

Introduction

John M. Lynch

Published online: 29 February 2012
© Springer Science+Business Media B.V. 2012

In November 1859, Charles Darwin's groundbreaking statement of his theory of descent with modification through natural selection was published as *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*. Almost exactly 150 years later, a series of papers were presented at the annual meeting of the History of Science Society (Phoenix, AZ, USA) which sought to examine how the ideas of Darwin were disseminated by "Darwinians" and popularizers in the years following that publication, while also examining how the very notion of Darwinism was constructed by Darwin's supporters.

The majority of the papers in this special issue of *Science & Education* originated in that session, which was titled "Popularizing and Policing 'Darwinism' 1859–1900." Quoting the session abstract:

Debates about the reception of Darwin's *Origin* have been integral to our understanding of the development of modern evolutionary biology. This scholarship has revealed that there were many diverse readings of what it meant to call oneself a 'Darwinian,' which were not only contested, but changed over time. Darwin's inner-circle of supporters held different levels of commitment to Darwin's ideas quite comfortably, but there were others who, formerly in this circle, found themselves either marginalized – as was the experience of the Harvard botanist, Asa Gray when he visited England in 1868, or excluded, as in the case of the Catholic evolutionist, St. George Jackson Mivart. Popularizers of Darwin and his ideas – and there were many – only further muddied the waters with their various appropriations and presentations of Darwin and his ideas to the public. This session will explore these negotiations over what it meant to be a Darwinian among those who proved some of the most influential in molding the public perception of 'Darwinism.' Although Darwin tried, he failed to control these variously progressive, teleological, and theistic interpretations of his work. If sales are any indication, the Anglo-American public was gripped more by 'non-Darwinian' accounts by the likes of Grant Allen, Samuel Butler, Arabella Buckley and Charles Kingsley, than by the more 'Darwinian' accounts of George John Romanes and Thomas Henry Huxley.

The papers by Piers J. Hale (on Kingsley) and Russell T. Hunter (on Gray) are directly derived from their presentations in Phoenix. Bernard Lightman—who originally spoke on

We dedicate this issue to our dear friend, colleague and mentor, Gar Allen, on the occasion of his 75th birthday.

J. M. Lynch (✉)
Barrett, the Honors College, Arizona State University, Tempe, AZ 85287-1612, USA
e-mail: john.lynch@asu.edu

Anglo-American popularizers of evolution—decided to submit a paper on popularizations of evolution for young people. The paper by Richard Bellon was invited especially for this issue.

Why is this of interest to educators and scientists? Firstly, the very definition of Darwinism remains somewhat problematic. Contemporary opponents of evolution reduce modern evolutionary biology to a crude “Darwinism” consisting of random variation and natural selection as the sole viable explanation for biological diversity. Examination of the historical record demonstrates that such a monolithic explanation was not accepted even by Darwin himself and was furthermore contested and modified in the years immediately following 1859. Secondly, the issue of science popularization remains one of great importance. Recent work has detailed changes in who popularized scientific knowledge over the past 200 years and how that knowledge was brought to the public (Bowler 2009; Lightman 2007). Given the problems that face science education particularly in the United States, the role of popularizers and the efficacy of popularization remains of continuing interest (National Science Foundation 2012; Lerner et al. 2012). Lastly, theistic interpretations of evolution remain popular. Figures such as Kingsley and Gray are the intellectual forefathers of the likes of Kenneth Miller and John Haught who take seriously the claim that naturalistic evolution and divine action can co-exist (Miller 2007; Haught 2010). While proponents of “new atheism” hold that one must choose between science and religion, the historical record shows this to be a false dichotomy and it is important for students to realize this if they are to approach the scientific evidence for evolution without preconceived hostility.

Much remains to be examined about how “Darwinism” was popularized and policed in the years after 1859. We hope that the papers herein provide inspiration for future examinations of these issues.

Acknowledgments I would like to thank Michael Matthews for soliciting this special edition and for his guidance, my colleagues for their willingness to work with me and the necessities of the editorial process, and the numerous referees who commented on the submitted manuscripts.

References

- Bowler, P. J. (2009). *Science for all: The popularization of science in early twentieth-century Britain*. Chicago and London: University of Chicago Press.
- Haught, J. F. (2010). *Making sense of evolution: Darwin, God, and the drama of life*. Louisville: Westminster John Knox Press.
- Lerner, L. S., Goodenough, U., Lynch, J., Schwartz, M., & Schwartz, R. (2012). *The state of state science standards 2012*. Washington, D.C.: Thomas B. Fordham Institute.
- Lightman, B. (2007). *Victorian popularizers of science: Designing nature for new audiences*. Chicago and London: University of Chicago Press.
- Miller, K. R. (2007). *Finding Darwin's God*. New York: Harper Perennial.
- National Science Foundation. (2012). *Science and engineering indicators*. <http://www.nsf.gov/statistics/seind12>. Accessed 11 Feb 2012.