

## The Pessimistic Meta-Induction Argument and Scientific Realism: The Non-Referential Approaches

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### Abstract:

According to the “No Miracle argument” (NM), science’s predictive and explanatory success would be a miracle if the unobservable entities postulated by them did not exist; that is, if successful scientific theories were not approximately true descriptions of the world. On the contrary, according to “the Pessimistic Meta-Induction argument” (PMI), there is no relation between the success of a theory and its truth. To justify PMI, Larry Laudan provides a long list of past successful and yet false theories, which have been abandoned today. In this paper, first, the two arguments of NM and PMI are explained briefly. Then, it will be shown that the essential realists’ solutions to PMI cannot rebut this argument decisively. The paper concludes that the common problem of all these solutions is their non-referential approach, i.e., they do not demonstrate that the central terms of many past successful and yet false theories are still somehow referential.

### Keywords:

No Miracle Argument; Pessimistic Meta-Induction; Non-Referential Approach; Scientific Realism.

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