Completing Sorensen's Menu: A Non-Modal Yabloesque Curry

JC BEALL

1. Non-Modal Yabloesque Paradox

A main aim of Sorensen's recent paper, "Yablo's Paradox and Kindred Infinite Liars", is to bolster the conjecture that all so-called paradoxes of self-reference are only so called; they are not essentially circular.[1] That such paradoxes are not essentially circular is seen via Yablo's technique, a technique in which, as Sorensen puts it, we replace "the cramped circularity of self-reference with the luxuriant linearity of an infinite series" (p.139).[2]

But why worry so much about whether the paradoxes are essentially circular? The answer, of course, is that many philosophers have been very suspicious of circularity, so much so that circularity is blamed for paradox. Their remedy: Do away with circularity! Aside, however, from throwing out harmless circularity, and aside from being ad hoc, this "remedy" is an obvious pseudo-remedy in the face of Yabloesque—that is, circularity-free—versions of the paradoxes. Accordingly, Sorensen extends Yablo's technique to show how to construct Yabloesque versions of many so-called paradoxes of self-reference.

Along the way, Sorensen notes that "no modal logic is needed to formulate Pseudo-Scotus' [validity] paradox [-es] or to extend it to the infinitary case" (pp. 149–50). This is correct, as Sorensen's non-modal Yabloesque version shows (see pp. 149–50). And this is important; the non-modal version, according to Sorensen, is an improvement: "Read's improvement", as Soresnsen calls it, given that it is due to Stephen Read.

But why should a non-modal version be an improvement? Sorensen does not say; however, there are two fairly clear reasons. Firstly, any modal version of a paradox is more complicated than a non-modal version; at the very least the former requires a more complicated language—

[1] See Sorensen (1998), to which all unqualified parenthetical page references refer. Following the practice of Barwise and Perry (1987) I use "circularity" in such a way that self-reference is a species of circularity but not the only such species.

[2] For his original papers see Yablo (1985, 1993).

the addition of modal operators, etc. The second reason is more important: namely, that quite frequently philosophers who have been suspicious of circularity have been equally suspicious of modality. (One thinks immediately of Tarski, for example, and of course more recently of Quine.) Accordingly, if the aim is to show that the suspicious phenomena can be removed without removing paradox, then all the better if both circularity and modality are removed.

Thus, for those who harbour not only suspicions of circularity but also the lingering view that modality was conceived in sin, Sorensen offers both modal and non-modal versions of Yabloesque paradoxes. There is, however, an exception.

The exception to his menu of modal and non-modal versions is Sorensen's treatment of the notoriously difficult (negation-free) Curry paradox. Sorensen suggests only a modal variety of Yabloesque Curry. He suggests that one can produce a Yabloesque Curry paradox by adding modal operators to the language, which is correct (see p. 150, and especially references therein). But given the aim of removing the suspicious phenomena—or, for that matter, for the sake of uniformity—it would be nice to make a modal-free Yabloesque Curry. Fortunately, a recipe is close at hand.

2. A Non-Modal Yabloesque Curry

The recipe is this:

(λ_1) If all λ_i (for $i \geq 2$) are true, then $1 = 0$.

(λ_2) If all λ_i (for $i \geq 3$) are true, then $1 = 0$.

(λ_3) If all λ_i (for $i \geq 4$) are true, then $1 = 0$.

PROOF: $1 = 0$.

> We first prove λ_1: Suppose that every λ_i (for $i \geq 2$) is true. Then λ_2 and its antecedent are true, whence via modus ponens $1 = 0$. Hence, by conditional proof, λ_1 is true.
>
> Generalizing the proof of λ_1 we can see that each of the λ_i can be proved similarly: To prove λ_j we assume that all λ_i ($i \geq j + 1$) are true, from which it follows that λ_{j+1} and its antecedent are true, in which case, via modus ponens, $1 = 0$. Conditional proof then gives the truth of λ_j.
>
> But, then, given the truth of λ_1 and the truth of each λ_i (for $i \geq 2$), modus ponens yields that $1 = 0$.

The recipe is written explicitly in terms of the identity of 1 and 0; this gives the recipe a concrete flavour. But by perfectly parallel reasoning one may prove anything: simply substitute the desired outcome for "1 = 0".

3. Menu Complete

Sorensen's paper gives a menu of Yabloesque paradoxes, all of which, except for Curry's, were available in both modal and non-modal varieties. With the addition of the non-modal Yabloesque Curry above, Sorensen's menu is complete. Most importantly, regardless of how suspicious modality or circularity might be, neither are to blame for paradox.[3]

Department of Philosophy JC BEALL
University of Tasmania
GPO Box 252-41
Hobart, Tasmania 7001
Australia
Email: j.c.beall@utas.edu.au

REFERENCES

Barwise, Jon and Etchemendy, John 1987: *The Liar.* Oxford: Oxford University Press.

Sorensen, Roy 1998: "Yablo's Paradox and Kindred Infinite Liars". *Mind*, 107, pp. 137–55.

Yablo, Stephen 1985: "Truth and Reflection". *Journal of Philosophical Logic*, 14, pp. 297–349.

¾¾ 1993: "Paradox Without Self-Reference". *Analysis*, 53, pp. 251–2.

[3] I am grateful to Graham Priest and Greg Restall for discussion of issues involved, and also to Bas van Fraassen for first introducing me to Curry's paradox.