Metaphysical Analyticity and the Epistemology of Logic

Gillian Russell, Washington University in St Louis

The Question

How can we be justified in believing claims that we’d represent using the “double turn-stile” (\(\models\)) such as:

\[\models \phi \lor \neg \phi\quad \text{the law of excluded middle}\]

\[\phi \rightarrow \psi, \quad \phi \models \psi\quad \text{modus ponens}\]

Influences on my Answer

— non-triviality of questions about meaning
— the fact that questions in logic don’t always seem to be resolvable by proof
— the distinction between metaphysical and epistemic analyticity and the fact that someone who endorses metaphysical analyticity seems to have even more trouble with the epistemology of logic than everyone else
— the distinction between logic and belief revision. (In Gilbert Harman’s words, between ”implication” and ”inference”)

Why does the epistemology of logic look so hard?

— a priority
— necessity
— basicness (this last problem makes the previous two more acute.)

What about analyticity?

— analyticity and necessity
— analyticity and a priority
— analyticity and basicness

Problems for the view that logic is analytic

— the Regress argument (Quine)
— Peter and “all vixens are vixens” (Williamson)
What about Quine and the Web of Belief?

— the revisability of logic
— centrality in the web and the appearance of analyticity, necessity and a priority

Problems for Quine’s view

— conflation of necessity, analyticity and a priority
— modal logic and the rule of necessitation
— the intrinsic interest of work in formal fields

My View

The story:

— Part 1: pre-logic
— Part 2: introduction to logic
— Part 3: non-classical logics
— Part 4: going too far?

Important features of the story:

— beliefs are given up as well as added—that makes it seem more like Harman’s inference than implication
— the theoretical virtues of the views are a significant part of the justification for accepting them/giving them up
— the justification of the Law of Excluded Middle is holistic
— but that doesn’t mean that there isn’t an atomistic justification of it using claims about meaning relative to any one theory
— the view is consistent with the necessity of logic
— it is consistent with the metaphysical analyticity of logic

This is a view on which logic is not basic, rather, reasoning is.

grussell@artscli.wustl.edu