

THE KINGDOM OF DARKNESS

In 1500, speculative philosophy lay at the heart of European intellectual life; by 1700, its role was drastically diminished. *The Kingdom of Darkness* tells the story of this momentous transformation. Dmitri Levitin explores the structural factors behind this change: the emancipation of natural philosophy from metaphysics; theologians' growing preference for philosophy over philosophy; and a new conception of the limits of the human mind derived from historical and oriental scholarship, not least concerning China and Japan. In turn, he shows that the ideas of two of Europe's most famous thinkers, Pierre Bayle and Isaac Newton, were both the products of this transformation and catalysts for its success. Drawing on hundreds of sources in many languages, Levitin traces in unprecedented detail Bayle and Newton's conceptions of what Thomas Hobbes called 'The Kingdom of Darkness': a genealogical vision of how philosophy had corrupted the human mind. Both men sought to remedy this corruption, and their ideas helped lay the foundation for the system of knowledge that emerged in the eighteenth century.

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THE KINGDOM OF DARKNESS

Bayle, Newton, and the Emancipation of the European
Mind from Philosophy

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PREFACE

This book is the product of a long period of reflection on the nature of intellectual change in pre-modern Europe. That reflection engendered a growing conviction that the Kuhnian question concerning how that change occurred is best answered via a story of disciplinary reconfiguration, changing ideals of the ends of knowledge, and shifts in conceptions of what real ‘knowledge’ might be, especially when it came to philosophy. The more I read, the more I came to believe that even the most seminal individual thinkers were, at some level, the products of these structural factors. One might, therefore, call this book a study in the social history of philosophy.

At the same time, the book also emerges from a parallel conviction that that story cannot be told *only* sociologically or structurally, and that it must incorporate meticulous attention to the detail of philosophical arguments themselves. It therefore attempts – perhaps hubristically – to combine two types of intellectual-historical approach: one focussing on structural shifts over the *longue durée* (Part I), the other on intensive, textually precise interpretation and contextualisation of the works of two major thinkers operating at the turn of the eighteenth century (Parts II and III). I shall not belabour any tired metaphors about hedgehogs and foxes when I say that, inevitably, the interpretative methods deployed across the book vary, and that its results may take on different levels of interest for different readers (students with limited time, for example, may be particularly interested in Part I). Nonetheless, the whole is intended to make a coherent argument (summarised in the General Prologue and then further in the Conclusion), and I hope that the book might show that combining the two approaches into some kind of hedgehog–fox hybrid is not an entirely futile exercise.

If I have succeeded at all in that exercise, it is because I have been very fortunate in the conditions in which I have been able to conduct it, and in the assistance which I have received. As the spark of the idea for this book grew into something larger, I realised that to make my case I would have to conduct extensive reading in several textual corpora: the complete works of Bayle and Newton; the most important texts that they themselves read; and the significant primary and secondary literature on the history of pre-modern philosophy, science, medicine, mathematics, theology, oriental scholarship, and the

interconnections between them. I have only been able to do so because of the assistance of the library staff in all the institutions whose names appear in the 'Manuscripts' section of the Bibliography, but above all Gaye Morgan and her wonderful team at All Souls College Library. I have long been aware of their despairing looks as I disappeared behind three different editions of Bayle's *Dictionnaire* on one side and Newton's *Mathematical Papers* on the other, and I am endlessly grateful to them for tolerating my disruptive nesting in their remarkable institution. More generally, I am obliged to the Warden and Fellows of All Souls for providing me with the time to conduct serious research, and especially for all their extraordinary kindness during an unexpected period of serious illness. I am also deeply indebted to the various organisers, trustees, and judges of the Leszek Kołakowski Prize, of which I was the first recipient; in this regard, I would particularly like to celebrate the role played by the late Tamara Kołakowska and by Agnieszka Kołakowska in promoting new work in intellectual history.

