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THE BICONDITIONAL DOCTRINE: *CONTRA* KÖLBEL ON A  
“DOGMA” OF DAVIDSONIAN SEMANTICS

**ABSTRACT.** Should a theory of meaning state what sentences mean, and can a Davidsonian theory of meaning in particular do so? Max Kölbel answers both questions affirmatively. I argue, however, that the phenomena of non-homophony, non-truth-conditional aspects of meaning, semantic mood, and context-sensitivity provide *prima facie* obstacles for extending Davidsonian truth-theories to yield meaning-stating theorems. Assessing some natural moves in reply requires a more fully developed conception of the task of such theories than Kölbel provides. A more developed conception is also required to defend his positive answer to the first question above. I argue that, however Kölbel might elaborate his position, it can't be by embracing the sort of cognitivist account of Davidsonian semantics to which he sometimes alludes.

1. INTRODUCTION

Davidson (1984, p. xiv) famously suggested that a truth-theory for a natural language, one that provides interpretive truth-conditions for each of its sentences, can “do duty” for a theory of meaning. Some, however, have felt uncomfortable that truth-theories don't actually *state* what sentences mean. Suppose we distinguish a *theory of meaning* and a *meaning-theory*. The former, roughly, is an attempt to illuminate the concept and/or phenomenon of linguistic meaning. The latter is a formalized theory that yields for some particular language theorems stating what each sentence of the language means.<sup>1</sup> Then the basis of their qualms is that a theory of meaning ought to include meaning-theories for natural languages. Critics otherwise impressed by Davidson's truth-theoretic approach have thus attempted to construct meaning-theories on the basis of truth-theories.

Max Kölbel, for instance, criticizes as “*prima facie* absurd” what he labels the *Biconditional Doctrine*: “a theory of meaning for a language does not say what any sentence of that language means . . . [but rather yields theorems that] take the extensional form of material biconditionals of the form ‘S is true if and only if p.’” On his view, if

it is possible to construct theories whose theorems *do* state what the sentences of the language mean, one ought to reject this “dogma of Davidsonian semantics.” And this indeed is possible, according to Kölbel: the addition of a simple inference or production rule enables the generation of theorems that state what the sentences mean, given the appropriate biconditionals. Kölbel thus maintains that it is both desirable and possible for a Davidsonian theory of meaning for a language to state what the sentences of the language mean.<sup>2</sup>

In this paper, I take issue with both these claims: that one *can* state what the sentences of a natural language mean and that a theory of meaning *should*. I don’t go so far as to argue that one *can’t* and *needn’t*. That would depend ultimately on what should count as successful theorizing about meaning and as stating what a sentence means – issues not much explored by Kölbel and, in my opinion, not currently subject to definitive resolution. What I do argue is, first, that Kölbel hasn’t *shown* us that one can – nor is it obvious that one can extend his strategy or a variant beyond a restricted range of sentences; and, second, that by the lights of *one* conception of a theory of meaning (to which Kölbel himself adverts), there’s reason to think one doesn’t need meaning-theorems in any event. I base the first claim on a consideration of context-sensitivity, semantic mood, non-homophony, and non-truth-conditional aspects of meaning. Some of the commitments that might enable a meaning-theorist to accommodate these phenomena would undermine the charge that it’s *prima facie absurd* that theories of meaning don’t state what sentences mean. Seeing this thus softens one to the *possibility* that it’s not at all absurd and so prepares the way for my second claim. Here I argue that, by the lights of cognitivist neo-Davidsonianism, the Biconditional Doctrine is an empirical claim – not a dogma– supported by the apparent explanatory superfluity of meaning-theorems. I develop these claims after reviewing Kölbel’s discussion.

## 2. KÖLBEL ON THE BICONDITIONAL DOCTRINE

Kölbel (2001, pp. 616–623) crafts his strategy for extending truth-theories to meaning-theories in light of his understanding of Davidson’s grounds for accepting the Biconditional Doctrine. According to the Biconditional Doctrine, says Kölbel (2001, p. 614):

the target theorems of a theory of meaning for a language ought to take the extensional form of material biconditionals of the form ‘S is true if and only if p’, so that the theorems of a theory of meaning do not *state* what the sentences of the

language mean ..., but rather “give the meaning” of sentences and allow us to interpret them if we have further information about these theorems.

Why does Davidson hold this? As Kölbel explains, Davidson’s reason is that Tarski-style truth-theories that enable the derivation of such biconditionals (T-sentences) provide a way to satisfy the constraint of compositionality without presupposing a conception of meaning. Theories that would yield theorems of the form ‘S means that p,’ on the other hand, would seem to presuppose a prior account of the logic of intensional contexts and thus in turn a prior conception of meaning: inferences don’t necessarily preserve truth if there is a substitution of expressions differing in *meaning* within an intensional context. Thus, a theory of meaning ought not aim to generate theorems that *state* what a sentence means.<sup>3</sup>

Material biconditionals of the form ‘S is true if and only if p,’ however, not only fail to *state* what a sentence means, they can fail to “give” the meaning of a sentence. Since they are extensional, substitution of a sentence agreeing with ‘p’ in truth-value will preserve truth, even if what the substituted sentence says seems rather distantly related to what S means. Davidson and Davidsonians have thus entered various proposals concerning what “further information” must be in place for such material conditionals to be “interpretive.” Kölbel mentions in particular two proposals. First, it’s been held that T-sentences “give” the meaning of the target sentence, or are “interpretive,” if and only if they can be derived via a certain canonical procedure. Second, there is the proposal (made explicitly from a cognitivist perspective) that T-sentences are interpretive if and only if they are generated by the production rules (weaker than what classical logic allows) employed by the semantics module.<sup>4</sup>

Now, Kölbel argues that, if there’s a compelling proposal concerning this further information, then one can undermine the argument given in support of the Biconditional Doctrine. Given a truth-theory and an account of the further constraints T-sentences must satisfy to be interpretive, it’s easy to extend the truth-theory to yield theorems of the form ‘S means that p’: just add an inference or production rule that says, *if* the further constraints are met, then from ‘S is T if and only if p’ you may infer ‘S means that p.’ It is not necessary to have a more *general* understanding of the logic of intensional contexts in order to validate *this* pattern of inference.

