Replacing Truth, by Kevin Scharp. Oxford: Oxford University Press, 2013. Pp. xvi + 325. H/b £45.00.

Logicians have been trying to solve the Liar Paradox and its associated family of *insolubiles* for the best part of two and a half thousand years; so one might well have thought that there could be no very new views on the topic. The subject is deep and hard, however; and this is not the case. In *Replacing Truth*, Kevin Scharp has come up with one.

The main idea is a variation of the thought that truth is an inconsistent concept (as endorsed by, e.g., Chihara, Eklund, and dialetheists). Its main novelty lies in the idea that it should be replaced by *two* notions. One of these, descending truth, D, satisfies the *T*-schema from left to right: $D\langle \varphi \rangle \rightarrow \varphi$. The other, ascending truth, A, satisfies it from right to left $\varphi \rightarrow A \langle \varphi \rangle$. Neither converse holds. (Here, φ is any non-indexical sentence, angle brackets are a naming device, and \rightarrow is the material conditional.)

Chapter 1 surveys the proposed solutions to the Paradox currently on the market. Chapter 2 spells out what it means for a concept to be inconsistent. Chapters 3 and 4 then argue that *truth* is indeed inconsistent. The core chapters 5 and 6 spell out the replacement theory. Chapters 7 and 8 investigate how the theory is to be taken as meshing with more general notions, such as interpretation and meaning. Chapter 9 then explains how our original concept of truth appears from the post-revolutionary perspective; and Chapter 10 mops up a few final objections.

The view is thoughtfully and knowledgeably advocated. The discussions are generally careful; the technical work is clearly spelled out, and is set in the context of much larger philosophical issues. This is an impressive piece of work, from which anyone interested in the area can learn many important things. Indeed, several careful readings may be necessary to grasp its wealth.

Was I persuaded? Unfortunately not. In the rest of this review I will explain why. Perhaps the most natural way to understand the claim that truth is an inconsistent concept is that the principles that govern it—notably the instances of the T-scheme—are analytic. This is not Scharp's account. A concept is inconsistent iff its constitutive principles are inconsistent (p. 36). But what are constitutive principles? This is explained on pp. 52-3, and may be clarified (as Scharp did to me in correspondence) as follows:

• a principle, P, is constitutive of a word, W, for person, S, iff: if a conversational participant, T, with S denies P then S takes that to be *prima facie* evidence that S and T do not mean the same thing by W.

Clearly, this makes the notion of a constitute principle speaker-relative. One may therefore ask: who are the speakers in question? I take it that the answer intended is: most (standard?) speakers of the language in which W occurs—in our case, English and 'true'. One may worry about the linguistic relativity of truth involved here; but set this aside.

It is not at all obvious that the T-schema is constitutive of truth in this sense. Many, perhaps most, of the logicians in the 20th century who addressed the semantic paradoxes denied the T-schema. Is this prima facie evidence that they meant something different from most English speakers by 'true'? The argument that the Schema is constitutive is given in chapters 3 and 4. Mostly, this is to the effect that the T-schema gives rise to inconsistency, in the shape of the liar and its revenge paradoxes. This is the easy bit. But why is the Schema consititutive? The main argument for this is on pp. 62f: it would be very strange if someone in a conversation said 'Snow is white, but that's not true'. Indeed it would be. But would that suggest that they do not mean what I mean by 'true'? Perhaps. If the person was a recently arrived foreign student whose grasp of English was shaky, this would certainly occur to me. But if it was a native English-speaker, I would probably think that they just had very odd views about truth (especially if they were a philosopher!). In the same way, if a native-English speaker in downtown New York said to me 'Hilary is in Beijing, but she is not in China', I would suspect that it was their grasp of geography, not semantics, which was shaky.

A second problem. The reason that Scharp wants to avoid the more natural definition of an inconsistent concept is that analyticity would appear to imply truth; and Scharp wants to insist that not all instances of the *T*schema are true (e.g., pp. 47, 254)—heading off dialetheism at the pass. But if that is so, why does the concept need revision? If only some of the instances are true, should we not be trying to figure out which ones, and settling for those?—which is what, of course, most accounts of the semantic paradoxes do. After all, if we find that some of our beliefs about Australia are not true, we try to determine which ones are; we do not replace the concept *Australia*. Similarly, when it was discovered that the naive abstraction schema of set theory was inconsistent, the orthodox response was not to replace the notion of set-membership, but to try to figure out which instances were true.

