Constructing the World

Lecture 5: Hard Cases: Mathematics, Normativity, Intentionality, Ontology

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Plan

1. Hard cases
2. Mathematical truths
3. Normative truths
4. Intentional truths
5. Philosophical truths
6. Miscellanea
7. Minimizing the base.
Recap

• Scrutability thesis: there’s a compact class of truths such that all truths are scrutable from truths in that class

• So far I’ve argued: All ordinary truths are scrutable from PQTl.
Hard Cases

- Hard case: a putative class of non-ordinary truths $M$ such that it’s not obvious that $M$ is scrutable from PQT.
Today

• I’ll argue that in key hard cases, all relevant truths are scrutable from PQTl.

• I’ll also consider minimizing the base: moving from the generous PQTl to a smaller base.
Options

1. Rationalism: M is a priori (perhaps under idealization)

2. Empiricism: M is not a priori but scrutable from base truths (or: from non-M truths).

3. Anti-realism: M isn’t true

4: Expansionism: Expand the base
Argument from Knowability Extended

• Argument from Knowability: If M is knowable, it is conditionally scrutable from PQTI.

• Argument from Reconditionalization: If M is conditionally scrutable from PQTI, it is a priori scrutable from PQTI.

• So the hardest cases are those in which M isn’t knowable (or M is in PQTI).
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Mathematical Truths I

- Unprovable mathematical truths
- E.g. Gödel sentence G of Peano arithmetic
  - Apriority doesn’t require provability in PA. We know G a priori (by knowing a priori that the axioms of PA are true, hence consistent).
• E.g. Gödel sentence G of system H, where H models human competence.
• Then we can’t know H, but some more ideal reasoner could.
• So on for arbitrary Gödel sentences?
Mathematical Truths III

- Arbitrary sentences of arithmetic?
- Feferman: any can be proved in system reached by iterated Gödelization
- Q: is this cheating?
- Alternative, any can be known by infinitary idealization
- Russell’s “mere medical impossibility”.
Mathematical Truths IV

- Statements of higher set theory, e.g. continuum hypothesis or large cardinal axioms
  - Perhaps knowable under relevant idealization
  - Perhaps indeterminate (set theorist’s view)
Mathematical Truths V

• Opponent needs case that’s determinate but not ideally knowable.
  • No clear candidates

• If there are such cases
  • Expand base to include some mathematical truths
  • No expansion in vocabulary required?
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Normative Truths

- Moral truths: true but not a priori scrutable
- Prima facie, moral truths (if true at all) are knowable, conditionally scrutable from nonmoral truths, and so a priori scrutable
- Little reason to believe in unknowable moral truths, and knowable truths are plausibly scrutable.
Normative Truths II

- Consistent with error theories, noncognitivism, moral rationalism, moral empiricism (many forms), moral subjectivism.

- Inconsistent with hardline Cornell realism: moral truths a posteriori necessitated without a priori entailments

- Not clear that anyone holds this view.
Normative Truths III

- Threats to a priori scrutability?
  - Open question argument
    - No threat
  - Ideally rational moral disagreement
    - Accommodate via anti-realism or subjectivism
  - Essential role of emotions in moral knowledge
    - Then ideal reasoning must involve emotions
Normative Truths IV

- Epistemological truths
  - Same issues (leaning toward realism?)
- Aesthetic truths
  - Same issues (leaning toward anti-realism?)
- In each case: little reason to believe in inscrutable truths.
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Intentional Truths I

• Logical behaviorist, analytic functionalist

• Intentional truths (e.g. S believes that p) are scrutable from functional/behavioral truths (plus environmental truths?)

• My view

  • Narrow intentional truths are scrutable from phenomenal truths plus functional truths

  • Wide intentional truths are scrutable from narrow intentional truths plus non-intentional environmental truths.
Intentional Truths II

- Worries for scrutability
  - Kripke-Wittgenstein puzzle
    - Appeal to phenomenal intentionality helps?
  - Externalism
    - Scrutability from narrow plus wide truths
Intentional Truths III

- Alternative: build intentional truths into base
  - E.g. S believes p, S entertains primary intension p

- Worry: threat of noncompactness
  - All propositions p in base!
Worry 1: Arbitrary concepts/expressions required

Perhaps a few will suffice.

E.g. primary intensions can be characterized using intentional relations to primitive concepts?

