



# Concepts and the Scrutability of Truth

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# The Scrutability of Reference

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- The Scrutability of Reference
  - Once we know enough about the world, we're in a position to know what our concepts and our terms refer to.

# Examples

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- E.g. ‘water’
    - A priori, we don’t know what ‘water’ refers to
      - Could be H<sub>2</sub>O, XYZ, whatever
    - Once we know enough about the environment, we know that ‘water’ refers to H<sub>2</sub>O
      - E.g. given knowledge of appearance, behavior, composition, distribution, history of environmental objects and substances
  - Likewise for ‘Jack the Ripper’, ‘Homer’, ‘gold’, and so on.
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# Nontriviality

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- Trivial version: Allow the knowledge in the antecedent to include *water*-knowledge
  - Nontrivial version: Disallow knowledge involving *water* and cognate notions from the antecedent
  - The nontrivial version is plausibly true for many or most terms and concepts
    - Knowledge of *underlying* truths suffices for knowledge of what 'water', 'Homer', etc, refer to.
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# Idealization

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- Speakers given the relevant knowledge may *in fact* make mistaken judgments about reference
    - E.g. '68+57'
  - But they're *in a position to* make correct judgments, given rational reflection
    - I.e. the relevant empirical knowledge plus sufficient rational reflection enables knowledge of reference
  - In effect, the scrutability thesis invokes a normative idealization.
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# Scrutability of Reference II

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- For most terms T, there exists a truth D such that D is independent of T and such that knowing that D is true puts the speaker in a position to know the referent of T.
    - D is independent of T when D doesn't contain T or close cognates
    - E.g. for 'water', D might involve truths about appearance, behavior, composition, distribution of environmental objects and substances (plus their relation to oneself).
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# Problems

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- Problem 1: The notion of ‘knowing what an expression refers to’ is unclear.
  - Problem 2: For some expressions, it’s unclear (maybe indeterminate) what sort of thing they refer to
    - E.g. ‘number’, ‘symphony’, etc.
    - Cf. Quinean inscrutability of reference
  - Solution: Move to the scrutability of truth.
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# Scrutability of Truth

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- Scrutability of Truth:
    - Once we know enough about the world, we're in a position to know whether our utterances and our beliefs are true.
  - Avoids problem 1
    - The notion of knowing truth-value is relatively clear
  - Minimizes problem 2
    - This will only affect a few sentences such as 'two is a set of sets'
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# Scrutability of Truth II

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- For most terms  $T$  used by a speaker, and for any truth  $S$  involving  $T$ , there exists a truth  $D$  such that  $D$  is independent of  $T$  and  $D$  is epistemically sufficient for  $S$ 
    - $D$  is epistemically sufficient for  $S$  when knowing that  $D$  is the case puts the speaker in a position to know (on sufficient rational reflection, without needing further empirical information) that  $S$  is the case.
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# Scrutability of Truth III

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- There is a relatively limited vocabulary  $V$  such that for any truth  $S$ , there is a  $V$ -truth  $D$  such that  $D$  is epistemically sufficient for  $S$ .
  - To pare down the vocabulary, just eliminate “scrutable” terms one-by-one according to the previous reasoning.
  - A minimal such  $V$  is a sort of *epistemic basis* for actual truths.
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# From Epistemic Sufficiency to A Priori Entailment

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- Knowing D enables knowledge of T without further empirical information
  - Stronger thesis: the inference from D to T is justified a priori
    - If empirical knowledge E is needed, just put this in the scrutability base!
    - Even a speaker who suspends all empirical beliefs can know that *if* D is the case, then T is the case.
    - See Chalmers and Jackson 2001 for detailed argument.
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# Scrutability of Truth IV

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- There is a relatively limited vocabulary  $V$  such that for any truth  $S$ , there is a  $V$ -truth  $D$  such that  $D$  implies  $S$ .
    - $D$  implies  $S$  when the material conditional ' $D \rightarrow S$ ' is a priori
    - N.B. This doesn't require that  $S$  be definable in terms of  $V$ -vocabulary
      - C&J 2001: 'knowledge' in Gettier case.
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# Epistemic Basis

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- Q: How small can an epistemic basis be?
- C&J: PQTI, a conjunction of
  - P = microphysical truths
  - Q = phenomenal truths
  - T = a “that’s-all” truth
  - I = indexical truths (speaker’s place/time, etc).
- Yields knowledge of macroscopic appearance, behavior, composition, etc, which suffices for knowledge of ordinary macroscopic truths.

