

KBNS A Priori Seminar 11/12/18

Attending: Giacomo Melis, Giovanni Merlo, Paul Conlan, Xintong Wei, Indrek Lobus, Jonathan Jenkins Ichikawa, Fiona Doherty, Crispin Wright, Sonia Roca Royes, Philip Ebert.

Brainstorming Session.

Quasi-Perceptualist Accounts

- **Indrek** suggested that even if we have a unified story about intellectual seemings and perceptions, you need to tell some kind of positive story about why there is justification in both cases – the parallel with perception would not be enough, or a qualitative similarity, as the parallel might be so watered down as to not provide justification **Carrie** responded that presumably this is a strategy for someone who has a theory of perception in place, e.g. the phenomenal conservative.
- **Crispin** wondered what the authenticity conditions in the conservative view would be. **Giacomo** suggested that he had nothing specific in mind, but rather the aim was to make a structural point about justificatory conservatism in this domain, and question the suggestion that the quasi-perceptualist proposal is neutral with respect to a number of accounts of epistemic justification.

The Reliability Challenge

- **Sonia** suggested looking at the integration challenge literature by Peacocke. **Carrie** suggested that the challenge is more broad than even the reliability challenge.
- **Crispin** wondered whether the view that one receives some justification from having a presentation, stops the reliability challenge from arising. **Jonathan** suggested that there is still a reliability challenge: in addition to thinking we generally have justified beliefs about these subject matters, we also have reliable beliefs about these subject matters, and it becomes a question as to whether we are reliable.
- **Sonia** suggested that there are multiple ways to understand the reliability challenge, and it might be best to treat the challenge as multiple challenges.
- **Crispin** wondered why we need to explain reliability. **Jonathan** suggested that one challenge is that an explanation from e.g. cosmic coincidences is very unsatisfying. **Jonathan** further suggested that if one wants to give an account of an objective reality, then we owe an explanation of how we are reliably in touch with it.
- **Crispin** wondered why a metaphysical story is needed. **Giacomo** suggested that when we claim knowledge of p , we want a story about what p is to be justified in claiming knowledge.

Carrie suggested that perhaps this is not the case, considering e.g. a small child who is told that x is wrong. The child has no story to tell about what wrongness is, but seems justified in saying x is wrong. **Paul** suggested that perhaps the justification transfers from the parent. **Giacomo** commented that we want a story about how an epistemic agent can be in cognitive contact with the entities in question, which might require a metaphysical story.

Visual Thinking

- **Giacomo** wondered whether investigation of proof is independent of investigation of discovery. **Crispin** pointed out that if one came up with a proof as the first understanding of a proposition, then that proof would be a discovery. **Giacomo** wondered whether when we compare e.g. a subject investigating the formal proof of $2+2=4$ and a child who comes to realise it for the first time, are they both justified in the same way? **Carrie** suggested that Giaquinto wants to separate discovery, justification and proof. **Giacomo** responded that Giaquinto takes proof and justification to be related.
- **Crispin** suggested that the proper way to formulate the veridicality point is that the believer is agnostic on the source of the experience. **Giovanni** suggested that this would not be enough for the experience to not provide reasons or grounds, which is what Giaquinto wants.
- **Crispin** suggested that the notion of analyticity that Giaquinto discusses may be Frege's notion rather than the Quinean notion of true in virtue of meaning.
- **Sonia** wondered whether it helps to consider that even if all the information in a diagram is there at once, we still process it sequentially. **Jonathan** suggested that there is no good notion of 'information' that can play the role Giaquinto wants, given that proof is recognizing more of the information that is already there. Information is not added in proof. **Giacomo** suggested that Giaquinto conflates 'proof' and 'following a proof'. **Indrek** suggested that the learning that happens in following a proof is one type of a priori knowledge that is acquired. As you see the steps working together, it seems some information has been added, namely the chain of reasoning from premises to conclusion. **Giovanni** wondered whether we need another concept of 'heuristic role' – it might be that e.g. my proof involves taking some memories of my grandmother, and taking that out, the proof collapses. If there is information and it plays an important role in the proof, it need not play an important *epistemic* role, it might play some other important role (an enabling role perhaps).

