

# KNOWLEDGE: Induction

## Lecture 11

Phil 1000, Fall 2008  
Prof. Bryan Benham

## Quick Review

- Sceptic's Challenge
  - Knowledge is not possible b/c always possibility for doubt
  - Descartes' reply: I can't doubt I exist (cogito argument)
    - Foundationalism and rationalism
  - What does this leave us with epistemologically?
    - Solipsism and External World
    - Certainty vs. Probability in knowledge
- Today: Empiricism & Induction
  - Hume's empiricism as an alternative to Descartes' rationalism
  - The problem of induction
  - Solutions?

2

## Rationalism & Empiricism

- **Rationalism**
  - Knowledge is derived from reason or the intellectual grasp of ideas (Descartes' "clear and distinct ideas"), not through perception/experience per se. Emphasis on certainty.
- **Empiricism**
  - Knowledge is derived from experience or perception. Emphasizes probability, not certainty.

3

## Hume's Empiricism

- Impressions and ideas (Psychology?)
  - **Impressions** (aka, perception)
  - **Ideas** (aka, thoughts)
    - No idea without a corresponding impression (simple vs. complex)
    - Idea of God?
- Two types of knowledge
  - **Relations of ideas** (a priori): truths known by the intellect alone; logical truth whose opposite is a contradiction.
  - **Matters of fact** (a posteriori): truths that depend on facts about the world; the opposite is not a logical contradiction.

4

## Skepticism and Certainty

- Hume criticizes Descartes
  - Descartes mistakenly applying the standards of certainty (relations of ideas) to matters of fact – knowledge of external world is not a relation of ideas, but based on experience.
  - Thus we should reject Descartes' (and the skeptic's) demand for certainty in knowledge.
- How then do we show (reliable) knowledge of external world is possible?

5

## External World?

- Open your eyes and you can't help but perceive something: there is a world external to our minds. Problem: doesn't tell me my perceptions are correct or reliable.
- We are justified in accepting our perceptions as reliable because experience tends to be "self-correcting", misperceptions can be detected because of inconsistencies; coherent perception provides some reliability.
- Also, we probably wouldn't survive very long if our perceptions were entirely unreliable...

Note: these arguments are not found in your reading

6

## General Knowledge?

- Hume's empiricism holds for particular bits of knowledge, but what about knowledge that goes beyond particulars?
  - Generalizations
    - I see a number of crows that are black, so I infer that probably all or most crows are black.
  - Prediction
    - The sun has risen numerous times in the past, so I infer that tomorrow the sun will probably rise again.

7

## PUN

- Hume thinks knowledge about matters of fact are based on knowledge about causation – **the principle of the uniformity of nature (PUN)**:
  - “similar effects will have similar causes” or
  - “the future will be like the past”.

**But, what are our reasons for thinking PUN is reliable?**

8

## Problem of Induction

- P1**: Either there is a demonstrative (a priori) argument or an inductive (a posteriori) argument for PUN.
- P2**: No demonstrative argument because PUN is a matter of fact, not a relation of ideas.
- P3**: No inductive argument because this would be circular (begging the question); using PUN to justify PUN.
- C**: There is no rational justification for PUN.

9

## Solutions?

- **Hume**: we are not rationally justified in PUN, but we are psychologically (habitually) compelled to rely on PUN.
  - Problem: makes knowledge accidental, not justifiable (JTB?), and thus suspect.
- **Pragmatic**: We can accept PUN because it seems to work, the best thing going.
  - Problem: either is circular or simply doesn't address the problem of justification (JTB?).

10

## Coherentism?

- Hume and Descartes are both **foundationalist**. What if we avoid foundationalism?
- **Coherentism**: in order for belief to be justified it doesn't have to ultimately rest on foundational beliefs, but it does need to cohere (be consistent) with other beliefs, like a network or web of beliefs.
  - Problem: how do we know our coherent set of beliefs is reliable about the world?

11

## Next Time

- Science as a model for reliable knowledge
  - A coherent set of beliefs about the world that are ultimately testable by experience;
  - A web of beliefs is adjusted to fit experiential tests.

Will science save the day?

12