



ESSAY REVIEW

The end of an era

Frederick Burkhardt, James Secord and the editors of the Darwin Correspondence Project (eds), The Correspondence of Charles Darwin, vol. 27

Cambridge: Cambridge University Press, 2019. Pp. 852. ISBN 978-1-108-49375-8. £99.99 (hardcover).

Frederick Burkhardt, James Secord and the editors of the Darwin Correspondence Project (eds), The Correspondence of Charles Darwin, vol. 28

Cambridge: Cambridge University Press, 2021. Pp. 793. ISBN 978-1-108-83960-0. £101.00 (hardcover).

Frederick Burkhardt, James Secord and the editors of the Darwin Correspondence Project (eds), The Correspondence of Charles Darwin, vol. 29

Cambridge: Cambridge University Press, 2022. Pp. 975. ISBN 978-1-009-23356-9. £94.99 (hardcover).

Frederick Burkhardt, James Secord and the editors of the Darwin Correspondence Project (eds), The Correspondence of Charles Darwin, vol. 30

Cambridge: Cambridge University Press, 2023. Pp. 766. ISBN 978-1-009-23359-0. £94.99 (hardcover).

Peter J. Bowler

Queen's University Belfast Email: P.Bowler@qub.ac.uk

These volumes conclude a series initiated in 1974, marking almost fifty years of effort by a huge cohort of scholars. This review is thus a valedictory for the whole series as well as an account of what we have learned from the most recent volumes about Darwin's final years (1879–82). The project was begun by Frederick Burckhardt, who shared the editorial role

 $@ \ The \ Author(s), 2024. \ Published \ by \ Cambridge \ University \ Press \ on \ behalf \ of \ British \ Society \ for \ the \ History \ of \ Science$

for the early volumes with Sydney Smith and a rolling sequence of assistant editors and advisers who eventually comprised a significant fraction of the leading members of what used to be called the 'Darwin industry'. Smith passed away in 1988 (volume 7 notes his legacy). Burkardt too left this world in 2007 – volume 16, part 1 includes an obituary, but his name has been retained and Cambridge University Press still ask that the series be cited as 'Burkhardt *et al.*' Duncan Porter took over for volumes 8–15, again with a sequence of fellow editors and assistants, after which James Secord became head of the project through its final years. The dedications of successive volumes record the efforts of individual scholars who have aided the teams and the involvement of the many institutions and foundations that have leant moral and material support over the years. For those of us with Cambridge connections, the University Library will not seem the same without the presence of the team it supported.

The first volume in the series defined the high editorial standards that would be applied throughout, noting especially the decision to publish the letters to as well as from Darwin – a policy unusual at the time and not always adopted by other series. This has had the advantage of allowing access to ongoing exchanges of opinions and information, although, as noted below, this evaporates when Darwin closed off communication with some opponents on personal grounds. The huge amount of information added in the biographical registers and bibliographies at the end of each volume has also been a boon to scholars. Translations of letters in foreign languages are provided in a supplementary section. Each volume starts with a substantial introduction identifying the main events in Darwin's personal life and career. Supplements have been published as new letters have come to light, and the final volume for 1882 is fully as large as its predecessors, even though Darwin died in April of that year, because it contains a supplement with over four hundred letters, some of considerable interest. Material that comes to light after this final volume went to press will be added to the Correspondence website (at www.darwinproject.ac.uk).

From the start, the project attracted not only scholarly but also wide public interest. The early volumes were reviewed not just in academic journals but also in the serious general press. Darwin's name was one to conjure with at the time, and it remains so in the public imagination, although inevitably the interest among non-specialists waned as the volumes continued to appear, year after year. Reviewers praised the level of scholarship involved, every volume offering a mine of information on the correspondents and their activities, in addition to the meticulous attention paid to Darwin's own life. Time and time again the letters and the footnotes provided throw light on previously unknown incidents of interest to historians both of science and of the general life of the period. Needless to say, these high standards have been maintained to the end of the series and have become a model for similar projects.

