Lakatos on Dogmatic Falsificationism

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Lakatos on Dogmatic Falsificationism

Dogmatic (naturalist) falsificationism accepts the falsifiability of all scientific theories without qualification but preserves an infallible empirical basis. He is strictly empiric without being inductivist: he denies the fact that certainty of the empirical basis can be conveyed to theories. Thus, dogmatic falsificationism is the weakest mark of justification.

The distinctive sign of dogmatic falsificationism is the recognition that all theories are equally conjectural. Science cannot prove any theory, but it can reject it. Scientific honesty thus consists of specifying an experiment in such a way that, if the outcome contradicts the theory, we must reject the theory. Once a sentence is rejected, it must be unconditionally rejected. Falsified sentences are marked "metaphysical" and denied scientifically.

According to the logic of dogmatic falsificationism, science grows by repeatedly removing theories with the help of heavy facts. Thus, science is carried out by daring speculations, which are never proven or even probable, but some of them are then eliminated by heavy and conclusive rejections, and then replaced by even more daring, new and, at least initially, unfalsified speculations.

The dogmatic falsificationism is, however, considered by Lakatos to be impossible. It is based on two false assumptions and on a too narrow criterion of demarcation between science and non-science. The first hypothesis is that there is a natural, psychological boundary between theoretical or speculative propositions, on the one hand, and the factual or observational (or basic) propositions, on the other hand (the "naturalistic approach" of the scientific method). The second hypothesis is that if a sentence satisfies the psychological criterion of being factual or observational (or basic) then it is true; it can be said that it has been proven from facts (the doctrine of observational or experimental evidence). These hypotheses are complemented by a delimitation criterion: only those theories are "scientific" which forbid certain observable states of things and are therefore factually possible to be rejected (if they have an empirical basis).

For classical empiricists, the right mind is a *tabula rasa*, emptied of all original content, freed from any prejudice of theory. But it seems from Kant and Popper's work - and from the work of psychologists influenced by them - that such empirical psychotherapy can never succeed. Therefore, there is no natural (i.e. psychological) delimitation between theoretical and observational propositions.

But even if such a natural delimitation existed, logics would still destroy the second assumption of dogmatic falsificationism. For the truth of the "observational" propositions cannot be decided unquestionably: no factual proposition can ever be proven by an experiment.

Propositions can only be derived from other propositions, they cannot be deduced from facts: no statements of experience can be demonstrated.

Finally, even if there was a natural delimitation between statements of observation and theory, and even if the truthfulness of the statements of observation could be undeniably established, dogmatic falsificationism would still be useless to remove the most important class of what is commonly regarded as scientific theories. Even though experiments might show experimental reports, their refusal power would still be limited: the most admired scientific theories simply do not manage to forbid any observable state of things.

Classical justificationists admitted only proven theories; the neoclassical justificationists admitted the probable ones; the dogmatic falsificationists have realized that in any case no theory is admissible. They have decided to admit theories only if they are falsifiable - by a limited number of observations. But even if there were such falsifiable theories - those that could be contradicted by a limited number of observable facts - they are still logically too close to the empirical basis.

Source: Lakatos, Imre. 1978. "*The Methodology of Scientific Research Programmes*." Cambridge Core. 1978. https://doi.org/10.1017/CBO9780511621123.