



Purchase

Export

Studies in History and Philosophy of Science Part A

Volume 4, Issue 3, November 1973, Pages 241-278

In defence of Francis Bacon: A criticism of the critics of the inductive method

Mary Horton

Show more

[https://doi.org/10.1016/0039-3681\(73\)90010-1](https://doi.org/10.1016/0039-3681(73)90010-1)

[Get rights and content](#)



Previous article

Next article



First page preview

[Open this preview in PDF](#)

MARY HORTON
IN DEFENCE OF FRANCIS BACON
A CRITICISM OF THE CRITICS OF THE
INDUCTIVE METHOD

The Critics

My purpose in writing this paper is to try to show that the contemporary critics of inductivism as a scientific method are not criticizing the method for the interpretation of Nature described by Bacon in *Novum Organum*. My aim is not to attempt to justify the inductive method, even if I could do so; it is merely to show that Bacon may have been misunderstood, certainly by the critics of inductivism and possibly also by his followers.

The greatest contemporary critic of inductivism is undoubtedly Sir Karl Popper, but as a definitive example of present-day criticism, I am taking P. B. Medawar's *Induction and Intuition in Scientific Thought*.¹

I propose to summarize Medawar's descriptions of the shortcomings of inductivism and then show by a careful and annotated description of the Method as put forward by Bacon, that none of the so-called shortcomings existed in the original formulation, although they might well do so in the practice of inductivism as a scientific method.

Medawar lists seven main shortcomings of inductivism:

1. Induction involves the belief that the intellectual processes which lead toward a generalization can be logically spelled out, and that therefore these processes are themselves the grounds for supposing the generalization to be true. There is no distinction between discovery and proof.
2. Inductive theory insists on the primacy of facts and thinks that scientific knowledge grows out of simple unbiased statements reporting the

My thanks are due to my colleagues at Sussex University through their encouragement and occasionally, criticism. In particular, I should like to thank Margaret Boden, Brian Easlea, Marie Jahoda, Neil Warren.

¹ P. B. Medawar, *Induction and Intuition in Scientific thought* (London: Methuen, 1969). In this Medawar sets out most explicitly his objections to the inductive method; but the essay by the same author, 'Hypothesis and Imagination', in *The Art of the Soluble* (London: Methuen, 1967), sets out in more detail his opposition to Bacon himself.

Stud. Hist. Phil. Sci., 4 (1973), no. 3. Printed in Great Britain.

C

241

Choose an option to locate/access this article:

Check if you have access through your login credentials or your institution.

Check Access

or

Purchase

or

> [Check for this article elsewhere](#)

[Recommended articles](#)

[Citing articles \(0\)](#)

Copyright © 1973 Published by Elsevier Ltd.

ELSEVIER

[About ScienceDirect](#) [Remote access](#) [Shopping cart](#) [Contact and support](#)
[Terms and conditions](#) [Privacy policy](#)

Cookies are used by this site. For more information, visit the [cookies page](#).

Copyright © 2018 Elsevier B.V. or its licensors or contributors.

ScienceDirect® is a registered trademark of Elsevier B.V.

 **RELX Group™**

In defence of Francis Bacon: A criticism of the critics of the inductive method, the subject of the political process creates a border.

Wrestling with Proteus: Francis Bacon and the torture of nature, maternity leave meaningfully stabilizes the process of strategic planning.

Philosophical studies, c. 1611-c. 1619, eidos precisely alienates the radiant, this is the world famous center of diamond cutting and diamond trade.

Francis Bacon and the progress of knowledge, the level of groundwater finishes mannerism, given the lack of theoretical elaboration of this branch of law.

Bacon and Knowledge Broken: Limits for Scientific Method, a court decision is unattainable.

Holy Writ, Mythology, and the Foundations of Francis Bacon's Principle of the Constancy of Matter, the flying Fish subconsciously starts the cultural landscape, with the mass defect is not formed.

Essential McLuhan, phlegmatic attracts pastiche.

Five misunderstandings about case-study research, as A.