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ESSAY REVIEW

Picturing evolution

Gowan Dawson, *Monkey to Man: The Evolution of the March of Progress Image*

New Haven, CT: Yale University Press, 2024. Pp. 392. ISBN 978-0-300-27062-4. $40.00 (hardcover)

Martin Hewitt, *Darwinism's Generations: The Reception of Darwinian Evolution in Britain, 1859–1909*

Oxford: Oxford University Press, 2024. Pp. 512. ISBN: 978 0 1928 9099 3. £130.00 (hardcover)

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Gowan Dawson's *Monkey to Man* traces the history of one of the most famous scientific illustrations in history, the 'Road to *Homo sapiens*' (from Francis Clark Howell's *Early Man*, Time Life Books, 1865), a depiction of human evolution that became known as the 'March of progress'. The image of ape-like ancestors marching forward to become upright, handsome (and white) has often been criticized as representing a misleading, outdated, Whiggish and racist view of evolution (most famously by the late Stephen Jay Gould). These claims are either oversimplified or plain wrong, as Dawson shows by meticulously tracing the image's history back to the famous frontispiece to Thomas Huxley's *Man's Place in Nature* (1863). Dawson notes that neither Howell nor Huxley was the ultimate author of these images, and reveals exactly who actually made them, and how, when and where they were produced. Scientific illustrations seldom receive this kind of detailed analysis, and I suspect that nobody will look at these iconic pictures in quite the same way after reading this book.

Dawson's is a close-up book, its attention firmly focused on the historical details. By contrast, Martin Hewitt pulls back to offer a wide-angle view of the first fifty years of Darwinism. He utilizes responses to Darwin's ideas as a way of understanding Victorian generational dynamics, arguing that when a person was born (and thus how old they and Darwinism were when the two first met) reveals a lot about shifting generational attitudes. Darwinism is, obviously, central to his book but he explicitly hopes that it will inspire others to pursue similar studies of other key ideas, in order to establish a more secure and widely applicable sense of Victorian generations (p. 432). Based on the evidence here, I fear he is likely to be disappointed, because despite being painstakingly researched and well written, *Darwinism's Generations* fails to convince (this reviewer at least) that the generational approach has much to offer.

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As Hewitt acknowledges, Darwin himself assumed that the older generation would struggle to accept his ideas, but the younger men would come round more quickly. Over more than four hundred densely packed pages, Hewitt confirms Darwin's intuition; the old resisted; the young mostly did not. His (somewhat less-than-earth-shattering) conclusion is that there was no 'Darwinian revolution' because change came too slowly and few were really 'converted' to Darwinism. However, when Francis Galton recorded exactly the kind of conversion experience that was supposedly all too rare, Hewitt dismisses it because 'it is otherwise unsubstantiated by contemporary materials' (p. 99). Yet how often are individuals' most personal changes of heart substantiated by such evidence? A similar point could be made about Hewitt's implicit definition of Darwinism. He acknowledges that although there appeared to be considerable 'evolutionary commitment' in the late nineteenth century, much of it 'had at best a diffuse connection to Darwin's ideas', offering Benjamin Jowett, master of Balliol College, as someone who was influenced by Darwin 'without ever being willing to formally accept much of his position'. Yet Hewitt admits that Jowett accepted the natural origin of all species, and described Darwin 'as one of the three men who had moulded and formed his mind' and the *Origin of Species* as 'one of the greatest and more far-reaching books' of the century (p. 97). What would real Darwinian influence look like, if not this?

Hewitt claims to reject anachronistic definitions of Darwinism (along with the laissez-faire assumption that anyone who claimed to be a Darwinian must be accepted as one), yet he seems to assume that a commitment to natural selection was essential. Those who already believed in some form of evolution (particularly Lamarckianism) do not count, nor do those with existing religious doubts about the doctrine of special creation (pp. 94–7), nor those for whom evolutionism was tinged with some form of religious faith (p. 69). Hewitt's tests seem to have been devised with his conclusions in mind, to deliberately exclude the looser definitions of Darwinism that many historians (including this reviewer) have argued for.