What do we learn about the final years of Darwin's life from these volumes? As usual, the main points are conveniently summarized in the introduction to each volume. His health was much improved over previous decades, at least until the onset of the heart problems that finally carried him away. But he mourned the deaths of family members and friends of his own generation, including his brother Erasmus (a situation we all come to eventually). At the same time, though, he took pride in the activities of his children as they matured, began to take up professions, and start families of their own. He negotiated difficulties over his son Horace's choice of a marriage partner and followed Francis's growing skill as a botanist, which led to their subsequent collaboration in his own final researches. New friends and disciples emerged, including George Romanes, while help was provided to a number of correspondents facing difficulties. In 1879 Darwin sounded out colleagues in an effort to gain a government pension for Alfred Russel Wallace, who was then in financial difficulties. Joseph Dalton Hooker urged caution

because of Wallace's enthusiasm for spiritualism, but the campaign was later renewed and in the following year – with the help of Arabella Buckley – was ultimately successful. Help was also provided for Grant Allen, who was emerging as a significant commentator on evolutionary themes. The year 1879 saw Darwin's seventieth birthday, with congratulations pouring in from around the world, while Thomas Henry Huxley delivered his lecture on 'The coming of age of the *Origin of Species*'.

Darwin also renewed his botanical researches. He now took up the issue of the power of movement in plants and the letters reveal his collaborations with a host of correspondents, including his son Francis. There are letters to and from Hooker, William Turner Thiselton-Dyer and Asa Gray in America. His book on the topic appeared in 1880 and the letters show that it was well received. As in previous volumes, the correspondence is a mine of useful information for those working on Darwin's detailed scientific projects.

On the negative side, there was the potential for a nasty confrontation with Samuel Butler, who took offence at Darwin's collaboration with Ernst Krause to produce a biography of his grandfather, Erasmus Darwin. Butler was emerging as a vitriolic critic of the theory of natural selection, but the ultimate source of the breach – as in the earlier case of St George Mivart – was the allegation of inappropriate conduct exposed in print. Butler seemed determined to force a public row, but Huxley and others advised Darwin to ignore his efforts and the affair did not continue.

Darwin's botanical work had always been carried out to throw light on evolutionary questions and this was again evident in the study of movement in plants. Here was a property that seemed to blur the distinction between the plant and animal kingdoms. A letter from embryologist Francis Balfour in November 1880 expressed amazement at the ability of plants to respond to their environment despite their lack of a nervous system. More generally, Darwin was always ready to encourage those whose work provided support for his theory, as with Fritz Müller's studies of South American insect species. He would also engage with critics, at least when there was enough common ground for meaningful communication (the index to each volume usefully lists 'Opponents of CD's theories' under his name). He praised Alexander Agassiz's survey of the links between embryology and evolution, even though Agassiz had warned that many efforts to reconstruct evolutionary genealogies were doomed to fail. Correspondents sometimes reported comments and attacks by less well-known figures; these were seldom followed up (but the editors provide references for any that were published).

Other relationships were more complex. Darwin still thought highly of Wallace's work on biogeography, but found it difficult to understand his objections to the theory of sexual selection and thanked others, including Grant Allen, for responding in print. He had always expressed doubts about the value of Herbert Spencer's philosophical support for evolutionism – the supplement to volume 30 contains a letter to Wallace in 1864 reinforcing this point – but in 1879 letters from John Fletcher Moulton gave him a broader perspective by pointing out Spencer's role as a popularizer of evolutionism. In some cases, the correspondence reveals a more or less complete failure of meaningful communication. In a respectful letter in May 1881, the American palaeontologist Alpheus Hyatt admits his inability to fathom Darwin's thinking on evolution, although Darwin had thanked him for sending his account of the fossil sequences at Steinheim in Germany. Evidently the gulf between Darwin's vision of divergent, adaptive evolution and Hyatt's model of parallel developments driven by embryological constraints was too wide to bridge.