Handout

KBNS A PRIORI STREAM
BRAINSTORMING SESSION
11/12/2018

QUASI-PERCEPTUALIST ACCOUNTS

Chudnoff and Bengson defend views according to which: (i) at a certain level of abstraction, intuition and perceptual experience, are the same kind of mental state or event; (ii) states or events of that kind are, by their very nature, poised to play a distinctive epistemic role. While the view is attractive because it promises to offer a unified account of basic perceptual, proprioceptive, and a priori warrants, it is problematic in some respects. For example:

- It's not entirely clear how to identify intuitions. In particular, it's not clear how to distinguish them from dispositions to believe. The examples used to motivate the existence of intuitions rely heavily on the appeal to so-called "presentational" phenomenology, but one might argue that the phenomenology in question is just the phenomenology of dispositions to believe. If so, it's not clear that there are any intellectual experiences that are relevantly similar to perceptual experiences and which might be expected to play an analogous justificatory role.
- While the quasi-perceptualist approach is sometimes presented (e.g. by Bengson) as neutral with respect to a number of theories of epistemic justification, one might worry that the view is rather tightly linked to liberalism/dogmatism. The quasi perceptualist proposal appears to have it that the presentational state *alone* gives one prima facie justification (Chudnoff ch. 3, Bengson 2015: 734 and *passim*). It is thus not clear how the view is compatible with, say, reliabilism—according to which, presumably, the justificatory role would be played by the presentational state *and* the reliability associated with it—or conservatism—according to which, presumably, the justificatory role would be played by the presentational state *and* the antecedent warrant sustaining the claim that the relevant authenticity condition has been met.
- To the extent that they want to endorse realism about the relevant domains of inquiry, advocates of quasi-perceptualist accounts of the a priori have to face the so-called "Field-Benacerraf problem" or "reliability challenge". Typically, they have addressed the challenge by outlining some metaphysical view about the link between minds and abstract entities, as in Chudnoff (2013: ch. 7, Bengson's "Grasping the third realm", and Bonjour (1998: chapter 6). We have engaged with some of these proposal in previous terms, and we were not too impressed. But the Field-Benacerraf problem seems to be on the table for all accounts of a priori warrants who endorse a realist metaphysics of abstract entities. This raises a general question...

THE RELIABILITY CHALLENGE

- To what extent can an epistemology of a given domain remain neutral with respect to the nature of the entities in that domain?

Epistemology is concerned with how agents may learn that some proposition is true. If we allow that the truth of a proposition depends on some truth-makers, we may think that epistemology is concerned with how agents may learn that there (likely) is a truth-maker for a given proposition. But the obtaining of the truth-making relation between truth-bearers (according to some theories, they're not propositions) and something else is a metaphysical issue which, presumably, requires a theory of what entities truth-bearers and truth-makers are. If so, arguably, in general epistemology needs to rely on a modicum of metaphysics.

Another way of putting the question (in terms of the reliability challenge). Since accounting for reliability requires an account of how we can have access to the relevant facts (broadly speaking, a belief-forming method is reliable when it generally relates one's beliefs with the relevant facts), can we really have an account of reliability of a given cognitive mechanism while remaining neutral on the sort of facts that that cognitive mechanism is supposed to give us access to?

It seems to me that, at the very least, there is something suspicious in *claiming* knowledge or justification about any given domain without having a clue on what sort of entities and facts populate that domain. Things might be different with respect to mere *having* knowledge or justification in a domain.

EPISTEMOLOGY OF VISUAL THINKING

- *Proof vs discovery.* Are we clear on the distinction between discovery and proof (using Giaquinto's terminology), and its impact on a comprehensive epistemology of the a priori?