More specifically, if being interpretive requires that a T-sentence be canonically derivable, then we should allow the following inference: from something of the form ‘S is T if and only if p’ reached by a

canonical derivation, you may infer ‘S means that p.’ If being interpretive requires that a T-sentence be generated by the production rules of the semantics module, then we should hypothesize that the semantics module also employs the following production rule: given ‘S is T if and only if p’ (where ‘p’ does not mention object-language expressions), infer ‘S means that p.’<sup>5</sup>

The claim is that, insofar as we can successfully restrict T-theorems to those that “show” what sentences mean, it’s a simple matter to derive from them theorems that *state* what they mean – viz., theorems of the form ‘S means that p.’ Moreover, *contra* Davidson, *justifying* the proposed inference in no way requires any further commitments concerning the logic of intensional contexts. The fact that the T-theorems are “interpretive,” and thus do indeed “give” the meaning of the sentences they’re about, guarantees that the meaning-stating theorems of the form ‘S means that p’ are true, and so guarantees that the inference is valid – whatever else might be true of meaning-stating claims and their patterns of entailment.

Perhaps, then, although truth-theories can’t quite *do duty* as theories of meaning, they can do the heavy lifting: once one’s got an interpretive truth-theory, getting a meaning-theory seems a piece of cake. Theories of meaning – Davidsonian theories of meaning in particular – thus can and should include meaning-theories.

### 3. CAN A THEORY OF MEANING STATE WHAT SENTENCES MEAN?

Kölbel’s discussion proceeds in abstraction from the complexities of human natural languages. Indeed his sole example of a truth-theorem is Tarski’s “Snow is white’ is true iff snow is white.’ It’s thus a question, even assuming his strategy successful for a range of cases, whether one can extend it to handle natural language sentences more generally. I argue that it’s at least unclear whether it can accommodate context-sensitive sentences, non-declaratives, sentences with non-homophonic T-theorems, and sentences whose meanings have non-truth-conditional aspects. If the strategy can’t accommodate these cases, it applies at best to a subset of sentences (a very small – perhaps *null* – subset if *none* can be accommodated) and is thus drained of interest.

I argue only that it’s *unclear* whether Kölbel’s strategy can be extended because it’s unclear what further commitments a meaning-theorist would be willing to defend, underwritten by what more developed conception of meaning and of the proper way to theorize about it. In particular, some moves I consider below in response

would undermine Kölbel's charge that it's *prima facie absurd* that a theory of meaning not state what sentences mean. This section, in addition to raising questions about what a theory of meaning *can* accomplish, thus also prepares the way for the succeeding section in which we consider whether a theory of meaning *should* include meaning-theorems in any event.

### 3.1. *Context-Sensitivity*

Consider first, as a framing device, an argument that one *can't* state the meaning of context-sensitive sentences and thus can't derive such statements as theorems. Suppose S is a context-sensitive sentence. A meaning-theory for a language containing S must yield a theorem of the form 'S means that p.' But no such theorem can be true. For 'p' is itself either context-sensitive or context-insensitive. But if 'p' is context-sensitive, then so is 'S means that p.' So, rather than stating what S means, 'S means that p,' when it is *itself* considered in abstraction from a context of utterance, would fail to state *anything*. What's more, when it *is* considered as uttered in some context, it would assign different (inaccurate) meanings in different contexts. The sentence-type 'I am tall' doesn't mean, for example, that *I* am tall. Suppose, then, that 'p' is context-insensitive. But if 'p' is context-insensitive, then it determines truth-conditions and so for that very reason can't state what a context-sensitive sentence means. The sentence-type 'I am tall' doesn't mean, for example, that there is a unique speaker, time, and comparison class such that the speaker is tall at that time relative to that class.

If this argument is sound, then one *can't* state what each sentence of a natural language means and so there can't be a theory yielding accurate meaning-theorems. In particular, neither Kölbel's strategy nor any other can provide a way of extending truth-theories into meaning-theories. But the argument is obviously enthymematic. One might challenge (albeit at a price) the tacit assumptions that sentences containing context-sensitive syntactic constituents are themselves context-sensitive; that a theory of meaning should concern itself with types rather than tokens; and that 'S means that p' must be the normal form for stating what sentences mean.

#### 3.1.1. *Inherited Context-Sensitivity and Sententialism*

The framing argument assumes that, if 'p' is context-sensitive, then so is 'S means that p.' This assumption had better not be based on the

claim that an expression is context-sensitive if it contains a context-sensitive syntactic constituent: the context-sensitivity of ‘it’s prime’ doesn’t render ‘every prime number is such that it’s prime’ context-sensitive. But one might plausibly claim that in the case of sentences of the form ‘S means that p’ there is nothing to bind or otherwise neutralize the context-sensitivity present in ‘p’.

To challenge this claim, one might adapt Davidson’s approach to attitude ascriptions and advance some version of sententialism with respect to such ‘means-that’ sentences. Suppose, for example, that the truth-conditions of *meta-language* sentences of the form ‘S means that p’ are given by T-sentences of the form: ‘S means that p’ is true iff S same-says ‘p’.<sup>6</sup> There is then a sense in which ‘p’ isn’t semantically *used* at all in the ‘means-that’ claim and so cannot transmit its context-sensitivity to the larger whole in which it syntactically occurs. This would undermine the charge that, for example, ‘He is tall’ means that he is tall’ (at least on its sententialist reading) fails to say anything considered independently of a context and says various (inaccurate) things when considered as uttered in various contexts.<sup>7</sup>

One might object, however, that on a sententialist account one could know that S means that p (and that this is a meaning-theorem) without knowing what the target sentence means. For one can know that two sentences are same-sayers without understanding the sentences. In effect (runs the objection), a means-that claim so construed amounts to the claim that S means what ‘p’ means. Indeed, truth-theorists often object in just this manner that alternative approaches to semantic theorizing fail to preserve a connection between theories of meaning and accounts of semantic competence.<sup>8</sup>

A second objection is that, even if one allows that the sentence ‘I am tall’ means that I am tall’ (on its sententialist reading) states what the sentence-type ‘I am tall’ means, it’s unclear how to *reach* this claim given a truth-theory. Kölbel’s inference rule only helps if the relevant truth-theorem is ‘I am tall’ is true iff I am tall.’ But no appeal to sententialism can save *this* claim, construed as about the sentence-type.<sup>9</sup>

