Adelene Buckland, "Charles Dickens, Man of Science." *Victorian Literature and Culture* 49. 3 (2021): 423–455.

Not many dare challenge the literary impact of Charles Dickens. But when it comes to him as a "man of science", Dickens's influence is frequently overlooked. Adelene Buckland's article is one endeavour to rectify this.

Buckland's departure point is the criticism George Henry Lewes exercised on Dickens. For Buckland, this is a conscious attempt by Lewes to undermine Dickens's role as communicator of scientific knowledge and, thereby, obscure any hint of him contributing to science in the mid-Victorian period. Lewes criticized the Dickensian oeuvre as unsophisticated and superficial and Dickens himself as "completely outside philosophy, science, and the higher literature" (423). Although Lewes's efforts were ostensibly successful, Buckland is not the first to advocate for Dickens' interest—and achievements—in the scientific field as she follows such critics as George Levine and K. J. Fielding. Buckland's argument also draws on the work of James A. Secord. In his essay, "Knowledge in Transit", Secord advocates for knowledge communication as key tool of constituting knowledge. By accepting this premise, Buckland claims, one would be able to place Dickens more centrally in nineteenth-century scientific culture and appreciate his contribution.

Before doing that, Buckland sets out to destabilize Lewes's arguments. She discusses his publications in the broader context of the history of scientific reviewing, highlighting how they were more an effort by Lewes to construct his self-image rather than pass criticism on others (here, Dickens). Even though Buckland provides her readers with an informed overview of Lewes' arguments, she appears to spend a considerable amount of time discussing them in an article devoted to another subject. It would have been helpful to compare Lewes's views with those of other thinkers of the time, who are mentioned only passingly if at all.

Buckland does take note of more contemporary scholars such as Wilkinson, Levine, and others. However, there is no mention of Dickens' reception from his own time up until the second half of the twentieth century. Instead, the author emphasises that despite his engagement with geology, anatomy, chemistry, medicine, psychology, etc., and despite the latterly scholarship acknowledging it, Dickens is still not entirely established as a valid contributor to science. While it is commonly agreed that Dickens was "absorptive of scientific knowledge", it is less widely believed that he was also actively involved in "its creation, communication, or contestation" (432).

Grounding her analysis on Secord's interpretation of communication as scientific practice, Buckland then approaches Dickens from this perspective, aiming to demonstrate and prove his fundamental role in Victorian scientific culture. The author is convinced that if seen this way, "Dickens as scientific communicator—opening up and defining new fields of scientific knowledge and new objects of scientific inquiry— appears everywhere" (439). To achieve this, Buckland includes both excerpts from different works such as *Nicholas Nickleby*, *Pickwick Papers*, and a handful of essays often alongside their reception by different reader groups, including scientists. Dickens's writing, for instance when describing hectic fever, obesity or even a character's dying moments, is seen to complement medical textbooks familiarising medical students with different diseases and aiding medics to describe recently understood illnesses. Moreover, Dickens's vivid and repetitious prose meant that his descriptions often left more intense and lasting impressions on readers.

In like manner, Buckland considers the interplay between science and the stories in which Dickens was involved as either writer, editor, or publisher. A striking example is found in Dickens obtaining Michael Faraday's lectures on candle chemistry for republication as short stories in *Household Words*, the magazine Dickens edited in the 1850s. While Dickens believed the public would benefit from having access to this type of work, he was also intent on promoting communication on medical and sanitary matters more broadly, which were very topical at the time. Dickens's magazines were evidently interested in publishing pieces on "the sciences of heat, energy, ozone, and combustion" (437) among other topics.

Buckland's article is a welcome advocacy of the plurality of a man who has undoubtedly been extensively influential. Notwithstanding the well-informed arguments, at times the author seems to deviate from what she has set out to do and could make use of additional concrete proof of Dickens's actual communication feats that have also functioned as creating scientific knowledge. Albeit scarce, the primary references are very welcome and vividly illustrate the point the author is trying to make. Nevertheless, new historicist approaches often serve to shed light on writers' lives and in doing so illuminate their lasting contributions, literary or otherwise. Buckland is successful in this aspect. Clustering with similar scholarship this may pave the way for Dickens's long overdue recognition as a scientific contributor.

Alkisti Kallinikou University of Edinburgh