

“Comments on Foster’s ‘On Tarski’s theory of logical consequence—a reply to Bates’”

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Abstract: In the present commentary, I argue that Foster has attacked an uncharitable reconstruction of Etchemendy’s argument against Tarski’s account of the logical properties. I provide an alternative, more charitable reconstruction of that argument that withstands Foster’s objections.

When I first read Chris Foster’s paper,¹ I found myself agreeing with much of what he said, even agreeing that Etchemendy and I are both guilty of the same mistake. But I don’t think we’re guilty of the mistake that Foster thinks we are. And I want to explain why.

But before I do, I want very briefly to characterize the dialectic as it’s been carried out so far: In 1936, Tarski put forth an analysis of logical consequence that Foster correctly identifies with the standard model-theoretic account. The definition has enjoyed, as far as definitions in philosophy go, a long and fruitful tenure. But, as Tarski himself states, “[a]ny attempt to bring into harmony all possible vague, sometimes contradictory, tendencies which are connected with the use of this concept, is certainly doomed to failure” (409). In 1990, Etchemendy claimed to have found where the definition went wrong. It’s clear to me—and Foster concurs—that Etchemendy’s strongest objection to the definition is that, if it gets the extension of the concept of consequence right, it gets it right for the wrong reasons (Etchemendy, 113-7). But some have responded that, if Tarski’s definition gets the extension of ‘consequence’ right, then no further objection can be made since fixing the extension of the concept is all Tarski set out to do. I argued last year that this is no response at all for those who are interested in a conceptual analysis of consequence, for it eliminates the main contender for that role (53). Foster clearly agrees.

In fact, Foster thinks that Tarski’s definition is more than the main contender for the role of conceptual analysis of consequence: He thinks that it *succeeds* as a conceptual analysis of consequence. And he thinks that Etchemendy’s argument to the contrary (and, by adoption, mine) goes wrong in a serious way. In particular, Foster argues that Etchemendy and I have employed too strict a notion of conceptual analysis—one that requires Tarski’s definition itself to be, or to depend only upon, logical

¹ Chris Foster, “On Tarski’s Theory of Logical Consequence: A Reply to Bates,” *Southwest Philosophy Review*, 16, 1 (January 2000) pp. 125-132.

truths. (To wit: Etchemendy claims that Tarski's definition gets the extension of 'consequence' right for the wrong reasons because it gets the extension right by relying on the axiom of infinity, which is *not* a logical truth.) But, such a requirement on conceptual analysis (whether generally or in the special case of logical consequence) is spurious. We don't expect that good conceptual analyses of knowledge, freedom, or anything else will be logical truths, and we have no reason to think that logical consequence is any different in this regard. This disarms Etchemendy's objection. And Foster goes on to argue that Tarski's definition can be easily shown to satisfy a more reasonable set of criteria for good conceptual analysis.

To his credit, Foster exposes and brings to the fore the very issue upon which Etchemendy's entire objection hangs—namely, the nature of conceptual analysis. Perhaps surprisingly, in his objections to Tarski's definitions, Etchemendy never explicitly addresses what he takes conceptual analysis to come to. And I hardly fare better on this count in my own paper. It is clear now that this was a mistake; but it also our only mistake. I'm in agreement with Foster that it is not a necessary condition on conceptual analyses that they be, or depend only upon, logical truths. But I disagree that either Etchemendy or I are committed to this view, given our comments. Here, it may be appropriate to note that I cannot pretend to know Etchemendy's precise views on conceptual analysis. But I think that what I am about to say about conceptual analysis is compatible with what is implicit in Etchemendy's objection. (Indeed, I think it is compatible with Tarski's own implicit views on analysis.) But, should Etchemendy eschew the view of conceptual analysis that I'm about to advocate, it will be clear that this view nevertheless lends credence to Etchemendy's objection and obviates Foster's reply.

