New Light on John Davy

Andrew Lacey

Lancaster University, England

John Davy (1790–1868), the only brother of Sir Humphry Davy (1778–1829), was an army doctor, serving overseas, in various posts, in Belgium, France, Ceylon, the Ionian Islands, Malta, and the West Indies. He was also a researcher, a writer in his own right, and the editor of his brother's works. This article, drawing principally on three unpublished manuscript sources recovered during work on the Davy Letters Project, examines a crucial, formative period in John Davy's life – the years 1808–1814 – and situates him in the cultures and networks, scientific and literary, of which he was part. It explores John Davy's time working as an assistant at the Royal Institution (1808–1811), a period he spent in Edinburgh as a student (1811–1813), and his engagement there in a scientific dispute with John Murray (1778–1820) over the chemical composition of muriatic acid gas, and the time he spent in his native Cornwall in 1814, prior to his first medical posting with the military.

#### Introduction

The publication of *The Collected Letters of Sir Humphry Davy*, which has been long in preparation, will represent a landmark in Davy studies: in presenting texts, with full annotation, of many previously unpublished letters written by Davy, the edition will provide new insights into Davy himself, the Davy circle, and the various, often interrelated cultures and networks – scientific, literary, and others – of which he was part. As the title suggests, the primary focus of this article is John Davy, Humphry Davy's younger brother. In working on the *Collected Letters*, a wealth of valuable material on John Davy has been recovered in recent years. Gratifyingly, interpreting this material frequently achieves something of a double effect: it not only sheds new light on John Davy's life, career, and social

<sup>&</sup>lt;sup>1</sup> The Collected Letters of Sir Humphry Davy, ed. Tim Fulford and Sharon Ruston, advisory ed. Jan Golinski, Frank A. J. L. James and David Knight, 4 vols. (Oxford: Oxford University Press, 2019). Hereafter Davy, Collected Letters.

environment, but also enriches our knowledge and understanding of Humphry Davy, especially when read alongside his letters.

John Davy was born in 1790 in Penzance, in Cornwall, and lived to the age of seventy-seven, dying in 1868 at Lesketh How, near Ambleside, in the Lake District.<sup>2</sup> Throughout Humphry Davy's life, John Davy and his brother maintained a close relationship: the pair had worked together, through an arrangement of Humphry's, at the Royal Institution during the years 1808–1811; they kept up a regular correspondence, the older brother often giving the younger brother advice and encouragement, even well into later years; and it was John who cared for Humphry, in his capacities both as a medical doctor and as his closest living relative, during his final weeks in Rome and Geneva.

[Insert image 'John Davy Wellcome']

Figure 1. John Davy, c. 1830<sup>3</sup>

In the last letter Humphry Davy sent to England, to his sister Katherine Davy, he writes, poignantly, in a faltering hand: "I am very ill but thanks to my dearest John still alive." Although Humphry does not say so, John's comforting ministrations in these final days would surely have been as much to the heart and the mind of the dying "philosopher" as to the body, if not more so.

It was John Davy, too, who took charge of Humphry Davy's literary estate following the latter's death in 1829, Humphry having bequeathed to John various manuscript

<sup>&</sup>lt;sup>2</sup> For biographical information further to that provided in this article, see Richard S. Ross, "John Davy: Physician, Scientist, Author, Brother of Sir Humphry," *Bulletin of the History of Medicine* 27 (1953): 101–11, and "Davy, John (1790–1868)," *ODNB*.

<sup>&</sup>lt;sup>3</sup> "John Davy M. D.," in Collection of "Netley Photographs" ("Crimean Period and Later Officers of Netley Mess"), Lieutenant Colonel J. G. Foster's Collection of Material re the History of Army Medical Services, Royal Army Medical Corps Muniments Collection, Museum of Military Medicine. Item 132, in RAMC/52/1, held at the Wellcome Library. Image reproduced under the terms of <u>CC BY-NC 4.0</u>. Ross ("John Davy," 102), quoting from "Recollections of Dr John Davy," *Medical Times and Gazette* 2 (1871): 390–91, notes that John Davy "was described as 'small and spare [...] with a fair complexion, his hair was dark and plentiful, though kept short, and he had bright hazel eyes.' His face was said by one who knew him to be very like that of his brother." The resemblance of this image to the Thomas Phillips portrait of Humphry Davy (1821; National Portrait Gallery, NPG 2546) is, indeed, striking, as was remarked upon during the "Using the Davy Letters" symposium.

<sup>&</sup>lt;sup>4</sup> John Davy and Humphry Davy to Katherine Davy, 20 April 1829, Davy, *Collected Letters*, 4: letter 1204.

<sup>&</sup>lt;sup>5</sup> Humphry Davy conceived of himself as such in the title of his last, posthumously published work, edited by John Davy, *Consolations in Travel, or The Last Days of a Philosopher* (London: John Murray, 1830).

notebooks and journals. In 1836, he published the two-volume *Memoirs of the Life of Sir Humphry Davy*, <sup>6</sup> in part a corrective to *The Life of Sir Humphry Davy*, <sup>7</sup> published by John Ayrton Paris in 1831, which, as the Preface to *Memoirs* reveals, John Davy found defective in several respects:

There appeared to be much in it that was objectionable, many things which were incorrect, and that the general tone and tendency of it were to lower the character of my brother in public estimation; not, indeed, as a man of science, and an original enquirer, but as a man and a philosopher; and to deliver his name to posterity with a sullied reputation, charged with faults which he would have indignantly repelled if living, and which it has become my duty, believing the charges to be unfounded, not to allow to pass unrefuted, now he is no more.<sup>8</sup>

This represents something of a reversal of roles: the younger brother now exercises vigilance on behalf of, and seeks to protect, the older brother, or at least his posthumous reputation "as a man and a philosopher," as Humphry Davy often did for John Davy, such as on the occasion in April 1812 when Humphry warned John against experimenting upon himself with digitalis:<sup>9</sup>

I have heard of some experiments you have made on the nature of digitalis & other poisons on yourself. I hope you will not indulge in trials of this kind. I

<sup>&</sup>lt;sup>6</sup> John Davy, *Memoirs of the Life of Sir Humphry Davy, Bart.*, 2 vols. (London: Longman, Rees, Orme, Brown, Green, and Longman, 1836).

<sup>&</sup>lt;sup>7</sup> John Ayrton Paris, *The Life of Sir Humphry Davy, Bart.*, 2 vols. (London: Henry Colburn and Richard Bentley, 1831). Paris's *Life* was also published as a single volume in the same year, 1831.

<sup>&</sup>lt;sup>8</sup> John Davy, *Memoirs*, vii. As David Amigoni has recently highlighted, Paris's comparison of the characters of Humphry Davy and William Hyde Wollaston offers a neat example of Paris's "sullying" of Davy's image: "Notwithstanding [...] the scrupulous attention with which [Davy] observed all the minute details of the art [of fishing]; if truth must be told, he was not more successful than his brother anglers; and here [...] the temperament of Wollaston presented a characteristic contrast to that of Davy. The former evinced the same patience and reserve – the same cautious observation and unwearied vigilance in this pursuit, as so eminently distinguished his chemical labours. The temperament of the latter was far too mercurial: the fish never seized the fly with sufficient avidity to fulfill his expectations, or to support that degree of excitement which was essential to his happiness, and he became either listless or angry, and consequently careless and unsuccessful" (Paris, *Life*, vol. 1, 296–97). See Amigoni, "Writing the Scientist: Biography and Autobiography," in *The Routledge Research Companion to Nineteenth-Century British Literature and Science*, ed. John Holmes and Sharon Ruston (London: Routledge, 2017), 128–40, on 131.