In fact, because of context-sensitivity, truth-theorists standardly don’t even aim for biconditionals of the form ‘S is true iff p.’ They seek rather *conditionalized* or *relativized* T-sentences. The former, for example, have the form ‘For all u,  $x_1, \dots, x_n$ , if u is an utterance of S such that  $A(x_1, \dots, x_n)$ , then u is true if and only if  $B(x_1, \dots, x_n)$ ’ – so that a conditionalized T-theorem for ‘He is tall’ might look roughly like this: For all u, x, t, and k, if u is an utterance of ‘He is tall’ such

that  $x$  is the contextually relevant male,  $t$  is the time of utterance, and  $k$  is the kind of person under discussion, then  $u$  is true if and only if  $x$  is tall for a  $k$  at  $t$ .<sup>10</sup> The second objection still has force, however (the first too, for that matter): what rule yields meaning-theorems from such truth-theorems? An inference from ‘For all  $u, x_1, \dots, x_n$ , if  $u$  is an utterance of  $S$  such that  $A(x_1, \dots, x_n)$ , then  $u$  is true if and only if  $B(x_1, \dots, x_n)$ ’ to ‘ $S$  means that  $B(x_1, \dots, x_n)$ ’ would land ‘He is tall’ and ‘She is tall’ with the same meaning. The problem is to restore the semantic content that parameterization removes from the biconditional’s right-hand-side without introducing descriptive material that arguably ought to be absent.

If we wish to accommodate context-sensitivity, retaining ‘ $S$  means that  $p$ ’ as the normal form for statements of what sentence-types mean seems unpromising.

### 3.1.2. *Tokens, Not Types*

The framing argument assumes that a theory of meaning concerns itself with expression-types rather than tokens. When one’s dealing only with context-insensitive expressions, it’s easy and perhaps harmless to identify the semantic properties of types and tokens. It then doesn’t matter that the Biconditional Doctrine is in fact *ambiguous*. But tokens would seem to possess semantic properties distinct from those of context-sensitive sentence-types. It matters then about *which* it’s prima facie absurd that a theory of meaning not state what they mean. How best to disambiguate the Biconditional Doctrine and Kölbel’s charge depends on what a theory of meaning is supposed to do. But, if one can argue that a theory of meaning should concern itself with tokens, one can resist the framing argument.

One still must show, however, *how* to generate meaning-theorems for sentence-tokens. Suppose we start from conditionalized T-sentences. Suppose further that a plausible premise links the semantic properties of utterances and sentence-tokens. Then one can “deconditionalize” the conditionalized T-theorem if there are premises supplying values for the contextual variables on the particular occasion of utterance – for example, for a particular token of ‘He’s tall,’ premises stating who the contextually relevant male was, when the speaker uttered the sentence, and what the contextually relevant comparison class was. An application of Kölbel’s inference rule then yields a meaning-theorem.

A first problem for this strategy, however, is that it’s unclear that true premises always result in true meaning-theorems. How one characterizes the values of the contextual variables doesn’t affect the

truth of the deconditionalized T-theorem. But it arguably affects the truth of the *meaning*-theorem. If neither the speaker nor the hearer (nor anyone else for that matter) knows that he was Jocasta's son, is it correct that that token of 'He's tall' *meant that* Jocasta's son is tall (at that time for that kind)? That depends on the conception of meaning in play and how the means-that claim itself is construed. If it does affect the truth of the meaning-theorem, then one must introduce some constraints on acceptable characterizations. But this draws the meaning-theorist back into the controversies concerning intensional logic that Kölbel claims to avoid.<sup>11</sup>

A second problem is that this strategy requires *extra*-semantic information. Who in fact talks to whom when is no part of a theory of meaning. But, without such further information, no meaning-theorem is forthcoming. On this approach, therefore, the meaning-theorems are not the product of the theory of meaning *alone*. Thus, it remains the case that *the theory of meaning* – even with Kölbel's additional rule – must be deemed by his lights a failure. One might rejoin that it's the precisely the point of the "tokens, not types" move to reject conceptions of semantic theorizing that focus on the more-or-less unchanging properties of types, prescind from the particulars of conversational contexts. But then let it be clear what this challenge entails: a radical broadening of the domain of facts a theory of meaning comprises.<sup>12</sup>

Let me turn to an alternative way of implementing the "tokens, not types" reply, one whose truth-theoretic starting point is not conditionalized t-sentences. Although parameterizing the contribution of context is indeed the *standard* strategy for accommodating context-sensitivity in a truth-theoretic framework, an alternative is to accommodate object-level context-sensitivity by deploying *coordinated* context-sensitivity in the meta-language used to state truth-conditions. For example, instead of aiming for conditionalized T-theorems, one might aim for context-sensitively characterized Tarskian T-theorems like "He's tall' is true iff he's tall.' Without further ado, Kölbel's rule would then yield "He's tall' means that he's tall.' The framing argument rejects such theorems for *types*, but doesn't consider them for *tokens*.

This strategy – if it could be worked out – avoids the problems encountered above concerning constraints on acceptable characterizations of contextual features. But it still brings seemingly extra-semantic information within the purview of a theory of meaning. In addition, it brings in tow further controversial commitments of its own. For example, because it uses context-sensitive expressions in the

meta-language, its theorems only express truths when themselves considered as uttered in certain contexts. Clearly, adopting this strategy requires quite controversial commitments.<sup>13</sup>

Unless some large promissory notes can be cashed, retaining the normal form ‘S means that P’ thus seems unpromising for *tokens* too.

### 3.1.3. *The Normal Form ‘S means that p’*

So let’s turn to the framing argument’s assumption that theorems stating what sentences mean must take the form ‘S means that p.’<sup>14</sup> Assessing alternatives is difficult, since it’s unclear what constraints a theorem must satisfy in order to count as stating what a sentence means. But let’s consider the most natural candidate.

