

## Russell's Project - 3 questions (ch. 1)

- 1) logical structure of phys, as deduc. sys. - a Kantian project
  - defines  $\mathcal{F}$  entities, rules of derivation from axioms
  - not really 'entities' but "prop'ls. forms containing variables"
  - the structuralist claim is sounded
  - and the recognition of the seeds of Newman's objection, and Putnam's "opaque reference" and model-theoretic problems
  - provision of an interpretation - provision of Tarski
- 2) application of phys (logical structure) to the empirical world  $\Rightarrow$  necessity for analysis of perception, as ultimate evidential basis for physics in its application to the world
  - Kant's question about structure of perception, how much we can ascertain whether it 'matches' the structure of its causes
  - epistemology - what can be demanded of a physical theory for it to be "true"
- 3) ontology

## Abstractness of Physics of Perception as Evidential Basis

- consider what ~~the~~ physics has to say about emission, propagation & absorption of light, compared to 'common-sense notion of seeing'
- $\Rightarrow$  how can visual perceptions provide a source of knowledge relevant to scientific claims, evaluation thereof?
- common sense notion of 'matter' vs what QM & GR tell us
- $\Rightarrow$  physics makes us doubt the veracity of our perceptions, and so undermines their use as evidence for physics! (p. 137)

Physics of Perception (Part II)

problem: evidence for ~~that~~ truth of physics, general stance of relations between data and theory that render one capable of being evidence for the other -

primitive perception - à la Powers - refinement of Powers's exps, w/ explanation of notion of sense-modality spaces, identified w/ neurological states (p. 145)  
- but his behaviourist tendencies get him into trouble; how are stimuli and responses to be individuated → a Kantian-like a priori? (p. 154)

Empirical Set

- Russell's insight into Kantian distinctions - analytic and synthetic or qualitative propositions (prop'ls facts) and are purely logical categories whereas a priori and a posteriori (empirical) qualify knowledge, and its evidentiary sources and grounds
- a priori knowledge vs a priori beliefs