Criticism; A Way to Approach Truth; Analysis Based on Critical Rationality

Sayyed Mohammad Taghi Movahhed Abtahi[1]

Abstract

In critical rationality, science is a set of falsifiable conjectures to solve a problem that have not yet been refuted. The criterion for measuring scientific theories is truth (correspondence with reality). In contrast, technology is a human-made product that aims to respond to non-cognitive needs or simplify the response to a cognitive need. In critical rationality, the progress of science and technology follows a single pattern. Scientific and technological activity begins with a problem. A solution is proposed to solve the problem. This solution is criticized and its problems are removed so that a scientific theory is closer to the truth or a more efficient technology is obtained. This article shows how criticism is transformed into truth in three ways. The main part of the article will address the issue of how the critique of soft and human technologies related to science, including the critique of institutions in charge of science, the critique of policies and programs governing the development of science, the critique of universities, and the critique of scientometric indicators, can lead us to the truth. Finally, it is pointed out that if we believe that the Western worldview is not realistic, we must accept that we cannot approach the truth through scientific activity within the framework of developed Western and secular institutions. As a result, we must prepare the ground for approaching the truth as much as possible through philosophical and ethical critique of soft technologies governing science.

Keywords: Critical rationality, science, technology, critique, approach to truth, institution of science.

1. Assistant Professor of the Institute of Humanities and Cultural Studies
✉ smtmabtahi@gmail.com
https://orcid.org/0000-0001-7013-1469

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