It’s a natural thought that, if, in order to state a context-sensitive sentence’s truth-conditions, we must introduce contextual parameters, then that’s what we must do to state its meaning as well. Meaning-theorems for context-sensitive sentences might then have the following normal form: For all  $x_1, \dots, x_n$ , if  $A(x_1, \dots, x_n)$ , then S means of  $(x_1, \dots, x_n)$  that  $B(x_1, \dots, x_n)$ .<sup>15</sup> The target meaning-theorem for ‘He is tall,’ for example, would then be something like: For all  $x, t$ , and  $k$ , if  $x$  is the contextually relevant male,  $t$  the time of utterance, and  $k$  the contextually relevant kind, then ‘He is tall’ means of  $s, t$ , and  $k$  that  $s$  is tall at  $t$  for a  $k$ . Reformulating Kölbel’s rule so as to yield such generalized *de re* meaning-theorems from relativized T-theorems is a simple matter. Although the quantification into means-that clauses increases the grade of intensional involvement, one might still hope that endorsing the added rule doesn’t require any *further* insight into the logic of intensional contexts.

The problem, however, is that generalized *de re* meaning-theorems seem *not* to state what sentence-types mean. Rather, they state how varying conditions – and correlatively varying *rerum* – affect what the sentence-types mean of those *rerum*. In the sense of meaning in play here, context-sensitive types – though not ambiguous – are associated with *multiple* meanings. Consider some sample (instantiated) *de re* meaning claims. ‘He’s tall’ would mean of Jabbar, a certain time, and athletes that *he* (Jabbar) is tall for *them then*; while it would mean of my nephew, a different time, and 5th graders that *he* (my nephew) is tall for *them then*. ‘He’s tall’ thus means something different of different *rerum*. But the generalized *de re* meaning-theorem, from which such *de re* claims are extra-semantically derived,<sup>16</sup> would not itself *state* that the sentence means these various things. Neither would it state some one thing the sentence itself means considered

independently of any *re*. It thus doesn't seem to state in any sense what the sentence means.

It might be objected that I've assumed a particular understanding of the *de re*, according to which the *rerum* themselves enter into the content ascribed in a *de re* ascription. The assumption is in fact not uncommon (cf., e.g., Recanati, 1993) but – be that as it may – it's clear that the meaning-theorist who would defend generalized *de re* meaning-theorems must bear the burden of developing an alternative conception of these *de re* claims. She would again have to enter after all into just the complexities of intensionality that Kölbel hopes his strategy can avoid.

It might also be objected that I've unfairly restricted what can count as stating what a sentence means. Why not allow that in some looser sense the generalized *de re* claims state what the sentences mean? A more interesting meaning-theorist, however, will take on the burden of sufficiently clarifying what counts as stating what a sentence means, since it is she who wields this as a weapon. In particular, we need enough purchase on the notion to see why (1) generalized *de re* meaning-claims count while T-theorems don't, and (2) it's *prima facie* absurd that a theory of meaning not yield meaning-theorems so construed. It's certainly not enough that generalized *de re* meaning-theorems enable (with some extra-semantic supplementation) the derivation of *de re* meaning-claims, nor that they in some sense "show" what the sentences mean. Neither distinguishes them from T-theorems. To be sure, generalized *de re* meaning-theorems differ from T-theorems – for example, with the former, we have introduced at least *some* intensionality. But why should the absence of intensionality *per se* embarrass a theory of meaning? A meaning-theorist tempted to thus recast her charge of *prima facie* absurdity owes us some motivation.

No doubt there are other ways one might attempt to modify the normal form for meaning-theorems. But pending their development, I claim that we have not yet seen how to modify Kölbel's strategy in this direction.<sup>17</sup>

### 3.2. *Semantic mood, non-homophony, and non-truth-conditional aspects of meaning*

I now turn more briefly to three other phenomena an extension of Kölbel's strategy would have to accommodate. It is less clear that these phenomena in the end pose a decisive challenge to the meaning-

theorist. But the lack of clarity again results from unclarity as to the aims and claims of theories of meaning. It's thus worth spelling this out in anticipation of the next section, if only as a "softening-up" maneuver.<sup>18</sup>

### 3.2.1. *Non-Declaratives*

Even if Kölbel's strategy works for declarative sentences, it's not obvious how it – or a variant – could work for *non*-declaratives. Providing a treatment of such sentences is a task for truth-theorists as well. But the particular problem for meaning-theorists is to extend whatever treatment is offered into something that can yield a statement of what such sentences *mean*.<sup>19</sup>

The meaning-theorist's simplest reply is to commit herself to an approach to semantic moods that assimilates them all to the declarative. Lewis (1970) for example, paraphrases non-declaratives in terms of declaratives that explicitly state the relevant force with which the non-declarative is conventionally, if defeasibly, uttered. If non-declaratives (thus paraphrased) require no special truth-theoretic treatment, they pose no particular problem for the meaning-theorist either. But there's a drawback to adopting this reply: assimilationist approaches face well-known difficulties – for example, handling embedded non-declaratives.<sup>20</sup>

The standard alternative to assimilation strategies assigns sentences fulfillment conditions. Truth-conditions, on this view, are but the fulfillment conditions appropriate to declaratives. Interrogatives, for example, have conditions in which they're *answered*. Thus might the truth-theorist generalize her approach. It's unclear, however, how one generates a *meaning*-theory from a fulfillment-theory. Perhaps 'What time is it?' is answered iff the addressee says what time it is. But it's not the case that 'What time is it?' *means that* the person asked says what time it is. The sentence's meaning is not dependent upon utterances of it receiving answers. Whereas assimilation strategies look unpromising for everyone, the fulfillment approach thus looks unpromising in particular for the meaning-theorist.

