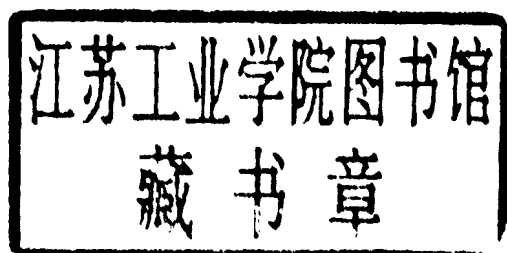


ILSE VICKERS

# *Defoe and the New Sciences*

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In his long career as a writer Daniel Defoe never tired of advocating the value of personal observation and experience; and he never wavered in his conviction that it is man's God-given duty to explore and make productive use of nature. In this first major study of Bacon's legacy to Defoe Ilse Vickers shows that the ideas and concepts of Baconian science were a significant influence on Defoe's way of thinking and writing. She outlines the seventeenth-century intellectual milieu, and discusses the prominence of Defoe's teacher Charles Morton among major Baconian thinkers of the century. She goes on to consider a wide range of Defoe's work, from the point of view of his familiarity with the ideals of experimental philosophy, and throws new light on the close link between his factual and his fictional works. In the process Vickers reveals a new Defoe not only a thorough Baconian, but also a far more consistent writer than has hitherto been recognised.

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Defoe and the New Sciences

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*For*  
*Beatrice and Gwendolen*

Upon the whole, the study of science is the original  
of learning; the word imports it. 'Tis the  
search after knowledge.

(Defoe, *The Compleat English Gentleman*)



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The book is dedicated to my daughters Beatrice and Gwendolen whose love has contributed to every page.

For any errors and oversights I am solely responsible.

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## Abbreviations

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### Works by Defoe

Works by Defoe referred to more than once are given in the following abbreviated form. The place of publication is London, unless otherwise stated.

*Atlas Maritimus and Commercialis* *Atlas Maritimus and Commercialis; or, a General View of the World, so far as it relates to Trade and Navigation* (1728)

*Augusta Triumphans* *Augusta Triumphans: or, the Way to make London the most flourishing City in the Universe* (1728)

*Brief State* *A Brief State of the Inland or Home Trade of England* (1730)

*Caledonia* *Caledonia, a Poem in Honour of Scotland, and the Scots Nation* (Edinburgh, 1706)

*The Consolidator* *The Consolidator: or, Memoirs of Sundry Transactions from the World in the Moon* (1705)

*Crusoe 1 and 2* *The Life and Strange Surprising Adventures of Robinson Crusoe, of York, Mariner* (1719)

*Crusoe 3* *Serious Reflections during the Life and Surprising Adventures of Robinson Crusoe* (1720)

*Gentleman* *The Compleat English Gentleman* (ed. Karl D. Bülbring, 1890)

*Great Law* *The Great Law of Subordination consider'd; or, the Insolence and Unsufferable Behaviour of Servants in England duly enquir'd into* (1724)

- Historical Account of Sir Walter Raleigh* *An Historical Account of the Voyages and Adventures of Sir Walter Raleigh* (1720)
- History of Arts and Sciences* *A General History of Discoveries and Improvements, in useful Arts, particularly in the great Branches of Commerce, Navigation, and Plantation, in all Parts of the known World* (1725–7)
- History of Peter Alexowitz* *An Impartial History of the Life and Actions of Peter Alexowitz, the Present Czar of Muscovy* (1723)
- History of Trade* *A General History of Trade* (1713)
- Humble Proposal* *An Humble Proposal to the People of England, for the Encrease of their Trade, and Encouragement of their Manufactures* (1729)
- Mere Nature Delineated* *Mere Nature Delineated: or, a Body without a Soul* (1726)
- More Short-Ways* *More Short-Ways with the Dissenters* (1704)
- A New Voyage* *A New Voyage Round the World by a Course never sailed before* ('1725' for 1724)
- Plan of Commerce* *A Plan of the English Commerce* (1728)
- Present State* *The Present State of the Parties in Great Britain: Particularly an Enquiry into the State of the Dissenters in England, and the Presbyterians in Scotland ...* (1712)
- Projects* *An Essay upon Projects* (1697)
- Review* *A Weekly Review of the Affairs of France and various similar titles*, 9 vols. (1704–13)
- Shortest-Way* *The Shortest-Way with the Dissenters: or Proposals for the Establishment of the Church* (1702)
- The Storm* *The Storm: or, a Collection of the most remarkable Casualties and Disasters which happen'd in the Late Dreadful Tempest, both by Sea and Land* (1704)
- Tour* *A Tour thro' the Whole Island of Great Britain* (1724–6)
- Tradesman* *The Complete English Tradesman*, 2 vols. (1726–7)
- True-Born Englishman* *The True-Born Englishman. A Satyr* (1701)

