Book Review

Review of David C. Stove's Book: Anything Goes: Origins of the Cult of Scientific Irrationalism

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ABSTRACT

What are the implications of Stove's remarkable book? I will summarize my observations. Induction is not the poison that Popper made it out to be. Moreover, science need not be restricted to negative declarations as Popper demanded, but may also seek evidence that affirms. Popper's falsification principle continues to be important to promote error recognition, but it is very partial. Popper's own failure in deductive reasoning shows his limitation. Induction and deduction as a two-piece logic system is still too restrictive for proper error recognition, in my view. You can find this book at Amazon http://www.amazon.com/Anything-Goes-Origins-Scientific Irrationalism/dp/1876492015/ref=cm_cr-mr-title .

Key Words: scientific irrationalism, cult, scientific method, logic of science.

Stove is critical of philosophers of the scientific method, the Authors [Popper, Kuhn, Feyerabend, and Lakatos]. Stove accuses the Authors of corrupting truth, confusing the logic of science with the history of science, and permitting the expression of scientific irrationality.

Stove (chapter 1) blames the Authors of "neutralizing success words," for example, by putting the word "proof" in quotations to bring ambiguity to a declaration of proof. Equivocation provides an additional avenue to neutralize success words, removing the commutative success of science as Kuhn seemed to do and seemed not to do. And Stove is right that any composer of words ought to use clear language, minimizing confusion. Nevertheless, if the Authors made mistakes they are likely to be unconscious mistakes; bringing the Authors back to life and they might reconstruct their opinions in better words. Moreover, it is possible to neutralize success words because a subject demands exploration at the level of language; e.g., where we find that the neutralities are talked about either in the negative sense as Stove demonstrates, or in the positive sense to describe a character of communication that is auxiliary to most language. There can be no a-priori restriction placed on language to guard against the impurities that Stove fears.

Stove (chapter 2) blames the Authors for "sabotaging logical expressions," for example, by "epistemic embedding" where logic becomes a conjecture dependent on the history of science. Logical purity requires consistency, and Stove (page 65) did catch Popper in an inconsistency, for Popper maintained that: "(1) that some such propositions are scientific; (2) that none of them are falsifiable; while [Popper] also maintained that only falsifiable propositions are scientific." This was revealed to be a round-about way for Popper to introduce his falsification principle, which on the surface is a very reasonable principle. Nevertheless, Stove goes too far. Logical consistency does not tell us where truth comes from, nor does it lead to a truth that is discovered beyond the initial premisses. Logical consistency only provides small slivers of truth, and the Authors were interested in a bigger picture of reality. They were giving their accounts of science, which is necessarily contentious because science (as Stove's ideal) cannot be separated from scientists. If the Authors made errors, Stove might have asked them to return to consistency and to provide a better articulation. But like

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Stove, they are gone. And Stove misses the point that there is truth beyond logical consistency; for example, coming from Bayesian decision theory where subjectivity impacts both utility and prior probabilities, and this subjectivity necessarily involves volition. Stove (page 81) is silly when he writes: "That our Authors embed a logical expression in a volitional context, we have yet another instance in their writings of a logical expression being deprived of its implication about the logical relation between propositions."

Stove sores a major victory in chapter 3, showing the weakness in Popper's thinking. Stove (page 95) writes: "Popper endorses the notorious skeptical thesis of Hume concerning the inductive arguments, or arguments from the observed to the unobserved. This is the thesis that no proposition about the observed is a reason to believe any contingent proposition about the unobserved; or in other words, that the premise of an inductive argument is never a reason to believe its conclusion." Stove (page 96) tells us that Popper's irrationality is amplified when it is combined with the thesis of empiricism, "for then it follows at once (since inductive skepticism says there can be no reason from experience) that there can be no reason at all, to believe any contingent propositions about the unobserved; which class of propositions includes, of course, all scientific theories." Stove (page 103) writes, "The irrationalism of Popper about scientific theories has turned out to be no other than the skepticism of Hume concerning contingent propositions about the unobserved." As for Kuhn, Feyerabend, and Lakatos, well Stove contends that they inherited this weakness in thinking from Popper, leaving us with Hume as the source of this monumental blunder. Logic and language being what they are (noted in chapters 1 and 2) and we can see now how unpromising it is to return in a time machine and ask the Authors for revision; this conflicts goes deep.

In chapter 4, Stove digs into Hume. And we see the biggest mistake of them all. Even today, logicians may claim that induction is invalid, and they might reference Hume. However, as Stove shows, Hume's evaluation of induction is based on deductive arguments, and this is a nonsense approach. Induction cannot be reduced by deduction because induction implies something auxiliary. And Stove (page 128) corrects Hume's logic, revealing what deduction does show: "Any inductive argument [minus a Resemblance Thesis] is invalid, and the validator [or the Resemblance Thesis] of it is neither a necessary truth nor a proposition about the observed." In other words, Stove deduced that induction cannot be validated by deduction alone, or from empiricism. Nevertheless, inductive skepticism can only be a preference or a revulsion, its is an abduction and what gives its support to induction can only be something other beyond the reasons we concern ourselves with; we must discover something sufficiently sense-certain to have faith, we must feel though Stove does not say this. Given these implications, Stove's chapter 4 deserves a very close read.

Stove figured that inductive skepticism emerged from an overly aggressive deductivism, and he identified this weakness in Hume, a weakness then passed to Popper and the rest of the Authors. And in chapter 5, Stove returns to his literary assault on irrationality and the Authors. The reading is again as contentions as it was in chapters 1 and 2. However, it is clear that Stove is not himself the deductivist I thought him to be. It is only that Stove is hypersensitive to extreme deductivism, and Stove appreciates induction and reveals himself to be a Bayesian in temperament. Nevertheless, his point has already been made. And regarding Popper, I can't figure how any scientific theory can even be tested if not for some expectation that embraces the validity of induction. The requirement of falsification is itself conflicted with inductive skepticism.

What are the implications of Stove's remarkable book? I will summarize my observations. Induction is not the poison that Popper made it out to be. Moreover, science need not be restricted to negative declarations as Popper demanded, but may also seek evidence that affirms. Popper's falsification principle continues to be important to promote error recognition, but it is very partial. Popper's own failure in deductive reasoning shows his limitation. Induction and deduction as a two-piece logic

system is still too restrictive for proper error recognition, in my view. Charles S. Peirce developed a three-piece system involving abduction (hypothesis formation), deduction and induction, and error recognition is necessary on all three levels, in my view. Abductive error recognition relates to emotionality, something you can't miss if you read Stove. Without proper error recognition on all three levels, Popper's demarcation between science and pseudoscience fails while generating the irrationality that Stove hates (chapters 1, 2, and 5 come to mind). Stove missed the tension between Kuhn and Popper (noted in Fuller's "Kuhn vs. Popper"), lumping the two together while confusing some irrationality with what Ken Wilber calls the transrational. This tension can find a better accounting with Peirce's three-piece system.

References

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