

## Book Review

# Review of Thomas S. Kuhn's Book: The Structure of Scientific Revolutions

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### ABSTRACT

Kuhn rejects the attainment of truth that comes from science, but then he is found accepting the absolute truth of a Darwinian evolution now operating above the conflicts of science. To Kuhn, only this blind watchmaker drives the emergence of new scientific paradigms, and a successful paradigm is fittest merely because of an empty politics. Kuhn goes from contradiction to a circular argument: that science finds no truth because truth is not permitted at the level of the paradigm. This realization should provide the refutation of Kuhn's paradigm dependent science. But rather than admit the obvious that science somehow stumbles upon the truth by way of a paradigm turned induction, Kuhn would rather say that science does not seek truth at all. Even Popper would not go this far. You can find this book at [Amazon](#).

**Key Words:** Thomas S. Kuhn, scientific revolution, structure, paradigm.

Thomas Kuhn (page 23) defines the paradigm: "a paradigm is an accepted model or pattern ... a paradigm is rarely an object for replication. Instead, like an accepted judicial decision in the common law, it is an object for further articulation and specification under new and more stringent conditions."

Kuhn (page 24) writes about the mop-up work under the paradigm: "Mopping-up operations are what engage most scientists throughout their careers. They constitute what I am here calling normal science. Closely examined, whether historically or in the contemporary laboratory, that seems an attempt to force nature into the preformed and relatively inflexible box the paradigm supplies."

In my estimating, Kuhn succeeds in demonstrating a dialectical, and almost political, nature of a paradigm dependent science; Kuhn provides a rich history of science to prove his points. Kuhn's treatment is not perfect, however. While Kuhn picked up on the paradigm that Popper missed, Kuhn failed to articulate how closely his paradigm depended on the reality of inductive thinking. It was Popper that warred with induction. But Kuhn only falls short when describing scientific truth as a goal, he (page 171) makes the conflated remark: "If we can learn to substitute evolution-from-what-we-do-know for evolution-toward-what-we-wish-to-know, a number of vexing problems may vanish in the process. Somewhere in this maze, for example, must lie the problem of induction." There is no other mention of induction, even as we see the above reference to "the problem of induction" that came from Hume's philosophy. For more information about Kuhn and Popper's inductive skepticism, see: [Anything Goes: Origins of the Cult of Scientific Irrationalism](#)

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Kuhn's science does not converge to truth, as the goals of a paradigm dependent science is mainly political. This hands truth over to a radical relativism that can make no truth claim at all, if only because truth seeking involves inductive thinking, and induction is a "problem" in Kuhn's view. Rather than seeing induction as a reality that is only mysterious, Kuhn is found rejecting induction and with it goes the truth that science hopes to seek within the paradigm. Kuhn accepts only the inductive tendency of habit formation that comes with the reality of the scientific paradigm, and then he falls short revealing an empty science. Note that it is easy to fix Kuhn's mistake by introducing a transcendental science (see [The Crisis of European Sciences and Transcendental Phenomenology: An Introduction to Phenomenological Philosophy \(Northwestern University Studies in Phenomenology & Existential Philosophy\)](#)), thereby returning truth to its proper place.

Kuhn's empty science is most apparent when truth is considered, and when the scientific paradigm has no transcendent guiding principle (even with biological evolution). Kuhn (page 172) writes: "For many men the abolition of that teleological kind of evolution was the most significant and least palatable of Darwin's suggestions. The Origin of Species recognized no goal set either by God or nature." Kuhn (page 172-173) then grafts this onto science, and writes: "The analogy that relates the evolution of organisms to the evolution of scientific ideas can easily be pushed too far. But with respect to the issues of this closing section it is very nearly perfect. The process described in Section XII as the resolution of revolution is the selection by conflict within the scientific community of the fittest way to practice future science. The net result of a sequence of such revolutionary selections, separated by periods of normal research, is the wonderfully adapted set of instruments we call modern scientific knowledge. Successive stages in the developmental processes are marked by an increase in articulation and specialization. And the entire process may have occurred, as we now suppose biological evolution did, without benefit of a set goal, a permanent fixed scientific truth, of which each stage in the development of scientific knowledge is a better exemplar. "

Kuhn is unable to see the contradiction in his thinking. He rejects the attainment of truth that comes from science, but then he is found accepting the absolute truth of a Darwinian evolution now operating above the conflicts of science. To Kuhn, only this blind watchmaker drives the emergence of new scientific paradigms, and a successful paradigm is fittest merely because of an empty politics. Kuhn goes from contradiction to a circular argument: that science finds no truth because truth is not permitted at the level of the paradigm. This realization should provide the refutation of Kuhn's paradigm dependent science. But rather than admit the obvious that science somehow stumbles upon the truth by way of a paradigm turned induction, Kuhn would rather say that science does not seek truth at all. Even Popper would not go this far.

## References

Thomas S. Kuhn 1996, *The Structure of Scientific Revolutions*. University Of Chicago Press.