

reason for the inclusion of these addenda is unclear to the reviewer; they seem to stray from the theme of the book, and the lack of translations into English may render them inaccessible to many readers.

The core of the book presents a variety of translations of various problems in medieval recreational mathematics, gathered into seventeen chapters on similar topics by various historical authors. There is little historical argumentation or grand narrative here; the text reads more like a collection of episodes than a progression of ideas. The problems are gathered effectively; one can gain some idea of their transmission and how they varied over time within each chapter, partly through the author's commentary. Books and names that appear frequently include Nicholas Chuquet's fifteenth-century *Triparty*, Claude-Gaspar Bachet de Méziriac's early seventeenth-century *Problemes plaisants et delectables*, and of course Fibonacci's *Liber abaci*. Other than one chapter on geometry, the scope is mostly arithmetical and algebraic, reflecting the genre as a whole. Small images from historical texts enliven the text. Every once in a while, an interesting historical point arises when one witnesses a medieval author struggling with whether a certain solution qualifies as such, especially when dealing with systems of linear equations where negative quantities can appear naturally. Most problems are accompanied by a modern mathematical (usually algebraic) analysis. These features raise the question of the intended audience of the book: historians may use it to locate fodder for arguments concerning the transmission of mathematical ideas but ignore the algebra; mathematical enthusiasts, teachers, and popularizers might enjoy the algebra but read the history only for background color.

As long as one knows what to expect entering into this volume, it can be a pleasant and enriching experience for both historians and enthusiasts. It is an easy read; one quickly enters into translations of the medieval texts, and the problems can be intriguing and entertaining. It is hard to imagine the entire book being of interest to any one particular audience; but conversely, it is just as hard to imagine that any particular audience will find nothing of interest for them. It is worth a look.

Glen Van Brummelen

Glen Van Brummelen is a Historian of Pre-modern Mathematical Astronomy. Among his books are The Mathematics of the Heavens and the Earth (Princeton: Princeton University Press, 2009), The Doctrine of Triangles (Princeton: Princeton University Press, 2021), Trigonometry: A Very Short Introduction (Oxford: Oxford University Press, 2020), and Heavenly Mathematics (Princeton: Princeton University Press, 2013). He has served twice as president of the Canadian Society for History and Philosophy of Mathematics.

Ivano Dal Prete. *On the Edge of Eternity: The Antiquity of the Earth in Medieval and Early Modern Europe.* 368 pp., notes, bibl., index. Oxford: Oxford University Press, 2022. £28.99 (cloth); ISBN 9780190678890. E-book available.

With very few and partial exceptions, the vast majority of studies of the discovery of deep time in Western culture that have been published in the past decades have restricted their focus to the late Renaissance and early modern period. There are good reasons, of course, for this choice: the early modern European context alone guarantees an intimidating supply of complexity to justify a chronologically (and geographically) circumscribed analysis of theories and debates. Still, this approach has generally come at the cost of losing sight of the roots of such theories and debates, roots that are deeper and more important than those that the traditional historiography has often described.

The novelty and the merit of *On the Edge of Eternity: The Antiquity of the Earth in Medieval and Early Modern Europe* lie precisely in its retracing and investigating the ancient and medieval links to the great geochronological themes of the seventeenth and eighteenth centuries. Ivano Dal Prete convincingly proves that the notion of an old, even eternal, Earth predated the Western discovery of geological time and circulated openly in medieval and early modern Europe, coexisting and, not infrequently, interacting with

biblical chronologies. This fact challenges us to redefine our understanding of the relationship between natural philosophy and religion in the premodern and modern eras, a relationship far more nuanced than the victorious accounts that followed the “secular turn” of Enlightenment and positivism seem to suggest.

The book builds on a thorough examination of sources and studies. Especially beneficial is the author’s choice (and skill) not to confine his research to English literature. It is this approach, I believe, that allows him to grasp the full significance of the impact of classical philosophy on late medieval European society: an impact that was too deep and broad to influence the religious realm alone – and which, therefore, left profound traces not just in natural philosophy and university teaching but also in popular culture. This was surely the case with Aristotle’s works, including the concept of eternalism: a notion that could not easily disappear from the European mind, as – in the author’s words – “the eternity of the world is not a simple addition to the edifice of the Aristotelian universe but a massive cornerstone, whose removal would cause the collapse of the whole structure” (46). This helps us to understand not only why (as discussed through the first three chapters of the book) the idea of an immensely old Earth spread freely in medieval and Renaissance Europe and was substantially tolerated by religious authorities, but also why this notion “raised interest in social contexts other than those of the universities or the intellectual elites” (65), thanks also to the diffusion of vernacular literature.

In reading the geochronological debates of the seventeenth and eighteenth centuries through the lens of this premise, Dal Prete then explains (chapters 4–7) how in the early modern period the growing importance of biblical timescales, diluvialist models, and the contextual restrictions on the autonomy of natural philosophy from theology were not a long-term consequence of “a dark age supposedly dominated by religious intolerance” (169). Rather, these changes followed the radicalization of tensions that were not merely confessional, but social and political, too. It was with the Enlightenment – the author argues – that the myth of an inevitable conflict between religion and science was created. This thesis was then reinforced and popularized in the nineteenth century, providing “ideological ammunition to both religious conservatives and their opponents” (203).

Dal Prete’s work is a valuable contribution to our understanding of the evolution of the geochronological debate in Western culture. Yet, there are some aspects in the book that in my opinion are not fully convincing. While I applaud the author’s effort to highlight the importance of the medieval circulation of Aristotelian and other classical theories on the antiquity of the Earth, I am more doubtful that – as he seems to suggest – the discovery of deep time by the new experimental science arose from the revival of these theories (which, in fact, belong to a metaphysical conception). As interesting as this argument sounds, I think it needs more robust evidence.

Even more problematic is the claim that biblical diluvialism became “the ideological pillar of European imperialism” (132) and of “racial exploitation” (137). Although this view aligns with a dominant trend in Anglo-American scholarship, the book provides no solid evidence that a link existed between Flood literalism and colonial expansion. In overstating the role played in this matter by religion, the author seems to make the very mistake that he (rightly) criticizes in the anti-Christian advocates of the “conflict thesis.”

These, however, are minor flaws in an otherwise excellent work. *On the Edge of Eternity* is a precious compendium of the Western debate on deep time: it will soon become a benchmark for all the historians of science, philosophy, and religion who aim to explore this complex and intriguing subject.

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