It is usual at this point to thank those who have directly assisted in the writing of a book. Before I do that, I should like to offer my gratitude to those scholars whom I have never met (or have only met very briefly), but whose research – much of it cited in the footnotes – has stimulated so many of my thoughts. It is with some despair that I have realised that the adage 'it's not what you know but who you know' has taken root in academia, the last place it should be manifesting itself. A reader for Cambridge University Press wished me to cite only a minimal amount of secondary literature: I cannot at all agree with this approach, which seems to me to go against the very spirit of what scholarly life is about (especially when the few names which remain in the footnotes inevitably just happen to be those of the alpha males of Anglo-American academia). One of the glories of intellectual history is its non-parochialism, and the potential for individual scholars working anywhere in the world – perhaps without great institutional or financial backing – to make seminal contributions. This book would not be possible without the work of many such individuals, who are far too many to list by name.

That being said, I have benefitted enormously from conversations with immediate colleagues. At All Souls, I have been fortunate to be part of a community of remarkable scholars of early modern intellectual, religious, and cultural history: Robin Briggs, Clare Bucknell, Maya Krishnan, Ian Maclean, Noel Malcolm, Philipp Nothaft, Jenny Rampling, and Keith Thomas have all taught me more than they can realise. Katherine Backler, Péter-Dániel Szántó, Claire Hall, Fitzroy Morrissey, and Andrew Wilson have been a source of discussion and inspiration on matters classical and Asian. In Oxford, I have also had the privilege of conversations with Maria Rosa Antognazza, Jim Bennett, John Christie, Howard Hotson, Rob Iliffe, Mogens Lærke, Kirsten Macfarlane, Will Poole, Joanna Weinberg, and my students Natasha Bailey, Michelle Pfeffer, and Jessie Simkiss: the last three are all

already making discoveries of which I could never dream. The portion of this book grounded in the history of orientalism benefitted enormously from the series of seminars at the Centre for Research in Arts, Social Sciences, and Humanities organised by Renaud Gagné, Simon Goldhill, and Geoffrey Lloyd: I am particularly grateful to Tony Grafton, Joan-Pau Rubiés, Jonathan Sheehan, and Guy Stroumsa for many stimulating discussions. For several years, I had the luck of being able to talk frequently with Nick Hardy about how one might better integrate the history of theology with intellectual history more broadly, a subject to which he has made a huge contribution; Jean-Louis Quantin also continues to offer endless inspiration and assistance on that front. On Newton, I have benefitted from discussions with several of the brilliant scholars whose names repeatedly grace my footnotes, above all Moti Feingold, Niccolò Guicciardini, Andrew Janiak, and Steve Snobelen. Scott Mandelbrote in particular has shown me what it means to think historically about Newton, above all by approaching every manuscript scrap with curiosity (and scepticism) about its dating, provenance, and meaning. I have benefitted immeasurably from his advice and his example. On Bayle, I have been consistently inspired by conversations with Mara van der Lugt. One of the great Bayle scholars of our time, Antony McKenna, has been unfailingly helpful in sending material that I could not get hold of, and supplying me with early versions of his own writings. I suspect that he will not agree with my conclusions, but that makes me all the more grateful for his generosity.

Noel Malcolm read the typescript of this book, and offered more suggestions and corrections than I can begin to enumerate (all remaining errors are my own). More generally, conversations with him over the last five years have presented me with a model of scholarly rigour, probity, and brilliance which has never ceased to inspire, and which – alas! – I can never hope to emulate.

Last but not least, I am hugely grateful to Liz Friend-Smith for the faith she has shown in me, for making this book so much better, and for permitting the double-columned footnotes: a small homage to Bayle. In turn, Jane Burkowski has been the dream copy-editor.

I dedicate this book to the staff at the Oncology Department at the Churchill Hospital in Oxford, who saved my life; and to my family, friends, and to Lynn, who make it worth living.

