that may or may not be used by anyone—namely, a finitely storable function that maps each of infinitely many sequences of sounds, marks, hand gestures, smoke signals, or whatever (the expressions of

---

<sup>9</sup> Frege (1892). For contemporary expressions of the view see for example McDowell (1998a), Heck (2002), Buchanan and Ostertag (2005), and Buchanan (2010). Martin Abreu, a recent NYU Ph.D., defends a novel version of this line in his doctoral dissertation.

<sup>10</sup> Lewis (1969, 1972, 1975).

the language) to things that can play the role that “meanings” are supposed to play. If a function  $L$  is a language and  $L(\epsilon) = \mu$ , then we may stipulate that  $\epsilon$  is an expression of  $L$  and  $\mu$  its meaning in  $L$ , but that stipulation is merely a notational convenience and doesn’t implicate the use-dependent notion of meaning that philosophers have long struggled to understand, the notion to which the slogan “the meaning of a word is determined by its use” is intended to apply. But if  $L$  is the language of a population  $P$ , then every expression of  $L$  will mean in  $P$  what it means in  $L$ , where the notion of an expression’s having a certain meaning in a population *is* the use-dependent notion of meaning to which the slogan is supposed to apply. What sort of thing a meaning must be is determined by the work a language must do if it’s to be the language of a population. So if we know what must be the case in order for a language  $L$  to be the language of a population  $P$ , then we will know both what meanings must be and how meaning is determined by use. Let’s say that the *public-language relation* is the relation that a population must bear to a language in order for the language to be the language of the population, i.e. the language members of the population use to communicate with one another. If we can define the public-language relation, then we will know what it takes for a language to be the language of a population. The view being sketched contends that, when speaker-meaning is understood to be a relation between speakers and the propositions they mean, the public-language relation can be defined in terms of conventional speaker-meaning practices that prevail in a population. The following gives the gist of such a definition:

For any language  $L$  and population  $P$ ,  $L$  is a language of  $P$  iff there prevails in  $P$  a system of conventional speaker-meaning practices conformity to which requires one who produces an unembedded utterance of a sentence of  $L$  to mean thereby a proposition that “fits” the meaning of the sentence in  $L$ .

When we understand the “fitting” relation we will know what meanings are supposed to be.

To understand that relation we must understand the meaning/content distinction. *Meanings* (aka “characters”) are meanings of expression-*types* and *contents* are contents of expression-*tokens* (or utterances of expressions, or expressions-relative-to-occasions-of-use; these distinctions won’t matter for present purposes). The meaning of an expression determines the conditions that something must satisfy if it’s to be the content of a token of the expression. The meaning of a non-indexical expression will determine all of its tokens to have the same content, and the meaning of an indexical expression will allow different tokens of the expression to have different contents. (It’s convenient to specify the meanings of expressions in “character”-style as functions that map tokens of expressions onto their contents, for then we will have *things*—namely, those functions—to be the meanings of expressions, and thus the referents of substituends for ‘ $\mu$ ’ in substitutions instances of the matrix ‘ $L(\epsilon) = \mu$ ’.) Propositions are the contents of sentence tokens, and a primary

role such a content plays is to be the proposition the speaker means when she utters an unembedded sentence token whose content is that proposition.

The proposition a speaker means in uttering a sentence “fits” the sentence’s meaning just in case the proposition satisfies the conditions determined by the sentence’s meaning for being the content of a token of the sentence. The content of every expression token will be what it contributes to the content of the unembedded sentence token in which the expression token occurs. Given that the view being sketched ignores vagueness, we might expect it to assign meanings to the expressions on which the discussion of Tom’s utterance turned such that:

- The content of every token of ‘boy’ (that has a content) is the property of being a boy.
- The content of a token of ‘here’ is an area  $\alpha$  such that the speaker who uttered the token is within  $\alpha$  and referred to  $\alpha$  with that token.<sup>11</sup>
- The content of a token of ‘a little while ago’ is a period of time  $\pi$  such that  $\pi$  occurred shortly before the token was uttered and the speaker who uttered the token referred to  $\pi$  with it.
- The content of a token of ‘A boy was here a little while’ is the proposition *that something that had  $\phi$  was in  $\alpha$  at a time within  $\pi$* , where  $\phi$  is the content of the uttered token of ‘boy’,  $\alpha$  the content of the uttered token of ‘here’, and  $\pi$  the content of the uttered token of ‘a little while ago’.

