

Nature's Truth: Photography, Painting and Science in Victorian Britain by Anne Helmreich. University Park, PA: Pennsylvania State UP, 2016. xii, 255 pp. + 70 colour, b/w illus. ISBN 9780271071145. \$89.95

In *Nature's Truth, Photography, Painting and Science in Victorian Britain*, art historian Anne Helmreich has tackled an enormous subject. The project, which has taken over fifteen years, aims to answer the question, "What was the impact of science upon art making in Britain in the period we have come to associate with the formation of modernism?" She suggests that "radical changes in science and its discourses over the course of the long nineteenth century" led to changes in the practice of art, thus relocating the history of British modernist art to "the cultural field of science." She explores in particular the rendering of landscape in relation to questions such as whether it was best apprehended by the eye or the camera, and what roles in perception were played by feeling, memory, and imagination. Related issues of exactly what was meant by the term "truth to nature" were, she notes, central to debates in artistic and scientific journals during the nineteenth century.

Helmreich marks the start of her study with the adoption in 1834 by William Whewell of the term "scientist" for those who pursued investigations into the material world. He selected the term as an equivalent to that of the artist who is "a Musician, Painter, or Poet" as the scientist is "a Mathematician, Physicist, or Naturalist." It is significant that the Royal Society for science and the Royal Academy of Arts were both located in Somerset House by 1780 and both relocated to Burlington House in the middle of the nineteenth century. Discourse in both science and art used terms such as "experiment," "fact," "observation," and "truth" and stressed the importance and potential unreliability of vision. Whewell's term was coined at a time when a number of scientific societies were formed in Britain, among them the Geological Society, Astronomical Society, Zoological Society, and Chemical Society. Important at this juncture was the establishment of the British Association for the Advancement of Science (1831), formed to disseminate "the results and benefits of the discipline," a goal greatly aided by journals such as the *Quarterly Review* (1809), *Blackwood's Magazine* (1817), and the *Athenaeum* (1828). T.H. Huxley successfully talked the editors of the *Saturday Review* (1855) into running a regular column on science every two weeks and including science books among those reviewed. Helmreich cites Bernard Lightman's observation that, by the 1840s and 1850s, "there were four times the number of titles on the sciences published annually than at the start of the century." The case was similar for the arts with the proliferation of illustrated journals and papers. Both reflected the expansion of the middle and skilled working classes so that by 1855 half a dozen weekly newspapers and cheap