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 Sorensen 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 imme-
diately 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 espe-
cially 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:

(\lambda_1) \text{ If all } \lambda_i \text{ (for } i \geq 2) \text{ are true, then } 1 = 0.

(\lambda_2) \text{ If all } \lambda_i \text{ (for } i \geq 3) \text{ are true, then } 1 = 0.

(\lambda_3) \text{ If all } \lambda_i \text{ (for } i \geq 4) \text{ are true, then } 1 = 0.

PROOF: 1 = 0.

We first prove \lambda_1: Suppose that every \lambda_i \text{ (for } i \geq 2) \text{ is true. Then }
\lambda_2 \text{ and its antecedent are true, whence via modus ponens } 1 = 0.
Hence, by conditional proof, \lambda_1 \text{ is true.}

Generalizing the proof of \lambda_1 \text{ we can see that each of the } \lambda_i \text{ can be
proved similarly: To prove } \lambda_j \text{ we assume that all } \lambda_i \text{ (} i \geq j + 1 \text{) are}
true, from which it follows that } \lambda_{j+1} \text{ and its antecedent are true,
in which case, via modus ponens, } 1 = 0. \text{ Conditional proof then
gives the truth of } \lambda_j.

But, then, given the truth of \lambda_1 \text{ and the truth of each } \lambda_i \text{ (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

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.