<sup>&</sup>lt;sup>9</sup> As used in medical trials by Thomas Beddoes. See, for example, his *Observations on the Medical and Domestic Management of the Consumptive; on the Powers of Digitalis Purpurea; and on the Cure of Scrophula* (London: Longman and Rees, 1801), especially 115–225.

cannot see any useful results that can arise from them, it is in states of disease & not of health that they are to be used & you may injure your constitution without gaining any important result besides if I were in your place I should avoid being talked of for any thing extraordinary of this kind.<sup>10</sup>

In later life, John Davy noted the irony that this warning was coming from one "who about the same age had risked his life in breathing gases;" nevertheless, says John, "I followed his advice." 11

Following the publication of *Memoirs*, John Davy edited and published *The Collected Works of Sir Humphry Davy*, in nine volumes, in 1839–1840.<sup>12</sup> This was followed, in 1858, by *Fragmentary Remains, Literary and Scientific, of Sir Humphry Davy*, <sup>13</sup> which John chose to publish after the death of Jane, Lady Davy, in 1855, when new manuscript items passed from her estate to him. John Davy also published works in his own right, including a considerable number of papers, in the *Philosophical Transactions of the Royal Society of London* and other periodicals, <sup>14</sup> and nine books, including *An Account of the Interior of Ceylon, and of Its Inhabitants. With Travels in That Island* (1821), *Notes and Observations on the Ionian Islands and Malta* (1842), and *The West Indies, Before and Since Slave Emancipation, Comprising the Windward and Leeward Islands' Military Command* (1854). <sup>15</sup>

<sup>10</sup> Humphry Davy to John Davy, 22 April [1812], Davy, *Collected Letters*, 2: letter 325.

<sup>&</sup>lt;sup>11</sup> John Davy, "Some Notices of My Life," i, [n. pag.] [24]. For full information on this resource, see below. Humphry Davy did indeed "risk his life" on occasion during the period he spent working at Beddoes's Medical Pneumatic Institution, 1798–1801. In one of his most dangerous instances of self-experimentation, Davy almost fell unconscious having inhaled a large quantity of carbon monoxide: "I made three inspirations and expirations of the hydrocarbonate. The first inspiration produced a sort of numbness and loss of feeling in the chest and about the pectoral muscles. After the second inspiration, I lost all power of perceiving external things, and had no distinct sensation except a terrible oppression on the chest. During the third expiration, this feeling disappeared, I seemed sinking into annihilation, and had just power enough to drop the mouth-piece from my unclosed lips. A short interval must have passed during which I respired common air, before the objects about me were distinguishable. On recollecting myself, I faintly articulated, 'I do not think I shall die.' Putting my finger on the wrist, I found my pulse thread-like and beating with excessive quickness" (Humphry Davy, Researches, Chemical and Philosophical; Chiefly Concerning Nitrous Oxide, or Dephlogisticated Nitrous Air, and its Respiration (London: J. Johnson, 1800), 468–69).

<sup>&</sup>lt;sup>12</sup> The Collected Works of Sir Humphry Davy, Bart., ed. John Davy, 9 vols. (London: Smith, Elder, 1839–1840).

<sup>&</sup>lt;sup>13</sup> Fragmentary Remains, Literary and Scientific, of Sir Humphry Davy, Bart., Late President of the Royal Society, etc. With a Sketch of His Life and Selections From His Correspondence, ed. John Davy (London: John Churchill, 1858).

 $<sup>^{14}</sup>$  According to Ross, "John Davy," 102, John Davy published 152 papers in his lifetime.

<sup>&</sup>lt;sup>15</sup> John Davy, An Account of the Interior of Ceylon, and of Its Inhabitants. With Travels in That Island (London: Longman, Hurst, Rees, Orme, and Brown, 1821); Notes and Observations on the Ionian Islands and Malta: With Some Remarks on Constantinople and Turkey, and on the System of Quarantine as at Present Conducted, 2

As the titles of these books suggest, John Davy lived a peripatetic life. Qualifying in medicine from the University of Edinburgh in 1814,<sup>16</sup> the same year he was elected a Fellow of the Royal Society, he entered the army as a surgeon, and saw much foreign service over the years 1815–1848. John Davy's papers and books give us a generally good account of his various researches – in Edinburgh, in Ceylon (now Sri Lanka), in the Ionian Islands (principally Corfu), in Malta,<sup>17</sup> and, in his final overseas posting, in the West Indies. These works, however, provide much less detail on John Davy the man. This article will focus on one period of John Davy's life – a crucial, formative period, the years 1808–1814 – and present some new details from recently recovered manuscript sources that enable us to flesh out his biography, as well as providing new insights into the wider Davy circle.

The primary sources I will draw upon are two manuscript letters, in John Davy's hand, and one more substantial manuscript resource: a largely unpublished, two-notebook memoir, written by John Davy towards the end of his life, entitled "Some Notices of My Life." I have transcribed this memoir in full, producing a 24,000 word typescript, which,

vols. (London: Smith, Elder, 1842); and *The West Indies, Before and Since Slave Emancipation, Comprising the Windward and Leeward Islands' Military Command; Founded on Notes and Observations Collected During a Three Years' Residence* (London: W. and F. G. Cash, 1854). John Davy's other books are: *Researches, Physiological and Anatomical*, 2 vols. (London: Smith, Elder, 1839); *Lectures on the Study of Chemistry, in Connexion With the Atmosphere, the Earth, and the Ocean: and Discourses on Agriculture; With Introductions on the Present State of the West Indies, and on the Agricultural Societies of Barbados* (London: Longman, Brown, Green, and Longmans, 1849); *The Angler and His Friend; or, Piscatory Colloquies and Fishing Excursions* (London: Longman, Brown, Green, and Longmans, 1855); *The Angler in the Lake District; or, Piscatory Colloquies and Fishing Excursions in Westmoreland and Cumberland* (London: Longman, Brown, Green, Longmans, and Roberts, 1857); *On Some of the More Important Diseases of the Army, With Contributions to Pathology* (London: Williams and Norgate, 1862); and *Physiological Researches* (London: Williams and Norgate, 1863).

<sup>&</sup>lt;sup>16</sup> John Davy took the degree of MD, and also became a Diplomate of the Royal College of Surgeons; see entry for "Davy, John," the University of Edinburgh: Historical Alumni Collection website, https://collections.ed.ac.uk/alumni/record/83109 (accessed 1 February 2019).

<sup>&</sup>lt;sup>17</sup> On John Davy's researches in Malta, see Paul Cassar, "Physiological and Pathological Research at the General Military Hospital of Valletta, Malta, in the Early Nineteenth Century," *Medi-Scope* 9 (1986): 18–33. I am grateful to Frank James for providing me with this source.

<sup>&</sup>lt;sup>18</sup> John Davy, "Some Notices of My Life," 2 MS vols., Keele University Library, Special Collections and Archives, Raymond Richards Collection, M 118/4. Several pages of the memoir, covering John Davy's recollections of serving as a surgeon at the Battle of Waterloo, have been published, as a transcription, in *The Waterloo Archive: Previously Unpublished or Rare Journals and Letters Regarding the Waterloo Campaign and the Subsequent Occupation of France: Volume I: British Sources*, ed. Gareth Glover (Barnsley: Frontline Books, 2010), 219–22. "Some Notices of My Life" is also briefly referred to in Michael Neve, "The Young Humphry Davy: or John Tonkin's Lament," in *Science and the Sons of Genius: Studies on Humphry Davy*, ed. Sophie Forgan (London: Science Reviews, 1980), 1–32, on 32. As becomes clear at several points throughout the memoir, John Davy's intended reader is one of his children; see "Some Notices of My Life," i, [n. pag.] [63<sup>r</sup>, 64<sup>r</sup>, and 66<sup>v</sup>].

since the "Using the Davy Letters" symposium, I have made freely available online.<sup>19</sup>
Occasional reference will also be made to several Humphry Davy letters; as I will
demonstrate, reading these sources in conjunction is often mutually illuminating, shedding
light on the personal lives and professional careers of both Davy brothers, as well as on their
strong and enduring fraternal relationship, which was of great value to both men.

