History of editing

The editor's role: Reflections from the history of Nature

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On 4 November 2019, *Nature* is celebrating its 150th anniversary of publication—a century and a half of weekly magazines about scientific research. In that time *Nature* has had just eight editors: Norman Lockyer, Richard Gregory, AJV Gale, LJF Brimble, John Maddox, David Davies, Philip Campbell, and the current editor Magdalena Skipper. (In contrast, there have been nine James Bonds and thirteen Doctors on *Doctor Who*.)

Pick up an issue of *Nature* from any era and it will show the fingerprints of its editor. Issues from the Gregory period (1919-1939), for example, reflect Gregory's interest in the relationship between science and politics. Maddox (1966-1973 and 1980-1995) was a journalist at heart who wanted *Nature*'s news content to be provocative and up-tothe-minute. Davies (1973-1980) combined a wry sense of humor with his academic background; his editorials often poked gentle fun at university life.

But no editor has made quite as large a mark on *Nature* as Lockyer, who both founded the magazine and served as its editor-in-chief for the first 50 years of publication. *Nature* was Lockyer's brainchild, and it was born from equal parts high-minded aspiration and financial desperation. Ultimately, *Nature* did not become the publication Lockyer had imagined when the first issue left the presses in 1869—but when Lockyer retired fifty years later, he was more than pleased with its place in the world of science publishing.

Like many researchers in the mid-19th century, Lockyer was not paid to do his science. He pursued his astronomical work in his spare time and at his own expense. Meanwhile, he stitched together a living for his growing family by working at the government's War Office, writing books and articles about astronomy, and reviewing book manuscripts for the publishing house Macmillan and Company. Lockyer became frustrated by the number of scientific books and articles being written by people with no background in scientific research. He felt those writers often got the details of the science wrong, and he became convinced that science in Britain would attract more intellectual respect—and financial support—if researchers were the ones writing about science instead of journalists.

In 1868, Lockyer found a reason to act on his frustration with the state of science writing in Britain. A bureaucratic reorganization at the War Office led to him being demoted and losing nearly half his salary. Eager for more income, Lockyer approached Macmillan and Co. with an idea: a weekly magazine about science, written by the most respected researchers in Britain and edited by Lockyer. The new publication, *Nature*, would be aimed at an elite audience of educated laymen. Lockyer imagined barristers, landowners, and members of Parliament picking up his new magazine to learn about the latest scientific developments.

There was one problem with that plan. Unlike Lockyer, the next generation of British researchers began their careers in an era when scientific research was a more established and respected career path. Those younger researchers were not interested in writing journalistic articles aimed at an audience of laymen; their professional success depended on impressing their scientific peers. *Nature*'s contributors quickly realized that a weekly journal with a short turnaround time was a convenient venue for scientific debates—and, later, for announcing their most important new research findings.

Since Lockyer did not want to turn to authors outside the scientific community for material, his contributors' desires shifted *Nature* away from his vision of a magazine for laymen and turned it into a publication by and for scientists. He was initially frustrated by the contrast between his vision for *Nature* and the submissions he was receiving, but Lockyer soon grew to enjoy *Nature*'s prominence among his fellow researchers. By the end of the 19th century some contemporaries accused him—not without cause—of letting *Nature*'s reputation go to his head.

But Lockyer himself could not claim full credit for Nature's status. It was the contributors' interest in writing for their fellow researchers that remade Nature from a popular magazine into an influential research periodical. Like their forebearer, Lockyer's successors have all had to grapple with forces beyond their control. At various points in Nature's history, editors have had to weigh their visions for Nature against bottom-line business considerations, wartime challenges, and the rising popularity of competitors like Cell and Physical Review Letters. As Nature moves into its 151st year of publication, calls for open-access publication and new publishing requirements like Plan S are beginning to change the landscape of scientific publishing once again. The editor's leadership and vision will be crucial to charting Nature's future-but, as Lockyer's story shows, editorial intent is only one factor that shapes a scientific publication.