AG lit. review questions: week 7

Collapse

(Q1) What is the principle of Collapse?

(Q2) Linnebo claims: 'Collapse is not only simple but also has great intrinsic plausibility' (p. 145). Does it?

(Q3) Can we accept Collapse?

Alternatives to Collapse

(Q4) Which (pluralities of) things can form a set? How far does ZFC go in answering this question?

(Q5) Can 'Limitation of Size' provide a viable alternative to Collapse?

(Q6) Linnebo writes: 'it is hard to see how an explanation of why some pluralities fail to form sets can avoid appealing to some principle of limitation of size' (p. 151). Why think this? Is an alternative explanation available?

Modalization

(Q7) What is a *fully modalized* version $\phi^\diamond$ of a plural formula ϕ?

(Q8) In light of Linnebo's 'mirroring theorem' (Theorem 1, p. 164), how does Collapse$^\diamond$ avoid Russell's paradox?

(Q9) How much mathematics might we recover on Linnebo's approach?

(Q10) Does this improve on other ways to avoid the paradox?

Objections

(Q11) Does Collapse$^\diamond$ invoke a species of set-theoretic creationism?

(Q12) If the modality isn't a 'circumstantial modality' (e.g. metaphysical necessity), what is it?

(Q13) Can we really interpret mathematicians assertions as having tacit modal content?

Naturalism

(Q14) Is Hewitt's deflationary answer preferable?

> Under what conditions does a plurality form a set? Do not expect an answer that is both general and explanatory: look to your set theory, and believe (defeasibly) that all and only those pluralities form sets which your theory tells you do. To the extent that your theory is still being constructed, the subject of debate, or open-ended, so too is your capacity to answer the formation question in a deep fashion—there is, of course, a fact of the matter which pluralities form sets; it is simply hidden from you. (p. 24)