

DAVY'S NOTEMAKING

by

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In three sections, this article, building on David Knight's early and important (but brief) assessment of the character of Humphry Davy's (1778–1829) notemaking, presents and examines three of the main uses of Davy's notebooks: as spaces or sites for experimentation; for projection; and for preservation. After providing an introductory overview of Davy's notebook collection, it presents key readings, tied closely to Davy's biography, of Davy notebooks from his early (notebooks 13C, 13E, 21B, 22A, and 22C), middle (06 and 07), and later (14E) years. It also suggests ways in which we might apply organizing or guiding principles to what, on the surface, may appear to be a heterogeneous mass of almost overwhelmingly disparate information, and, taking a primarily comparative approach throughout, of interpreting Davy's notebook collection as a whole.

Keywords: Humphry Davy; notebooks; heterogeneity; experimentation; projection; preservation

INTRODUCTION: THE HETEROGENEITY OF DAVY'S NOTEBOOKS

In three sections, this article presents and examines three of the main uses of Humphry Davy's notebooks: as spaces or sites for experimentation; for projection; and for preservation. Notebooks played an important part in Davy's life from the start: in his *Humphry Davy: Science and Power*, David Knight writes of the 'formidable programme of self-education'¹ that the sixteen-year-old Davy set down in list form in notebook 13F.² The list is formidable not only for its length, but also for the variety of the subjects to be studied. Some of the categories are simple (if 'simple' can ever be the right word for such vast categories): 'Geography', 'Logic', 'Mechanics'.³ Others discriminate between sub-branches of a subject: 'Theology' is divided into 'Religion' and 'Ethicks or Moral Virtues', then divided again into 'taught by Nature' and 'taught by Revelation'; 'Rhetoric' and 'Oratory' are combined as a single entry, as are 'History' and 'Chronology'. The remainder of the categories

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3 Ibid., p. 136.

¹ David Knight, Humphry Davy: science and power (Blackwell, Oxford, 1992, repr. 1994; reiss. Cambridge University Press, Cambridge, 1996, 1998), p. 16.

² RI MS HD/13/F, Royal Institution of Great Britain.

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discriminate to a greater degree: the study of 'Language' is to take in English, French, Latin, Greek, Italian, Spanish, and Hebrew; 'Physics' is perhaps more daunting still, including 'The Doctrines & properties of Natural Bodies', 'Of the Operations of Nature', and, as Davy imposes a perhaps sensible check on his youthful ambition, 'Simple Astronomy'. This is not to be purely learning for learning's sake, however, as Davy's third category reveals:

3 *My profession* [my emphasis] 1 Botany – 2 Pharmacy – 3 Nosology – 4 Anatomy – 5 Surgery – 6 Chemistry –

As Knight observes, 'Already we see here, and in the notebooks that Davy now began to keep, the breadth of his interests. ... [The notebooks] were clearly a very important part of [the] programme of 'making himself' ...; full of things he could not have learned at school, and handled unsystematically rather than formally as in a course' (figure 1).⁴

Knight's late-twentieth-century assessment of the character of Davy's notemaking, which speaks of the breadth of Davy's interests, of the importance of the notebooks in what Jan Golinski has termed his 'self-fashioning',⁵ and of the often apparently haphazard arrangement of the material therein,⁶ is very much in tune with the findings so far of the Davy Notebooks Project. This article, building on Knight's early and important (but brief) assessment, will examine in more detail some of the various ways in which Davy used his notebooks, and explore his notemaking practice during his early, middle, and later years.

It is apt to adopt a term commonly used in chemistry—'heterogeneous', meaning 'Of one body in respect of another, or of various bodies in respect of each other: diverse in kind or nature, of completely different characters ...',⁷ as used in Robert Hooke's (1635–1703) *Micrographia* (1665): 'chusing two *heterogeneous fluids*, such as Water and Oyl'⁸—to approach Davy's notebook collection as a whole. A slightly softer definition, which lays the stress more on 'divers[ity]' and less on 'completely different', is adopted for the purposes of this article: 'Of a body in respect of its elements: composed of diverse elements or constituents; consisting of parts of different kinds ...'.⁹ We see heterogeneous in terms of content. Davy kept good to his promise to follow a formidable programme of self-education in that his notebooks take in, to various degrees, agriculture, astronomy, chemistry (and electrochemistry), geology, mathematics, medicine, philosophy, poetry, and more. Sometimes the apparently 'diverse elements or constituents ... parts of different kinds' occupy the

8 Robert Hooke, Micrographia: or Some Physiological Descriptions of Minute Bodies Made by Magnifying Glasses. With Observations and Inquiries Thereupon (Jo. Martyn and Ja. Allestry, London, 1665), p. 25.

