

## THE MANY WORLDS OF THOMAS BEDDOES

Thomas Beddoes was made for the tumultuous times in which he lived. Born in 1760, he began to emerge as a public figure in the 1790s, when radical spirits in Britain were inflamed by the French Revolution and those of a more conservative disposition reeled in horror. He both witnessed and participated in the birth of the Romantic movement (not least through his son, the poet Thomas Lovell Beddoes) and the maturing of the Industrial Revolution. By the time he died, in 1808, he had earned extremes of respect and suspicion as a charismatic maverick doctor whose Pneumatic Institution in Bristol had pioneered unconventional remedies founded on the administration of gases of contestable efficacy. Along the way, he taught chemistry at Oxford for six years and, following an intemperate resignation from his university post and various manifestations of his Jacobin sympathies, he even appeared on the Home Office list of political undesirables. It was quite a life.

Someone whose activities embraced so many domains deserved better than the lengthy but rather lacklustre volume of *Memoirs of the life of Thomas Beddoes M.D.* that a former assistant, John Edmonds Stock, published in 1811. Yet it was not until the 1980s that Beddoes attracted sustained scholarly attention. The seven articles in this special issue of *Notes and Records of the Royal Society*, based on papers delivered at a conference at the Royal Society on 12 December 2008, reflect the continuing tide of interest, treating some (though not all) of the many worlds in which Beddoes made his mark.

The political world in which Beddoes moved emerges with particular clarity from Trevor Levere's study of the intricate relations between parallel commitments to the new chemistry of Lavoisier, unorthodox medicine, and democracy that helped to give Beddoes's work a radical edge at a time of extreme sensitivity in British history. Levere also points to the bonds between Beddoes and the Lunar Society circle, in which he counted James Watt, James Keir and Erasmus Darwin among his friends. As Levere shows, Watt, Keir, and others in or close to the Lunar Society were eager patrons when Beddoes began raising funds for his programme of medico-chemical research. Those associations remind us how much Beddoes owed to the traditions of the British Enlightenment and how easily he was tainted with the air of radicalism that made Joseph Priestley such a tempting target in Edmund Burke's tirade against the new (French) politics and the 'philosophers' whose free-thinking had fostered the pernicious Francophile tide. Iwan Morus points to the confused nature of the Tory attacks that tended to lump together charges of demagoguery in politics with those of manipulative deceit in medicine, especially where electricity was involved. It was this confusion, as Morus argues, that led to an exaggerated perception of Beddoes as an adept of galvanic treatments.

Morus makes the point that Beddoes, although keenly interested in galvanic research, saw galvanism as tangential to his therapeutic priorities. On this score, he draws an important distinction between Beddoes and Humphry Davy, who began experimenting with the voltaic battery in Bristol in 1800 and thereafter took electricity in directions that divested it of its harmful radical connotations. Giuliano Pancaldi similarly focuses on electricity, specifically in the period between the summer of 1800, when Davy began experimenting

with the battery in Bristol, and the spring of 1801, when he arrived in London to take the chair of chemistry at the Royal Institution. Pancaldi presents Davy as belonging to a new generation of experimentalists in electricity rather than an older generation of whom Erasmus Darwin, who offered electrical cures, and Beddoes (who did not) were typical. Davy broke sharply with the older generation's interest in the confusing and, at the time, futile task of trying to explain the phenomena of the battery, which Pancaldi describes as a 'hybrid' instrument in the sense that its functioning could be plausibly interpreted in a number of different ways. As Pancaldi argues, it was in the hands of Davy, who benefited in London from materials and skills more readily available there than they had been in Bristol, that the battery was 'emancipated' from its tangled roots in the involved world of medical electricity, chemistry and natural philosophy.

Despite Beddoes's interest in and knowledge of electricity, the core of his medical practices lay firmly in pneumatic therapy. Larry Stewart brings out the intensity of the vogue for the inhalation of gases and the hopes (usually shattered) that gases inspired, especially as a cure for the scourge of consumption. From Stewart's discussion, Beddoes emerges as a key participant in a broader movement rather than an initiator. Within that broader movement his skill as a promoter of pneumatic treatments was exceptional, and the range and quality of the contacts he was able to draw upon in his extensive communication network (including James Watt, who offered advice on the efficacy of various gases after the death of his consumptive daughter, Jessy, in 1794) gave him and the Pneumatic Institution a special standing.

Despite Watt's understandable but misguided optimism, the question whether the inhalation of gases actually 'worked' was quickly resolved by the lack of a significant body of confirmed cures. This had happened, in fact, by the time of Beddoes's death, a few years after the Pneumatic Institution was transformed, in 1802, into the very different Preventive Institution for the Sick and the Drooping Poor. Where efficacy was to all appearances a reality, however, was in certain recreational uses. Mike Jay evokes the trials that Beddoes and Davy conducted with self-administered nitrous oxide in Bristol in 1799. These opened a door on a world of pleasurable experience that Beddoes proceeded to share with chosen clients. Oddly, and to the detriment of the Pneumatic Institution's reputation, the effects were far less marked when the gas was taken by correspondents elsewhere. Jay takes this observation as the starting point for a discussion of the variability of nitrous oxide's efficacy: as he argues, the failure to reproduce the experiences of Beddoes and Davy in Bristol had damaging consequences not only for the Pneumatic Institution but also for the plausibility of the 'Brunonian' ideas of a balance between stimulus and sedation, then under generally favourable discussion in Beddoes's circle.

So where are we to place Beddoes? George Rousseau interprets him as someone fashioned, although in no way constrained, by the multiple elements of a late, 'utilitarian' form of the British Enlightenment. Beddoes was committed, in other words, to the advancement of human happiness through the promotion of material well-being. The particular context that Rousseau takes is the treatment of gout. His title, 'Political gout', captures his view of Beddoes's sensitivity to the political and cultural associations of the disorder. For Beddoes, gout could only be 'treated' effectively through changes in society that would adjust the lifestyle of the classes that were particularly afflicted. Those classes were, of course, pre-eminently the ones on which Beddoes the democrat cast his relentlessly critical eye and in respect of whom political intervention was, in his opinion, most urgent.

The need for an acceptance of complexity and paradox in working towards an understanding of Beddoes is evident. Neil Vickers's argument reinforces the point. Vickers sees Beddoes at the 'cutting edge' of many disciplines, including not only his relatively well-known specialities of pneumatic medicine and chemistry but also theories of the mind. Specifically, he presents Beddoes as one of the conduits by which German psychological theories, in particular those of the eighteenth-century Karl Philipp Moritz, became known to British readers. Moritz's ideas helped Beddoes to a perception of a continuity between the states of sanity and madness rather than a negation of each other. In exploring this perception in his *Hygëia* (1802–03), Beddoes became a late contributor to Enlightenment debates in the capacious British tradition of associationist psychology, although always with characteristically idiosyncratic glosses of the kind that led him to Shakespeare for insights into the nature of insanity.

The brevity of Beddoes's period of fame or (depending on the observer) notoriety makes his impact on contemporary medical practice and science all the more remarkable. His impact could arguably be extended to include the foundations that were laid in the Pneumatic Institution for the exploitation of gases in anaesthesia from the 1840s. But claims to a long-term personal influence are surely unnecessary. As the contributions to this special issue suggest, Beddoes and the world of the heady few years of his true celebrity offer quite enough of interest and historiographical significance.

**Robert Fox**

([robert.fox@history.ox.ac.uk](mailto:robert.fox@history.ox.ac.uk))