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Dissertation Title

: Popper's Principle of Falsification as A Growth Model

and A Demarcation Criterion: A Critical Study

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Abstract

The core interest of this thesis is Popper's principle of falsification, as the criterion of demarcation between science and non-science and as a model of the growth of scientific knowledge.

Many philosophers of science have criticized the principle of falsification as Popper articulated it, but that principle, especially the argument that science can grow through the practice of falsification withstands those critiques. Although alternative models of the growth of knowledge proposed by other philosophers of science differ in detail, the main concept of the growth of knowledge is the same in that advances in scientific knowledge occur when the previous knowledge is defeated by new knowledge.

The present thesis supports Popper's contention that falsification contributes to the growth of knowledge. Even where it is difficult to claim that falsification directly brings progress, at the very least it brings about change, opening up opportunities, in turn, for real progress. However, Popper narrows the application of falsification excessively when he construes it as applicable only in science. In fact, other sorts of knowledge can also be falsified and grow through the discipline of falsification. Popper is consequently mistaken in insisting on falsification as the criterion of demarcation between science and non-science. The domain for the power of falsification should be expanded for the sake of growing other kinds of knowledge.