### John Davy at the Royal Institution, 1808–1811

John Davy spent the years 1808–1811, autumn to autumn, working with Humphry Davy at the Royal Institution. Through "Some Notices of My Life," we gain a better impression of John's feelings at the time, of the company he kept, and of what his occupations were while there:

It was in the Autumn of 1808, that I left home, never to return to it, except on short visits at long intervals. This was the turning point of my life. At my Brother's desire I was to come to him and to enter on the study of Chemistry in the Laboratory of the Royal Institution. [...]

[...]

At the Royal Institution I remained between two and three years. I look back on this period of my life with unmixed satisfaction. Never was my time better employed, or with more advantage to myself in the way of mental progress. I found Chemistry practically taught very fascinating. My Brother had just then made some of his most important discoveries, and the Laboratory was the scene of most active research. There I spent the whole of every day *learning* whilst *assisting*, and in the evenings, I had the use of the reading room of the Institution, where I had an opportunity of consulting and studying the best Authors on Chemistry. During the whole time I left London only once[.]<sup>20</sup>

Having isolated potassium, sodium, and boron in 1807, and magnesium, calcium, strontium, and barium in 1808, Humphry Davy continued his electrochemical researches at

<sup>&</sup>lt;sup>19</sup> See http://wp.lancs.ac.uk/litscimed/john-davy-some-notices-of-my-life (accessed 1 February 2019). I am grateful to Sharon Ruston, co-editor of the *Collected Letters*, at whose request the earliest working transcription of the memoir was made, for use in the notes to the aforementioned edition, and who provided me with images of the MS.

 $<sup>^{20}</sup>$  John Davy, "Some Notices of My Life," i, [n. pag.] [13 $^{v}$ –15 $^{r}$ ].

the Royal Institution, providing details of his "work in progress" in his Bakerian Lectures of 1808 and 1809,<sup>21</sup> in which he "wrestled with the nature of ammonia and its amalgam, the problem of acidity[,] and the general question of composition and properties."<sup>22</sup> In July 1810, Humphry Davy announced the elemental nature of the gas first discovered by Karl Wilhelm Scheele in 1774,<sup>23</sup> and in his Bakerian Lecture of 1810, read in November of that year, gave it the name we still use today: chlorine.<sup>24</sup> John Davy assisted in some of these researches; he is acknowledged in Humphry Davy's papers "Researches on the Oxymuriatic Acid"<sup>25</sup> and "On Some of the Combinations of Oxymuriatic Gas and Oxygene."<sup>26</sup>

In his use, in "Some Notices of My Life," of the phrase "learning whilst assisting,"

John Davy suggests that his brother did not take an overtly didactic, traditionally "teacherly" role in John's early training, which provides an illuminating qualification to the statement in the letter sent by Humphry Davy to his mother Grace, dated 5 October 1808, that "Edmund [Davy]<sup>27</sup> will teach him Oeconomy [...] & I will endeavour to teach him Chemistry & Philosophy":<sup>28</sup>

<sup>21</sup> See, respectively, Humphry Davy, "The Bakerian Lecture: An Account of Some New Analytical Researches on the Nature of Certain Bodies, Particularly the Alkalies, Phosphorus, Sulphur, Carbonaceous Matter, and the Acids Hitherto Undecompounded; With Some General Observations on Chemical Theory," *Philosophical Transactions* 99 (1809): 39–104 (read 15 December 1808), and Humphry Davy, "The Bakerian Lecture for 1809: On Some New Electrochemical Researches, on Various Objects, Particularly the Metallic Bodies, From the Alkalies, and Earths, and on Some Combinations of Hydrogene," *Philosophical Transactions* 100 (1810): 16–74 (read 16 November 1809).

<sup>&</sup>lt;sup>22</sup> David Knight, *Humphry Davy: Science and Power* (Oxford: Blackwell, 1992), 83.

<sup>&</sup>lt;sup>23</sup> See Humphry Davy, "Researches on the Oxymuriatic Acid, its Nature and Combinations; and on the Elements of the Muriatic Acid. With Some Experiments on Sulphur and Phosphorus, Made in the Laboratory of the Royal Institution," *Philosophical Transactions* 100 (1810): 231–57 (read 12 July 1810).

<sup>&</sup>lt;sup>24</sup> See Humphry Davy, "The Bakerian Lecture: On Some of the Combinations of Oxymuriatic Gas and Oxygene, and on the Chemical Relations of These Principles, to Inflammable Bodies," *Philosophical Transactions* 101 (1811): 1–35 (read 15 November 1810).

<sup>&</sup>lt;sup>25</sup> Davy, "Researches on the Oxymuriatic Acid", 237.

<sup>&</sup>lt;sup>26</sup> Davy, "The Bakerian Lecture: On Some of the Combinations of Oxymuriatic Gas and Oxygene", 25 and 34.

<sup>&</sup>lt;sup>27</sup> As John Davy informs the reader, "My Cousin M<sup>r</sup> Edmund Davy was an Assistant in the Laboratory, and had apartments in the building. With him I messed" ("Some Notices of My Life," i, [n. pag.] [14']). Edmund Davy's time at the Royal Institution ended with his abrupt resignation; see Patrick R. Unwin and Robert W. Unwin, "Humphry Davy and the Royal Institution of Great Britain," *Notes and Records of the Royal Society of London* 63 (2009): 7–33, on 25.

<sup>&</sup>lt;sup>28</sup> Humphry Davy to Grace Davy, 5 October 1808, Davy, *Collected Letters*, 2: letter 176. By "Edmund will teach him Oeconomy," Davy means that Edmund will teach John to live frugally, by example.

I have said that I learned Chemistry practically by assisting in the researches in progress. This was perfectly true. My Brother never taught me, i.e by explanations of doctrines and facts, – never questioned me as to my progress, in the way of formal examination. I learned very much after the manner in which a child learns to walk, and with all the satisfaction of uncontrouled volition. Great indeed was the advantage I had in this mode of learning. It was more than sport with me, – and in the Laboratory I acquired the habit of research with the love of labour to which whatever little success I may afterwards have attained I mainly attribute.<sup>29</sup>

This is a good example of the pleasing double effect, mentioned above, of reading John Davy's memoir: light is shed not merely on John, but also on Humphry Davy. Furthermore, reading John Davy's recollections in parallel with Humphry Davy's letters – such as that to his mother, previously cited, in which Humphry, cautiously considering John's prospects and general "improvement," very much lives up to John's later description of him as being the one "who had acted the part of a father to me"<sup>30</sup> – enriches our understanding of each man, and of their relationship of the period.

On the one occasion John Davy did leave London during his time at the Royal Institution, "Some Notices of My Life" reveals, he suffered an unfortunate accident, falling "down a steep rock" while geologising on the Cornish coast, and breaking his left leg:31

Where I fell was a little cove bounded laterally by high rocks, by the cliff behind, and by the sea in front. The tide was coming in. I crept from it within the cove as far as I could, uncertain of my fate. A boat passed at some distance, to which I made signals in vain. When almost without hope and and [sic] yet little alarmed, I heard a voice from the cliff above asking what I was doing there. The person who asked told me afterwards that he had not come,

<sup>&</sup>lt;sup>29</sup> John Davy, "Some Notices of My Life," i, [n. pag.] [19<sup>v</sup>–20<sup>r</sup>].

<sup>&</sup>lt;sup>30</sup> John Davy, *Memoirs*, vol. 2, 348. Of his actual father, Robert Davy, who died in 1794, John records: "Of him I have no recollection" ("Some Notices of My Life," i, [n. pag.] [1<sup>v</sup>]). John was four-and-a-half years of age when his father died.