But the meaning-theorist might again object that the normal form for meaning-theorems needn't be 'S means that p.' Ludwig (1997) for example, argues that one can turn a fulfillment-theory into a theory yielding meaning-theorems for declaratives, commands-theorems for imperatives, and requests-theorems for interrogatives – so that (roughly) 'What time is it?', for example, requests that the person asked says what time it is. Whether this move in effect *abandons* the goal of providing a meaning-theorem for every sentence of the

language depends on what one wants meaning-theorems for and thus what form they can take. The clarificatory burden rests upon the meaning-theorist. In particular, she must explain what a theory of meaning lacks that yields “‘What time is it?’ is answered iff the person asked says what time it is’ but not “‘What time is it?’ requests that the person asked says what time it is.’ If the meaning-theorist takes this route, the charge of *prima facie* absurdity is rapidly drained of force.<sup>21</sup>

### 3.2.2. *Non-Homophony*

Kölbel supposes that T-theorems’ being interpretive guarantees the truth of their correlated meaning-theorems and thus the validity of his proposed rule. When attention is restricted to homophonic T-theorems (for context-insensitive declaratives), this is indeed difficult to question – no matter one’s views on meaning and the logic of intensional contexts. But things are otherwise with the more typical case of non-homophonic T-theorems. Then it matters what conception of meaning is at issue. Consider an arguably neo-Fregean constraint that speakers competent with the target sentence and with ‘means that’ would assent in favorable conditions to a true meaning-statement. It’s not just that such speakers might lack concepts deployed in a non-homophonic T-theorem: even when they don’t, the relation of these concepts to the target expressions needn’t be obvious. But then Kölbel’s proposed rule would not preserve truth.<sup>22</sup>

The obvious response is to deny that true-meaning statements need satisfy such a constraint. To my mind, this tack is most interestingly developed, not by casting the denial as a claim concerning some pre-theoretic commonsense concept of meaning, but rather as a clarification of the particular – perhaps technically regimented – concept of meaning one intends to deploy. Indeed, one might maintain that its content derives entirely from the T-theorist’s notion of interpretiveness, however that may be explicated – thus the guarantee, given an interpretive T-theorem, of the correlated meaning-theorem’s truth.<sup>23</sup>

But to the extent that it’s a *theoretical* notion of meaning at issue, it’s again no longer clear why it’s highly suspect that a theory of meaning not state what sentences mean – or indeed why it must *employ* a concept of meaning at all. Science provides many examples of inquiry fruitfully leaving behind pre-theoretical characterizations of its object.<sup>24</sup> In so defending the validity of Kölbel’s rule as applied to non-homophonic T-theorems, one thus again undermines the charge of *prima facie* absurdity.

### 3.2.3. *Non-Truth-Conditional Aspects of Meaning*

Arguably, there are aspects of expression meaning that are not even “given” by a truth-theory. For example, some countenance conventional implicatures that derive from lexically encoded aspects of meaning but don’t affect truth-conditions; some maintain that lexical entries contain analytic “elucidations” that need not show up in a truth-theory; and some worry how to incorporate something like Fregean “senses” into a theory of meaning built around truth-theories.<sup>25</sup> Truth-theorists might acknowledge such phenomena by disowning the suggestion that truth-theories “display” *all* aspects of meaning. A truth-theory can take a place in a larger account of semantics or semantic competence, allowing, for instance, that lexical entries contain more semantic information than what the truth-theory avails itself of. The problem for *meaning*-theorists, however, is that their theorems, if true, can seem to claim to capture *all* of what a sentence means: they seem to state *what* a sentence means, not just one part of it. But if ‘S is true iff p’ is blind to non-truth-conditional aspects of meaning, then there’s no guarantee that ‘S means that p’ will express a truth.

These phenomena of course pose no threat to Kölbel’s strategy if the meaning-theorist can either deny – and otherwise explain the evidence for – the alleged non-truth-conditional aspects of meaning or show that the relevant information in fact can and should be captured in the T-theory, whence it can then be passed to meaning-theorems. Taking on such burdens (with perhaps different tacks for different cases) is a reasonable response – less radical than other commitments we have considered. But they remain substantive commitments.<sup>26</sup>

But there are two responses available to meaning-theorists wary of being held hostage to these debates. First, they might maintain that meaning-theorems can be true even if they don’t capture *all* aspects of a sentence’s meaning. It’s unclear, however, how *partial* statements of meaning, even if true, can *fully* satisfy the demand for meaning-theorems. Second, they might maintain that the meaning-theory employs a restricted technical sense of meaning: meaning-theorems state what sentences *truth-conditionally* mean. But *theoretical* notions of meaning, however well-entrenched, must earn their theoretical keep. It’s not obvious that a theory of meaning, to achieve its ends, must include statements that split this aspect of meaning off from the rest. Perhaps theories of *logical inference* have a particular interest in *truth-conditional* meaning. But a theory of meaning and a theory of

logical inference are not the same thing, even if the latter adverts to the meaning of logical lexemes.<sup>27</sup> These two responses thus again render the *prima facie* absurdity charge less secure.

#### 4. SHOULD A THEORY OF MEANING STATE WHAT SENTENCES MEAN?

We've canvassed four phenomena that must be accommodated by attempts to extend a truth-theory for a natural language into a meaning-theory, a theory that states what the sentences of the language mean. In charting various ways of dealing with these problems, we've encountered numerous unclarities in the characterization of what's being attempted. Is the concern with all sentences, or just declaratives? Types or tokens? Truth-conditional aspects of meaning, or non-truth-conditional aspects too? A "pre-theoretic" conception of meaning, or not? One can't clarify these matters without clarifying what the aims and claims of a theory of meaning are in the first place. We've noted as well that it's not obvious that all ways of specifying the goals of a theory of meaning naturally support the charge that it's *prima facie* absurd that a theory of meaning for a language not state what the sentences of the language mean. We now turn more directly to the question whether a theory of meaning *should* state what sentences mean.

It's easy enough to advance a conception of the theory of meaning that *does* support Kölbel's charge against the Biconditional Doctrine. According to Ludwig (1997, p. 20) for instance, the goal of a theory of meaning is to "provide, from a specification of the meanings of a finite number of primitive expressions and a finite number of rules, a specification of the meaning of any of the infinite number of sentences of the language." If a "specification of the meaning" of a sentence is a statement of what the sentence means, then a theory of meaning that failed to provide such specifications would trivially fail to satisfy its aims.<sup>28</sup> It's a further question, however, whether a theory of meaning – so conceived – is of interest. This is not a question I address here. Rather, my interest is in whether there are *other* projects worthy of the label 'theory of meaning' that are of interest but do *not* support Kölbel's charge.