ABBREVIATIONS AND CONVENTIONS

Bayle

- APD= *Addition aux Pensées diverses* [1694], in OD.iii.161–86.
 BC= *Correspondance de Pierre Bayle*, ed. E. Labrousse et al., 15 vols (Oxford, 1999–2017).
 CG= *Critique générale de l'histoire du Calvinisme de Mr. Maimbourg* [1682], in OD.ii.160.
 CP= *Commentaire philosophique sur ces paroles de Jésus-Christ, Contrains-les d'entrer* [1686], in OD.ii.357–476.
 CPD= *Continuation des Pensées diverses* [1705], in OD. iii.189–417.
 DHC= *Dictionnaire historique et critique . . . cinquième édition*, ed. Pierre Desmaizeaux, 4 vols (Amsterdam, Leiden, The Hague, Utrecht, 1740). Cited by article name, note letter (in subscript), volume and page.
 EMT= *Entretiens de Maxime et de Thémiste* [1707], in OD.iv.1–106.
 Hickson= *Dialogues of Maximus and Themistius*, ed. and trans. M. W. Hickson (Leiden, 2016).
 NL= *Nouvelles lettres de l'auteur de la Critique générale de l'Histoire du Calvinisme de Mr. Maimbourg* (Ville-France [Amsterdam], 1685), OD.ii.161–335.
 NRL= *Nouvelles de la République des Lettres* (1684–7).
 OD= *Œuvres diverses de Mr Pierre Bayle*, ed. E. Labrousse et al., 8 vols (Hildesheim, 1964–82).
 PD= *Pensées diverses, écrites à un Docteur de Sorbonne, à l'occasion de la comète* [1682], in OD.iii.3–160.
 RQP= *Réponse aux questions d'un provincial* [1704–7], in OD.iii.501–1084.
 Sup.= *Supplément du Commentaire philosophique* [1688], in OD.ii.477–540.
 Systema= *Systema totius philosophiae*, in OD.iv.201–521.

Newton

- H, followed by a number= *The library of Isaac Newton*, ed. J. Harrison (Cambridge, 1978).
 Herivel= John Herivel, *The background to Newton's Principia: a study of Newton's dynamical researches in the years 1664–84* (Oxford, 1965).
 MP= *The mathematical papers of Isaac Newton*, ed. D. T. Whiteside, 8 vols (Cambridge, 1967–81).
 NC= *The correspondence of Isaac Newton*, ed. H. W. Turnbull, 7 vols (Cambridge, 1959–77).
 Opticks (1952)= *Opticks: or, A treatise of the reflections, refractions, inflections and colours of light. Based on the 4th ed.* (New York, 1952).
 PW= Isaac Newton, *Philosophical writings*, ed. A. Janiak, 2nd ed. (Cambridge, 2014).

LIST OF ABBREVIATIONS AND CONVENTIONS

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- Principia*= Isaac Newton, *The principia: mathematical principles of natural philosophy*, ed. and trans. I. B. Cohen and A. Whitman (Berkeley, 1999). The first, second, and third editions will be referred to as E_1 , E_2 , and E_3 .
- Schüller= V. Schüller, 'Newton's scholia from David Gregory's estate on the propositions IV through IX book III of his *Principia*', in *Between Leibniz, Newton, and Kant*, ed. W. Lefèvre (Dordrecht, 2001), 213–65.
- Trin.= Trinity College, Cambridge
- USP= *Unpublished scientific papers of Isaac Newton*, ed. A. R. Hall and M. B. Hall (Cambridge, 1962).
- Yah.= National Library of Israel, Yahuda Manuscripts

Others

- Alum. Cantab.*= J. A. Venn, *Alumni Cantabrigienses*, 4 vols (Cambridge, 1922–7).
- AO*= *Œuvres de Antoine Arnauld*, 43 vols (Paris, 1775).
- AT*= *Œuvres de Descartes*, ed. C. Adam and P. Tannery, 12 vols (Paris, 1964–76).
- Bib. ch.*= *Bibliothèque choisie*, ed. J. Le Clerc, 28 vols (1703–13).
- BL= British Library, London
- Bod.= Bodleian Library, Oxford
- Brief. Math.*= G. W. Leibniz, *Briefwechsel von Leibniz mit Mathematikern*, ed. C. J. Gerhardt (Berlin, 1899).
- BUH*= *Bibliothèque universelle et historique*, ed. J. Le Clerc, 26 vols (Amsterdam, 1686–1702).
- BW*= *The works of Robert Boyle*, ed. M. Hunger and E. B. Davis, 14 vols (London, 1999–2000).
- CSM/CSMK= *The philosophical writings of Descartes*, ed. J. Cottingham, R. Stoothoff, D. Murdoch, and A. Kenny, 3 vols (Cambridge, 1985–91).
- CUL= Cambridge University Library, Cambridge
- GO*= Pierre Gassendi, *Opera omnia*, 6 vols (Lyon, 1658).
- HO*= *Œuvres complètes de Christiaan Huygens*, 22 vols (The Hague, 1888–1950).
- Labrousse= E. Labrousse, *Pierre Bayle*, 2 vols (Paris, 1963–4).
- L–C*= *The Leibniz–Clarke correspondence*, ed. H. G. Alexander (Manchester, 1956). Cited by letter number and page.
- Le Clerc corr.*= Jean Le Clerc, *Epistolario*, ed. M. Sina, 4 vols (Florence, 1987–97).
- Math. Schrift.*= G. W. Leibniz, *Mathematische Schriften*, ed. C. J. Gerhardt, 7 vols (Berlin, 1849–63).
- Mersenne corr.*= *Correspondance du P. Marin Mersenne*, ed. P. Tannery, 17 vols (Paris, 1945–88).
- Millers= René Descartes, *Principles of philosophy*, ed. and trans. V. R. Miller and R. P. Miller (Dordrecht, 1983).
- MO*= *Œuvres complètes de Malebranche*, ed. A. Robinet, 20 vols (Paris, 1957–78).