These last remarks lead me to some concluding reflections on the significance of this monumental project. In search of inspiration, I looked up my reviews of the early volumes in the series (published well over thirty years ago) and was reminded of a concern I expressed at the time and which I suspect is still relevant today. While echoing the general chorus of praise for the meticulous work that was being done to present the

correspondence in a form of maximum usefulness to scholars, I was worried that so substantial an effort devoted to a single figure, however eminent, might distort our subject's focus by deflecting attention away from less well-known naturalists whose work was influential at the time but is now long forgotten. At this point in my career, I was trying to promote better recognition of the fact that a significant proportion of late nineteenth-century evolutionists had not followed the lines laid down by Darwin (Hyatt's model of parallel evolution is a classic example). Times have changed, and that point is now more widely accepted in the scholarly community. But it is not so well appreciated outside the realm of academic history of science, and this leaves at least some aspects of my original concern untouched.

Efforts are certainly under way to make the correspondence of other major Victorian scientists available in a form that will eventually match that of the Darwin project. The work being done on the letters of Alfred Russel Wallace is a good example. But it is hard for such projects to attract the level of funding that the Darwin project has enjoyed over such a long period, and for many less well-known individuals the surviving material is less extensive and sometimes less accessible, even via public archives. Online publication of what is available helps, of course, and some may question the necessity of publishing everything in printed format. But for a variety of reasons, it is likely to remain easier to access and publicize information about the most eminent figures than about those whose reputations have not stood the test of time.

To some extent the problem is offset by the policy of publishing the letters both to and from the key figure and by providing references to any published material mentioned even in casual communications. When Darwin engaged actively in correspondence with both supporters and opponents, we see both sides of any debate that emerges. The correspondence is thus a mine of information on the areas where meaningful interaction was possible and also provides valuable hints about the wider response from the many, often obscure, correspondents who provided Darwin with information, sought his advice or commented on his ideas. But in many cases the interaction did not continue, or ceased for other reasons – Darwin broke off relations on personal grounds with some of his most active critics, including Richard Owen, St George Mivart and Samuel Butler. In Hyatt's case, it became clear that their views were so far apart that both admitted the futility of arguing further. There is thus a limit to the project's ability to give a full picture of the debates that were started by the initiative of the lead figure whose eminence sustains its activity.

Darwin is an example of someone who achieved international fame in his own time and retains a high profile in the present. This is not always the case – some modern icons were ignored during their lifetime (think of Mendel) and many of the most eminent Victorian scientists are unknown to all but specialist historians today. Darwin's fame in his later career ensured that he would leave a vast legacy of correspondence, which throws light both on his own work and on its wide scientific and public reception. His continuing fame as the founder of modern evolutionism has no doubt been the inspiration for the funding that has allowed the letters to be collected and documented so effectively. We can only be thankful for the many institutions that have provided the funds, and to the small army of historians who have devoted a significant part of their careers to ensuring the successful completion of the project. Few of those who witnessed its start could have anticipated the level to which it would eventually expand, or the depth of the details it would provide.

Yet here is a dilemma: as historians we welcome the project for the insights it has provided on Darwin's life and influence, and our subject surely needs all the publicity it can get – yet we are aware that his letters provide a filtered view of the complex process by which his theory gained its currently high status. Their publication has helped to bring

our field to the attention of the scientific community and the wider public, but it may also have unwittingly helped to perpetuate an image of science as a sequence of great discoveries that our discipline is trying to challenge. As we celebrate the completion of this magnificent scholarly achievement, we may also reflect on the tensions that exist between scholarship and the public's enduring fascination with heroic individuals.

Cite this article: Bowler PJ (2024). The end of an era. The British Journal for the History of Science 1-5. https://doi.org/10.1017/S0007087423001036