

A chapter on “Catholicism” focuses primarily on the doctrines of the Roman Church rather than on any majority Catholic countries, but this still overlaps in part with both the chapter on Spain and Portugal and on Poland. Numbers notes in the Foreword that “the most surprising pattern ... is the generally rising rate of creationist sentiment as one moves east, into the former communist (and officially atheistic) countries of the Eastern bloc” (p. xiv). Nonetheless, Western and Northern Europe are far more represented in the book than are other regions. Romania’s recent history of creationism is not given its own chapter, but it is mentioned in Kjærgaard’s chapter on “The Rise of Anti-Creationism” (p. 237).

Perhaps the focus on individual nations is especially telling at a time when the very idea of Europe is being questioned by factions from both ends of the political spectrum. If creationism is seen not just as a marker of religious identity, but also as something that has roots in nationalism or in resistance to a transnational and transreligious state control, then European creationism is perhaps more like its American cousin, which has flourished in an environment dominated by rhetoric about local control of education and states’ rights. The editors do not explain the rationale for their selection of countries, yet they begin with an event that is unequivocally European.

Resolution 1580, titled “The Dangers of Creationism in Education,” was passed by the Council of Europe Parliamentary Assembly in 2007. In warning against such dangers, the resolution most notably expressed concern about “the possible ill-effects of the spread of creationist ideas within our education systems and about the consequences for our democracies. If we are not careful, creationism could become a threat to human rights.”¹ Perhaps one of the most striking things about that resolution is its representation of “present-day creationists, most of whom are of the Christian or Muslim faith.” This implies that Islamic creationism is coequally present in Europe as are Christian versions, despite lacking the long and complex history that is described in this book. Indeed, the proximate cause of the adoption of Resolution 1580 was the publication and mass dissemination of Turkish creationist Adnan Oktar’s (Harun Yahya) *Atlas of Creation*. This in itself suggests that if there is something coherently European about creationism in Europe, it is in the way that creationism’s condemnation, in the language of a threat to human rights, no less, follows swiftly upon the heels of the first organized version of Islamic creationism in Europe. The book’s chapter on Turkey focuses extensively on Oktar, making him not only the face of Turkish

creationism, but also, by proxy, of all Islamic creationism in Europe.

As Islamophobic policies in European nations exacerbate the plight of refugees from majority Muslim countries, and as Muslim populations already resident in many European nations are vilified in resurgent politics of nationalism, nativism, and racism, the elevation of Islamic creationism to a perceived threat to human rights in Europe, and the depiction of it as equally threatening in Europe as all Christian creationism put together, is an aspect of creationist experience that is not just unique to the countries of Western and Northern Europe, but is also distinctly European.

The “Europe” in this book is undertheorized, and in declaring that there is no essential “European creationism,” the editors abdicate the need to define a cultural vision of Europe that informs their undertaking. More explicit consideration of the idea of Europe may be of special concern to North American audiences who claim Europe or a historically imagined Christendom as part of their intellectual and cultural pedigree. Despite this, the multinational picture of creationism in Europe, taken altogether, yields something more than its constituent chapters do on their own.

Reference

¹<http://assembly.coe.int/nw/xml/XRef/X2H-XrefViewPDF.asp?FileID=17592&lang=en>.

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NEWTON’S APPLE AND OTHER MYTHS ABOUT SCIENCE by Ronald L. Numbers and Kostas Kampourakis, eds. Cambridge, MA: Harvard University Press, 2015. 287 pages. Hardcover; \$27.95. ISBN: 9780674967984.

In *Newton’s Apple and Other Myths about Science*, Ronald Numbers and Kostas Kampourakis have assembled a series of essays that attempt to debunk common misconceptions that are taught in science classrooms. This collection serves as a companion piece to *Galileo Goes to Jail and Other Myths about Science and Religion* (Harvard University Press, 2010), which was also edited by Numbers. While the earlier work focused specifically on faulty interpretations that directly impact the modern debate between science and religion, this volume seeks to improve science literacy and generate an understanding of the “nature of science” by answering questions such as: How is science done? What questions do scientists ask? and, What type of knowledge do they produce? While not its focus, *Newton’s Apple* does engage with

Book Reviews

religion and the role of the church where those interactions are critical to the historical narrative; however, unlike the previous volume, these interactions are not the main focus. Numbers is a renowned historian of science and medicine, having written or edited more than thirty books. Kampourakis's interests in science education meld with Numbers's expertise to make *Newton's Apple* noteworthy.

