

Central Ideas

- Armchair reflection—and "off-the-shelf" cognitive processes.
 - No special faculties—no special class of intuitions
- Conceptually-grounded Necessary Truths
 - Rooted in accessible elements of conceptual semantics

(Henderson and Horgan, *The Epistemological Spectrum*, OUP, 2011)

The Epistemological Spectrum

At the Interface of Cognitive Science and Conceptual Analysis

David Henderson and Terence Horgan

Central Ideas

- ARMCHAIR REFLECTION—and "off-the-shelf" cognitive processes.
 - No special faculties—no special class of intuitions
 - Central role—common conceptual competence
 - Applied ("off-line") to concrete scenarios
 - Abductive inference
 - In which one accounts for the judgments made by way of an understanding of concepts, and one's conceptual competence.

Cf., Williamson

- H&H: Armchair reflection—using "off-the-shelf" cognitive processes.
 - No special faculties—no special class of intuitions
 - Central role of common conceptual competence—deployed "off-line" re: imagined scenarios.
 - Abductive inference
- W: Armchair reflection—using "off-the-shelf" cognitive processes.
 - No special faculties—no special class of intuitions
 - No Central role within a wide range of cognitive competences—deployed "off-line" re: imagined scenarios.
 - To arrive at a diverse set of counterfactual conditionals
 - Ultimately wanted: metaphysically necessities.

Cf., Williamson

- H&H: Armchair reflection—using "off-the-shelf" cognitive processes.
 - No special faculties—no special class of intuitions
 - Central role of common conceptual competence deployed "off-line" re: imagined scenarios.
 - ABDUCTIVE INFERENCE
- W: Armchair reflection—using "off-the-shelf" cognitive processes.
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 - Central role of a range of cognitive competences deployed "off-line" re: imagined scenarios.
 - To arrive at a diverse set of counterfactual conditionals

Central Ideas

- Armchair reflection—and "off-the-shelf" cognitive processes.
 - No special faculties—no special class of intuitions
 - Central role—common conceptual competence
 - Abductive inference
- Conceptually-grounded Necessary Truths
 - Rooted in accessible elements of semantics—reflected in common judgments (above).
 - Everyone needs this much—illustrated in some uncontroversial general applications:
 - E.g., reference fixing and rigidity.

Cf., Williamson

- H&H: Conceptually-grounded Necessary Truths
 - Rooted in accessible elements of semantics—reflected in common judgments (above).
 - Committed to something on the order of the epistemic notion of Analyticity
- W: Metaphysical Necessary Truths—none of which can be thought of as insured by what one has access to simply by conceptual competence.
 - Criticism of UA, UT, UJ links.

What epistemic Analyticity Requires?

- (d)Conceptually-grounded Necessary Truths
 - Turn on elements of conceptual semantics that commonly can be leveraged in reflection to provide justification for believing these claims.
 - This does not commit one to universally quantified UA, UK, or UJ links of the sort W criticizes.
 - The reason: The abductive character of the relevant reflection.

CGNTs and dCGNTs

- All truths are CGNTs—in some measure—as they depend on the semantic content plus the world.
- Some claims depend upon elements of conceptual semantics
 - that are not world-loaded
 - that seems particularly armchair accessible
- Familiar, uncontroversial, illustrative cases (NKS concepts):
 - How reference of the pivotal concept would be fixed, were the actual world some way ...
 - How reference in modal contexts depends on reference in the actual world.
 - Mode of composition.

dCGNTs

- 1. How reference of the pivotal concept would be fixed, were the actual world some way ...
 - Given that the stuff that we had interacted with in the formation of our concept of water had turned out to be of some distinctive homogeneous sort—as intended—then our concept of water would have referred just to stuff of that underlying sort.
 - \square { [If the stuff that we interacted with had been H₂O...] $\square \rightarrow water$ would refer to H₂O}
 - \square { [If the stuff that we interacted with had been XYZ...] $\square \rightarrow water$ would refer to XYZ}
- These depend only on 1.

dCGNTs, CGNT

- 1. How reference of the pivotal concept would be fixed, were the actual world some way ...
 - \square { [If the stuff that we interacted with had been H₂O...] $\square \rightarrow water$ would refer to H₂O}
 - \square { [If the stuff that we interacted with had been XYZ...] $\square \rightarrow water$ would refer to XYZ}
- 2. How reference in modal contexts depends on reference in the actual world.
 - If water is H_2O , then \square [water is H_2O].
- 3. Depending on 1 and 2, plus ...actual interactions:
 - \square [water is H₂O]

Three Observations

- A prominent way of drawing upon one's conceptual competence involves the generation of judgments about relatively specific and concrete scenarios. It is reasonable to suppose that human conceptual competence is particularly suited to the generation of responses to such concrete specific scenarios—and that it is at its most sure-footed here.
- 2. Conceptual competence is much less steady and reliable when called upon to directly generate conceptually grounded *general* truths.
 - Note: the track record of philosophers, particularly with respect to those concepts that proved to be of philosophical moment.
- 3. By drawing upon what conceptual competence *does* provide, one can manage to justifiably believe certain conceptually grounded generalities that are not themselves the direct deliverances of that competence.