<sup>&</sup>lt;sup>31</sup> John Davy's record of this incident also seemingly sheds light on the observation, in "Recollections of Dr John Davy," that "he had one leg somewhat bent from a fracture in early life" (391).

out of his way to the edge of this cliff not knowing why. The spot was exceedingly secluded, and remote from any dwelling.<sup>32</sup>

When John Davy returned to London after his accident, we learn, from "Some Notices of My Life," that he spent time with Sir Thomas Bernard, the philanthropist and first Treasurer of the Royal Institution, and with Joseph Johnson, the publisher of Humphry Davy's nitrous oxide researches, 33 among others:

Whilst in London I was very little in general society, – nor did I regret it.

Occasionally I dined with my Brother at a Coffee House, once with him at Sir

Thomas Bernard's and once at M<sup>r</sup> Rickman's.

Messrs <Johnson &> Hunter, the publishers in St Paul's church yard were then in the habit of giving a dinner weekly to Literary and scientific men.<sup>34</sup> I was once of the party and I well remember Bonnycastle and Fuseli, the painter, and how much I was struck by his coarse and audacious remarks. (Speaking of this reminds me of my surprise, the first time I was in Hunter's shop, soon after coming to Town, on being recognised by Mr Hunter a partner in the business, by my voice, — and when in the Laboratory I called my Brother's servant [?\*\*x\*] <he> often answered as supposing it was my Brother who summoned him)[.]\*\*35

John Davy attended the lectures of John Dalton on natural philosophy (over the winter of 1809–1810, when a course of twenty lectures was offered), of James Edward Smith on botany (in 1810, entitled, as Humphry Davy suggested to him, "On the Philosophy of Natural History"), and of William Allen (presumably the lectures that he agreed to give,

<sup>&</sup>lt;sup>32</sup> John Davy, "Some Notices of My Life," i, [n. pag.] [15<sup>r-v</sup>].

<sup>&</sup>lt;sup>33</sup> See footnote 11, above.

<sup>&</sup>lt;sup>34</sup> At his now-famous weekly dinner parties, Joseph Johnson, the bookseller and publisher, hosted eminent literary figures including Anna Laetitia Barbauld, William Blake, William Godwin, Charlotte Smith, and Mary Wollstonecraft. See the Introduction to *The Joseph Johnson Letterbook*, ed. John Bugg (Oxford: Oxford University Press, 2016), xix–lxii, especially xxv–xxvii. "Hunter" is probably Rowland Hunter, Johnson's greatnephew, who inherited a half-share of the publishing business on Johnson's death in 1809.

 $<sup>^{35}</sup>$  John Davy, "Some Notices of My Life," i, [n. pag.] [17  $^{\text{r-v}}$ ].

commencing in February 1810, at Humphry Davy's "urgent request"). We also learn, more revealingly, that Humphry Davy's lectures "charmed" John Davy most – "It was indeed a high pleasure hear them" – and he was left feeling "proud and exultant in seeing how crowdedly they were attended." The grounding in chemistry gained during his time at the Royal Institution, and the first-hand experience of conducting research in the laboratory, "learning whilst assisting," all the while developing confidence in his own capability as an experimentalist, was to stand John Davy in good stead, as he entered the next phase of his professional training.

#### John Davy in Edinburgh, 1811–1813

In the autumn of 1811, John Davy left London for Edinburgh. He travelled there with Thomas Charles Hope (1766–1844), Professor of Medicine and Chemistry at the University between 1799–1843. Having overcome some initial difficulty in his domestic arrangements, as John settled in he gradually "entered more into society," and was the occasional guest of eminent literary figures such as Henry Mackenzie, the novelist, and men of science such as John Playfair, the mathematician and geologist (who, according to Walter Scott, had proposed marriage to Jane Apreece;<sup>38</sup> she was, of course, to marry Humphry Davy, in 1812):

I went to Edinburgh by sea in a Leith smack in company with D<sup>r</sup> Hope, the successor of Dr Black in the Chemical chair of the Edinburgh College. I had formed his acquaintance just before, and at D<sup>r</sup> Pearsons where, I had the courage to advocate in opposition to him, the new doctrines respecting Chlorine, to which, in his Lectures he remained for several years hostile. The first house I slept at in Edinburgh was his brother's in Queen Street with whom he then resided. Though not an eloquent nor elegant Lecturer, yet so popular was Chemistry at that period, that his class was enormous, reaching 500. He was a good experimenter in a coarse way, and his experiments were always

<sup>&</sup>lt;sup>36</sup> William Allen, *The Life of William Allen, With Selections From His Correspondence*, 3 vols. (London: Charles Gilpin, 1846–1847), 1, 118.

 $<sup>^{37}</sup>$  John Davy, "Some Notices of My Life," i, [n. pag.] [ $18^v$ – $19^r$ ].

<sup>&</sup>lt;sup>38</sup> See Walter Scott, *The Journal of Sir Walter Scott: From the Original Manuscript at Abbotsford*, ed. David Douglas, 2 vols. (Edinburgh: David Douglas, 1890; repr. Cambridge: Cambridge University Press, 2013), 1, 108.

successful and illustrative of the leading doctrines of the Science, – then from its simplicity easy of comprehension, and <might be> rapidly learnedt.

During the whole of my student life, I was in lodgings close to the College. In the first I remained only twenty four hours, having been driven from them by bugs, — one restless night sufficed. My next were in the house of the sublibrarian of the College, — Mr Baines, — where I was very comfortable. My next and last (why I changed I do not recollect) was with a Mrs Gillies, a clergyman's Widow a very worthy woman. The allowance my Mother made me was £100 a year, to cover all my expences, — including Professors fees, and I found the sum adequate, never running in debt, and yet wanting nothing. My mode of living was simple enough. I drank neither wine nor beer, and my dinner consisted mostly of one dish of meat, or fish with potatoes, or some other vegetables.

Having had through my Brother and Mrs Apreece whom he shortly afterwards married, many introductions, I now entered more into society and of the best kind. During my three years sojourn the families from whom I experienced most attention were Mr Allen's, the Banker, – (from whom I had a general invitation to their Sunday's dinner) – Mr Henry Mackenzie "the Man of feeling" – Mr and Mrs Fletcher's, – Professor Playfair's – Mrs Grant's Mrs Elizabeth Hamilton's.<sup>39</sup> Admission into such society was indeed a privilege, and I have a grateful recollection of the kindness I experienced, and the pleasure derived from it. Evening parties were the most common, – commencing about eight oclock, with tea, and ending about eleven after a light supper, – parties

Mackenzie's sentimental novel *The Man of Feeling* – "the most popular of its decade" (*ODNB*) – was published anonymously in 1771. Eliza Fletcher, who married Archibald Fletcher in 1791, is now best-known for her *Autobiography of Mrs Fletcher: With Letters and Other Family Memorials*, published posthumously in 1874; see below for more detail on John Davy's attendance at Eliza Fletcher's literary soirées, and for his early admiration of one of her daughters, Grace Fletcher. John Davy would later marry another of Eliza Fletcher's daughters, Margaret, born two years after Grace, in 1830. Anne Grant published *Letters From the Mountains; Being the Real Correspondence of a Lady, Between the Years 1773 and 1807* (1806), *Memoirs of an American Lady: With Sketches of Manners and Scenery in America, as They Existed Previous to the Revolution* (1808), and *Essays on the Superstitions of the Highlanders of Scotland* (1811). Elizabeth Hamilton was the author of *Memoirs of Modern Philosophers* (1800), *Letters on Education* (1801) (republished in a second edition as *Letters on the Elementary Principles of Education*, and in its seventh edition by 1824), and *The Cottagers of Glenburnie* (1808). At these Edinburgh gatherings, John Davy found himself in distinguished literary company, much as he had, through his association with Johnson, in London.

formed chiefly of young people, but not exclusively so. At Sir James Hall's and Mr Allen's the guests parties were dinner parties, – the guests were chiefly men of Science. At Mrs Grant's Mrs E. Hamilton's, and Mrs Fletcher's the soireés [sic] were more of a literary kind.