⁴ Knight, op. cit. (note 1), p. 17.

⁵ Jan Golinski, 'Humphry Davy: the experimental self', *Eighteenth-Cent. Stud.* **45**, 15–28 (2011), at p. 17. See also his *The experimental self: Humphry Davy and the making of a man of science* (University of Chicago Press, 2016).

⁶ As Golinski notes in *The experimental self*, '[Davy] could be methodical in pursuit of a line of inquiry, but nobody who ha[s] looked into his notebooks could think of him as rigidly disciplined in his thinking' (p. 186).

⁷ Oxford English dictionary (OED), 1a.

⁹ OED, 2.

Charmac Doctrines & properties of Watural Bodies Of The Operations of Mature. 3 Of the Doctomes of Fluids -1 Of the Properties of Organized Matter 5 Of the Organization of Matter Ne. 7. Mechanics .-8 Abetonic & Oratory -9 History & Chronolog

Figure 1. RI MS HD/13 /F, p. 136 (rotated).

same page.¹⁰ Second, the notebooks are heterogeneous in terms of intention and audience. In Davy's notebook collection, we have an intermixture of: private reflections; records of reading, learning, and experimentation; work in draft, both prose and poetry, that was or was not later published; lecture notes that were or were not delivered to an audience;¹¹ draft letters that were or were not sent to a recipient (which is discussed in greater detail below); numerous sketches, some enlivened by the addition of watercolour paint, made for different purposes (some are mere doodles; others are diagrammatic or semi-diagrammatic representations, of, for example, rock strata or fish; others are natural scenes recorded for posterity); and more (this list is not exhaustive). There are other forms of heterogeneity in Davy's notebooks collection also—in materiality, in the presence of different hands, in the various afterlives of individual notebooks—that this article touches upon in part.

¹⁰ On poetry and science, see Sharon Ruston's article in this Special Issue.

¹¹ On Davy's lecture notes, see Frank James's article in this Special Issue.

The heterogeneity of Davy's notebook collection as a whole invites the reader to ask, from the very outset in considering the collection as one oeuvre made up of numerous interconnected parts, some 'big' questions on the nature of notebooks. First, the biggest: what do we mean by 'notebook'? 'Book' is straightforward enough: it is bound, or self-contained, a collection, probably in manuscript. What about 'note'? This is more difficult. Does it mean 'short-form'? If so, how short is 'short'? Is a long, polished notebook somehow 'more' of a notebook than a short, rough notebook? Or, is the rough notebook 'more' of a notebook than the neat one, as it is perhaps more interesting in that it is more revealing of process?¹² Is there a kind of intellectual hierarchy of notes, where all notes are not created equal, with some having more essential 'noteness'—that which clearly demarcates or distinguishes the 'note', however we may wish to interpret that, from other types of writing—than others? There are no easy answers to these questions; with increased heterogeneity of content, audience, and intention comes increased complexity in interpretation, categorization, and, ultimately, definition.

To simplify the issue at large, it is helpful to take an oppositional approach: what is *not* a notebook? In a recent review of *The collected letters of Sir Humphry Davy* (*CLHD*), David Philip Miller makes a salient point: 'in these volumes we have an epistolary tracing of [a] remarkable journey mainly from Davy's point of view. Of course, having Davy in his own write does not tell us whether what Davy pens is transparent or contrived for his correspondents. This is for the reader to judge'.¹³ Indeed, while a letter (or at least a 'sent letter', which is discussed in greater detail below) always presupposes another reader, this is not necessarily the case for a notebook. We might expect, therefore, to get the 'round, unvarnished' Davy—a 'transparent' Davy, to adapt Miller—in his notebooks. Comparing a Davy letter—which intended to have, and did have, another reader—to a Davy notebook—a creative space or site in which issues such as audience and intention are much less clear-cut—will begin to shed light on the nature of Davy's notemaking and, crucially, on how we might apply organizing or guiding principles to what, on the surface, may appear to be a heterogeneous mass of almost overwhelmingly disparate information.