I submit that there is: the cognitivist form of neo-Davidsonianism, according to which human linguistic behavior can be explained in part by the empirical hypothesis that we cognize (in large part tacitly) truth-theories that are causally implicated in our linguistic behavior. Kölbel himself discusses such views in explaining what constraints

might render a truth-theory interpretive. As he puts it, leaning on Larson and Segal (1995), ‘a theory of meaning [on this view] is supposed to model the knowledge which explains speakers’ linguistic behavior, that is, it models the ‘semantic module.’” It’s hypothesized that “humans have a semantic module which can be modeled as a T-theory, and humans treat the theorems that can be generated by the theory *as* interpretive.” (Kölbel 2001, pp. 612, 613, respectively) What makes the extensional theorems interpretive is that the cognitive states that possess T-theoretic content have certain functional roles: the theorems are passed on to other modules designed to treat them as interpretive. As far as I can see, there is nothing in this conception that would support the claim that a lack of meaning-*stating* theorems would be *prima facie* absurd or highly suspect.

There are two questions we should distinguish here. One is the question of whether, on the cognitivist neo-Davidsonian project, meaning-theorems are needed. The second question concerns the status of the first question. I take it that, absent reason to the contrary, the status of the first question is empirical: whether an account of semantic competence need posit tacit knowledge of a theory delivering meaning-stating theorems (or tacit deployment of the concept of meaning at all) is a question to be answered by continuing naturalistic investigation into language and our linguistic competence. On the cognitivist construal, the relevant ‘should’ concerns what one ought to think given the evidence. Contrast this with Kölbel’s charge that it is a *dogma* of Davidsonian semantics that a semantic theory should deliver truth-theorems instead of meaning-theorems.

Having clarified its status, let’s return to the first question: is there empirical reason to hypothesize a theory that yields meaning-theorems? If the semantics module’s place in a speaker’s cognitive architecture turns out to be as Larson and Segal hypothesize, then it would seem *otiose* to hypothesize that the semantics module generates meaning-stating theorems *in addition* to T-sentences: if the mind *treats* the generated T-sentences as interpretive, it doesn’t need to be “told” that they are.

This is a bit quick. As Larson and Segal note, but don’t pursue, it could be that the *way* truth-theorems are treated as interpretive involves a “brute inference” from ‘S is true iff p’ to ‘S means that p,’ an inference just like the one Kölbel suggests. They write (Larson and Segal, 1995, p. 560, n. 15):

Since we know little about the nature of the processes that deploy the T theorems, we are unable to specify in detail what is involved in their treating the theorems as

interpretive. One simple possibility is that the T theorems are fed into a processor that makes the brute inference in (i):

(i)  $S$  is true iff  $p$ .

$S$  means that  $p$ .

The other processors involved in speech, understanding, etc., would receive the outputs of this processor. There are clearly more complex possibilities, however, and we will not speculate on the empirical question of which is ultimately correct.

In fact, the difficulties encountered in the previous section provide some reason to doubt this “simple possibility” – at least so formulated. But the crucial point is that alternative hypotheses might address this empirical issue. For example, perhaps truth-theorems – at least Tarskain T-theorems for context-insensitive declaratives – are treated as interpretive in the following manner. In comprehension, a hearer assigns a phonetic form to what she hears. The phonetic form is paired with a syntactic representation. Drawing upon the cognized truth-theory, a T-theorem is generated for that syntactic representation. The right-hand side of the T-theorem is then simply *detached* and passed forward. In this sense it’s treated as interpretive. In production, the generated truth-theorem’s other direction would matter. Starting with a specification of the truth-conditions to be expressed, a T-theorem is generated, from which the syntactic specification of a sentence on the left-hand side is detached. This syntactic specification is paired with a phonetic form which can then be fed to articulatory systems. This is again *too* simple. Even if meaning-theorems play no role, one still needs to accommodate the apparent complications presented by the phenomena we’ve discussed. But the point remains: if some hypothesis that does *not* advert to meaning-theorems would suffice, then meaning-theorems – whatever form they take – would be explanatorily otiose.

## 5. CONCLUSION

Kölbel has not shown us how to extend Davidsonian theories of meaning in order to generate theorems that state the meanings of context-sensitive sentences. Nor is it clear whether his proposal can be modified in order to do so. A meaning-theorist would likewise have to accommodate various other phenomena. The responses we’ve considered can’t be fully assessed without a clearer conception of

what a theory of meaning is supposed to do. Such a conception is also needed to assess in the first place the claim that theories of meaning *should* yield meaning-stating theorems. On a cognitivist conception, whether a theory of meaning for a language should state what its sentences mean is a broadly empirical question: a negative answer would thus not be – *contra* Kölbel – prima facie absurd. Indeed, there is some reason to think that meaning-theorems, from a cognitivist perspective, would be explanatorily otiose. The Biconditional Doctrine – not as dogma, but as hypothesis – is not touched by Kölbel’s considerations.

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## NOTES

<sup>1</sup> Cf., e.g., Davies (1981, p. 3). Davies, however, limits a theory of meaning to an illumination or analysis of the *concept* of meaning.

<sup>2</sup> Kölbel (2001, p. 614). It’s clear from context that the force of his ‘prima facie’ is not *merely at first blush*, but *even at first blush*. Kölbel (2001, p. 618) also labels the Biconditional Doctrine “awkward,” “highly suspect,” “cumbersome,” “unattractive,” and “unnecessary.”

In the quote above, I’ve modified Kölbel’s conventions for representing schematic letters. Note that ‘S’ is schematic for a sentence-name. (In examples, I will for simplicity’s sake supply quote-names rather than syntactic representations.) ‘p’ is schematic for a sentence. (I will assume corner-quotes read where needed.)

I’ve also adjusted the reference to dogma from the plural to the singular. The second dogma of Kölbel’s title, which he rejects as well, is the *truth doctrine*: “the concept of truth plays a central explanatory role in Davidsonian theories of meaning for a language.” (614) Kölbel’s positions concerning the two dogmas are connected in that he claims that, having rejected the first, “it becomes easier” (623) to reject the second. However, he doesn’t claim – nor does it seem to be the case – that rejecting the latter *requires* rejecting the former. (The truth doctrine is rejected on independent Chomskian grounds in Pietroski (2003).) I don’t discuss the truth doctrine here.

Various others have discussed the need for and possibility of meaning-theories. Within the Davidsonian tradition (see, for example, Davies, 1981; Ludwig, 2002). Although I key this paper to Kölbel, much of what I will say carries over to these discussions as well.