Roughly, a (formal) proof of P is a deductive argument from axioms, and the agent's discovery of P amounts to the agent's coming to believe that P by one's own lights (possibly visual) in an epistemically appropriate way. I take it that, to the extent that we are concerned with epistemic warrants that apply to ordinary agents, we are interested in what Giaquinto calls 'discovery'. On the other hand, proofs would seem to constitute the ultimate epistemic grounds (if there are such things!) of mathematical truths, so we are also interested in the question of what justifies belief in the axioms and inference rules on which mathematical proofs rely.

Questions: how is the goal to account for the justification of the axioms and inference rules of a mathematical system related to the goal to account for mathematical discovery? Are they two distinct and unrelated projects? Is the investigation into mathematical discovery expected to offer insight that may be used in new accounts of the justification of axiomatic systems? Or is the justification of axiomatic systems supposed to help in accounting for mathematical discovery?

- *On the role of visualization in discovery.* Giaquinto says: 'On my account a visual experience causes the belief, but does not play the role of reasons or grounds for the belief, as it is not necessary for the believer to take the experience to be veridical: it is enough that a perceived figure appears perfectly square.' (p. 44)

Question 1: Is putative non-veridicality enough to disqualify an experience (or some piece of information) from playing a justificatory role? The quote above appears to presuppose that the answer is 'yes', but this may be a contentious point. While many philosophers today are

attracted to the idea that the content of a piece of evidence, to be such, must be true, some have argued that we can acquire knowledge based on falsehoods. For example I can know that I'm not late for my 7 pm meeting by learning the falsehood that now it's 5:28 pm (suppose it's in fact 5:30). (See Fitelson, Warfield, Luzzi for discussion.)

Question 2: Suppose Giaquinto is right that the visual experience does not play the justificatory role. What does play the justificatory role in the cases of discovery he discusses then? At p. 35, he says:

In having geometrical concepts we have certain general belief forming dispositions that can be triggered by visual experiences; and if that happens in the right circumstances, the beliefs we acquire constitute knowledge.

So, it's the possession of concepts which, with the prompt of the visual experience, triggers the relevant dispositions to believe. That suggests that the justificatory role is played by the possession of concepts. But if the relevant dispositions to believe arise from empirical concept-acquisition, shouldn't the relevant warrant be considered, at bottom, empirical (a bit like in Carrie's view)?

While Giaquinto does not take himself to be discussing the epistemology of analytic propositions, the worry just raised connects with a general question about what plays the warranting role in one's judgment that an analytic proposition is true (the agent's reflection? the analyticity of the proposition itself? both?), and how what plays that role can be said to be independent of experience. Perhaps we should read parts of Carrie's book, if we want to engage with some of these questions.

- *On the notion of analyticity.* One might think that since the process of knowledge-acquisition described by Giaquinto, at bottom, is one of conceptual knowledge, the propositions known are analytic. Not so, says Giaquinto: that's because reaching the relevant beliefs requires a visual prompt and does not involve unpacking definitions, conceptual analysis, or logical deduction. (47)

General Question: how shall we characterize analyticity? One might worry that Giaquinto's line of thought is a bit too fast. Giaquinto is, in effect, treating analyticity primarily as an epistemic notion. But while it is a notion that, if in good standing, has epistemic significance (analytic propositions may be known a priori), it is arguably not primarily an epistemic notion. That is, it is not a notion that concerns directly the way in which we come to justifiably believe propositions; rather, it's a notion that concerns the logico-semantic status of propositions: analytic propositions are those that are true in virtue of the meaning of their constituents (regardless of how they might be known). If that is right, it's not clear that the content of the beliefs Giaquinto is discussing really is synthetic. It would be synthetic if the beliefs in question were about physical space (hardly a purely conceptual matter), but Giaquinto emphasises that they're just claims about how the space would be, *if* it were Euclidean.

- *Diagrammatic reasoning in proofs.* How exactly can we distinguish diagrammatic reasoning that plays merely a heuristic role from diagrammatic reasoning that is integral part of a proof?