Worst case: the concepts are only mentioned, not used, and in highly delimited way.
Intentional Truths V

- Worry 2: Trivialization. E.g. ‘p is true’ or ‘S would know p if …’ or...
  - Bar mechanisms of semantic descent
  - Bar factive intentional operators?
  - Restrict p to right-hand side of certain intentional relations.
Intentional Truths VI

• Phenomenal truths may be intentional truths
  • Phenomenal redness = phenomenally representing redness
  • If so, some intentional truths may be in the base
  • Specified in constrained form using limited vocabulary, as before?
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Philosophical Truths 1

- Metaphysics: 3-dimensionalism or 4-dimensionalism
- Epistemology: internalism or externalism
- Philosophy of mind: materialism or dualism?
- Philosophy of action: compatibilism or incompatibilism?
- Philosophy of science: realism or anti-realism?
- Philosophy of maths: nominalism or Platonism?
- Decision theory: causal or evidential?
- Ethics: deontology, consequentialism, virtue ethics?
Philosophical Truths II

- Options (illustrations from metaphysics)
- Rationalism (modal realism?)
- Empiricism (spacetime substantivalism vs relationism?)
- Anti-realism (God?)
- Expansionism (dualism, quidditism?)
- Pluralism (3-dimensionalism vs 4-dimensionalism?)
Philosophical Truths III

- Ontological truths: e.g. universal composition?
- PQT-I builds in existential truths at macro level, but PQT-I- does not.
- Heavyweight quantifier: macro existence claims can’t be analytically entailed by micro existence claims?
Philosophical Truths IV

- My (Carnapian) view:
  - existence claims involving a heavyweight quantifier aren’t true
  - existence claims involving a lightweight quantifier are scrutable

- Illustration of general pattern:
  - e.g. positive claims about Edenic (primitive) colors inscrutable but untrue
  - positive claims about non-Edenic colors true but scrutable
Philosophical Truths V

- Alternative view: true heavyweight ontological claims inscrutable from PQT1-
- If so: base requires more existential truths
  - Laws of ontology?
  - No expansion in vocabulary required
  - Scrutability base goes beyond supervenience base?
Philosophical Truths VI

- General worry: philosophical truths are not conclusively settled by simpler base truths. They are settled abductively, without certainty
  - Compatible with ordinary a priori scrutability
  - Not with conclusive a priori scrutability
- My view: philosophical truths outside fundamental natural ontology can be (ideally) settled with certainty
  - Of course we are nonideal.
  - If I’m wrong: expand the base?
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Modal Truths

- Modal truths
  - A priori entailed by nonmodal truths
- Apriority truths
  - Themselves a priori, given S4 and S5 for apriority.
Vagueness

- Epistemic theorist of vagueness: ‘X is tall’ may be true but unknowable. Ideally inscrutable?
  - If so, perhaps no compact base will suffice.
  - Scrutability thesis will be false!
- But the epistemic theory is often regarded as implausible
  - If the compact scrutability thesis is otherwise plausible, this yields a further reason to reject the epistemic theory.
Demonstratives

- Demonstrative truths
  - ‘That is red’ (Two Tubes case)
- Not always scrutable from ‘I’, ‘now’, etc
- Need further primitive indexicals
  - ‘That experience’
Miscellanea

- Social truths: scrutable from intentional truths
- Metalinguistic truths: scrutable from intentional truths
- Deferential truths: scrutable from metalinguistic truths (plus...) 
- Nominal truths: scrutable from metalinguistic truths (plus...)
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Minimizing the Base I

- So far: scrutability of all truths from PQTI?
- Q: How far can we minimize the base?
Minimizing the Base II

- Macrophysical truths: from microphysical truths
- Counterfactuals: from laws
- Microphysical truths: from Ramseyan truths
- Secondary quality truths: from phenomenal and causal truths
- Mass truths: from phenomenal and causal truths
Minimizing the Base III

• Spatiotemporal truths: from spatiotemporal experience and causal truths?
• Nomic/causal truths: from regularities?
• Phenomenal truths: from functional truths?
• Quiddities: from dispositions?
• That’s all: from fundamentality?
• Indexicals
• Logical/mathematical expressions
Minimizing the Base IV

- Indexicals, logic/math, fundamentality
- Spatiotemporal expressions?
  - Depending on spatiotemporal primitivism
- Nomic expressions?
  - Depending on Humean scrutability
- Phenomenal expressions?
  - Depending on phenomenal realism
- Quiddities?
  - Depending on quidditism
Minimizing the Base V

- My view
  - Indexicals (‘I’, ‘now’, ‘This experience’)
  - Logic/math
  - Fundamentality
  - Phenomenal (or awareness plus qualities)
  - Nomic (‘Is a law of nature that’)

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