<sup>3</sup> It’s not obvious why thus adverting to a conception of meaning should be problematic. Davidsonian theories of meaning aim at least to “give” – and, according to Kölbel, ought to aim to *state* – the meanings of the sentences of some language. A worry about circularity would seem only to arise if the goal were

rather (or, also) to provide an “analysis” of meaning. Davidson, no doubt, sees his conception of the form a theory of meaning for a language should take as part of a larger theory of *meaning*. But it’s not clear that all *Davidsonians* would or should. One’s worries about the logic of intensional contexts could take other forms, however. For example, one might want to avoid appeal to an unanalyzed notion of meaning, not because one saw one’s project as providing an analysis of meaning, but rather because one finds such notions unacceptably obscure, metaphysically suspect, or not empirically fruitful. Or, one’s worry might be that we simply lack a sufficient understanding of the logic of intensional contexts *punkt*.

<sup>4</sup> Kölbel (2001, p. 617, fn. 6) cites Davies (1981, p. 33) and Peacocke (1976) for the first proposal, and Larson and Segal (1995, pp. 32–42) for the second.

<sup>5</sup> The exclusion of mentioned object-level expressions on the biconditional’s right-hand side blocks inferences to ‘means-that’ claims from such biconditionals as those of the form “‘q and r’ is true if and only if ‘q’ is true and ‘r’ is true.” (On the first proposal, the notion of a canonical proof procedure excludes such cases.)

<sup>6</sup> Cf. Davidson (1968). Note that I’m deploying ‘same-says’ to denote a relation among sentence-types rather than utterances. For an example of sententialism with respect to a meaning-claim, see Ludwig and Ray (1998, p. 146).

<sup>7</sup> Sententialists needn’t follow Davidson in advancing a *paratactic* treatment. (Cf. Larson and Segal, 1995, p. 423). It’s thus not the case that these ‘means-that’ sentences would remain context-sensitive on account of a demonstrative. One might suggest, however, that they remain context-sensitive for another reason. Sententialists about attitude ascriptions tend to allow, or even emphasize, that what satisfies ‘same-saying’ contextually varies. The claim is that at issue really is similarly-saying according to contextually varying standards. (Cappelen and Lepore, 1997, e.g., argue on such grounds against the claim that, if a speaker, in uttering S, says that p, then the content of S – assigned on their view by a theory of meaning – is p.) However, insofar as a meaning-theorist is concerned with a technical sense of ‘meaning’ and its cognates, she might maintain that, although ‘means’ may express various similarly-saying relations, depending on the context, we are *here* using ‘means’ in a *particular* conversational context, one in which we’re theorizing about meaning. We might even introduce a new context-*insensitive* term – ‘means\*’ – to express the relation context-sensitive ‘means’ expresses in such distinguished theoretical contexts.

<sup>8</sup> See, e.g., Lepore (1983) and Higginbotham (1988, 1999). Indeed, this objection has been aimed more specifically at sententialism about attitude ascriptions. (See Schiffer 1987, p. 133). But, in that case, one objects to a proposed semantic treatment of an object-level sentence, whereas in our case the objection is raised about the proper construal of terms deployed in the meta-language.

It must be noted, however, that not everyone accepts the conception of a theory of meaning that underwrites such objections. Soames (1989) for example, maintains that a semantic theory needn’t play a role in an account of semantic competence.

Finally, I should note that Ludwig and Ray (1998) reply to this first objection, as raised against sententialism generally, by allowing that ‘p’ is both mentioned *and* used. If ‘p’ can be a context-sensitive sentence, however, the framing argument’s unwanted consequences then follow. We’ll see below that Ludwig (2002)

would respond by altering the normal form for meaning-statements in a way that precludes context-sensitivity on the right-hand side.

- <sup>9</sup> We consider presently such T-sentences construed as about sentence-*tokens*.  
<sup>10</sup> Cf., e.g., Higginbotham (1988). Relativized T-sentences (cf., e.g., Larson and Segal, 1995) have the form ‘For all  $x_1, \dots, x_n$ , if  $A(x_1, \dots, x_n)$ , then S is true relative to  $(x_1, \dots, x_n)$  if and only if  $B(x_1, \dots, x_n)$ .’ (Nothing turns on my choice of ‘relative to’ as opposed to ‘at’ or ‘with respect to,’ etc.) Regarding the example above, I should note that Cappelen and Lepore (2003) reject the claim that ‘tall’ is context-sensitive.

Since the Biconditional Doctrine, as Kölbel characterizes it, specifies Tarskian biconditionals as the normal form, Davidsonians thus do indeed have reason to reject the Biconditional Doctrine after all – albeit a reason distinct from his. But no doubt Kölbel would readily acknowledge that such Davidsonians would prefer a reformulation in terms of conditionalized or relativized normal forms. Kölbel’s characterization would be retained, however, by those mentioned below who adopt the alternative (non-standard) attempt to accommodate context-sensitivity in a truth-theory.

- <sup>11</sup> Cf. my remarks below on *de re* meaning-claims.  
<sup>12</sup> It might be thought that one could avoid broadening the theory of meaning to include facts concerning *actual* conversational contexts by instead including a specification of all *possible* conversational contexts. Then a theory of meaning could state what all possible tokens mean without adverting to such facts as that Billy was talking to Mary on such-and-such date. This suggestion is problematic for at least two reasons. First, it’s unclear that one could recursively characterize all possible conversational contexts. (How would one characterize all possible addressees or all possible pragmatic presupposition sets?) Second, even if there were the means for characterizing all possible values of contextual variables, it’s unclear that the characterizations would include characterizations of the right kind. For example, one can characterize all possible locations according to their distances along some axes from a distinguished point; but neither the speaker nor the hearer might be capable of so characterizing the location referred to by ‘here’ on some occasion.  
<sup>13</sup> In Gross (2005), I consider at greater length the prospects for accommodating object-level context-sensitivity by using context-sensitivity in the meta-language. Although the suggestion must overcome a variety of obstacles – for example, accounting for comprehension of utterances of context-sensitive sentences entered in a context other than the hearer’s – it does have resources worth exploring. I distance myself, however, from the claim that *all* context-sensitivity can be thus accommodated. (See Gross 2005, p. 77, fn. 20.) If it can’t be, then this strategy is only of limited help to the meaning-theorist.  
<sup>14</sup> Kölbel (2001, p. 618) himself briefly mentions such other possibilities as ‘S’s content is that p’ and ‘S’s truth-condition is that p,’ though these don’t happen to help with our current problem. He also (2001, pp. 614 and 623, fn. 11) mentions meaning-theorems of the form ‘S means m,’ where ‘m’ refers to a meaning, and reports Davidson’s “slingshot” argument against them. For discussion of the slingshot argument, see Neale (2001).  
<sup>15</sup> Cf. Ludwig (2002).  
<sup>16</sup> Again, such claims are not derivable within the theory of meaning alone, since one requires the aid of supplementary premises providing the requisite contextual

information. In addition, the requisite further inference rule involves further commitments concerning the logic of intensional contexts.

