Peter J. Grund, 'Misticall Wordes and Names Infinite': An Edition and Study of Humfrey Lock's Treatise on Alchemy. Tempe: Arizona Center for Medieval and Renaissance Studies, 2011. Pp. xii+350. ISBN 978-0-86698-415-7. \$72.00 (hardback). doi:10.1017/S0007087412000829

Elizabethan England: Humfrey Lock, an English carpenter in the employ of Ivan the Terrible, seeks Elizabeth I's permission for him to return to his native country in her service. After fruitless attempts to enlist the help of two of her most influential secretaries, Robert Dudley, Earl of Leicester, and William Cecil, Lord Burghley, Lock devises a more cunning plan to appeal to the queen's penchant for alchemy and riches. He writes a treatise, dedicated to Cecil, which describes the alchemical production of precious metals in a cryptic style, and offers to unlock its secrets in a practical demonstration upon his return to London, should Her Majesty approve of his proposal. The sources are silent on the success of Lock's plea, but his *Treatise on Alchemy* (c.1572) certainly passed through the hands of influential scientists, scholars and statesmen. It links Elizabeth I and her court with doctor–astrologer Simon Forman, John Dee's son Arthur and, later, Oxonian collector Elias Ashmole. The appearance of one Cambridge-educated Eliseus Bomelius, physician and alchemist at the tsar's court, further opens up questions about the international mobility of craft knowledge, skill and Renaissance writing. But, above all, Humfrey Lock's *Treatise on Alchemy* adds a chapter to the story of how alchemy, the English language and its late medieval written corpus shaped a significant part of Elizabethan culture.

Peter Grund's publication, based on his doctoral thesis, introduces and presents the first critical edition of Lock's *Treatise on Alchemy*. A historical linguist who most recently worked on the Salem witch trials, Grund applies his scholarly expertise to the *Treatise* with commendable care. The introduction to the text's sociohistorical context (i.e. Lock); the *Treatise*; and its extant manuscripts, textual sources and alchemical terminology is thorough; material ancillary to the edition (including explanatory notes and a glossary) appears both careful and serviceable.

Particularly enlightening is the section on Lock's sources. Rather than being an original composition, the *Treatise* is a cleverly amalgamated compilation of Middle English alchemica supplied with a verse dedication. As Grund lays out, the text employs pseudo-Albertus Magnus's *Mirror of Lights*; the didactic dialogue *Scoller and Master*; anonymous texts known by the titles of *Perfectum magisterium*, *Dicta* and *Thesaurus Philosophorum*; the *Notabilia* of Guido de Montaynor; and two texts associated with George Ripley, the *Medulla Alchimiae* and *Concordantia Raymundi et Guidonis*. Derivate forms of the *Treatise* include a short, practical digest, delightfully entitled *The Picklock to Riplye his Castle*. The patchwork nature of the *Treatise on Alchemy* allows for an analysis of Lock's strategies of composition as well as an expansive investigation of the source texts' histories and transmissions. Since some of them form part of an older, previously more exclusive, Latin tradition, Grund's observations are of consequence beyond the immediate context of the *Treatise* and its reception.

A chapter on 'Language and alchemy' discusses the significance of the vernacularization of alchemical, medical and other scientific texts for historical linguistics before introducing the symbolic language of alchemy and its sigils (shorthand symbols for elements, substances and methods). Grund's examination of the technical vocabulary of alchemy and concise comparison of discourse strategies in theoretical alchemical writing and recipe literature are necessarily confined to the evidence at hand. Yet they are particularly noteworthy in their implications, as they highlight the need for further critical editions, indeed for a sizeable body of alchemical literature reclaimed through editions, as a basis for more inclusive studies in these areas.

Simon Forman's autograph copy of Lock's *Treatise on Alchemy* (Bodleian Library MS Ashmole 1490) forms the focus of Grund's edition proper. Written eighteen years after the original composition of the *Treatise*, this not only appears to be the fullest of the seven extant witnesses but also holds interest for Forman scholars. This indirect focus on one text and its known copyist in

both the edition and its paraphernalia thus connects Grund's work with existing research on early modern science. However, paired with the fact that no stemma could be constructed for the surviving witnesses, this emphasis also places some limitations on Grund's study, which merely touches upon the large body of anonymous works in the tradition of alchemical writing. Further, the edition's intended audience, general rather than scholarly, presents a conundrum. For example, the modernization of capitalization and punctuation employed here adds to the accessibility of the text but removes the possibility for researchers to understand the printed text as a representation of the original manuscript, i.e. to use this printed version of Forman's copy as evidence of his scribal practice. Conversely, a general audience may find it difficult to navigate this volume due to its minimalistic table of contents, which lacks chapter numbers and subheadings, and due to the absence of an index – an unfortunate discrepancy between authorial design and publisher's house style. The edition's explanatory notes record scribal peculiarities and list parallel passages from other early modern alchemical texts for textual scholars. Yet general readers will be delighted about the thorough glossary, which brings obscure terminology from the alchemical workshop to life.

Overall, quibbles aside, this is a fine edition which forms a bridge between the central role of alchemy in Elizabethan England and its disproportionately meagre representation in modern scholarship. The nascent tradition of editing alchemica, of which Grund's present book forms part, will evolve as audiences, publishers and interdisciplinary scholarship develop further. It would be a mistake to judge this present book by its humble physical appearance. Historians of alchemy, historical linguists and scholars of Elizabethan England's textual culture will find this a valuable addition to, or perhaps extension of, their collection of well-known authors and the canonical literature of early modern science. As Lock himself put it so aptly in the *Treatise*, these labours should not 'be buried in the bottomlesse lake of oblyuion' (p. 160).

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Patrick J. Boner (ed.), Change and Continuity in Early Modern Cosmology. Heidelberg, London and New York: Springer, 2011. Pp. xii+181. ISBN 978-94-007-0036-9. £90.00 (hardback). doi:10.1017/S0007087412000830

This collection of essays, originally written for a conference held at Johns Hopkins in 2009, coheres around a major question in the history of astronomy – indeed, the history of science broadly. How does anomalous empirical data affect theory change? Most famously through Galileo's telescope, new heavenly bodies raised profound questions about a picture of the cosmos associated with Aristotle, in which perfect motion and incorruptible bodies characterized the planets and stars while generation and corruption belonged to earth, the universe's center. 'New stars' have long captured the attention of historians, but to my knowledge this is the first set of studies to focus on how early modern astronomers dealt with new stars from 1572 to the late seventeenth century. Therefore it brings a wealth of insight to histories of observation, heavenly physics, Aristotelianism and the like.

The history of astronomy has long focused on unique minds, such as those of Kepler and Galileo. Their world, however, was shaped by a wealth of authors who interpreted the skies, particularly in university texts such as the *Sphere* of Sacrobosco and the *Theories of the Planets* updated by Georg Peurbach. Displaying the rich proliferation of early modern astronomical genres, Peter Barker shows that ignoring such 'introductory' books (text and images) has led historians to miss the striking consistency with which they taught—or at least did not undermine—the reality of the universe as a collection of concentric material orbs. Barker's attention to the range of astronomical discourses is refreshing, and makes explicit a theme that implicitly informs most papers in the volume. Shifting genres formed the loci in which early