The nature of conceptual analysis, and its role in philosophy, has received explicit treatment by a number of philosophers lately. Frank Jackson, for instance, conceives of conceptual analyses as attempts to reveal what governs our application of concepts; more precisely, conceptual analyses try to capture our "folk theory" explaining our applications of concepts through possible cases (31-2). Michael Smith also explicitly addresses the nature of conceptual analysis. On his view, our "folk theory" (though I don't think he uses this word) of some concept is constituted by a set of inferential and judgmental dispositions governing our use of the concept. Stated explicitly, these dispositions come to a set of platitudes surrounding the concept. And a conceptual analysis of a particular concept is successful when it captures all and only the platitudes surrounding that concept (37-8). Thus, for example, the standard justified true belief analysis of knowledge is rejected because it violates a platitude central to that concept that a case of knowledge can't be the result of a fluke. This platitude is revealed by our disposition not to ascribe knowledge to Smith when Gettier tells us that Smith justifiably

and truly believes that Jones owns a Ford or Brown is in Barcelona.

I think that this account of conceptual analysis is actually widespread, though its adherents often subtly withhold their explicit avowals. Something close to this view of conceptual analysis is even at work in the portentous quote from Tarski about attempts at analyzing logical consequence. He there implies that conceptual analysis of consequence attempt to capture the “tendencies which are connected with the use of this concept” (409). What could these tendencies be but our own inferential and judgmental dispositions? Indeed, Tarski goes on to characterize some platitudes about logical consequence that any adequate analysis would have to get right: In order to be genuine, a putative consequence-relation (i) cannot have counterexamples, and (ii) cannot be influenced by empirical facts. To Tarski, these “intuitive” considerations are “essential for the proper concept of consequence” (414-5).

Of course, philosophically interesting concepts are going to have more than one or two platitudes closely associated with them. And, I think that Etchemendy's objection is best thought of as introducing another platitude about consequence, but one that Tarski's definition gets wrong. Namely (iii) The consequence-relation cannot be influenced by facts about how many things there in fact are. The thrust of Etchemendy's objection then, is that it is surely platitudinous that whether or not one claim follows logically from another does not depend on how many individuals there are in the world. But, Etchemendy's considerations of the α -sentences clearly shows that Tarski's definition does depend on how many things there are; for its extensional adequacy, it has to depend on the set-theoretic fact that there are infinitely many things. So, we can understand Etchemendy's objections as showing that this dependence violates a platitude relevant to consequence; he concludes then, that the definition fails.

Understood in this way, it is clear that Etchemendy needn't be committed to the view that definitions in philosophy must themselves be, or depend only upon, logical truths. Yet, Foster's ascription of this claim to Etchemendy is not entirely unmotivated. However, I think that Foster's motivation is misguided. Let me be specific: Having shown that the extensional adequacy of Tarski's definition depends upon the axiom of infinity, Etchemendy states:

The problem [the α -sentences] bring out remains...even if we take the axiom of infinity to be a necessary truth. All we need to recognize is that the axiom of infinity, and its various consequences, are not *logical* truths. (116)

Etchemendy seems to argue thus: Tarski's definition depends upon a claim that is not a logical truth; therefore, Tarski's definition is inadequate. There is a premise missing in

this argument, and Foster supplies one that will do the trick: Any adequate definition (of consequence) depends only upon logical truths. Foster is surely right that this premise is false. But the problem is that this is an uncharitable reading of Etchemendy's argument. Taken in context, we see that the burden of Etchemendy's cry over and over is that Tarski's definition is influenced by substantive facts, facts about the size of the universe, which is illegitimate. In the quoted passage, he says that this influence remains illegitimate even if the relevant substantive facts are *necessary*. The only reason this needs to be clarified at all is that so many are apt to take the 'necessary' to mean the same as 'logically necessary.' (How many times have you heard it—or said it!—that it's *logically necessary* that water is H₂O, or that $2+2=4$, or that bachelors are unmarried? I don't know what the force of the use of 'logically' is supposed to be here, but none of these is really a logical truth.) Clearly, Etchemendy is here forestalling a likely confusion about what sort of necessity is involved in the axiom of infinity. So, this passage cannot be taken as the canonical statement of Etchemendy's argument, and he cannot legitimately be saddled with the view that a good definition of consequence must itself depend only upon logical truths.