Chisholm, naturalism and the role of logic in epistemology

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Two Properties of Epistemic Justification

• Accessibility

• Truth-conduciveness
Two Views of Epistemic Justification

- **Access Internalism** (Chisholm, Feldman)
  - an agent S’s justification is accessible to S
  - evaluate justification status on reflection

- **Truth-conduciveness**
Two Views of Epistemic Justification

- **Access Internalism**
  - an agent S’s justification is accessible to S
  - evaluate justification status on reflection

- **Truth-tracking Externalism**
  - Beliefs formed by a reliable process (Goldman)
  - Counter-factual accounts (Ramsey, Nozik)
Two Views of Epistemic Justification

• Internalism

• Externalism

Naturalism?
Epistemic Naturalism

• Substantive Naturalism

• Methodological Naturalism
Epistemic Naturalism

- Substantive Naturalism
  
  ‘causes’, ‘entails’, ‘is probable’ (non-epistemic)
  
  ‘is evident’, ‘is justified’, ‘evidentially probable’

- Methodological Naturalism
Epistemic Naturalism

• Substantive Naturalism
  ‘causes’, ‘entails’, ‘is probable’ (non-epistemic)
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• Methodological Naturalism

  methods or results of cognitive science are relevant to epistemology
Two Views of Epistemic Justification

- **Internalism**
- **Externalism**

Naturalism
# Naturalism & Theories of Justification

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Epistemic properties and epistemic relations are irreducible; they cannot be defined by a complex of psychological or familiar logical operations. (Chisholm 1966)
Naturalizing Internalism

(a) The content of an internalist theory of justification is compatible with naturalism. (Feldman 2001)

(b) Some internalist notions are open to scientific study. (Wheeler and Pereira 2004)

(c) Some internalist notions should be studied scientifically.
# Naturalism & Theories of Justification

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• Substantive Naturalism

‘causes’, ‘entails’, ‘is probable’ (non-epistemic)

‘is evident’, ‘is justified’, ‘evidentially probable’

Terms purported to denote natural facts
Feldman

- Methodological Naturalism

  methods or results of cognitive science are relevant to epistemology?

A priorists  Commonsense/Reflection  Full Naturalism
Feldman

• Cooperative Naturalism

empirical information is important; detailed empirical information is not important.

Commonsense/Reflection
Feldman

Reply to Kornblith’s Aluminum Analogy

It is difficult to see, however, exactly why we should think that knowledge is relevantly like aluminum. For one thing, what we seek in the case of aluminum is an understanding of its physical constitution. We want to know what it is made of, how it interacts with other materials and why, and what we can use it for. Our analysis of knowledge does not call for an account of its physical constitution...But knowledge isn’t a substance like aluminum or a process like cell division. So, analogies such as these don’t provide reasons to seek naturalistic analyses of knowledge (Feldman 2001).
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Full Naturalism: Logical AI

• We want to understand the mathematical structure of epistemic support relations.

• Results from logics in AI offer deep insight into defeasibility, paraconsistency, among other properties relevant for understanding epistemic support relations.

• We should define epistemic support relations rather than describe them.

• We may then test theories that are fully specified. (Wheeler and Pereira 2004).
## Naturalism & Theories of Justification

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Objections

- Rules of epistemic justification are not derivable from (classical) logic. (Goldman)
- Logic has nothing to do with epistemology. (Harman)

*these objections are based upon a naive application of classical, first-order mathematical logic and the axioms of probability.*
Objections

- Commitment to a computational view of the mind;
- A 19th century view of logic as “the rules of thought” (George Boole).

*Our view does not entail either of these theses. One may remain neutral about substantive items standing in epistemic relations and still adopt our methodological approach.*
Summary

- Externalists and Internalists have been arguing over the role of psychology in epistemology.
- Both have agreed that logic plays no constructive analytical role in epistemology. (*Chisholm*)
- Our proposal illustrates how to use logic to model, test and study epistemic support relations
- Naturalism is fully applicable to the study of both theories of justification.