Suggestion:

- at least as it has application to philosophical cases, an adequate model of conceptualcompetence based a priori reflection will need to recognize at least two stages:
- one in which reflection on specific concrete scenarios generates correspondingly particular judgments (the direct deliverances of conceptual competence, mentioned in the first observation),
- and another in which one reflectively draws upon these particular judgments to inferentially support a judgment whose content is abstract and general.

Taking soundings:

S1: Parallel interactions/intentions, with a homogeneous stuff, H₂O in the vast majority of cases.

S2: S1 + discovery of surface-similar XYZ in new environment.

S3: Parallel interactions/intentions, with a homogeneous stuff, preponderantly XYZ.

Indicate/Suggest

- The concept rooted in S1 is rather like our concept of water—plausibly our conceptual competence with water and similar terms informs one's responses.
- The concepts here apply in parallel fashion in S2.
- The S1/S2 concept plausibly is the concept of water.
- The concept rooted in S3 is rather like our concept of water in one respect, rather different in another.
 - Like: in how reference would be fixed in the focused scenario
 - Like: in how its reference in other possible worlds is settled.
 - Different: in referent.
- All this seems to involve some sense for how "such" concepts work

Early stage-2 suggestions

- One reasonable response: formulating a subjunctive conditional from commonalities in what is supposed in the scenarios (S1, S2, S3, ...) and the commonalities in verdicts prompted in the armchair by entertaining those scenarios:
- dCGNT1: Given that the stuff that we had interacted with in the formation of our concept of water had turned out to be—as intended—of some distinctive homogeneous sort (presumed to be a matter of its elemental or compositional structure), then our concept of water would have referred just to stuff of that underlying sort.
- Alternatively: ... then the concept that we express with our term 'water' would refer to whatever had just that underlying sort.

Mixed Bag—some not dCGNTs

- Reflect on a scenario in which folk discover water on some planet. What have they found?
- One judges that what they have found is H₂O.
- One then formulates the counterfactual conditional—the metaphysical necessity:
 - $\square \forall x (Water x \square \rightarrow Composed of H_2O x)$
- Few would suppose that this is either a dCGNT or knowable a priori.

Mixed Bag—some not even MP□

S4: A given agent is 80 years old and has troubling emphysema—and this agent attempted to run a mile yesterday.

- Thinking from the armchair about this case, as it were just letting one's cognitive machinery loose to see what pops out, suppose that one entertains the question: Did that individual run a sub-four-minute mile?
- One is likely strongly inclined to the verdict that he did not. This allows one to generate a counterfactual conditional:
 - $\forall x([S4]x \square \rightarrow {}^{\sim}[Ran a four minute mile yesterday]x)$
- This is arguably neither a dCGNT nor a metaphysically necessary truth—it is a contingent truth.

Lesson/Project

- If one is to identify metaphysically necessary truths from the armchair, one must have a method that can sort verdicts and conditionals into the various categories. One must have the epistemic capacity to sort the mixed-bag that comprises the results of armchair reflection.
- Extension: in sorting out metaphysical modalities, it will be important to sort out the sort of dCGNTs discussed above.

Instructive Parallel

- The linguistic inquiry concerning natural language syntax.
 - When the linguist proposes certain abstract general syntactic principles, claiming that they are the rules of grammar for a given language, these proposals are not themselves the direct deliverances of the linguist's cognitive mechanisms of grammatical competence.
- 1. Grammatical competence generates grammaticality judgments about specific sentence-like word-strings
- 2. Then the linguist's own grammaticality judgments, with their default status of presumptive correctness, are data vis-à-vis these proposed rules.
- The evidential connection between the data and the theoretical hypotheses—here, as elsewhere in science—is inference to the best explanation.

Analogous Philosophical Reflection

- The types of data that can figure in philosophical conceptual-analytic reflection include the following:
- 1. Intuitive judgments about what it is correct to say concerning various concrete scenarios, actual or hypothetical.
- 2. Facts about conflicting judgments or judgment-tendencies, concerning the correct use of certain concepts in various actual or hypothetical scenarios.
- 3. Facts about standardly employed warrant-criteria for the use of various concepts.
- 4. Facts about the key purposes served by various terms and concepts.
- General background knowledge, including untendentious scientific knowledge.
- Data of all these kinds can go into the hopper of wide reflective equilibrium whereby conceptual-analytic claims are defended in philosophy.