As with all compiled volumes, this one is built upon the expertise of its twenty-seven individual contributors: these include Peter Harrison, Michael Ruse, Bruno Strasser, Mansoor Niaz, and Patricia Fara. The slate of authors is impressive, each author bringing their own personal expertise to bear on one specific commonly taught idea that lacks historical accuracy. The questions in this compilation range from the general (e.g., that religion has typically impeded the progress of science) to the specific (e.g., that the Millikan oil-drop experiment was simple and straightforward) and are organized into four sections: Medieval and Early Modern Science, Nineteenth Century, Twentieth Century, and Generalizations.

The importance of *Newton's Apple* lies in its honest ability to define and provide historical depth and context to the events surrounding commonly taught myths. Strasser defines a myth in his essay as "a way of collectively expressing something about values, beliefs, and aspirations, even though, taken literally, the content of the myth is not true." He continues to say that "myths not only (imperfectly) reflect the past but also shape the future. For this reason, explaining how and why a myth crystallized in a particular community at a specific time in history is often more illuminating than simply debunking the myth by showing its inaccuracies" (pp. 179-180). Both this volume and *Galileo Goes to Jail* serve this role well by providing succinct, historically informed essays aimed at explaining a variety of myths that have been shaped over time to serve the purpose of their advocates, rather than conveying precise historical events.

Overall, the essays included in this volume address important myths that continue to hinder the public understanding of science and its history. *Newton's Apple* questions myths such as the oft-taught idea that Columbus believed in a flat earth and that a falling apple led Newton to postulate the Law of Gravity. A number of essays are devoted to various aspects of evolution, as postulated by Charles Darwin and interpreted by others. Historical context is also provided for more modern myths, including the role of *Sputnik* in spurring changes to scientific education in the United States and the story that medical practice was revolutionized when Linus Pauling

discovered that there was an underlying molecular basis for sickle-cell anemia. Perhaps the most compelling essays, however, are the four included in the final Generalizations section, which provide a useful overview of the field and the major reasons for trying to debunk these myths in the first place. In a classroom setting, engaging these final essays first might provide a useful foundation for the discussion of the other more temporally placed myths, which occur earlier in the volume. With almost thirty percent of the essays in this compilation addressing some form of Darwinian evolution, there are sections of the collection that feel a bit repetitive; however, as evolution and Darwin in general remain major points of debate on the modern stage, the inclusion of so many different myths in relation to this topic may be justified.

I believe that this book has brought together the right group of scholars to address, in intelligent yet accessible ways, the stories that many of us were taught and that we continue to teach our students today about science's most famous characters and the way scientific advancement occurs. Engagement with this volume stands to improve scientific accuracy and the general understanding of how scientists actually do science. While both *Newton's Apple* and *Galileo Goes to Jail* address some of the same myths, it does seem that the change in focus from "science and religion" to "the nature of science" renders this latest volume of value, especially to those working in science education at all levels who wish to ensure that their students are capable of interacting with the modern world in an enlightened and accurate way. Context matters, and this volume does an excellent job of placing each of the presented myths within its historical context and identifying important historical details, which in many cases have been skewed for rhetorical, pedagogical, or, occasionally, for more malicious reasons. Regardless of the motivation, it is time to reclaim scientific history, and *Newton's Apple* serves as an important step in that process.

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HUXLEY'S CHURCH AND MAXWELL'S DEMON: From Theistic Science to Naturalistic Science by Matthew Stanley. Chicago, IL: University of Chicago Press, 2015. 364 pages, including notes, bibliography, and index. Hardcover; \$45.00. ISBN: 9780226164878.

That naturalism functions as a guiding point of view or philosophy for the practice of modern science has become a truism. Naturalism is critical of any appeal to the supernatural or of any being or idea that smacks of the transcendent. But how, you may ask, did so many scientists become accustomed