

Book Review

Review of Steve Fuller's Book: Kuhn vs. Popper: The Struggle for the Soul of Science (Revolutions in Science)

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ABSTRACT

Fuller's book is interesting (worth four stars) because of the contrast made between Kuhn and Popper found in the first half of the book. The confusion comes later, but Fuller (page viii) shows little affection for Kuhn from the get-go, and writes: "The more I have tried to make sense of Kuhn's words and deeds, the more I have come to regard him as an intellectual coward who benefitted from his elite institutional status in what remains the world's dominant society." Fuller tells us that Kuhn won the class struggle, and Fuller's own emotionality betrays his affection for Popper's libertarianism. You can find this book at Amazon http://www.amazon.com/Kuhn-vs-Popper-Struggle-Revolutions/dp/0231134282/ref=cm_cr-mr-title.

Key Words: Kuhn, Popper, Struggle, soul of science, revolution in science.

Fuller's "Kuhn vs. Popper" tells of the authoritarian Kuhn and the libertarian Popper, and their separate ideals of science indicated below:

(1) Thomas Kuhn, in *The Structure of Science*, related science to the fallibility of scientists, and this made science into a progression of phase changes (Kuhn's paradigm transitions). Science could not be separated from either scientist or from history. The ruling paradigm was an opiate, a habitual application of the one induction that gave its support to an authoritarian class; breaking the paradigm required something special.

(2) Karl Popper's *The Logic of Scientific Discovery* departed significantly from Kuhn's view. Popper was a deductivist, and he wanted to bring scientific theories to the test of falsification, mere verification of the ever-go-lucky induction would not do. Popper's deduction was meant to eliminate induction by refutation, bringing science closer to an ideal that is independent of the fallibility of scientists. Popper wanted to liberate science from the dictates of the ruling paradigm.

Fuller (page 31) writes: "While neither Kuhn nor Popper would care to deny that a specific paradigm may dominate the understanding of a particular slice of reality at a particular time, they differ over whether it should be treated as a source of stability (Kuhn) or a problem to be overcome (Popper)."

Fuller's book is interesting (worth four stars) because of the contrast made between Kuhn and Popper found in the first half of the book. The confusion comes later, but Fuller (page viii) shows little affection for Kuhn from the get-go, and writes: "The more I have tried to make sense of Kuhn's words and deeds, the more I have come to regard him as an intellectual coward who benefitted from his elite institutional status in what remains the world's dominant society." Fuller tells us that Kuhn won the class struggle, and Fuller's own emotionality betrays his affection for Popper's libertarianism. From about chapter 13 on, Fuller stops comparing Kuhn and Popper directly, and Theodor Adorno and Martin Heidegger are noted. Fuller's views become more political as the reader approaches the end of the book.

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Politics can only be confusing. Despite Heidegger's Nazi past, despite the cold war and the Vietnam war, Fuller fails to discredit Kuhn's privileged professional life. Fuller's criticism of Kuhn's silence on moral issues goes nowhere, in my view. My impressions aside, Fuller has made a stronger case for his criticism in "Thomas Kuhn: A Philosophical History for Our Times." Nevertheless, there is no Popperian deduction that I know of that will remove the confusion from Fuller's politics. What Fuller is doing is not deduction, rather it is an exploration of history and it is dialectical. Fuller's dialectical path to truth is closer to Kuhn's history-knows-best-approach than it is to Popper's call-for-empirical-refutation, at least in my opinion.

Yet if Popper's science was so wonderful in Fuller view why then did it fail? The highly irate Stove, in "Anything Goes", tells us why: Popper fell for Hume's inductive skepticism. Popper, like Fuller, gives to deduction a perfection that cannot be given to any logic independent of the emotions of the logician. Induction cannot be reduced by deduction, the two must stand independent yet one logic cannot eliminate the other. Therefore, there must be something important that is dialectical, something missing from Fuller's account even as Fuller relies much on dialectical logic.

The confident induction and the doubting deduction as emotions are made obvious by a read of Stove, or Fuller. Popper's deduction works to break free of the overbearing induction, while Kuhn's induction works to return us to a blissful automatic polite. It can only be that deduction and induction are one in the same emotion, only coming at us from a different point of view. Schelling's transcendental idealism gives support to this view, as a sensation must come that is found breaking away from itself if only to return later to get a better look of itself. Error recognition is required for induction (as Popper demanded), but it is also needed for deduction (something Popper and Fuller forgot), and it is also needed on something that has to do with emotionality (what Charles S. Peirce calls abduction). The three levels of error recognition returns us to science again, but this cannot be a confused dialectical science that Marx would have us follow. This science would integrate both Kuhn and Popper, something that Fuller's bitterness missed.

References

Steve Fuller, 2005, *Kuhn vs. Popper: The Struggle for the Soul of Science (Revolutions in Science)*, Columbia University Press.