Replacing Truth. By KEVIN SCHARP. (Oxford: Oxford University Press, 2013. Pp. xvi + 325. Price £45.00.)

The semantic paradoxes certainly appear to show that our concept of truth is inconsistent. Take a simple Liar sentence, e.g., (1) 'This sentence is false', and suppose (1) were true. Then, by (T-Out): 'if $\langle \varphi \rangle$ is true then φ ', (1) is false. Conversely, if (1) is false, it follows by (T-In): 'if φ then φ ' is true', that (1) is true. So (1) is true if and only if (1) is false. Thus either (1) is both true and false or neither true nor false.

The paracomplete response is that it is neither; the paraconsistent (or dialetheist) that it is both. But a revenge paradox (as R.L. Martin called it in his 'Introduction' to his 1984 collection *Recent Essays on Truth and the Liar Paradox*, p. 4; before that it was known as the strengthened Liar) undercuts such a response. First, consider (2) 'This sentence is false or neither true nor false': then (2) is true if and only if it is either false or neither (by T-In and T-Out again). Or (3) 'This sentence is false or both true and false': again, (T-In) and (T-Out) imply that (3) is true if and only if it is false or both. In brief, (2) and (3) are true if and only if they are not.

Contrary to what Kevin Scharp suggests on p. 82 of the book under review, *Replacing Truth*, we do not need the law of excluded middle to infer a contradiction from this biconditional. Suppose (2) is true. Then by the biconditional, it is not true, so by intuitionistic *reductio*, it is indeed not true, discharging the assumption. So using the biconditional again (this time from right to left), (2) is also true. Contradiction. A similar intuitionistically valid argument shows that (3) is both true and not true. Our concept of truth, in so far as it warrants the inferences (T-In) and (T-Out), appears to be inconsistent.

Scharp believes that (T-In) and (T-Out) are constitutive principles of our concept of truth, and so is forced to accept that truth is indeed an inconsistent concept. He is not the first to arrive at this conclusion. Charles Chihara (in 'The semantic paradoxes: a diagnostic investigation', Philosophical Review 1979) is usually credited with authorship of the "inconsistentist" diagnosis of the paradoxes, though there he suggests that one should attribute the view to Tarski (see footnote 33 on p. 610). Others have taken up the idea more recently, e.g., Eklund, Ludwig, Patterson and Azzouni. Scharp is unusual among them in recommending that our present inconsistent concept should be replaced. Indeed, he is breezily optimistic: he asks (p. 275) what will happen come the "aletheic revolution", when people adopt his proposed replacements for truth, namely, ascending truth and descending truth. He thinks the consequences will not be so very great. Indeed, it is a "guiding principle" (p. 169) that ascending and descending truth should remain as close to (inconsistent) truth as possible. minimizing the number of "unsafe" sentences, that is, those for which (T-In) and (T-Out) fail. For although Scharp maintains that (T-In) and (T-Out) are constitutive of our (inconsistent) notion of truth, he belives they are not true: "Constitutive principles often turn out to be true, but when they do it is because

the world is as they take it to be. Simply stipulating that a certain word has a certain meaning is enough to establish that it does indeed have that meaning, but it does not ensure that the constitutive principles in question are true" (p. 127). He admits this is an unusual account of constitutive principles. It follows that they are not analytic, nor is believing them a necessary condition of possessing the concept (p. 47).

In fact, Scharp claims that, for the most part, philosophy is the study of inconsistent concepts (p. 3) and that, rather than conceptual analysis, it consists in conceptual engineering, as practised by Carnap in his project of explication. His heroes are Brandom and Davidson, Brandom for his analytic pragmatism, focussing on our use of the word 'true' and its role in linguistic theory. Davidson for his methodological naturalism, that is, a "measurement theory" studying how a formal theory, in this case, the theory of ascending and descending truth (ADT, pp. 153-4), with its mathematical model ("xeno semantics", p. 162), apply to a physical structure (in this case, natural language). One of Scharp's major complaints about recent discussions of truth is that they concentrate too much on the formal theory, ignoring its connection with our actual usage. Another is the tendency to develop solutions to the semantic paradoxes divorced from the theory of truth itself. Of course, this trend was begun and encouraged by Tarski's belief that semantically closed languages were irredeemably inconsistent and that a coherent theory of truth could only be developed for formal languages. Kripke's salutary observations in the 1970s went some way to bridging this divide, and I think Scharp overemphasizes the separation. Nonetheless, there has been a strong tendency to develop formal theories without regard to their possible application in philosophy of language and linguistics. Even the fact that Kripke's approach is now described as paracomplete, requiring a special Kleenelogic as precursor to theories that preserve (T-In) and (T-Out) as cases of the socalled "Tarski equivalence" by revising and weakening logic, indicates that the interest is too much on the formal side and too little on looking closely at language and its uses. Kripke own expression of amazement (in footnote 18 on p. 700 of 'Outline of a theory of truth', Journal of Philosophy 1975) at the suggestion that he (and Kleene) were proposing to abandon classical logic is too often ignored.

Scharp's aim is to save logic, in particular, classical logic, from paradox, by rejecting the Tarski equivalence, where necessary. As the names suggest, ascending truth satisfies (T-In) but not (T-Out), while descending truth satisfies (T-Out) but not (T-In). The formal theory shows that the replacement concepts behave rather like the modalities 'possible' and 'necessary'. Ascending and descending truth are duals (*p* is ascending-true if and only if not-*p* is not descending-true) and *p* follows from '*p* is descending-true' and in turn entails '*p* is ascending-true'. Consequently, the "safe" sentences are those that are either descending-true or not ascending-true. Scharp likens the separation of truth into the two concepts of ascending and descending truth to the replacement of the Newtonian concept of mass by "proper mass" and "relativistic mass" (p. 37—indeed, he calls this his "guiding analogy", p. 153). The Newtonian concept

proved inconsistent when it was found that the ratio of momentum to velocity was not the same in all reference frames. Nonetheless, both distinctions can be ignored in most situations—in the one case at low velocities, in the other with safe sentences.

The book is very rich in ideas. In presenting his own theory, Scharp situates it in the broader context of approaches to the paradoxes, giving useful thumbnail sketches of a wide range of theories as well as a taxonomy of the various responses to them. Nonetheless, his treatment can sometimes seem superficial. For example, he rejects theories which deny the transitivity of inference as "baffling" (p. 80) without looking closely into why they might do so. Again, he describes Tim Maudlin's account (in Truth and Paradox, 2004), which rejects (T-In), as "self-refuting" (p. 102) without close enough examination of why Maudlin feels forced into this position, and without recognising the similarity with his own account. Maudlin believes that although (1) is false, it is not true that (1) is false else (1) would also be true. Indeed, Maudlin has to accept that though (T-Out), unlike (T-In), is valid, not all its instances are true. Scharp too believes that not all instances of (T-Out) are true, nor indeed of (T-In). Some are paradoxical. So consider (4) 'This sentence is false or paradoxical'. On Scharp's theory, (4) is paradoxical, but one cannot infer that '(4) is paradoxical' is true (p. 272). Bafflement is avoided only by rejecting truth as inconsistent and replacing it with the new pair of concepts.

In sum, Scharp presents an intriguing example of conceptual engineering, proposing to discard our apparently inconsistent concept of truth and replace it with two shiny new and arguably consistent concepts. In doing so, he provides an informative and welcome survey of current approaches to truth and paradox, rightly urging that a unified theory of the two notions is essential. There is much to be learned from his discussion.

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