



REVIEW

Darwin's Disciple: George John Romanes, A Life in Letters

by Joel S Schwartz

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reviewed by John M Lynch

Correspondence has always been central to the scientific enterprise, and nineteenth-century scientists have left us with a rich seam of letters to mine in our efforts to understand their work, lives, and milieu. Some of these letters have been published in posthumous “life and letters” volumes, often lovingly assembled by spouses, children, or close colleagues. To the modern historian, these often suffer from excessive editorial interference. Other letters remain unpublished, languishing in public and private collections scattered worldwide. Given the value of letters as historical source material, recent decades have seen projects (often transnational) aimed at collecting, transcribing, editing and publishing the correspondence of notable scientists such as Charles Darwin, Thomas Henry Huxley, Alfred Russel Wallace, and John Tyndall. Joel Schwartz has made a modest, yet valuable, contribution to this collective enterprise in making available the letters of George John Romanes.

A British physiologist who studied the nervous system of invertebrates under such luminaries as Michael Foster and John Burdon Sanderson, Romanes became a supporter of Darwinism, albeit one who argued that there were problems with the theory. Noting that Darwin never showed how natural selection could produce new species (as opposed to adaptations), he proposed a theory by which physiological “peculiarities” involving the reproductive system lead to hybrid sterility between individuals occupying the same area, thus causing isolation that would then allow natural selection to promote diversification (Romanes 1886). While natural selection was by no means an accepted idea at this time, Romanes’s idea received significant resistance from the Darwinians, whom he believed were being inflexible in their opposition.

In other matters, Romanes was a more orthodox Darwinian. After coming to the attention of Darwin in 1874, he began research into the material basis of mind. His *Animal Intelligence* of 1882 aimed to extend Darwin’s argument in the *Descent of Man* and to further establish the continuity between the mental capacities of humans and other animals. He also formulated failed experiments to establish Darwin’s theory of pangenesis and the inheritance of acquired characteristics, both of which he accepted in the face of August Weismann’s theory of germ plasm. In a letter to his wife, Ethel, he wrote:

[S]ince coming here [to Madeira] I have heard of no less than three additional cases of cats which have lost their tails afterwards having tailless kittens. I wish to goodness I had been more energetic in getting on with my experiments about this, so I have written to John to get me twelve kittens to meet me on my return. It will be a great thing to knock down W[eismann]’s whole edifice with a cat’s tail. (p 66, letter of 3/19/1893)

Unless he has already procured ordinary kittens, tell John [their butler] to get them either Angora or Persian. They will cost more but will be much better. (p 67, letter of 3/22/1893)

While cutting tails off kittens in an attempt to disprove Weismann is unlikely to endear him to modern sensibilities, such was Romanes's status that *The Times* described him as "the biological investigator upon whom in England the mantle of Mr. Darwin has most conspicuously descended." Simply put, Romanes was the Darwinian *non plus ultra* of the era.

Romanes was a "rare example of an educated Victorian whose religious beliefs were undermined by scientific reason" (Smith 2004–2012). Though initially an orthodox believer, by the time he met Darwin he began to deny the rationality of theism and intelligent design. By the following decade, he had begun to examine the limits of naturalism and adopted a form of monism that saw mind as a factor in evolution. In so doing, he was not alone, mirroring the doubts of such biologists as Wallace (with whom he disagreed about spiritualism) and St George Jackson Mivart (who incidentally also accused the Darwinians of inflexibility). Before his death, he "certainly came to believe that his rational rejection of religion ... was faulted by an undue reliance on reason to the exclusion of emotional sources of truth" (Smith 2004–2012). There is, however, no evidence that a deathbed conversion occurred.

Like many of his contemporaries, Romanes wrote not just for the emerging scientific elite but also for a general audience, and he was a regular contributor to the periodical press. Wanting to continue outreach to the public but aware of his frail health, he endowed Oxford's annual Romanes Lecture in 1891, the second occurrence of which provided a venue for Huxley to deliver his famous discourse on evolution and ethics. Romanes died in 1894, exactly three weeks after Weismann delivered his own Romanes Lecture (*The Effect of External Influences upon Development*). Two years later Ethel published the *Life and Letters of George John Romanes*. Like many such volumes, the selection of letters was not exhaustive, and the accompanying narrative and editorial apparatus was somewhat tendentious, seeking, for example, to solidify Romanes' return to orthodox belief.

Aiming to provide a "faithful record" of an "eventful life" (p xvii), historian Joel Schwartz has assembled letters from archives in the UK and US. While the collection is not exhaustive—though the full Darwin/Romanes correspondence is included—Schwartz has succeeded in his task. Letters are transcribed with minimal editorial apparatus (for example, insertions and deletions are not indicated as with some other correspondence projects). Schwartz provides useful short introductions to each period of Romanes's life and indeed to the individual letters—these can profitably be read on their own to provide a capsule biography of the man. I for one would have preferred to see the endnotes as footnotes and for there to be a biographical register to guide the novice student of Victorian science. But these are mere quibbles. Schwartz presents the reader with an opportunity to examine the life of a Victorian who not only was a skilled scientist but also struggled with—and I offer only the slightest sampling—vegetarian dinners (p 35), the ethics of suicide (p 44), his own poetry (p 36), and his own lack of belief (p 26 and *passim*).

Recently, biologist Donald Forsdyke (2001) has attempted to establish Romanes's relevance as a precursor to his own "Physiological Selection Theory," though there are historical

problems with this claim (see, for example, Lynch 2004). What Schwartz's volume makes abundantly clear is that Romanes—occupying as he did a central place in the early history of Darwinism—should be seen as a fascinating character on his own merits. This volume deserves to be on the shelf of anyone—historian or not—with an interest in nineteenth-century biology.

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ABOUT THE AUTHOR

John M Lynch is an evolutionary biologist and historian of science at Barrett, the Honors College at Arizona State University. He is currently an editor for the John Tyndall Correspondence Project.

AUTHOR'S ADDRESS

John M Lynch
Barrett, the Honors College
Arizona State University
Tempe, AZ 85287-1612
john.lynch@asu.edu



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