

# 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 turnstile" ( $\vDash$ ) such as :

$\vDash \phi \vee \neg\phi$  the law of excluded middle

$\phi \rightarrow \psi, \phi \vDash \psi$  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@artsci.wustl.edu