# Hard Cases

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- Hard cases for PQTI scrutability
    - Vague truths (on epistemic theory)
    - Deep mathematical truths (CH?)
    - Moral/normative truths?
    - Some metaphysical truths?
  - Handle hard cases by
    - Indeterminacy of truth-value; or
    - Idealization of apriority; or
    - Expanding the scrutability base (if necessary)
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# Minimal Basis?

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- Further reduction of PQTI: P is arguably scrutable from observational/causal/categorical truths
    - e.g. from underlying Ramsey sentence.
  - Observational truths are arguably scrutable from phenomenal/causal/spatiotemporal truths.
  - Spatiotemporal truths are *maybe* scrutable from phenomenal/causal truths
  - Leaves phenomenal, causal, spatiotemporal (?), indexical – plus logical, categorical, etc.
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# Generalizing Scrutability

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- Scrutability thesis applies to actual truths
    - But presumably is an instance of something more general
    - E.g. *if* we knew that our environment is like the XYZ-world, could know that ‘water is XYZ’ is true
    - Can know non-empirically that *if* we’re in the XYZ-environment, then water is XYZ.
  - So we might generalize scrutability from actual truths to arbitrary epistemic possibilities.
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# Generalized Scrutability

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- Generalized scrutability:
    - There's some relatively limited vocabulary  $V$ , such that for all epistemically possible  $S$ , there's some epistemically possible  $V$ -sentence  $D$  such that  $D$  implies  $S$ .
      - $S$  is epistemically possible when  $S$  [better:  $\text{det}(S)$ ] is not ruled out a priori.
  - Here  $V$  is a *generalized epistemic basis*
    - A scrutability base for arbitrary epistemic possibilities, not just for actual truths
    - A basis for epistemic space?
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# Conceptual Scrutability

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- Conceptual formulation of scrutability
    - There's some limited set of concepts  $V$  such that
      - For all true thoughts  $T$ ,  $T$  is implied by some true  $V$ -thought
      - For all epistemically possible thoughts  $T$ ,  $T$  is implied by some  $V$ -thought
  - A thought = a world-directed propositional attitude token (e.g. an occurrent belief or hypothesis)
  - Concepts = constituents of thoughts
    - N.B. mental entities, not abstract entities.
    - Concepts have contents but aren't contents.
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# Primitive Concepts

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- Traditionally: primitive concepts = those in terms of which all other concepts can be defined.
    - E.g. a set of primitive concepts  $V$ , such that all concepts are a priori equivalent to some  $V$ -concept.
    - But: it seems that most concepts can't be defined in this way.
  - Alternative: primitive concepts = those in terms of which the application of all other concepts can be determined
    - E.g. application of *knowledge* can be determined by specification of situation using non-*knowledge* concepts, so *knowledge* isn't primitive
    - Application of *cause*, *consciousness*, *time*, *exists* (??) can't be determined in this way, so these may be primitive.
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# Conceptual Basis

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- A *conceptual basis* = a minimal set of concepts that serves as a basis for conceptual scrutability
  - Primitive concepts = members of a conceptual basis?
    - There may be multiple conceptual bases, some with cognate concepts, etc, some fairly complex, etc
    - May end with circles of (cognate) primitive concepts
      - E.g. *cause, law, natural necessity, counterfactual dependence?*
    - And might require a maximally simple conceptual basis.
  - Candidates for primitive concepts:
    - Phenomenal concepts, causal concepts, logical and mathematical (?) concepts, categorical concepts, spatiotemporal (?) concepts.
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# Epistemic Space