The Lectures I attended, were those required for taking the degree of M. D. – and for obtaining a Surgical Diploma, the latter with the view to an appointment in the Medical Department of the Army.<sup>40</sup>

Some details of John Davy's relationship with Hope, and of Humphry Davy's connection with him, are already known: for example, we know that Hope had taught John at Edinburgh, that it was Hope who proposed John for election to the Royal Society of Edinburgh in 1841,<sup>41</sup> and, more famously, that Hope had a hand in securing Humphry his first lectureship, at the newly founded Royal Institution.<sup>42</sup> But, in examining a selection of the extensive collection of Hope papers held at the University of Edinburgh, further details have come to light. These papers – a mixture of Hope's lecture notes, correspondence, and other miscellaneous items in manuscript and print – are only lightly catalogued, so it was with a measure of good fortune that I happened upon a small manuscript letter, written by John Davy, and simply dated "Sunday Evening," slipped into one of the many fragile packets of loose notes. The packet containing the letter, which is sufficiently short to reproduce in full, is marked "Notes on Galvanism – not Lectures," in ink:<sup>43</sup>

My dear Sir

The following are the results which Brande has communicated to me & which you expressed a wish to be made acquainted with – He says "I find that the flame of candles, Spirit of Wine, Carburetted Hydrogene & Potassium are attracted by the negative conductor of the common

<sup>&</sup>lt;sup>40</sup> John Davy, "Some Notices of My Life," i, [n. pag.] [20<sup>v</sup>–22<sup>v</sup>].

<sup>&</sup>lt;sup>41</sup> See entry for "Davy, John," Former Fellows of the Royal Society of Edinburgh 1783–2002, https://www.rse.org.uk/cms/files/fellows/biographical\_index/fells\_indexp1.pdf (accessed 1 February 2019), 244.

<sup>&</sup>lt;sup>42</sup> See Thomas Stewart Traill, "Memoir of Dr Thomas Charles Hope, Late Professor of Chemistry in the University of Edinburgh," *Transactions of the Royal Society of Edinburgh* 16 (1849): 419–34, on 432. See also Humphry Davy to Thomas Charles Hope, 28 June 1801, Davy, *Collected Letters*, 1: letter 43.

<sup>&</sup>lt;sup>43</sup> The packet is also marked "55," in pencil.

<electrical> machine & repelled by the positive; & that the flame of Phosphorus & of Sulphur urged by a stream of oxygene gas are (in a similar situation) attracted by the + conductor and repelled by the –". In another place he adds that the appearance of the different flames makes a good class exp<sup>t</sup>. –

I shall be much obliged to you to send the jar of mercury belonging to the Medical Society to the Hall before Wednesday next, as there is an order to return all the apparatus before that time. –

My Brother has desired me to write an account of the muriatic exp<sup>t</sup> made in your Laboratory – if you have no objection, I should shall do it immediately. –

Believe me my dear Sir  $\mid$  to be your's most respect [sic]  $\mid$  J. Davy No 10 Nicholson S<sup>t</sup> M<sup>r</sup> Bain's Sunday Evening<sup>44</sup>

This unpublished letter sheds more light on Hope: he obviously wished to know something of an experiment involving flames and a "common electrical machine" conducted by William Thomas Brande, Humphry Davy's successor as Professor of Chemistry at the Royal Institution, and he had clearly borrowed a jar of mercury from the Royal Medical Society, the student medical society of the University of Edinburgh.<sup>45</sup> It also sheds more light on John Davy, and on Humphry Davy: we see the student John acting as a conduit of chemical information from London, and we have evidence in this letter of Humphry urging John to write up and publish an account of an experiment on muriatic acid gas<sup>46</sup> which took place in the College Laboratory in Edinburgh, *c.* 9 October 1812, at which were present Humphry Davy (travelling south from his honeymoon in the Highlands), Sir George Mackenzie (the chemist, geologist, and antiquary), and John Playfair, among others.

<sup>&</sup>lt;sup>44</sup> John Davy to [Thomas Charles Hope], [after 25 October 1812], packet marked "Notes on Galvanism – *not Lectures*," with "55" in pencil, University of Edinburgh, Centre for Research Collections, Thomas Charles Hope Papers, GEN. 269. Davy, *Collected Letters*, 2: letter 347.

<sup>&</sup>lt;sup>45</sup> John Davy, who became one of the Royal Medical Society's Presidents, described this organisation as "the gathering place of all zealous students," adding that "The animation with which discussions on medical matters was carried on [during its meetings], was, as I now think of it, marvellous" ("Some Notices of My Life," i, [n. pag.] [23<sup>r</sup>]).

 $<sup>^{46}</sup>$  Now known as hydrogen chloride or hydrochloric acid (HCl), which ionises completely when mixed with water: HCl + H<sub>2</sub>O  $\rightarrow$  H<sub>3</sub>O<sup>+</sup> + Cl<sup>-</sup>.

In a letter to John Davy, of 25 October 1812 (i.e., written after the experiment in the College Laboratory), Humphry Davy writes: "I think you should answer Murrays assertion by a short note with testimonials. – The controversy is closed."<sup>47</sup> Since Humphry Davy had claimed, in 1810, that oxymuriatic acid (now known as chlorine) was elemental in nature, 48 several, including Joseph Louis Gay-Lussac and Louis Jacques Thénard, Jöns Jacob Berzelius, and Henry Brougham, remained unconvinced. 49 The "most sustained challenge" to Humphry Davy's assertion came, as Jan Golinski notes, from John Murray, the Edinburgh chemist. 50 As Golinski summarises,

Murray's challenge led off from the supposition that acids such as muriatic acid required combined water in order to exist as independent entities. On this basis, the experiments on which [Humphry] Davy rested his claims for chlorine could be given an alternative explanation. For example, oxymuriatic acid combined with hydrogen to form muriatic acid because its oxygen formed the water that was part of the final product. Charcoal would not be expected to reduce oxymuriatic acid because charcoal could not provide the water that was needed to constitute muriatic acid in its gaseous form.<sup>51</sup>

The series of papers that Murray had published in William Nicholson's *A Journal of Natural Philosophy, Chemistry, and the Arts,* the first appearing in February 1811, had previously attracted replies from John Davy.<sup>52</sup> By May 1812, Murray had turned his attention to the

<sup>&</sup>lt;sup>47</sup> Humphry Davy to John Davy, 25 October 1812, Davy, *Collected Letters*, 2: letter 346.

<sup>&</sup>lt;sup>48</sup> Davy, "Researches on the Oxymuriatic Acid".

<sup>&</sup>lt;sup>49</sup> See Jan Golinski, *Science as Public Culture: Chemistry and Enlightenment in Britain, 1760–1820* (Cambridge: Cambridge University Press, 1992), 224–25. Golinski provides a detailed discussion of the controversy with Murray over the composition of muriatic acid; see 225–33.

<sup>&</sup>lt;sup>50</sup> John Murray (1778–1820), Fellow of the Royal Society of Edinburgh; not to be confused with John Murray (1785/6–1851), another Scottish man of science, whose works include *Elements of Chemical Science, as Applied to the Arts and Manufactures; and Natural Phaenomena* (Saffron Walden: G. Youngman, [1815]).

<sup>&</sup>lt;sup>51</sup> Golinski, *Science as Public Culture*, 225.