Scharp (in correspondence) suggests that matters are different if the principles involved are constitutive: replacing a false constitutive belief is 'tantamount to revising the concept'. Now, first, this does not seem to me to follow on his understanding of 'constitutive'. Even if denying the belief is prima facie evidence that a person means something different, it does not follow that they do mean something different. Secondly, it seems false. We have a bunch of beliefs about truth and Australia. Some of them, let us suppose, are false. What makes them true/false are the concepts employed and facts about the world. So finding out which are true and which are false seems to be finding out things about our current concepts (and the world). Thirdly, even if the investigation does change the concept, so what? The Greeks held that the Earth was not a planet. We now hold that it is. Arguably, the meaning of 'planet' has changed in the process. (For the Greeks, a planet was something that wandered through the heavens in irregular fashions.—Gk: planetes, to wander.) But that does not matter: the revision has brought the sentence held-true into line with those that are true (we hope!). That seems like a very happy outcome, and it was done simply by revising which claims were held true.

Next, whatever else it is, an inconsistent concept is one which delivers contradictions in some sense. But concepts other than truth have to be invoked to produce contradiction—notably, negation and the conditional (and self-reference). If the principles concerning these are not themselves constitutive, no conceptual revision is necessary. Moreover, the thought that the principles often taken to govern these notions are constitutive is much less plausible than the thought that that the *T*-schema is constitutive of truth. It takes only a passing knowledge of the history of logic (sadly lacking in many contemporary philosophers) to be aware that formal accounts of truth are relatively few in the history of logic, whilst divergent formal accounts of negation and the conditional are legion.

Scharp endorses Frege/Russell logic. Now, take, for example, its principles of (Boolean) negation: $A \vdash B \lor \neg B$ and $A \land \neg A \vdash B$. These fail for even the founder of Western logic, Aristotle (*De Int*, ch. 9 and *An Pr* 63^b31-64^a16). And most native English speakers find the second, in particular, bizarre. The thought that these principles are true, let along constitutive, is far from mandatory.

Or another example: the conditional. Conditional Proof, in the form cited by Scharp is: $A \vdash B$ iff $\vdash A \rightarrow B$. Let us grant, for the sake of argument, that this is constitutive of at least one notion of conditionality. Why is it constitutive of the notion of conditionality deployed in the *T*-schema? This conditional would seen to express logical entailment; and the *T*-schema does not seem to be such an entailment. One might avoid this by moving to a more general form of Conditional Proof: $\Gamma, A \vdash B$ iff $\Gamma \vdash A \rightarrow B$. But this fails if \rightarrow is the strict conditional of any modal logic, "conditional" logic, or relevant logic. And for good reason. This form gives rise to "paradoxes of the material conditional", such as "if Washington is not the capital of the US, then Managua is', which most native English speakers find bizarre. Again, the thought that these principles are true, let along constitutive, is far from mandatory.

Indeed, if I have a major criticism of the book, this is it. Given the sophistication of the discussion concerning truth, the thin nature of the comments on the logical connectives are disappointing. It is claimed that the relevant principles concerning negation are delivered by the linguistics of actual use (e.g., pp. 109, 127)—which one might well doubt, given what I have just pointed out about native speakers. References are given (p. 110) to the linguists Atlas and Horn who endorse the view that English negation, at least, does not permit truth value gaps (maybe Ancient Greek is different!). This, if true, would get us half way concerning negation; but, even then, more recent data suggests that speakers are quite willing to say that some thing are both true and false or neither true nor false. (See D. Ripley, 'Contradictions at the Borders' in R. Nouwen, R. van Rooij, U. Sauerland, H-C. Schmitz (eds.), *Vagueness in Communication*, Springer, 2011.)

We are told that "classical logic" is 'our' logic (several times, e.g., p. 78), as opposed to a standard *theory* of logic. We are told that giving up some of its principles would 'cripple our' reasoning (p. 78). This does not follow at all: changing a theory does not change what it is a theory of. It just gives us a different understanding of it. (Compare: the fact that, according to standard theory, the inference 'this is red, so it is coloured' is invalid does stop us employing it.) And who is the *us* in question? Scharp says (in correspondence) that it is those who regard the principles in question as constitutive. So, maybe *we* are those few native speakers who have taken Logic 100!

Sometimes, the endorsement of Frege/Russell logic is described as methodological (e.g., p. 242). If this be method, yet there is madness in it. Frege/Russell logic is a *theory* of validity which emerged at the end of the 19th Century to do justice to the reasoning in mathematics as it stood at that time. Simply to *assume* that it applies to *all* topics is an unjustified extrapolation. (It must be said that Scharp is hardly alone in making it.) Why should one suppose that it applies to vague language, statements about the future, branches of mathematics invented in the 20th Century—or, of course, paradoxical discourse? (This is not an argument for logical pluralism. Classical logic may just be a special case of a more general logic, which applies to classical mathematics in virtue of some of its particular features.)

But set all this aside. Let us suppose that the concept of truth is to be replaced. What of Scharp's replacement? An axiom system is given (p. 154), and a novel, complex and ingenious, world semantics is provided—a melding of modal relational semantics, neighbourhood semantics, and revisiontheoretic semantics. Soundness is claimed (p. 186f), though details of the argument are left for the reader to provide.

