Abstract The problem of testing auxiliary hypotheses in the Dehum-Quine Thesis Khaled A. Qutb

In the first half of twentieth century, the logical empirical philosophers of science argue that the validation of scientific theories depends mainly on the empirical data which makes science objective. But, in the second half of same century some philosophers of science as Paul Feyerabend, N.R.Hanson, Thomas Kuhn and Stephen Toulmin, reject the logical empiricist view, they assumed that the rationality of science denies the role of empirical data in the development of scientific ideas and downplays the role of empirical data in the development of science itself, those philosophers assert the role of hypotheses; the philosophical, metaphysical, religious and scientific ones in the progress of science.

The epistemological issue which I discuss in this paper concerns with the role of auxiliary hypotheses in the testing of scientific theories. It focuses the "Duhem-Quine Thesis" and how this thesis rejects the role of observations and experiments in testing scientific theories by presenting a serious epistemological contribution which asserts that it is impossible to test a scientific theory but to test a set of auxiliary hypotheses, so there is no what we called "Crucial Experiments" in science. I conclude that the "Duhem-Quine thesis" asserts the statue of the mind within the science, and it shows the overlapping relationship between science and other forms of knowledge, the scientific and non-scientific ones.