Field on the Normative Role of Logic*

Gilbert Harman

Harman (1986) asserts that logic is neither a normative nor a psychological theory and, although immediate implication and inconsistency may play a role in reasoning, there is nothing special about *logic* in this connection. Field (2009) purports to reject these claims but actually accepts them and concludes that, because of the semantic paradoxes, logic is 'somehow connected to norms of thought'! A real nonsequitur!

Field (2009) purports to reject my arguments (Harman 1986) that there is not (as he puts it) 'a close connection between logic and rationality' (p. 252). Here I briefly reply.

I begin by summarizing the first two chapters of (Harman 1986). The first chapter stresses the importance of not confusing inference with implication and of not confusing reasoning with the sort of argument studied in deductive logic. Inference and reasoning are psychological events or processes that can be done more or less well. The sort of implication and argument studied in deductive logic have to do with relations among propositions and with structures of propositions distinguished into premises, intermediate steps, and conclusion. Deductive logic is not a particular psychological subject and is not a particularly normative subject, although one might attempt to develop a logic of belief or a deontic logic, for example.

The second chapter begins by considering the suggestion that logic might be specially relevant to reasoning in two ways, via implication and inconsistency. It seems that any relevant principle would have to be defeasible, holding only other things being equal. Furthermore, it would apply only to someone who *recognized* the implication or inconsistency. Such recognition might be manifested simply in the way a person reacted to an implication or inconsistency. The chapter suggests that certain implications and inconsistencies might be psychologically 'immediate' for a given person

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and that it is these immediate implications and inconsistencies that would be particularly relevant to reasoning. Since there seems to be nothing special about *logical* implications and inconsistencies in this respect, there seems to be no significant way in which *logic* might be *specially* relevant to reasoning.

Far from disagreeing with any of this, Field (2009) eventually proposes basically the same thing. Where I appeal to recognized implication and psychologically immediate implication, he initially appeals to *obvious entailment* and degrees of belief. After some discussion he arrives at the following tentative principle, where $P(X)$ refers to one's degree of belief in X.

(D*) If it's obvious that $A_1 \ldots A_n$ together entail B, then one ought to impose the constraint that $P(B)$ is to be at least $P(A_1)+\ldots+P(A_n)-(n-1)$, in any circumstance where $A_1, \ldots, A_n$ and B are in question. (p. 239)

where the *ought* in (D*) [and later variants] is intended as a prima facie *ought* rather than an exceptionless *must*.

Field worries about the appeal to what is 'obvious' and suggests instead

(I) The way to characterize what it is for a person to *employ* a logic is in terms of *norms the person follows*, norms that govern the person's degrees of belief by directing that those degrees of belief accord with the rules licensed by that logic. (p. 262)

This leads him to rephrase his (D*) as

(E) Employing a logic L involves it being one's practice that when simple inferences $A_1, \ldots, A_n \vdash B$ licensed by the logic are brought to one's attention, one will normally impose the constraint that $P(B)$ is to be at least $P(A_1) + \ldots + P(A_n) - (n-1)$.

Notice that, as part of a response to Harman (1986) (I) and (E) beg the question by *assuming* that an ordinary person might 'employ a logic'—the very point at issue. Furthermore, the word 'inferences' here should be 'implications.' Field's 'simple inferences' would seem then to be what I called 'psychologically immediate implications' and I see no adequate response to my argument that there is nothing special about *logical* implication.

Another worry about (D*), (I), and (E) is their appeal to *degrees of belief*. Chapter 3 of (Harman 1986) argues that people do not and cannot operate with the sorts of degrees of belief Field needs. But since Field does not discuss that argument, I won't say more here.

The second part of Field's essay takes up a view he wrongly attributes to me, namely, that logic is 'the science of what forms of inference necessarily preserve truth' (p. 252). For one thing, I would not use the word 'inference' to mean implication. And I do not accept that thesis, given the way Field interprets it. In any event, (Harman 1986) does not discuss this topic.

Field's objection to the thesis properly stated, namely, that logic is the science of what forms of implication necessarily preserve truth, is that this thesis is ruled out by the semantic paradoxes. If one responds to these paradoxes by restricting the application of the truth predicate, then the thesis will not apply to all logical inferences or implications. If one allows for a general truth predicate by giving the predicate unusual laws or by adopting nonclassical theories that keep the usual laws of truth while weakening the logic, 'in every such theory of any interest, it is either inconsistent to suppose that all the axioms are true or inconsistent to suppose that all the rules preserve truth' (p. 265).

And, according to Field, 'if logic is not the science of what necessarily preserve truth, it is hard to see what the subject of logic could possibly be, if it isn't somehow connected to norms of thought' (p. 263). In other words, since there is no completely satisfactory solution to the semantic paradoxes, we should think that logic is 'connected to norms of thought.'

Now there is a real nonsequitur!

Department of Philosophy
Princeton University
Princeton, NJ 08544-1006
USA

References

Field, H. (2009): 'The Normative Role of Logic,' *Proceedings of the Aristotelian Society Supplementary Volume 83*, pp. 251-268.

Harman, G. (1986): *Change in View: Principles of Reasoning.* Cambridge, MA.: MIT Press. A pdf version is available from
`http://www.princeton.edu/~harman`