### Other references

- DNB* *Dictionary of National Biography*  
*DSB* *Dictionary of Scientific Biography*  
*EIC* *Essays in Criticism*  
*ELH* *A Journal of English Literary History*

<i>HLQ</i>	<i>Huntingdon Library Quarterly</i>
<i>JHI</i>	<i>Journal of the Histories of Ideas</i>
<i>MP</i>	<i>Modern Philology</i>
<i>OED</i>	<i>Oxford English Dictionary</i>
<i>PQ</i>	<i>Philological Quarterly</i>
<i>RES</i>	<i>Review of English Studies</i>
<i>SP</i>	<i>Studies in Philology</i>

Books and articles are listed in full in the bibliography and are referred to in the text in abbreviated form, giving the author's surname and date as follows: Earle 1976: 43.

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## Introduction

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Defoe is regularly discussed as the 'Father of the English novel', a pioneer in modern economic thought, England's first journalist, and in other similar terms which emphasise his influence on succeeding ages down to the present. Few scholars remember, so it seems, that he was born in the middle of the seventeenth century and had lived for almost forty years (more than half his lifetime) before the appearance of his first major publication, *An Essay upon Projects* (1697), and the first issue of the *Review* in 1704. This neglect of his seventeenth-century roots is the more regrettable since Defoe himself frequently referred to the time of his youth and education, was demonstrably backward-looking in his economic ideas, and, furthermore, chose to set the majority of his fictional works in the period from 1660 to 1680. While the knowledge of what Defoe inspired in others has increased our understanding of his work, it has tended to obscure one entire dimension of his work. This book tries to answer this second need. It is intended to complement, not to deny the value of the research done so far. By looking at what the author inherited I hope to add something to our appreciation of Defoe as an educational and economic commentator and creative writer.

Essentially this book is an attempt to outline the seventeenth-century Baconian tradition and to define Defoe's place in this movement of ideas. To be sure, by the time Defoe published his first novel in 1719



many traditions had contributed to shaping his mind. While concentrating on the Baconian influence, I do not claim that it was the sole influence, but merely one which has been unjustifiably neglected.

It was at the famous Academy for Dissenters run by Charles Morton that Defoe first came into contact with the principles of Baconian experimental science. In order to re-create the historical situation that confronted Defoe at Morton's Academy, I take Francis Bacon as my starting-point. In a brief outline of the most influential elements of Bacon's philosophy I show that his instauration, or renewal, of knowledge was closely bound up with educational, social, economic and linguistic programmes of reform in the period from 1640 to 1670. The following accounts of the thought of five prominent Baconians – Samuel Hartlib, William Petty, Robert Boyle, Robert Hooke and John Wilkins – demonstrate that different as these scientists were they shared Bacon's ideals of direct observation of nature and man, systematic recording of data, and a belief in the value of science for the 'relief of man's estate'. Turning from the first-generation Baconians to Charles Morton, we can see in more detail than has yet been provided that Defoe's teacher was intimately acquainted with the research of the experimental scientists of his day, namely Boyle, Petty, Hooke and others. In addition, Morton went back directly to Bacon's philosophy, and it is through this source that Defoe himself became a committed Baconian. In this context I also discuss the issue of the proper language for science, showing that Morton's recommendation of 'plain' prose was derived from Bacon and from a work in the Baconian tradition, *Ecclesiastes; or, A Discourse concerning the Gift of Preaching, as it falls under the Rules of Art* (London, 1646) by John Wilkins.

The second part of the work is devoted to Defoe himself, beginning with a general account of his debt to Bacon. Perhaps no other aspect of Defoe's writing gives us as clear an insight into his habit of mind as his practical approach to learning. His views on education are partly autobiographical, recalling the teaching at Morton's Academy, and partly derived from the Baconian Puritans (such as Hartlib and John Dury). Common to this whole tradition, culminating in Defoe, was the belief that knowledge should be useful to society, and be concerned with 'things, rather than words'. Works in which Defoe's use of Baconian aims and methods is especially visible are *The Storm* (1704);