complexity of Γ_∞ is staggering. We have merely described Γ_∞ from an external vantage point. The essentially richer metalanguage is still with us.

We can do better. One can give an effective version of this construction in which the theory Γ is actually written down, concretely and explicitly.[9] The mathematical details are somewhat intricate,[10] but their unmistakable basis is the Kripke construction.

As Tarski saw clearly, if we insist that our semantic theory entail schema (T), we shall only be able to give a semantic theory for a language if we can look at the language from the perspective of an essentially richer metalanguage. This implies that we cannot give a semantics for the very language we speak, for we have no external vantage point. On the other hand, if, as I recommend, we weaken our requirements from (T) to (DT), we find that we can give a consistent theory of truth for our own language. Thus, there will be no logical grounds for supposing that human language must lie beyond the reach of human understanding.

VANN MCGEE

University of Arizona

TRUTH, DEFINITE TRUTH, AND PARADOX*

THE STORY we are given has three parts: since (1) the paradoxes show that our "naive understanding of truth" is inconsistent, (2) a new understanding is required, which (3) is obtainable by redeployment of Saul Kripke's methods in the form of a theory which (i) does minimal violence to semantic intuition, (ii) can be formulated in the language of which it treats, (iii) discovers an error in the naive reasoning that leads to paradox, and (iv) generates no new paradoxes of its own. Just to be contrary, I quarrel with most all of this.

Suppose that our naive understanding of truth is inconsistent. Since the truth about anything, truth included, is consistent, does it not follow that naive truth theory, like any theory which misdescribes the facts, needs revision? Only, I think, if it *purports* to describe the

[9] The effective version uses A-logical consequence in place of the mathematically obstreperous supervaluational consequence.

[10] See ch. 8 of my *Truth, Vagueness, and Paradox: An Essay on the Logic of Truth* (Indianapolis: Hackett, 1989).

* Abstract of a paper to be presented in an APA symposium on Kripke's Theory of Truth, December 29, commenting on a paper by Vann McGee, this JOURNAL, this issue, 530–539.

0022-362X/89/8610/539–541

facts, an assumption which sits as ill with Vann McGee's "meaning postulates" and "linguistic conventions" as with Kripke's guiding metaphor of "explaining the word 'true' to someone who does not yet understand it." Meaning something by a word involves the obligation to employ it in a certain manner, or else incorrectly; and the paradox's legendary intransigence suggests that the contradiction, if such there be, is *forced* on us by the meaning we attach to 'true'. But then its lesson is not, as the analogy with genetics suggests, that we are caught up in factual errors, but that the meaning of 'true' imposes irreconcilable obligations. If a "scientifically reconstructed" understanding of truth is indicated, that is because semantics would go better, if we meant something different by 'true'. Maybe it would. But it can hardly relieve any genuinely *philosophical* discomfort about the liar paradox, generated as it is by the meaning that we have, to be told that another is now available.

What would relieve the discomfort is an explanation of what paradox is, and how something like that can issue from procedures whose general workability has never been questioned. The "definitely" theory pins the blame on our use of a definite-truth preserving inference rule (e.g., $T\ulcorner\varphi\urcorner/\varphi$) in a context (conditional proof) where a (definitely) truth-preserving rule was needed; in essence, we err in supposing that, if $\ulcorner\varphi\urcorner$ is true, then φ. Unless it is denied, implausibly, that this is, in our usage, analytic, this diagnosis discovers an error only relative to an alien construal of 'true'. What, if anything, is the error, given the actual meaning of 'true'?

To judge by the claim that our naive understanding of truth, if paradoxical, is classically inconsistent, paradox is equated with classical inconsistency among naively acceptable classical formulae. Thus, the naively acceptable (T)$T\ulcorner\varphi\urcorner \leftrightarrow \varphi$, in combination with the empirical $L = \sim T\ulcorner L\urcorner$, classically entails $L \& \sim L$. By these standards, it should also be a paradox if 'Spiderman enjoys soup' lacks truth-value (in symbols, $\sim T\ulcorner S\urcorner \; \& \sim T\ulcorner \sim S\urcorner$); for $\sim T\ulcorner S\urcorner \; \& \sim T\ulcorner \sim S\urcorner$, in the presence of (T), classically entails $S \& \sim S$. Insistence on classical methods, in this case as in others, turns the light of reason so blindingly bright that intuitive distinctions are lost from view. The assimilation of paradox to contradiction is a case in point. That our naive understanding generates paradox *may* mean that it prescribes contradictory assertions (e.g., in the obvious notation, $O(\vdash \varphi)$ and $O(\vdash \sim\varphi)$); but it may equally mean that it prescribes incompatible actions ($O(\vdash \varphi)$ and $O(\nvdash \varphi)$); or that its instructions are incoherent ($O(\vdash \varphi)$ and $\sim O(\vdash \varphi)$), or even ill-defined ($O(\vdash \varphi$, if $\nvdash \varphi)$ and $O(\nvdash \varphi$, if $\vdash \varphi)$). On these latter hypotheses, note there is no real question of descriptive inaccuracy, because the conflicts are all at the level of obligation.

McGee's positive proposals take off from his complaint that the gap theory, though effective against the ordinary liar ('I am false'), is powerless against the strengthened liar ('I am not true'). In fact, the same problem arises in connection with both; if 'I am false' ('I am not true') is neither true nor false, then it is *a fortiori* not false (not true), whence, given what it says, it is false (true) after all. Another problem with the gap theory is that, if true, it is inexpressible in the language of which it treats (if the liar is neither true nor false, then so is 'the liar is neither true nor false'). Likewise, though, the "definitely" theory cannot, on pain of contradiction, allow as definitely true its own (apparent) prediction that λ = 'λ is not definitely true' is not definitely true.

Perhaps this is to forget that it is not (yet) definite that λ is not definitely true (we may yet adopt conventions, given which it becomes definitely true). Such a response seems disingenuous, since any convention that would make λ definitely true would lead to contradiction. Indeed, realizing this, will we not want to enact a convention which *precludes* the determination of λ as definitely true? Only if we are willing to contradict ourselves; resolved though we may be that λ must never become definitely true, we cannot consistently express this resolution except by ascent to the metalanguage (this is the kind of thing that troubles the sleep of the ghost of Tarski's hierarchy). To make the point vivid, an appropriate formalization of 'I am not definitely true, unless everything is' seems likely to generate contradiction.

Grant that 'λ is not definitely true' is not definite; by what right do I then assert that λ is not definitely true? Perhaps the answer is that assertibility goes not with definite truth, but with truth *simpliciter;* it is true that λ is not definitely true, because λ is not entailed by facts plus current conventions. On the other hand, in calling λ indefinite, I describe it as (in McGee's words) 'either true or false, but it is not clear which', which appears to commit me to the belief that it is not clear whether λ is true. But λ is what I assert; and what business have I in asserting something such that it is not clear whether it is true? If 'λ is not definitely true' is *not* true, then it appears that 'one may sincerely assert . . . statements that one does not believe to be true'; if so, then 'I no longer understand why the notion of truth . . . has any real importance'. Could it be that we do *not* assert that λ is not definitely true? Why not, since such is evidently the case? (The ghost stirs.)

STEPHEN YABLO

University of Michigan