- Muller, *PRRD*= R. A. Muller, *Post-Reformation reformed dogmatics: the rise and development of reformed orthodoxy, c.1520 to c.1725*, 2nd ed., 4 vols (Grand Rapids, 2003–6).
- Nidditch= John Locke, *Essay concerning human understanding*, ed. P. H. Nidditch (Oxford, 1975).
- OFB= *The Oxford Francis Bacon*, ed. G. Rees et al., 8 vols (1996–).
- ODNB= *Oxford Dictionary of National Biography*, online edition.
- Oldenburg corr.= *The correspondence of Henry Oldenburg*, ed. A. R. Hall and M. B. Hall, 13 vols (Madison, 1965–86).
- Opere di Galileo*= *Le opere di Galileo Galilei*, ed. A. Favaro, 20 vols (Florence, 1890–1909).
- PG*= *Patrologiae cursus completus, Series graeca* (Paris, 1857–1912).
- Phil. Schrift.*= G. W. Leibniz, *Philosophische Schriften*, ed. C. J. Gerhardt (Berlin, 1890).
- RS= Royal Society, London
- Sämtliche Schriften*= G. W. Leibniz, *Sämtliche Schriften und Briefe* (Berlin, 1923–).
- Turretin, *Inst.*= Francis Turretin, *Institutes of elenctic theology*, ed. and trans. J. T. Dennison, 3 vols (Phillipsburg, NJ, 1992–7).
- Two new sciences*= Galileo, *Two new sciences: including centers of gravity and force of percussion*, ed. and trans. S. Drake (Madison, 1974).

For the books of the Bible, standard abbreviations are used, and references and citations are from the Authorised Version, unless stated otherwise. Classical texts cited in the notes are only referred to by their short titles, usually as given in the *Oxford Classical Dictionary*, ed. S. Hornblower and A. Spawforth, 4th ed. (Oxford, 2005), and the appropriate book/section number (the editions used were those of the Loeb, Teubner, or Oxford Classical Texts series). Only in those cases when the text is relatively obscure, or when I have relied on a specific translation, have I offered a full reference to the relevant modern edition.

Quotations are given in the original spelling (with expanded contractions signalled), with the exception that medial ‘u’ (for ‘v’) and initial ‘v’ (for ‘u’) have been normalised. Manuscript transcriptions are diplomatic, with the following symbols used: insertions are signalled by <chevrons>, deletions with a ~~strike-through~~, underlining as in the original.

Bibliographical references are all repeated in the Bibliography. First references to primary sources are given in full, with the short title used thereafter. In the interests of economy, first references to secondary sources are given in a contracted version, with a short title used thereafter. So what appears in the Bibliography as Arthur, R., ‘Beeckman, Descartes and the force of motion’, *Journal of the History of Philosophy*, 45 (2007), 1–28, appears first in the text as: Arthur, ‘Force’ (2007), and thereafter as Arthur, ‘Force’.

Cross references to different chapters are in the format **I.1.1** (Part, chapter, section); cross references within the same chapter are in the format §6 (referring to section number).