
The title of this unusual book hints that it is intended to recuperate the reputation of an unjustly forgotten researcher of the late eighteenth century, William Charles Wells. Born in America, Wells was educated in Scotland but practiced medicine for most of his life in London. Wells’ “scientific vision” of the title is ambiguous, referring not only to his studies of binocular vision but also to his philosophical investigations of the formation of dew, and an hypothesis of natural selection. Other researches on rheumatism, heart disease and the colour of blood are mentioned in passing.

This diversity of interests makes a thematic treatment difficult, and the first chapter describing the scientific life of Wells is devoted mainly to an account in his own words. About one-fifth of the book reproduces this autobiographical Memoir and two rare scientific essays. The author makes rather little use of the Memoir, however, suggesting few connections linking the scientific investigations of Wells to the context of his life and career. Nor is the contemporary and subsequent reception to his findings clearly analysed.

Indeed, where the impact of Wells’ research is discussed, it is done in a reproachful tone implying that his importance can be objectively gauged. Thus the author deems it “puzzling, considering the originality of his experiments” that Wells’ vision research could be “overlooked and ignored”, and reproduces his essay on vision “in an attempt to redress the neglect” of his science (p. 2). He contrasts the recognition accorded to Wells for his theory of dew formation with the lack of attention given to his speculations on natural selection, citing it as “a clear case of the arbitrariness of scientific attribution” for ideas that were “ahead of their time” (p. 10). The final chapter usefully discusses historical sources which, the author again notes reprovingly, usually slight Wells or omit reference to his work entirely. This historiographical survey usefully locates Wells in the context of nineteenth and twentieth century thinking about vision, but merely hints at the intellectual and social factors that influenced evaluations of him.

The intervening chapters are more coherent and comprise the strength of the book. They give a detailed survey of eighteenth-century visual science and Wells’ research, providing a readable account of the understanding of afterimages, eye movements, accommodation, squinting, binocular disparity, vision-induced vertigo, and other visual phenomena. A subsequent chapter describes the rise of psychological studies of vision through philosophical toys.
Unfortunately, the illustrations are of low quality, usually consisting of coarse, high-contrast reproductions of disembodied heads, diagrams or apparatus arranged as collages. By contrast, the index and bibliography are useful and detailed.

The book, particularly its middle chapters, will be of considerable interest to vision scientists, but readers seeking an understanding of Wells and his times will require other sources to fill in this uneven but tantalising account.

SEAN JOHNSTON

University of Glasgow Crichton Campus

Johnston review of Wade, The Scientific Vision of William Charles Wells