The Nature of Oximuriatic Acid, in Reply to Mr John Davy," A Journal of Natural Philosophy, Chemistry, and the Arts 1811, with "On the Nature of Oximuriatic Acid, in Reply to Mr John Davy," A Journal of Natural Philosophy, Chemistry, and the Arts 28 (n.s.) (1811): 132–52. John Davy's reply, "Some Remarks on the Observations and Experiments of Mr Murray on the Nature of Oximuriatic Acid, and its Relations to Muriatic Acid," A Journal of Natural Philosophy, Chemistry, and the Arts 28 (n.s.) (1811): 193–206, was published in March 1811. Murray replied in turn, in April 1811, with "On the Nature of Oximuriatic Acid, in Reply to Mr John Davy," A Journal of Natural Philosophy, Chemistry, and the Arts 28 (n.s.) (1811): 294–310. Further papers by Murray on oxymuriatic and muriatic acid followed in 1811–1812: "Farther Observations and Experiments on Oximuriatic Acid," A Journal of Natural Philosophy, Chemistry, and the Arts 29 (n.s.) (1811): 187–202; "On the Nature of Oximuriatic Acid Gas, and the Conversion of Carbonic

reaction of muriatic acid gas with ammonia, and John, having reviewed Murray's findings, intended now, in the autumn of 1812, to definitively disprove Murray's claim that muriatic acid gas was "a compound of an unknown basis and water," rather than "a compound of chlorine and hydrogene". 53 Neither Humphry nor John Davy accepted that acids such as muriatic acid required combined water in order to exist as independent entities; John suspected that the gases Murray had used in his experiments had not been adequately purified or dried. The experiment in the College Laboratory at Edinburgh, intentionally performed "in front of the city's eminent men of science," was thus, as Tim Fulford and Sharon Ruston observe in annotating the 25 October 1812 letter, designed to silence Murray, on his home soil no less, by "reveal[ing] the inadequacy of [his] experimental technique." John Davy did indeed write up a short account of the experiment, as Humphry Davy had urged him to, in which John detailed that, under better experimental conditions than Murray's, only a minute "dew [that] could scarcely be perceived by the naked eye, unassisted by a magnifying glass"54 was produced by combining muriatic acid gas with ammonia. That the quantity of water produced was so small as to be insignificant strongly contradicted Murray's theory that water was an essential component of muriatic acid gas; to paraphrase Humphry Davy, in the view of John Davy and his distinguished company of observers, the controversy was thus closed.<sup>55</sup> The account was published as "An Account of

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Oxide Into Carbonic Acid by it, in Reply to Mr J. Davy," A Journal of Natural Philosophy, Chemistry, and the Arts 30 (n.s.) (1812): 226–35; "Experiments on Muriatic Acid Gas," A Journal of Natural Philosophy, Chemistry, and the Arts 31 (n.s.) (1812): 123–33; and "Experiments on the Existence of Water in Muriate of Ammonia Formed by the Combination of Muriatic Acid and Ammoniacal Gasses," A Journal of Natural Philosophy, Chemistry, and the Arts 32 (n.s.) (1812): 185–97. Further papers by John Davy also followed: "On the Nature of Oximuriatic Gas, in Reply to Mr Murray," A Journal of Natural Philosophy, Chemistry, and the Arts 29 (n.s.) (1811): 39–44; "An Account of a New Gas, With a Reply to Mr Murray's Last Observations on Oximuriatic Gas," A Journal of Natural Philosophy, Chemistry, and the Arts 30 (n.s.) (1812): 28–33; and "On the Nature of Oximuriatic and Muriatic Acid Gas, in Reply to Mr Murray," A Journal of Natural Philosophy, Chemistry, and the Arts 31 (n.s.) (1812): 310–16. One of the most important papers that John Davy published during this period of dispute with Murray prior to October 1812 was "An Account of a New Gas;" this paper, published in the September 1811 issue of Nicholson's Journal, announced John's discovery of the gas that would subsequently be named phosgene.

<sup>&</sup>lt;sup>53</sup> John Davy, "An Account of an Experiment Made in the College Laboratory, Edinburgh, Drawn up by John Davy, Esq.," A Journal of Natural Philosophy, Chemistry, and the Arts 34 (n.s.) (1813): 68–72, on 68.

<sup>&</sup>lt;sup>54</sup> John Davy, "An Account of an Experiment Made in the College Laboratory, Edinburgh," 70.

<sup>&</sup>lt;sup>55</sup> Murray did not think so, however, and continued to object; see Golinski, *Science as Public Culture*, 229–30. Murray's subsequent protestations drew no further reply from John Davy.

an Experiment Made in the College Laboratory, Edinburgh, Drawn up by John Davy, Esq." in the January 1813 issue of *A Journal of Natural Philosophy, Chemistry, and the Arts.* <sup>56</sup>

As a result of finding John Davy's letter to Hope, we now have a better understanding of the events of the muriatic controversy: not only do we have further evidence of Humphry Davy urging John Davy to go into print *contra* Murray, but we also have further evidence, beyond John's "An Account of an Experiment Made in the College Laboratory, Edinburgh," of Hope's role in proceedings,<sup>57</sup> from whom John sought explicit approval: "if you have no objection, I shall [write an account] immediately." John Davy also mentions the controversy in "Some Notices of My Life," in which he reveals more about the supporting, nurturing role that Humphry Davy – keen to see his brother progress in his studies and, indeed, in his life – had taken on: "having been engaged in the better cause, – I had the pleasure of successfully rebutting [Murray's] arguments. But my greatest pleasure was my Brother's approval and praise. I may mention in proof of his generous nature, his saying to me, about these papers, that he never at my age wrote anything so good." <sup>58</sup>

## John Davy in Cornwall, 1814

By early 1814, John Davy's formal medical education was complete. He left Scotland in the same way that he arrived there:

I returned to England as I had gone to Edinburgh by sea in company with my friends Hammick and Malden, and after spending a few days in London, I hurried into Cornwall. This was in the early spring of 1814. I spent a good part of the summer very happily at home with my Mother and sisters, who had then left Varfel for Penzance.<sup>59</sup>

<sup>&</sup>lt;sup>56</sup> See footnote 53, above.

<sup>&</sup>lt;sup>57</sup> See John Davy, "An Account of an Experiment Made in the College Laboratory, Edinburgh," 69, 70, and 72.

<sup>&</sup>lt;sup>58</sup> John Davy, "Some Notices of My Life," i, [n. pag.] [17].

<sup>&</sup>lt;sup>59</sup> John Davy, "Some Notices of My Life," i, [n. pag.] [28<sup>v</sup>–29<sup>r</sup>].

Frederick Love Hammick<sup>60</sup> and Jonas Malden<sup>61</sup> were, like John Davy, medical students; the latter two together prepared for their examinations by "conversing in Latin on medical subjects."<sup>62</sup> A recently recovered letter, written by John Davy, from Penzance, to the poet Robert Pearse Gillies (1789–1858), in Edinburgh, and dated 30 July 1814, provides evidence, further to that in "Some Notices of My Life,"<sup>63</sup> that John's Edinburgh circle took in literary as well as scientific acquaintances. More importantly, the long, in parts effusive letter to Gillies, compared to the short, business-like letter to Hope, discussed above, shows us a rather different side to the young John Davy, at this time a man of twenty-four years of age, and soon to leave England for his first medical posting in Belgium.

Gillies remained a minor poet in his day, and, throughout his life, struggled to live by his pen. John Davy met Gillies, a student of law under Dugald Stewart and John Playfair at the University of Edinburgh, at one of Eliza Fletcher's literary soirées. <sup>64</sup> Despite coming from landed wealth, Gillies lost most of his inheritance soon after acquiring it in 1808, which set him on a path of lifelong financial difficulty. He was an early contributor to *Blackwood's Edinburgh Magazine*, and attracted the notice of both William Wordsworth and Lord Byron. Wordsworth wrote Gillies a sonnet, urging him to rise above his trials: "From the dark chambers of dejection freed, / Spurning the unprofitable yoke of care / Rise, [Gillies,] rise: the gales of youth shall bear / Thy genius forward like a winged steed." <sup>65</sup> Byron was less

<sup>60</sup> See entry for "Hammick, Frederick Love," the University of Edinburgh: Historical Alumni Collection website, https://collections.ed.ac.uk/alumni/record/83398 (accessed 1 February 2019).

