

Welcome to:

Panel on logic and experimental studies:

**A new paradigm or
a contradiction in terms?**

Panelists:

Torben Braüner (Roskilde University), Moderator

Nina Gierasimczuk (Technical University of Denmark)

Paula Quinon (Warsaw University of Technology)

Niels Taatgen (University of Groningen)

Format:

- 15 minutes for each speaker
- Brief questions after each speaker
- General discussion

Abstract

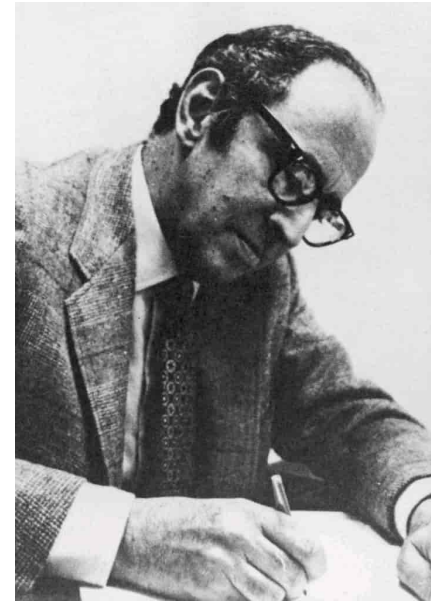
The main idea is to discuss how logic fits together (or doesn't fit together) with empirical studies. By empirical studies we mean scientific studies modeled after experimental natural sciences like physics (not natural sciences of a more historical nature, like geology). Standard textbooks on the philosophy of science give demarcation criteria like verifiability and falsifiability. Cognitive psychology and cognitive science clearly tries to live up to such ideals inherited from natural science.

When we say 'paradigm' we are not only referring to Thomas Kuhn (1962) in its original grandeur, but also to weaker notions of paradigm that might be more descriptive. The relation between logic and psychology has been discussed extensively since Frege, and is still continuing to play a role in our understanding of normative vis-a-vis descriptive enterprises. The natural questions one can ask: what would be an empirically informed logical formalism, or what would be a formalism informed experiment. In recent days, attempts have been made towards answering these questions - to this end, one could ask for a systematic study of these attempts in order to answer the query we put forward.

Paradigms (Thomas Kuhn 1922-1996)

Wanted to describe how science *actually* develops:

1. Normal science
 2. Anomalies crop up
 3. Scientific revolution (paradigm shift)
- Etc.



Normal science takes place within a paradigm with basic concepts, natural laws, definitions, experimental practices...

Back to the title:

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