- <sup>17</sup> One might try introducing a rule that takes appropriate outputs of truth-theories ‘...S...’, whatever more specific form they may have, and yields theorems of the form ‘The meaning of S is given by the claim that ...S...’ (This move, if otherwise successful, would accommodate non-declaratives as well.) Such theorems, however, don’t state what sentences mean. Rather, they state that the T-theorem gives the meaning of the sentence. Cf. ‘The meaning of S is given by the claim expressed by the German *wahrheits*-sentence R.’

Some might also object that these theorems, when taken at face value, refer to or quantify over intensional entities that Davidsonians have been loathe to admit into their ontology. I am less inclined to push this particular worry. My Gross (forthcoming) questions the move from semantic theorizing to ontological commitment – albeit from a cognitivist perspective that (as we’ll see) seems not to require meaning-theorems in any case. Those who *are* inclined to press this objection, however, might suggest more generally that introducing intensional operators requires willy–nilly positing intensional entities.

- <sup>18</sup> One further question I *don’t* press below: why is it only prima facie absurd that what *sentences* mean not be stated by the theory? Is it also prima facie absurd that the meaning of *sub-sentential expressions* is only “shown”? If so, then further rules are needed to extend a truth-theory into a meaning-theory. It’s not obvious how this is best done.

- <sup>19</sup> Kölbel (2001, p. 629) has some brief remarks that are relevant. But they don’t sharply distinguish force and mood; and his remarks concerning a ‘yes-no’ question do not obviously generalize to other interrogatives.

- <sup>20</sup> Assimilationist accounts also introduce explicit reference to speaker and addressee as well as an element of context-sensitivity (as in ‘The sentence ‘Where is John?’ is true iff – or, means that – the speaker of it asks the addressee where John is’). But none of this is explicitly present in either the non-declarative sentences themselves or their indirect counterparts. The paratactic account of Davidson (1979) – another assimilationist approach – in addition has difficulties with non-‘yes-no’ questions. Cf. Ludwig (1997) for general discussion.

A further objection often raised against paraphrase accounts is that they counter-intuitively maintain that non-declaratives possess *truth*-values. In Gross (forthcoming), however, I allow that yielding *true* T-theorems might not be among the adequacy conditions for a T-theory and that indeed it’s perhaps not obligatory that the ‘T’ in T-theorems be interpreted as a *truth* predicate. These suggestions, however, are again entered from a cognitivist perspective that does not support the demand for meaning-theorems. Kölbel (2001, pp. 633–635) also discusses whether ‘T’ need be interpreted as truth – albeit in light of his criticisms of the Biconditional and Truth Doctrines.

- <sup>21</sup> It’s also reasonable to worry whether, behind the demand for the further theorems, lies a conflation of sentence-meaning and speaker-meaning. But this speculation needn’t apply in all cases.

I note also an alternative reply available to the meaning-theorist: perhaps it’s only prima facie absurd that a theory of meaning not include statements of what *declaratives* mean. But clearly they would need to explain why.

- <sup>22</sup> T-theorems are typically far from homophonic in worked-out semantic proposals for natural languages. Kölbel’s example – Tarski’s “‘Snow is white’ is true iff snow

is white' – notoriously concerns a sentence that illustrates the point. 'Snow' occurs here as a mass noun in a generic claim. The proper treatment of both is much disputed, but it's unlikely that a successful treatment will yield homophony. Cf. Pelletier and Schubert (1989) on mass expressions and Carlson and Pelletier (1995) on generics.

The possible constraint on true meaning-statements is adapted from Frege (1906, p. 299) on thought-identity.

- <sup>23</sup> About the pretheoretic, commonsense concept of expression meaning, I note only that, even supposing that there is indeed but one such concept, it's far from obvious that it is sufficiently determinate either to settle whether it entails the neo-Fregean constraint or to render the relevant non-homophonic meaning-statements determinately true or false. The nature of pre-theoretic concepts of meaning is, however, arguably itself an unobvious empirical matter. Cf. Chomsky (2000, pp. 172–3) on ethnoscience and the study of folk semantics.
- <sup>24</sup> Without further premises, eliminativism doesn't follow from this observation.
- <sup>25</sup> On conventional (NB: *not* conversational) implicature, (see Grice, 1975, pp. 41 and 46). Standard examples include 'but,' 'still,' and 'in other words.' On elucidations, see Higginbotham (1989). An example (following Hale and Keyser, 1987) is the hypothesis that it's the lexical entry for 'cut' that contains the information that cutting involves a linear separation in the material integrity of the thing cut – as opposed to its being a piece of general knowledge. For truth-theories and Fregean sense, see, e.g., Ludlow (1999, pp. 42–5).
- <sup>26</sup> Against conventional implicature see Bach (1999) and against analytic elucidations, see Fodor (1998). On incorporating elucidations into truth-theories, (cf. Ludlow 1999, p. 39) on robust lexical axioms. On incorporating senses, see Ludlow (1999, pp. 42–5). Arguably one could adapt his remarks on senses to defend as well a requirement that T-theorems display truth-conditions via lexical items that reproduce the target sentence's conventional implicatures.
- <sup>27</sup> Nor should one identify a theory of semantic *competence* and a theory of *inferential* competence. Cf. Gross (forthcoming).
- <sup>28</sup> Ludwig (1997, p. 20, n. 4) attributes this conception of the aim of a theory of meaning to Davidson. I don't think this can be supported.

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