<sup>&</sup>lt;sup>61</sup> See entry for "Malden, Jonas," the University of Edinburgh: Historical Alumni Collection website, https://collections.ed.ac.uk/alumni/record/81837 (accessed 1 February 2019).

<sup>&</sup>lt;sup>62</sup> John Davy, "Some Notices of My Life," i, [n. pag.] [26<sup>r</sup>].

<sup>&</sup>lt;sup>63</sup> I refer to the passage in which John Davy recalls "I now entered more into society and of the best kind...," quoted above.

<sup>&</sup>lt;sup>64</sup> See John Davy, "Some Notices of My Life," i, [n. pag.] [28<sup>r</sup> and 22<sup>r</sup>].

<sup>65</sup> William Wordsworth, "To ——," II. 1–4, in *Shorter Poems, 1807–1820*, ed. Carl H. Ketcham (Ithaca, NY: Cornell University Press, 1989), 140. The sonnet was first published in *Poems by William Wordsworth: Including Lyrical Ballads, and the Miscellaneous Pieces of the Author*, 2 vols. (London: Longman, Hurst, Rees, Orme, and Brown, 1815), vol. 2, 194, with asterisks replacing the name "Gillies" in I. 3. In later life, Wordsworth observed: "Composed in Edinburgh [...] in the year 1814. Poor Gillies never rose above that course of extravagance in which he was at that time living, & which soon reduced him to poverty and all its degrading shifts, mendicity being far from the worst. I grieve whenever I think of him; for he was far from being without genius; and had a generous heart" (*The Fenwick Notes of William Wordsworth*, ed. Jared Curtis (London: Bristol Classical Press, 1993), 21).

encouraging (albeit in private), dismissing Gillies's volume of 1813, *Childe Alarique*, <sup>66</sup> as the production of a "half-wild young [...] man [who] can know nothing of life." In "Some Notices of My Life," John Davy remembers Gillies rather coldly:

During my last year in Edinburgh I formed the acquaintance of Mr Gillies, a man of poetical feeling and somewhat morbid taste. His motto was an excellent one "Lyra atollit aminam",<sup>68</sup> but in him it seemed only a sentiment without practical effect. He imprudently distinguished himself by giving and [sic] expensive dinners, (of which I occasionally partook) thus wasting ample means, and in a few years, from wealth reducing himself to poverty.<sup>69</sup>

Yet the letter from John Davy to Gillies, the latter having written to his friend while evidently in the throes of dejection, is a tender and soothing one, revealing, from the outset, John's own capacity for "poetical feeling":

When I wrote you last I had received neither of your letters – Allow me now to thank you for them – They afforded me pleasure & would have afforded me much more had they contained a less melancholy account of your condition – Believe me my dear Sir you very much underrate your mental powers & I trust to God very much overrate your bodily ailments. You possess that which is the foundation of all Genius – I mean Sensibility & the only fault is that you have it in excess – You possess too imagination vivid & fertile – that celestial wing which directed by Judgment has elevated mortals into the sublimest regions of poesy & which has already raised you to an enviable height on Parnassus – To these two qualities in themselves so highly honourable & so characteristic of humanity do not you think much of your suffering is referrible? Po

<sup>&</sup>lt;sup>66</sup> Robert Pearse Gillies, Childe Alarique: A Poet's Reverie, With Other Poems (Edinburgh: [? pub.], 1813).

<sup>&</sup>lt;sup>67</sup> Lord Byron, journal entry for 23 November 1813, in *Byron's Letters and Journals*, ed. Leslie A. Marchand, 13 vols. (London: John Murray, 1973–1994), vol. 3, 217.

<sup>&</sup>lt;sup>68</sup> "Lyra attollit animam": the lyre (or poetry by metonymy) rises/lifts the soul/the spirits. I am grateful to Henry Stead for assistance with this translation.

<sup>&</sup>lt;sup>69</sup> John Davy, "Some Notices of My Life," i, [n. pag.] [27<sup>v</sup>–28<sup>r</sup>].

<sup>&</sup>lt;sup>70</sup> John Davy to Robert Pearse Gillies, 30 July 1814, Getty Research Institute, Research Library, Special Collections, Letters of British Dignitaries and Professionals, 1756–1951, Accession Number 860525C.

The sentence "I trust to God [you] very much overrate your bodily ailments" suggests that Gillies has been laying his health problems – seemingly magnified by his "vivid & fertile" imagination – before the newly qualified doctor. John Davy replies generously, drawing upon his own experience in a revealing manner:

I have had experience in afflictions similar to what I conceive yours to be — "We are fearfully & wonderfully formed"<sup>71</sup> both in mind & body: — The one is as liable to as many diseases perhaps as the other: — both require equally attention — Oftentimes I have found myself completely wretched & without any apparent cause for wretchedness; on the contrary when every thing external around me was full of joy & conducive to pleasure — Such sensations I have had when in the midst of friends, in the midst of beautiful scenery, when the Sun has shone bright, when the fields, groves & woods were in their freshest verdure, in [?short] in advanced spring when all the Senses are by Nature feasted[.]

John Davy's assertion that "The [mind] is as liable to as many diseases perhaps as the [body]: – both require equally attention" shows him to be remarkably ahead of his time, an enlightened physician, though young: it was not until 1845, some thirty years later, with the passing of the Lunacy Act, that people with mental illness were formally recognised, in law, as patients requiring treatment. In describing his own experiences of feeling "completely wretched," there is little sense of John Davy holding anything back, of providing a distant, dispassionate account of himself, as one might expect between less intimate correspondents. It is clear, even at this early point in the letter, that the reader is being granted a valuable insight into the mind of John Davy: already, we are learning of his experiences, his feelings, and his attitudes and opinions both as a man and a doctor. The

<sup>&</sup>lt;sup>71</sup> An echo of Psalm 139: 14: "I will praise thee; for I am fearfully and wonderfully made: marvellous are thy works; and that my soul knoweth right well."

<sup>&</sup>lt;sup>72</sup> Another instance of John Davy's enlightened attitude towards mental illness may be found in "Some Notices of My Life," i, [n. pag.] [71<sup>r-v</sup>]. John describes a period of special service in Turkey, *c*. 1840: "One thing I believe, I was instrumental in effecting a better treatment of the insane in Constantinople. The number of these unfortunates is, I believe, very small in the east, – those in the Capital little exceeding thirty, – were at that time confined in cells with barred open windows, opening into a yard. The cells were like the dens of wild animals, of which a certain number were kept in an adjoining enclosure, and like these animals the lunatics were chained and alike allowed to be exhibited as a sight, and to be tormented by mischief loving boys. This I represented to the Pasha [Mustafa Reşid Pasha, Ottoman statesman and reformer], and after my return to England I had the pleasure to learn that more humanity was exercised in their treatment."

contrast with the letter to Hope, which is valuable for other reasons, is striking, and speaks of the essential richness of the medium of the letter.

The letter to Gillies also grants us an insight into other aspects of John Davy's personal life in 1814. Entreating Gillies to "perfect secrecy," John writes of an unrequited love, identified in "Some Notices of My Life" as Grace Fletcher, the second daughter of his Edinburgh acquaintance Eliza Fletcher, who died of typhus in 1817:<sup>73</sup> "In my last letter I acquainted you with a tender affection for a noble & adorable being – In such love I may well glory – but I must glory in silence – I have no reason to think it returned – but the contrary[.]" He also reveals a new found ambition: "Never till this moment was I avaritious of Fortune or Fame, both of which I want & without which I must ever despair of possessing the perfection of human happiness. – How I long now to look into the book of Fate to read my future life[.]" By "Fortune or Fame, both of which I want" (my emphasis), does John Davy mean he wishes to possess it, or that he lacks it – that he is wanting of it? Either way, his plan for acquiring it is already laid: "In less than three week[s], I quit [Cornwall] for a very different scene – for London where in future I intend to reside & where I must exert myself to acquire what I want Fortune & Fame. I intend to lecture on Chemistry at the Medical School in Great Windmill Street." John Davy did this, for a short while, until Humphry Davy returned from his sojourn on the Continent in April 1815 and advised him to give up the appointment for something that paid better, Humphry observing in a letter to his mother, Grace, of 14 September 1814 that "I am a little angry with [John] that he decided on so important subject without consulting me."74 In his own defence, John Davy records in "Some Notices of My Life" that "My Brother at this time was on the Continent so that I had not the advantage of his advice. The engagement in a pecuniary point of view was a mistake[.]"75

Before taking up his post at Great Windmill Street, John Davy was plainly reluctant to leave his native Cornwall, revealing, in the letter to the poet Gillies, a similar poetic

<sup>&</sup>lt;sup>73</sup> See "Some Notices of My Life," i, [n. pag.] [28<sup>r-v</sup>]. John Davy describes Grace Fletcher's death as "the first great shock of love I ever experienced. feeling I had ever experienced."