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- Can use a conceptual basis to define a space of epistemic possibilities
    - A V-thought  $T$  is *complete* iff for any thought  $T1$  such that  $T1$  implies  $T$ ,  $T$  implies  $T1$ .
    - Complete thoughts correspond to maximally specific epistemically possible hypotheses.
    - A *maximal epistemic possibility* (= *scenario*) is an equivalence class of complete V-thoughts (under mutual implication)
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# Epistemic Truth-Conditions

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- Given a complete V-thought, the truth-value of a given thought T will be implied: e.g.
    - V1 implies T
    - V2 implies  $\sim T$
  - T is associated with *epistemic truth-conditions*
    - T is true relative to scenario S1 [tied to V1]
    - T is false relative to scenario S2 [tied to V2]
  - Can call this the *epistemic content* of T.
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# Inferential Role

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- Epistemic content is a variety of *truth-conditional content* that is tied constitutively to *inferential role*
  - The epistemic content of T is a function of its (normative) inferential role relative to V-thoughts
    - E.g. normative dispositions to judge T or  $\sim T$ , given the judgment that V1.
  - Given the understanding of implication in terms of a priori entailment, this is a tie between truth-conditions of thought and a priori inferential role.
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# Epistemic Content of Concepts

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- Can extend this account to an account of the epistemic content (epistemic application-conditions) of *concepts*
  - For a (singular) concept C, there will be implications
    - V1 implies  $C=X1$ ,  $C=X2$ , ...,
    - Where X1, X2, are descriptive V-concepts
    - Equivalence classes of descriptive V-concepts (relative to V1) can be associated with *individuals* in the scenario S1.
    - So relative to S1, C picks out the corresponding individual
    - Relative to S2, C picks out an individual in S2, and so on.
  - Similarly (mutatis mutandis) for general concepts, kind concepts, property concepts, etc.
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# Concept Individuation

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- Concept *types* can be individuated in various ways
  - One way: two concepts are of the same type when they have the same epistemic content
    - This provides an individuation of concept types by a priori inferential role
  - More fine-grained than extensional individuation
    - *Hesperus* and *Phosphorus* are of different types
  - More coarse-grained than Fregean individuation
    - $68+57$  and  $115$  are of the same type
  - This coarse-graining is inevitable (?) given individuation in terms of apriority, as opposed to cognitive significance
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# Narrow Content

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- Epistemic content is arguably a form of narrow content, as long as
    - Conceptual bases correspond between twins
      - If  $V$  is a conceptual basis for one subject, a corresponding set of concepts  $V'$  is a conceptual basis in a duplicate.
    - Implication is narrow
      - When  $T1$  implies  $T2$  in one subject, and a duplicate subject has corresponding thoughts  $T1'$  and  $T2'$ , then  $T1'$  implies  $T2'$ .
  - These allow us to identify scenarios across subjects
  - The epistemic content of a thought  $T$  will be the same as the epistemic content of a corresponding thought  $T'$  in any duplicate.
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# Naturalizing Content

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- Could this account be used to “naturalize” epistemic content?
    - Issues1: the account doesn't yield a substantive account of the content of primitive concepts
    - Issue 2: it appeals to an unreduced notion of implication (or apriority).
  - But: it grounds the content of all concepts in the content of primitive concepts and a notion of implication (inferential role).
    - Will need a separate account of the content of primitive concepts (phenomenal intentionality?) and of inference
  - A two-stage grounding of content?
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# Meaning and Truth

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- More generally, the scrutability theses (if accepted) places a strong constraint on theorizing about meaning and truth
    - Links inferential role and reference/truth
      - In tension with many causal theories of content, with epistemic theory of vagueness, etc?
      - Coheres with a broadly Fregean view
    - Tends to support anti-realism about inscrutable domains
      - E.g. in metaphysics: the deep ontology of objects?
    - Captures the plausible core of stronger and implausible anti-realist views?
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