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VERIFYING AND FALSIFYING OF SCIENTIFIC THEORIES

Summary

Logical positivists plead for the application of verifying criteria in science as principles which justify the statements of science and give sense to scientific notions and statements. However, such principle questions not only many philosophical terms but also natural-science terms. Principle of verifying, connected with the method of induction, does not guarantee necessity and generality of verified theory. Critical rationalism of Karl Popper reminded us of the problem of justifying values of incomplete inductive concluding and it pleads for the principle of refuting (falsifying) scientific theories by deductively made singular statements. Possibility of falsifying some theory is a criterion for determining boundaries between scientific statements and unscientific attitudes of mathematics, logics and metaphysics. With this paper the author tries to point to incompleteness of both mentioned theories in the case when they pretend to exclusiveness of their method, but also to their scientific importance, compatibility and mutuality.

Key words: *logical positivism, principle of verification, method, induction, Popper, critical rationalism, deduction, falsification.*