

Book

Passionate polymath

Humphry Davy is best known today as a pioneering chemist. In 1799, he was the first scientist—although this term did not exist during Davy’s lifetime—to explore the chemical and physiological properties of nitrous oxide (later dubbed laughing gas), partly by hazardous self-experimentation. During the next decade, Davy discovered the elements potassium and sodium, and was also the first to isolate barium, boron, calcium, magnesium, and strontium. In 1815, after experiments with the gases known as “firedamp” (largely methane) in coal mines, Davy became the inventor of the safety lamp that bears his name. In addition, he is remembered as the most popular lecturer in the early years of the Royal Institution in London; as the “discoverer” of Michael Faraday; and as a high-profile, if divisive, President of the Royal Society during the 1820s, in succession to Joseph Banks.

Less well known is that Davy began his adult life in medicine, as a humble apprentice to an apothecary-surgeon in 1795, with the ambition of becoming a medical practitioner in his native Cornwall. Moreover, the earliest biographies of Davy, after his premature death in 1829, were written by physicians: the first by John Ayrton Paris, from documents supplied by Davy’s widow, and the second by his brother John Davy, who was dissatisfied with Paris’s book and who subsequently edited Davy’s papers for publication.

Historian Jan Golinski’s new study of Davy, *The Experimental Self*, is not a conventional biography. Instead, Golinski takes strong autobiographical hints from Davy’s notebooks and uses them to construct six, chronologically overlapping, chapters about Davy’s identity—“The Enthusiast”, “The Genius”, “The Dandy”, “The Discoverer”, “The Philosopher”, and “The Traveller”—that “each emerged to prominence during a certain phase of his career”. Thus, nitrous oxide

appears in “The Enthusiast”, and also in “The Genius” and “The Philosopher”.

Davy’s experiments with nitrous oxide, at the Pneumatic Institution in Bristol started by the radical Thomas Beddoes, led to a book published in London in 1800. This work launched Davy’s career, but at the same time provided ammunition against him for the rest of his life.

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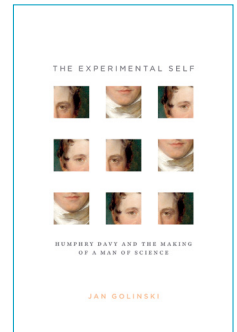
In a letter written to a friend the day after inhaling the gas, Davy remarked how it “made me dance about the laboratory as a madman, and has kept my spirits in a glow ever since”. As his doctor brother approvingly noted, Davy was “of that temperament best adapted to be excited by it, and of a tone of mind best fitted to enjoy its excitements”. But to his critics, his self-reports sounded highly inappropriate for dispassionate science. “He assumed, in other words, the persona of an enthusiast, one

whose passions had been excited even at the expense of his judgement”, notes Golinski. Certainly, Davy and his drug-inhaling friends, who included the poet Samuel Taylor Coleridge, seemed more interested in aesthetics than anaesthetics. For although in his book Davy did note the possible use of nitrous oxide to reduce pain in surgery, he did little to promote the idea, which was not put into practice until the 1840s.

Hence the satirical caricature drawn by James Gillray in 1802 showing a Royal Institution public lecture on nitrous oxide and its exhilarating effects, which depicts an easily recognisable Davy flourishing a pair of fuming bellows, standing next to a fellow lecturer administering the gas to a willing victim. Golinski reproduces this celebrated drawing without commenting on the strangely flushed demeanour of Davy. His omission is, in a way, typical of his book. Although insightful about many aspects of the self-made Davy’s ideas and personality, *The Experimental Self* doesn’t seem to animate Davy’s passion.

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The Experimental Self: Humphry Davy and the Making of a Man of Science
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