

# Review of: "Why naturalists must give up deduction, or return to Hume"

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Robinson's thesis is that naturalists reject analyticity and a priority, and yet affirm deduction. This is inconsistent, for deduction involves necessity, something intelligible or accessible only by virtue of analyticity or by a priori intuition. But naturalists reject analyticity and a priority. Thus, to be consistent, they must either reject the necessity which makes deduction possible as a form of truth-preserving reasoning, or else, against their naturalism, affirm a priority or analyticity.

Since I think that, on the whole, Robinson is probably right, my comments will focus more on the presentation of the main ideas in the paper rather than their substance.

First, I think Robinson could do a better job articulating or formulating the specific problem that certain naturalists face. My summary of the thesis above is an attempt to formulate clearly as I understand it based on her remarks. However, such remarks are distributed throughout the paper and they are less clear than they should be. There should be a clear and definitive statement of the problem or tension and its cause that remains consistently clear throughout the whole paper.

Second, and as other commenters have pointed out, the key terms of the paper need definition: 'naturalism,' 'a priority,' 'analyticity,' 'deduction,' etc. For my part, I think I have a good enough sense of "a priority," "analyticity," and "deduction," but "naturalism" is a very slippery, spongy notion. It needs to be pinned down before it can be criticized. Perhaps the term 'naturalism' should be foregone entirely: instead, those who reject analyticity and / or a priority and still use deduction could be the subjects of criticism in virtue of more easily identifiable or definable commitments which cause them to reject it (e.g. scientism, empiricism, etc.).

Third, the parts of the paper that discuss Hintikka and conceptual schemes are much less clear than the other parts. It is not apparent what role conceptual schemes are supposed to be playing for the naturalist in ameliorating the inconsistency that Robinson is identifying. The discussion of philosophy of science issues in this context complicates the discussion further and makes it even more difficult to understand its direct relevance—though I note that I am not disputing its relevance,

Fourth, I would not use Hume's sense of "deduction" as the exemplar case of deduction. As Jonathan Jacobs pointed out in his comment, Hume's understanding of reasoning involves many phenomenological and psychological elements. Hume

is concerned primarily with investigating the *associations* of ideas, not necessarily the truth-preserving relationships between them (if indeed there be any). I cannot but recommend David Owen's *Hume's Reason* for a discussion of Hume's conception of the nature of reasoning.

Fifth, I think Robinson needs to rethink how she characterizes (1) the relationship between deduction and contingency, as well as (2) the relationship between deduction and ampliativity.

(1) Throughout the paper, and in some of her responses to other commenters, she seems to think it is impossible for there to be a deductive argument whose premises and conclusions are all contingent propositions. Many commenters have produced counterexamples to this claim, since it is easy to formulate arguments which have a deductively valid *form* but whose *content* consists entirely of contingent propositions. The form is what provides the relevant necessity—the content of the premises do not matter with respect to this. Robinson says that contingent propositions are “never conclusively true or false,” which I suspect means that they are not necessary and that in virtue of this we cannot ever know their truth or falsity with certainty. Perhaps this is true in most cases (it is not in all cases, since “I exist” is an infallible item of knowledge involving a contingent proposition that anyone can have). Yet, when Robinson says that the inconclusivity of contingent premises “bear on the legitimacy of inferring the conclusion” (p. 13; cf. p. 14), she is mistaking soundness for validity. The necessity involved in validity is present independent of any final determination of the truth-value of the premises. This is why deduction can still express a necessary connection between totally contingent premises—the necessity is in the relation of the contents, not the contents themselves. Hence, a deductive argument involving totally contingent premises can be both valid and unsound, or valid with unknowable premises. In a response to Jonathan Jacobs, the author writes, “How can one get logical entailment / necessary inference, from premises which one does not know the truth value of?” and the simple answer is: because of a valid argument form. Such an argument will not be an absolutely conclusive demonstration, but it will be demonstrative or deductive *in form* so long as it is valid.

(2) Concerning ampliativity, Robinson says (p. 4) that naturalists need deduction to be ampliative. I think it needs to be made clearer *why* naturalists need this to be so. It seems to be Robinson's view that deduction, since it is construed in the Humean sense, cannot be ampliative or informative in any relevant sense. Perhaps I am naive, but I do not see why not. Let's take an ostensibly ampliative deductive argument which, in addition, has only contingent propositions as its content: disjunctive syllogism or process of elimination: Suppose I am a detective investigating a murder. My evidence suggests that there are only three suspects who could be responsible for the murder, A, B, or C. I have just now received evidence that two of the three suspects, A and B, could not have committed the crime. Thus, it must be the case that the only remaining suspect, C, committed the murder. Deduction, in fact, is playing a role in telling me who the killer is. It is the contents of the propositions *and* their relationship that furnishes this knowledge. This, I take it, is the whole point of truth-preservation. By engaging in a process of elimination, I gain information or extend my stock of knowledge. Maybe naturalists cannot help themselves to this, but I don't see why deduction cannot be ampliative, at least in some cases; perhaps the author can disabuse me of this.

On a more positive note, Robinson is right about Kripke's “a posteriori necessities.” What is necessary about them is not a posteriori, and what is a posteriori about them is not necessary. Because of observation, we associated new intensions,

and therefore new senses, with the names 'Hesperus' and 'Phosphorus' such that "Venus" is involved in both; this is a posteriori and contingent. And, since the intension of both 'Hesperus' and 'Phosphorus' involves "Venus as it appears...", it is simply analytic by the transitivity of identification that Hesperus is Phosphorus; but this is a priori and necessary. I do not think the author is confused on this point, as other commenters allege.

Before concluding, I want to (a) second some points that other commenters raised and (b) mention some quibbles and minor issues with the paper.

(a)

Son Pham is right about the general caliber of the work, and I think it would benefit from some of my comments about clarity above. I think the paper could also do with a lot more organization: more subsections with a clear logical progression through the subject.

Jacobs cites a great quote from Barry Stroud which fits nicely with the theme of the paper and should probably be featured in a revised draft.

For reasons I intimated earlier, more care should be exercised in ascribing certain philosophically substantive views about deduction to Hume, as Jacobs says.

(b)

Headers begin with "section 1" but continue "part 2, part 3," etc.

Inverted commas are not used when necessary (e.g., p. 13, which should have them despite what the author says in her response to Johnson).

All in all, the thesis of the paper is very fascinating, and I think the author's point probably ultimately succeeds, but I think the execution is lacking at this time.