In discussing the epistemology of proofs, Giaquinto seems to suggest that for something to play a heuristic role is for something to merely illustrate some step of a proof, in a situation where the relevant illustration may be detached from the proof itself without any loss of information. By contrast, a piece of reasoning that plays more than a heuristic role is a piece of reasoning that can't be eliminated without any loss of information (i.e. it constitutes a step in the proof).

Giaquinto proposes an example of a geometrical proof which includes a step made through diagrammatic reasoning (pp. 74-5). The relevant step is one that (as Giaquinto himself notes) may be replaced by some other kind of thinking (a deduction from the explicitly stated data?). Yet, the replaceability of the visual step does not make the role of the relevant diagrammatic reasoning merely heuristic: replaceability is not equivalent to superfluity—only the latter is supposed to be a sign that a given piece of reasoning plays only a heuristic role.

Fair enough. But the idea that a given piece of reasoning may be replaceable requires a criterion for identifying proofs (we are talking about replaceability *in the same proof*, of course). Now, since the epistemological concerns lie with the cognitive processes involved in following a proof, Giaquinto urges us to adopt a rather fine-grained notion of proof: two presentations of the same general idea that have two different structure and different sequences of steps count as two different proofs. Identity of proof requires the presentation of the same information in the same order (72). But then, how can we tell whether the proof that involves a visual step (discussed at pp. 74-5) is the same as the proof in which that visual step is replaced by some other kind of thinking?

Giaquinto would say that it's the same proof as long as the replaced step carries the same information in the same order as the original one. But how can we make sense of the idea of carrying the same information in the same order between two different modes of thinking? Presumably, a diagram carries a number of information all at once (as in a gestalt), while a deduction from a given set of data carries the same set of information overall in a sequential way.

PLANNING FOR NEXT TERM

Next term, we might still want to do some readings on the topics above (e.g. new Boghossian?, something from *Grounding Concepts?*), but here are some research goals (some of them left hanging from previous terms):

- (A) Get clear on the notion of epistemic grounds (and how appealing to them may help defuse the scepticism about the a priori inspired by Williamson and Hawthorne).
- (B) Assess the default-reasonableness/entitlement account of the epistemology of logical principles.
- (C) Campbell on anaphoric thinking
- (D) Investigate themes in common with SK seminars in a joint way.
- (E) Have research presentations

With respect to (A), I'm aware of no explicit discussions on the notion of epistemic grounds. However, we might address the issue by focusing on material on some related debates. For example, understanding what epistemic grounds might be seems related to the characterization of the epistemic basing relation (presumably epistemic grounds may serve as the epistemic basis), and to understanding the nature of inference (presumably, we might say that the premises of an inference constitute the epistemic grounds of its conclusion). Some possible readings:

- Exchange between Boghossian, Wright, and Broome in *Phil Stud* 2014 on the nature of inference, and Hlobil's 2014 reply to all of them (still *Phil Stud*).
- "What is reasoning" by Way and McHugh 2018.
- "Against the Taking condition" by McHugh and Way 2016 (along lines similar to Hlobil).

Some possible readings with respect to (B):

- Wright 2017 in Ebert – Rossberg on entitlements for Hume's principle;
- Wright 2014 in Dodd – Zardini on the nature of epistemic entitlements,
- Field 2000, "Apriority as an evaluative notion".

With respect to (C), the reading would be Campbell 1988. The idea developed there (that anaphoric thinking may preserve content) is supposed to help defending Burge's claim that there is preservative memory—that is, memory that delivers beliefs for use in inference without adding to the justificational demands on the inference. Showing that memory can work in this way would help in arguing that there are priori warrants based on inference (inferences rely on memory of the premises, and additional justificatory demands, if any, may be empirical). Of course, this goes back to Burge's (1993) discussion on memory, and it take on the thread of some readings we did last year, like Christensen and Kornblith (1997), and Lawlor (2002).