So much for the sketch of a theory that makes no attempt to accommodate vagueness. What remains of the theory when one attempts to adjust it to accommodate vagueness? *Nothing*. If what I said about vague speaker-meaning is correct, no theory that accommodated vagueness could be an *adjustment* of the theory sketch. According to that theory, the notions of meaning and content are functional notions, defined by the roles a thing must play in order to be a meaning or a content. The role something must play to be the meaning of a sentence is to determine what it takes for a thing to be the content of a token of the sentence, and the role something must play to be the content of a sentence token is to determine the token’s truth conditions and to be what the speaker *said* if the token was unembedded in another sentence token and the speaker was speaking literally when she uttered it, which is to say (nearly enough) if what she meant in uttering the token fit the

---

<sup>11</sup> This ignores the use of ‘here’ manifested when the FBI agent points to a certain spot on a map and says to the guy who’s about to enter the witness protection program ‘Here is where you’ll live for the foreseeable future’.

meaning of the sentence of which the uttered token was a token. But since speaker-meaning and saying-that have transpired not to be relations to anything, there is evidently nothing for contents and meanings to be, and therefore a language can't be taken to be "a pairing of sound and meaning over an infinite domain."<sup>12</sup>

The sort of semantic theory just sketched isn't the kind of theory that is currently dominant. Formal semantics seems to be the dominant approach. In the most familiar kind of formal semantic theory, a semantics for a language would be a finitely statable theory of the language whose theorems pair sentences with their truth conditions relative to assignments to the indexicals they contain. But that sort of formal semantics would represent the meaning of 'boy' as a function that maps a thing *x* onto Truth iff *x* is a boy, onto Falsity otherwise, and that requires that there be a definite set that is the set of boys (at a given time). Yet in showing that no property could be such that it was indeterminate whether it was the property of being a boy, we also showed that no set could be such that it was indeterminate whether it was the set of boys. So I don't see how a truth-theoretic semantics that ignores vagueness might be adjusted to accommodate the vagueness of all the expressions whose vagueness the semantics ignores.

You might feel that I've painted myself into a corner I can't get out of. I've committed myself to the following two claims about Tom's utterance of 'A boy was here a little while ago'. First, that the utterance was true, and second, that its truth-value wasn't a function of the denotations of its constituent expressions. But how can the utterance be true unless it has truth conditions, and how can it have truth conditions if they're not a function of the denotations the sentence's constituent expressions have in the utterance? Well, there is *a sense* in which the utterance has truth conditions and *a sense* in which those conditions, such as they are, are determined by denotation-like properties of the utterances of the sentence's constituent expressions. The utterance of the sentence has truth conditions in the sense that there are myriad states of affairs which, if realized, we know would make the utterance determinately true, and myriad states of affairs which, if realized, we know would make the utterance determinately false. An example of the first sort would be a state of affairs in which a five-year-old human male was within three meters of Tom eight minutes before he spoke, and an example of the second sort of state of affairs would be one in which a ninety-year-old woman was the only person to be within a kilometer of Tom in the two hours before he spoke. Moreover, that those states of affairs have that status is clearly due to there being conditions whose satisfaction by a use of 'boy', or 'here', or 'a little while ago' would make Tom's use of it determinately correct, and to there being conditions whose satisfaction by a use of 'boy', or 'here', or 'a little while ago' would make Tom's

---

<sup>12</sup> Chomsky (1980: 82).