<sup>&</sup>lt;sup>74</sup> Humphry Davy to Grace Davy, 14 September 1814, Davy, *Collected Letters*, 2: letter 432. In a later letter to his mother, Humphry Davy observed "I can not say I ever approved much of [John Davy's] connexion in Windmill S<sup>t</sup> nor do I think he himself felt it so agreable as he anticipated, nor was it a place of much promise" (Humphry Davy to Grace Davy, 21 May 1815, Davy, *Collected Letters*, 2: letter 449).

<sup>&</sup>lt;sup>75</sup> John Davy, "Some Notices of My Life," i, [n. pag.] [29<sup>v</sup>].

sensibility to that which Humphry Davy expressed in his early poetry, such as in "Lines Descriptive of Feelings Produced by a Visit to the Place Where the First Nineteen Years of My Life Were Spent," with its impassioned, paeanistic evocation of the beauties of the place ("The sunbeams dance / Upon thy waves, the purple clouds of morn / Hang o'er thy rocks resplendent. Scenes beloved!"). <sup>76</sup> John writes:

I have some feeling for the beauties of Nature & in the Mounts bay where I am I have enjoyed some in perfection – Here we have hills, vallies, meadows, rocks, woods, streams beautifully intermixed, – here we have the purest blue ocean with grand cliffs & golden sands & a great variety of different rocks & minerals & curious caverns equally capable of exciting the wonder & admiration of the Poet & the Philosopher; – here we possess in abundance the venerable & awful remains of remote antiquity – churches whose dates are unknown in the midst of church yards where families may be traced centuries back – the fortifications of the Danes the treacherous friends of the Britons & expellers of the Saxons – Saxon castles & arches & still more antient & primitive druidical works – but to enumerate all that is beautiful & curious in this extraordinary Bay, would swell a letter into a volume – I wish you were here – I think the air, with the exercise you would be tempted to take & the amusement & pleasure you must necessarily receive would produce the best effect on your health – I love this place so much that I regret greatly to leave it.

Elsewhere in the letter, John Davy refers to the poetic theories of Edward Jenner, the pioneer of vaccination, but also a poet:<sup>77</sup>

Dr Jenner I understand goes so far (I know not whether in earnest or humor) that there never was a thoughtful man not melancholic & that without melancholy there can be no Spirit, pathos or even imagination in Poetry – Moderate melancholy therefore I think is occasionally agreeable & desirable &

<sup>&</sup>lt;sup>76</sup> [Humphry Davy], "Lines Descriptive of Feelings Produced by a Visit to the Place Where the First Nineteen Years of My Life Were Spent, in a Stormy Day, After an Absence of Thirteen Months," II. 3–5, in *Annual Anthology* 2 (1800): 293–96.

<sup>&</sup>lt;sup>77</sup> On Jenner, vaccination, and poetry, see Tim Fulford and Debbie Lee, "The Jenneration of Disease: Vaccination, Romanticism, and Revolution," *Studies in Romanticism* 39 (2000): 139–63. As Fulford and Lee note (on 154, n. 29), Jenner directly influenced Beddoes's researches at the Medical Pneumatic Institution.

sorry should I be to acknowledge a Man for a Friend who never knew what melancholy is[.]

This, and the romantic description of Cornwall, clearly shows us, as I suggested earlier, a different – and thoroughly underappreciated – side to the young John Davy. The letter to Gillies, which contains evidence of John Davy's poetic sensibility and of his appreciation of poetry more generally, draws him closer alongside his brother Humphry Davy: in July 1814, we see John, nurturing a clearly important emotional connection at a distance through the medium of letter writing, not merely as a man of science, but as a man of science *and* of letters.

#### Conclusion

There are surely more relatively neglected items written by John Davy in existence, <sup>78</sup> and, on the evidence of what has been recovered so far, it is likely that they too will contain valuable insights. From "Some Notices of My Life," for example, further to the passages discussed, we have John Davy's first-hand account (which is, in parts, sobering)<sup>79</sup> of the aftermath of the Battle of Waterloo, where he served in the Medical Department of the Army as a hospital assistant (hence his posting to Belgium in 1815). We also learn, sensationally, that Humphry Davy was intentionally absent from London when the coronation of George IV took place, out of loyalty to his acquaintance in Italy, Queen Caroline, whom George, estranged from Caroline, excluded from the ceremony.

Additionally, we have John's frank assessments of a number of establishment figures, many of them part of the imperial machinery, whom he worked under or encountered overseas, such as Stratford Canning, British Ambassador to the Ottoman Empire, of whom he writes: "I saw nothing noble in his character. His temper was remarkable for irritability. He seemed to me, a most unsafe man, so much under the influence of feelings, not of the best kind and so ready both to give and take offence. Had a man of more judgment and better temper

<sup>&</sup>lt;sup>78</sup> Some of the notebooks that John Davy describes in "Some Notices of My Life," for example, have not been located.

<sup>&</sup>lt;sup>79</sup> Such as John Davy's recollection that "Most of the capital operations, such as amputations of the thigh proved fatal" ("Some Notices of My Life," i,  $[n. pag.] [32^v]$ ).

been at Constantinople before the Crimean war, that war would probably not have taken place."80

In the introduction to this article, I mentioned the poignancy of Humphry Davy's postscript on the last letter he was to send to England. The final entries in John Davy's "Some Notices of My Life" are similarly poignant. John's formerly neat hand has become unsteady, and the page is only half-filled, missing the sense of an ending, blotted with ink and bearing numerous corrections. In their final manuscript writings, we see another vital connection between the two brothers John and Humphry Davy: writing had been a major part of both of their lives, and both were writing to the last. The publication of the *Collected Letters*, the culmination of the work of the Davy Letters Project, will transform our understanding of Humphry Davy, his circle, and the cultures and networks of which he was part. As I hope to have shown by drawing on three quite different examples (the family memoir, the short letter to Hope, and the longer letter to Gillies), the benefit of this work has surely already begun to extend beyond Humphry Davy to other figures, such as John: a key member of the Davy circle; chemist, doctor, writer, traveller, and officer in service to his government; the one whose "greatest pleasure was my Brother's approval and praise."

# **Note on contributor:**

Andrew Lacey is a postdoctoral researcher, and was formerly a Senior Research Associate in the Department of English Literature and Creative Writing at Lancaster University. He worked on the Davy Letters Project (http://www.davy-letters.org.uk) between 2014 and 2018, in posts funded by the Modern Humanities Research Association, the Arts and Humanities Research Council, the British Academy, and the Society for the History of Alchemy and Chemistry. He studied at Durham and Newcastle Universities, and is a former winner of the Keats-Shelley Memorial Association Keats-Shelley Prize. Address: Department of English Literature and Creative Writing, County College, Lancaster University, Lancaster LA1 4YD, UK. Email: a.lacey2@lancaster.ac.uk.

<sup>&</sup>lt;sup>80</sup> John Davy, "Some Notices of My Life," i, [n. pag.] [52<sup>r-v</sup>].