what is to be sorted out is diverse or multi-faceted

- Which claims belong to which of various epistemic and semantic statuses:
 - Important and/or uncontroversial contingent truths
 - metaphysically necessary truths
 - dCGNTs.
 - That water is H2O, is not merely an uncontroversial empirical fact, it is metaphysically necessary—and this seems itself to best understood in terms of dCGNTs.
- The extent and character of one's conceptual competence:
 - Likely competent performances
 - Likely performance errors.
- The semantics/workings of one's concepts:
 - How the reference of these concepts (for some classes of concepts) depends on interactions in the actual world.
 - That the referents of these concepts in the actual world determine the referents of them across possible worlds.
- In a phrase, one sorts out in parallel, the semantics, epistemology, and metaphysics of modality in the course of one's abductive reflection.

Epistemic Analyticity

- Anyone who understands the claim—anyone who grasps the concepts and their mode of combination—is well epistemically situated with respect to that claim: they have resources for being justified in believing it.
- This idea requires more care than it is commonly given.
- Caution: having the resources for justified belief in not the same as being objectively justified in believing.

e.g., Williamson

- (UAt) Nec, whoever grasps the thought every vixen is a female fox assents to it.
- (UKt) Nec, whoever grasps the thought every vixen is a female fox knows every vixen is a female fox.
- (UJt) Nec, whoever grasps the thought every vixen is a female fox is justified in assenting to it.
- It is not hard to find philosophers who apparently understand the claim that every vixen is a female fox and understand the concepts at issue and yet are not inclined to assent to it "from the armchair."

Williamson, extended

- RE: the epistemic analyticity logical truths
- Specifically RE: (UA, UK, and UJ) links involving modus ponens and excluded middle, even non-contradiction.
- In each case, one can point to apparently competent logicians and philosophers who understand the concepts involved, and yet are, on extended careful reflection, inclined not to flatly assent.
- In their reflection, they have hit upon considerations such that they would not be justified in believing some general formulation of the principle (modus ponens or excluded middle).

Williamson's point is not to be denied: there are no necessary, universally quantified truths connecting conceptual competence and understanding with justified belief in generalities such as those at issue here.

We are not chastened

- Indeed, our understanding of low-grade a priori reflection makes it clear why one should expect no such necessary universal links.
- We insist that one can vindicate the pivotal idea: "The idea is rather to exploit whatever epistemic assets we have simply in virtue of our linguistic and conceptual competence."
- We have indicated above how we think that this can be done, and...
 - The abductive process opens up the possibility of understanding that compatible with failure to be justified.

Outliers and their Stage-1 Data

- Their judgment tendencies to respond to imagined scenarios are parallel to ours. Their competence largely delivers the standard jumble of verdicts.
 - Those who deny the law of non-contradiction, or doubt it, would be loath to violate it in most instances.
 - Those who envision truth-value gaps respect excluded middle in everyday contexts, and in connection with common armchair scenarios.
 - Those who doubt that there can be everyday (vague)
 objects, yet judge that there are cacti ... in their
 everyday environment, and step with caution.

Outliers and Stage-2

- Suppose that someone independently believes that, when the antecedent of 'Every P is a Q' is empty, there is a truth-value gap.
- Suppose that they also reasonably insist that in armchair reflection, one should not use empirical information about whether there are foxes (cf. unicorns).
- One would then not be armchair justified in believing that that every vixen is a female fox one has defeated justification.

Outliers and Stage 2

- Suppose that someone independently believes that there cannot be vague objects, and thus no biological organisms.
- In one's everyday life, one tracks speeding cars, bears, and foxes, but, in one's reflection, one thinks that there are no such things, really.
- One then concludes that one's commonsense verdicts in stage 1 must have been ill-considered results of one's everyday heuristics.
- One would then not be armchair justified in believing that that every vixen is a female fox one has defeated justification.

Central Point

• It is at the second stage that ideas about truth-value gaps, or vague objects, or reflection about conflicting judgment tendencies, or special general troubling arguments, can have their day. When abductively seeking to accommodate such complexities and subtleties in an articulate philosophical account, one might conclude that even some otherwise compelling (putative) logical truth breaks down—and is strictly false. Perhaps one is wrong. If one is not, then others are. But, there is no reason to think that either of these folk fail to understand the claim or grasp the concepts featured there. There is no reason to think that getting the wrong result here is "constitutive of failures to understand" the claims or the concepts featured. The reflective agents are trying to "exploit whatever epistemic assets we have simply in virtue of our linguistic and conceptual competence"—and can be proceeding along fitting lines.

Central Ideas

- Armchair reflection—and "off-the-shelf" cognitive processes.
 - No special faculties—no special class of intuitions
 - Conceptual competence... abductive inference
- direct-Conceptually-grounded Necessary Truths
 - Rooted in accessible elements of conceptual semantics
 - epistemic Analyticity without UJ links

