In the attempt to make good one of the desiderata in Bacon’s *Advancement of Learning*, a cohort of seventeenth-century philosophers, scientists, schoolmasters, clergymen and virtuosi attempted to devise artificial languages that would immediately represent the order of thought. This was believed directly to represent the order of things and to be a universal characteristic of the human mind. *Language, Mind and Nature* fully reconstructs, for the first time, this artificial language movement. In so doing, it reveals a great deal about the beliefs and activities of those who sought to reform learning in seventeenth-century England. Artificial languages straddle occult, religious and proto-scientific approaches to representation and communication, and suggest that much of the so-called ‘new philosophy’ was not very new at all. This study breaks new ground within its field, and will be of interest to anyone concerned with early modern intellectual history or with the history of linguistic thought in general.

**Rhodri Lewis** is a Fellow of the Max-Planck-Institut für Wissenschaftsgeschichte, Berlin. This is his first book.
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LANGUAGE, MIND
AND NATURE

Artificial Languages in England from Bacon to Locke

RHODRI LEWIS
Max-Planck-Institut für Wissenschaftsgeschichte, Berlin
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I am grateful to the following institutions for their permission to reproduce: for the cover image and for illustrations 2, 5 and 7, the British Library, London; for illustrations 6, 11 and 12, the Bodleian Library, University of Oxford; for illustrations 8, 9 and 10, the Fellows’ Library of Jesus College, Oxford; for illustrations 1 and 4, the Huntington Library, San Marino; for illustration 3, the University of Sheffield Library.
Acknowledgements

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Much intellectual history is made possible only through the generosity, knowledge and forbearance of librarians. I am indebted to the staff at all the libraries cited in the bibliography and notes, but particularly to those of the Rare Books and Manuscripts Rooms of the British Library, the Upper and Lower Reading Rooms of the Bodleian Library, the library of the Max-Planck-Institut für Wissenschaftsgeschichte, and the Ahmanson Room of the Huntington Library. Nevertheless, I got through most of my reading in Duke Humfrey’s Library in the Bodleian. A special word of thanks is thus due to Alan Carter, Russell Edwards, William Hodges and Jean-Pierre Mialon, who provide their readers with a first-class service in circumstances that are very much more testing than they should be.

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For taking a chance on a greenhorn author and for guiding him through the publication process, the Cambridge University Press has my sincere thanks. Richard Fisher has been a model editor: encouraging, tactful, efficient and informed.

Of course, my indebtedness to all of the above-named means that I cannot conclude without genuflecting towards one of the most benign of prefatory conventions: the inconsistencies, omissions, errors and misinterpretations that will be discovered within this book are mine, and mine
Acknowledgements

alone. Although technology might now ameliorate scholarly labours more efficiently than ever before, verum operi longo fás est obrepere somnum.

It remains to thank my friends for their habitual support, sanity and good humour. They know how important they have been.

R. L.
Oxford/Berlin, June 2006
Throughout this study, I refer to the ‘artificial language movement’. As many readers will be used to thinking about the ‘universal language movement’ (if familiar with seventeenth-century language planning at all), then this might need a word of explanation.

In short, universal languages were one kind of artificial language devised by the figures I consider. A universal language would be one in which the language planner might make a list of words (from one or a number of extant languages), and accord them new symbols or words that could then serve for inter-linguistic communication. Esperanto is an artificial language created on this model. However, the principal goal of those who concerned themselves with the topic in the seventeenth century was the construction of a ‘philosophical language’ that would in some way replicate the order of thought. As seventeenth-century thinkers believed the order of thought to be uniform among all human beings, they held that such a language would in turn be universally understood. These are two distinct classes of scheme, which should be clearly distinguished. (A similar distinction obtains between ‘universal’ characters and ‘real’ characters.) Further, as many seventeenth-century language planners themselves frequently described their ‘philosophical’ language schemes as ‘universal’ (they were universal, but not just universal), there is a danger that any modern account of their activities would become confused without clear conceptual definition. Although doing so is a little anachronistic, I have thus opted to describe the ‘artificial language’ movement, with a view to better defining its constituent parts.

Much of the material I examine in this study comprises correspondence. Accordingly, a number of problems arise as a result of the peculiarities of the early modern English calendar. First, the English year was held to begin on 25 March; a letter written on 20 January 1668 (or, more helpfully, 20 January 1668/9) was thus more often than not written on 20 January 1669. Throughout, I treat the year as beginning on 1 January, and date
correspondence accordingly. Second, although continental Europe had switched to the Gregorian calendar, England remained on the Julian calendar until the mid-eighteenth century. Early modern English dates are thus ten days behind their continental contemporaries. In correspondence written to or from continental addresses, I give both forms of the date (e.g., 10/20 January 1669).

In transcribing manuscript (and printed) sources, I have tried to be as faithful as possible to the original text. I have retained conventions of punctuation, orthography and capitalisation, the only exceptions to which are that I have normalised the long ‘s’, and that I have expanded ligatures. I have not expanded abbreviations (retaining, e.g., ‘y’ for ‘your’, ‘ye’ for ‘the’, and so forth) in transcribing manuscript correspondence or notes, which in most cases were not intended for publication. I have, however, expanded such abbreviations in my transcriptions of manuscript treatises, as would have happened had they been handed to a seventeenth-century publishing house.

A bibliographical note: unless otherwise stated, all printed works that I cite were published in London. Further (again, unless otherwise stated), classical texts are cited from the editions in the Loeb Classical Library.
Abbreviations

For ease of reference, the following abbreviations and short titles are used throughout.

Akad. G. W. Leibniz, *Sämtliche Schriften und Briefe*, 6 series, ed. der Deutschen Akademie der Wissenschaften (Darmstadt and Berlin, 1923–). (Cited by series, volume and page number.)


BL British Library, London.


Dalgarno David Cram and Jaap Maat, *George Dalgarno on Universal Language: The Art of Signs (1661), The Deaf and Dumb Man’s Tutor (1680), and the Unpublished Papers* (Oxford, 2001).

DNB *Dictionary of National Biography*.


List of abbreviations


HP The Hartlib Papers, CD-Rom, 2nd edn, ed. Patricia Barry et al. (Sheffield, 2002).

JHI Journal of the History of Ideas.


Maat Jaap Maat, Philosophical Languages in the Seventeenth Century: Dalgarno, Wilkins, Leibniz (Dordrecht and Boston, 2004).

NR Notes and Records of the Royal Society of London.


PL Philosophical Letters between the Late Learned Mr. Ray and Several of his Ingenious Correspondents, ed. William Derham (1718).

RSL Royal Society Library, London.


Slaughter Mary M. Slaughter, Universal Languages and Scientific Taxonomy in the Seventeenth Century (Cambridge, 1982).

Venn John Venn and J. A. Venn, Alumni Cantabrigienses: A Biographical List of all Known Students . . . at the University of
List of abbreviations

Cambridge from the Earliest Times to 1900, 10 vols. (Cambridge, 1922–54).
Wood Anthony Wood, Athenae Oxonienses. An Exact History of All the Writers and Bishops who have had their Education in the University of Oxford. To which are Added the Fasti, or Annals of the said University, 4 vols., ed. Phillip Bliss (1813–20).