use of it determinately incorrect. What there can't be is a *set* of states of affairs such that the utterance was determinately true just in case some member of the set was realized, another set such that the utterance was determinately false just in case some member of that set was realized, or a set of states of affairs such that it would be indeterminate whether an utterance of the sentence was true just in case some member of that set was realized. And so on. Likewise, *mutatis mutandis*, for there not being for any vague expression a set of conditions such that an utterance of the expression would be determinately correct just in case some member of the set was satisfied. And so on. This evidently means that my conclusions seem to preclude a natural language from having a compositional meaning theory or truth theory, where a compositional meaning theory is taken to be a finitely storable theory that issues for each of the infinitely many expressions of the language a theorem that assigns to it its meaning in the language, and where a compositional truth theory for a language is taken to be a finitely storable theory of the language that issues for each of the infinitely many truth-apt sentences of the language a theorem that specifies the conditions under which an utterance of the sentence would be true. So it's far from clear what kind of systematic, but non-compositional, account there can be of whatever sort of semantic properties expressions might have if what I've said about the effect of vagueness on semantics is correct. Consequently, any acceptance of the negative conclusions I have reached must be provisional until it's been shown that they are no barrier to explaining what needs to be explained. By my lights, the main thing that needs to be explained is our ability to understand utterances of previously unencountered sentences. But I don't now see that in order to explain that we need to assume that the languages we speak have finitely storable theories whose theorems assign meanings to each of the language's infinitely many expressions, or truth conditions to tokens of its infinitely many truth-apt sentences. One thing that's for sure is that I've got my work cut out for me.<sup>13</sup>

---

<sup>13</sup> Parts of this article are duplicated in Schiffer (2017).

## Works Cited

- Buchanan, R. (2010). "A Puzzle about Meaning and Communication," *Noûs*, 44(2): 340-71.
- Buchanan, R. and Ostertag, G. (2005). "Has the Problem of Incompleteness Rested on a Mistake?" *Mind*, 114(456): 889-913.
- Chomsky, N. (1980). *Rules and Representations* (Columbia University Press).
- Dietz, R. and Moruzzi, S. (eds.). *Cuts and Clouds: Vagueness, Its Nature, and Its Logic* (Oxford University Press).
- Frege, G. (1892). "On Sense and Reference," *Zeitschrift für Philosophie und Philosophische Kritik*, 100: 25-50.
- Gunderson, K. (ed.) (1975). *Minnesota Studies in the Philosophy of Science* (University of Minnesota Press).
- Heck, R. (2002). "Do Demonstratives Have Senses?," *Philosopher's Imprint* 2.
- Keil, G. and Poscher, R. (eds.). (2016). *Vagueness and Law: Philosophical and Legal Perspectives* (Oxford University Press).
- Lewis, D. (1969). *Convention: A Philosophical Study* (Harvard University Press).
- \_\_\_\_\_ (1972). "General Semantics," in ...
- \_\_\_\_\_ (1975). "Languages and Language," in Gunderson (1975): 3-35.
- \_\_\_\_\_ (1999a). "Many, but Almost One," in Lewis (1999b): 164-82.
- \_\_\_\_\_ (1999b). *Papers in Metaphysics and Epistemology* (Cambridge University Press).
- McDowell, J. (1998a). "De Re Senses," in McDowell (1998b): 214-27
- \_\_\_\_\_ (1998b). *Meaning, Knowledge, and Reality* (Harvard University Press).
- Schiffer, S. (2010). "Vague Properties," in Dietz and Moruzzi (2010): 109-130.
- \_\_\_\_\_ (2016). "Philosophical and Jurisprudential Issues of Vagueness," in Keil and Poscher (2016): 23-48.
- \_\_\_\_\_ (2017). "Gricean Semantics and Vague Speaker-Meaning," *Croatian Journal of Philosophy* 51: 293-317.
- Williamson, T. (1997). "Précis of *Vagueness*," *Philosophy and Phenomenological Research* 62(4): 921-8.