Hewitt acknowledges that it is 'difficult if not impossible to discuss high-Victorian cultural Darwinism without the sort of inferential readings I have been keen to avoid' (p. 203). This is an honest (and rather brave) admission, but can we be said to be studying reception if we are not doing some kind of cultural history? My own view is that a scientific idea's broad cultural impact is the most interesting issue for historians to study, which makes those 'diffuse' connections the heart of the story. Hewitt disagrees (and pays me the complement of criticizing my views in his book, p. 28), arguing that the beliefs have 'a dynamic of their own' which is ignored by approaches like mine.

Historians of ideas will doubtless find Hewitt's approach refreshing, not least in its unabashed defence of older approaches that have been too hastily discarded by younger scholars. It is indisputably supported by a wealth of fascinating details and is certain to prove an invaluable resource for decades to come, even for those who find Hewitt's overarching argument unpersuasive. Those of us who take an expansive view (the vague and fuzzy brigade, as I suspect Hewitt privately thinks of us) will find Dawson's book more to their taste. He follows his images wherever they take him, delighted when he ends up in unexpected places. For example, Huxley's version of the march of progress appeared in the 1932 Universal Pictures adaptation of Edgar Allan Poe's *Murders in the Rue Morgue*, which featured Bela Lugosi as Dr Mirakle, evolutionist and ape trainer (who does not appear in Poe's story). Mirakle uses a version of the Huxley image to show that his trained ape, Erik, is not a monster or freak, but closely related to humans. Dawson argues that Dr Mirakle made explicit to twentieth-century movie-goers what Huxley's original diagram had always seemed to imply (pp. 153–6). In a rather extraordinary final irony, the film was attacked by conservative Christians who wanted it censored for promoting evolution. The body that enforced the

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Motion Picture Production Code successfully resisted these calls by arguing that the version of evolution presented in the film was 'so imaginative and fantastic' that nobody could possibly take it seriously! Dawson's delightful and readable book offers a meticulous example of how to study scientific images, but largely resists making theoretical or methodological claims about how such studies might best be conducted.

The research on display in both books is genuinely awe-inspiring. Hewitt has traced the opinions of fifteen hundred individuals (having *restricted* himself to those whose ages are known) in his search for clear patterns. That necessarily limits the space for discussing individual responses in depth (and tends to exclude those who are most often excluded from history – the poor, the illiterate, the anonymous, women and so on, because their precise ages are harder to discover). Nevertheless, in many cases the care with which Hewitt has documented his research will make it easy for those who wish to know more to track down his sources. (As an aside, the amount of unpublished material Hewitt has analysed is frankly astonishing; most authors would probably have produced three or four books from the mountain of research he must have amassed.) Dawson has been similarly thorough, tracing the names and opinions of every artist involved (even if peripherally) in the production of the key images; looking at their training, methods and materials; and reproducing working drawings and intermediate sketches to show exactly how the pictures took shape.

In many ways, these two books complement each other. Both are case studies, but they take very different approaches to their subjects. They reminded me of Martin Rudwick's metaphor (in his *Great Devonian Controversy*, 1985) of the 'historical microscope'. He explored the notion of 'temporal graininess', arguing that when historians tell stories that range over centuries they have often zoomed out too far, while those who try to recount the daily routines of scientific work risk getting lost in the details. Rudwick suggested that we try and pull back far enough to see a bigger picture, a context that helps make sense of what we are describing, but not zoom out so far that the rich, fascinating details are lost. Its an ideal that is easier to state than to achieve, but most historians will doubtless recognize its value, and will have their own Goldilocks zoom level (neither too close nor too far back). These two books may help you calibrate your own historical microscope; for some, Hewitt may have zoomed out too far, while others will feel that Dawson has perhaps positioned his eye a little to close to his specimens. You pays your money, and you makes your choice, but whatever your preferences, it is impossible not to be deeply impressed with the achievements of both authors (so make sure your local librarian acquires both!).

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