Phil 184/284: Formal and Informal Epistemology
Section 1 Handout
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What is epistemology?
- The *philosophical* study of knowledge, belief, justification, rationality and other notions
- Why philosophical?
    1. Emphasis on *conceptual* questions and arguments
    2. Methodology:
        - Premium on conceptual clarity and argumentative rigor
        - Less empirically focused than, say, psychology

Why do epistemology?
1. Descriptive project:
    a. Want to understand and describe the mind and potential features of it (e.g. knowledge)
2. Normative/Prescriptive project:
    a. Want to investigate norms that *prescribe* how we *should* reason, acquire beliefs...
    b. Want to get *better* beliefs, more *rational* beliefs etc.
3. Practical project:
    a. Want to make better *decisions* in life based on better beliefs etc.
4. Methodological project:
    a. Developing philosophical virtues:
        i. Conceptual clarity
        ii. Argumentative rigor

Summary of *The Rational Mind,* Chapter 1:
- Major aim of book:
    o *"help readers build a deep and pleasing vision across a broad range of philosophical topics"*
- Literature in epistemology is divided along two splits
    1. Formal/informal split:
        - Formal epistemology:
            1. Somewhat like mathematics:
                a) Specialized languages (e.g. set theory, mathematical logic)
                b) Theorem oriented
                c) Proof driven
                d) Sometimes axiomatized
            2. Often criticizes informal epistemology as obsolete or inchoate
        - Informal epistemology:
            1. Natural languages
            2. Quotidian (everyday) intuition
            3. Thought-experiment
            4. Never axiomatized
            5. Often criticizes formal epistemology as not proper epistemology
        - Book aims to show neither criticisms are correct
    2. Coarse-grained/fine-grained epistemology:

- Coarse-grained epistemology:
  - Studies belief, disbelief and suspended judgment
  - Criticizes fine-grained epistemology as overly-nuanced, unrealistic
- Fine-grained epistemology:
  - Studies <u>confidence/credence</u> or comparative confidence
  - Criticizes coarse-grained epistemology as under-nuanced, needlessly blunt, focused on derivative phenomena etc.
- Book aims to show neither criticisms are correct
  - These splits create four partitions:
    1. *Formal* and *fine-grained* epistemology
    2. *Formal* and *coarse-grained* epistemology
    3. *Informal* and *fine-grained* epistemology
    4. *Informal* and *coarse-grained* epistemology
- Overall aim of book:
  - "unified approach to all major topics in the field", with elements from all partitions
- Subject matter:
  - Philosophy of mind: what are mental states and transitions like in themselves?
  - Epistemological: what mental states and transitions are *rational*?
- Starting assumptions of the book:
  - Starting assumptions for investigating the subject matter are…
  1. Nature-before-norms assumption:
     - The nature of the mind comes first, its rationality follows suit
     - Speculative explanation:
       - First develop theory of what mental states are, *then* a theory of what makes them rational or good in other ways?
  2. Binary-Attitude Assumption
     - Propositional attitudes are binary relations between thinkers and propositions
     - Example:
       - "Sacha believes that Brexit was a disaster"
       - Thinker = *Sacha*
       - Proposition (i.e. an idea) = *Brexit was a disaster*
       - Relation = Sacha *believes* this proposition—that Brexit was a disaster
       - Propositional attitude = attitude one could take towards a proposition
         - Examples: hope, believe, disbelieve, want, fear, etc.
  3. Primacy of propositional attitudes
     - Propositional attitudes are of primary concern in the theory of rationality
  4. Cash-Value Assumption
     - There are no differences in attitude type which make no difference to the functioning of an agent (to their "cash value" as such)
     - Explanation:
       - Type/token distinction example (less essential):
         - Type: Desires in general
         - Token: This particular desire
       - Functionalism = mental state types are characterized in terms of function
     - Example:
       - Sacha wants/desires Barry to have ice cream vs. Sacha wants/would hate it if Barry had ice cream

- If two attitudes types are different, then they have differences for the functioning of an agent

5. Rationality-of-States Assumption
    - Certain of our propositional attitudes are subject to epistemic appraisal
    - Explanation:
        - This basically means epistemic attitudes can be more or less rational
        - Epistemic attitudes = propositional attitudes which can be better or less-well taken in light of our evidence (e.g. belief, suspending judgment)

6. Rationality-of-Transitions Assumption
    - Shifts in epistemic attitude (e.g. acquiring a belief) are subject to epistemic appraisal
    - Explanation:
        - This basically means epistemic transitions can be more or less rational
        - Epistemic transitions = shifts in propositional attitudes which can be better or less-well taken in light of our evidence
    - Implication:
        - Norms of rationality play two roles:
            - Constraining states at a time (synchronic/static constraints)
            - Constraining states *across* times (diachronic/dynamic constraints)
        - Full-theory of rationality has three parts:
            - Synchronic norms
            - Diachronic norms
            - Linking theory: how synchronic norms relate to diachronic norms

7. Matching-Models Assumption
    - A formal model of rationality is fully acceptable only if it matches its target domain.
    - Explanation:
        - Target domain = area of reality that a model tries to depict (e.g. a Bayesian model of a rational mind)
        - "Formal model" is left underspecified
        - A model matches its target when:
            1. basic facts in the target domain are explicitly marked by basic elements of the model
            2. derivative facts in the target domain are explicitly marked by derivative elements of the model
            3. derivative facts in the target domain are grounded in basic facts in that domain in such a way that their explicit marks in the model stand to one another in analogue grounding relations
    - Sturgeon claims two major models—the Bayesian and Belief models—do not match their domain

- Next chapter:
    - Bayesian model of the rational mind:
        - Can use probability functions to model the mind
    - This has various problems…