The revision, however, faces significant problems. First: Scharp is laudably much concerned to locate his new theory in a more general perspective. (It is amazing how often paradox-solvers appear to think that their job has been done simply by presenting a formal theory of truth.) Essentially, he endorses a Davidsonian theory of meaning and interpretation. For Davidson we test a theory of truth, whose *T*-biconditionals are thought of as giving the meanings of a speaker's sentences, by seeing whether they hold-true $\langle \varphi \rangle$ when they may reasonably be held to believe that φ . If truth has gone out of the window, how is one now to proceed? We have schemas for ascending and descending truth, so we need corresponding attitudes of holding-ascending-true and holding-descending-true. What are those?

Second: the semantics define validity (in the standard way) as preservation of truth in a model (p. 254). Truth in a model is not the same as truth *simpliciter*. But a natural supposition is that truth *simpliciter* is truth in the intended model. That is why it makes sense to reason validly. But truth in a model is a consistent concept, and truth, according to this account, is not; they cannot be the same thing. So why should one reason validly?

Third: Scharp himself takes 'the biggest problem' of his account to be the following (p. 280): speakers take truth to have an "expressive" role. That is, speakers use truth to make claims like 'everything said was true'. For this to function as required, one needs the unrestricted T-schema, which Scharp no longer has. In reply, he says, somewhat inconsistently with his remarks about common usage, that people just get it wrong sometimes. Note that this is not a problem for those theories, such as a dialetheic one, that endorse the unrestricted T-Schema.

Which brings us to the subject of a dialetheic account of the paradoxes. I am not, myself, inclined to see such an account as a revisionary one: we have simply been operating, historically, with a flawed view of contradiction; and Frege/Russell logic, with its endorsement of Explosion, has just made matters worse in this respect. But it *could* be interpreted as revisionary. If it were, and given the problems Scharp's account faces, why should we not prefer it?

Scharp gives essentially two reasons. First, he suggests (p. 120), that it is better to revise the conception of truth rather than that of, say, negation, because it is the one concept that occurs in all the self-referential paradoxes (so the revision is more minimal). This is just not true: many cognitive notions are embroiled in self-referential paradoxes: thought, knowledge, rationality. (Are these all inconsistent concepts?) Here, for example, is the "irrationalist's paradox". Consider the sentence: it is not rational to believe this sentence. Suppose that you believe it. Then you believe it and believe that it is not rational to believe it. This can hardly be rational. So it is not rational to believe it. But we have just proved this, so it is (as well). Secondly, and in any case, minimal revisions are not always the most theoretically acceptable. Given the Michelson-Morley experiments, the most minimal revision would have been to accept the Lorentz-Fitzgerald contraction hypothesis. The scientific community decided, instead, to throw out Newtonian Mechanics. We are after the revision that is overall simplest, most robust, most fecund.

Scharp's second argument (p. 127) is to the effect that his account is preferable to all others (including a dialetheic account) because it avoids "revenge paradoxes". Whether or not his own account is so immune, his argument concerning dialetheic accounts trades on the use of Boolean negation, a notion which (I have argued—e.g., Doubt Truth to Be a Liar, Oxford University Press, 2006, ch. 5) is meaningless. (The same is argued by those who reject Excluded Middle, such as intuitionists and Hartry Field). Sharp says that supposing negation in English not to be Boolean 'flies in the face of contemporary linguistics' (p. 127). I have already dealt with that matter. He also says that simply stipulating that a word has a meaning (by satisfying, I take it, certain principles of inference) is sufficient to ensure that it has that meaning—though the concept may be inconsistent (p. 127). I find such voluntarism about meaning implausible. Notoriously, acts of fiat can fail (e.g., if the vicar at a marriage ceremony says 'I now pronounce you man and wife', the woman-normally-becomes a wife; but if, unbeknownst to the vicar, she is under marriageable age, she does not). But never mind: call Boolean Negation meaningful if you like. As long as it is in the same basket as *tonk*, one can hardly place much weight on arguments employing it.

There is much more to be said about the many interesting issues in the book than can be taken up in a review. But by way of drawing the threads of this review to a close, let me as say the following. Scharp's account of the Liar Paradox is an 'unhappy face solution' (in the terms of S. Schiffer, *Things we Mean*, Oxford University Press, 2003): things are broken, and all we can do is mend them. People have been driven to such solutions because of the apparent impasses that the usual kind of solutions run into. In fact, Scharp's book contains the most sophisticated version of an unhappy face solution to date. And a major lesson it would seem to deliver is that such routes are no better a way out of these aporia than their more usual cousins. (Many thanks go to Kevin Scharp for his both helpful and cheerful comments on earlier drafts of this review, which greatly improved my grasp of the issues involved.)

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