The first section of this article explores three notebooks, dating from 1800 to 1809, as experimental spaces or sites. The idea of 'noteness' is explored and developed, and the need to re-evaluate Davy's notebook collection as a whole, as one reads through the collection in roughly chronological order, is emphasized. By the later years of this period, when Davy was an established professional experimentalist, he had found his voice; before that time, Davy's notebooks reveal him to be far less sure of himself, and the early Davy notebook is therefore an experimental space or site for him to speculate on ideas, often tentatively, freely. The second section of this article also focuses on three notebooks, dating from 1798–1805, taking up the idea of the Davy notebook as a type of sounding board or testing ground. The notebooks examined in this section all contain drafts towards letters. The purpose of these drafts was to ensure that Davy was projecting the desired public image towards those whom he respected in various ways. This is not quite experimentation of the kind seen in the first section; this is less a creative process of speculating and finding

¹² On manuscripts that constitute text in a state of process, see Sally Bushell, *Text as process: creative composition in Wordsworth, Tennyson, and Dickinson* (University of Virginia Press, Charlottesville, 2009).

¹³ David Philip Miller, 'The Collected Letters of [Sir] Humphry Davy, ed. by Tim Fulford and Sharon Ruston (review)', Eighteenth-Cent. Stud. 54, 1065–1071 (2021), at p. 1066.

a voice, and more a revisionary process of honing and getting things right. In the examples considered, the importance of notebooks to the process of projection in Davy's personal, social, and professional contexts is emphasized. The third section of this article focuses on one notebook, used by Davy after a life-altering crisis in his health in 1826. It explores the idea that, as the gravity of Davy's health problems later in life became quickly apparent to him, his use of notebooks took on a different, altogether more urgent motivation. Davy is again, in his late notebook, projecting; the projection we see in notebook 14E has less to do with self-fashioning, however, and more to do, as Davy realized that time was running out for him, with self-preservation. These sections also speak, in part, of my personal experiences of working with Davy's notebooks, and suggest, by way of my section conclusions, fruitful ways of interpreting the notebook collection as a whole.

FINDING A VOICE: THE NOTEBOOK AS EXPERIMENTAL SPACE OR SITE

Davy's letter to Samuel Taylor Coleridge (1772–1834) of 26 November 1800 gives us a good sense of how Davy presented (or, rather, as this is a written artefact, projected) himself to one whom he was keen to impress. Coleridge was, by this time, an established poet, well-known among radical intellectual circles in Bristol and beyond, and in his letters we see Davy mirroring Coleridge to an extent. By 1800, Davy was himself a published poet, contributing five poems to Robert Southey's (1774–1843) *Annual Anthology* for 1799.¹⁴ Davy opens his letter, written from Thomas Beddoes's (1760–1808) Medical Pneumatic Institution (MPI), where Davy had worked for a little over two years,¹⁵ with an apology:

My dear Coleridge

You will pardon my long *epistolary* indolence when you are acquainted with the causes of it. Often within the last three weeks has my hand directed by love begotten thoughts seized the instrument of distant communion to tell you that it was connected with with [*sic*] real organs living *in pain* & with ideal organs, *only living* in pleasure when contemplating you & some other ideal aggregates; & as often has that instrument been snatched away by devils in the forms of gas wonder hunters,¹⁶ spectre = \exp^{15} & sicknesses of the stomach.¹⁷

The sense of Davy's being in the city, 'pent 'mid cloisters dim' as Coleridge had it in a poem of 1798,¹⁸ and his desire to transcend his present situation, is strong:

16 Those visiting the Medical Pneumatic Institution in search of a 'wonder cure' to a variety of ailments. Most were disappointed.

17 Humphry Davy, Letter to Samuel Taylor Coleridge, 26 November 1800, in CLHD, vol. 1, pp. 79-81.

¹⁴ Davy contributed a further poem to the Annual Anthology for 1800. For a list of Davy's published poems, see CLHD, vol. 4, p. 357.

¹⁵ Davy, disillusioned with the false promises of pneumatic medicine and increasingly interested in the new science of electrochemistry, would soon leave after writing this letter. Davy was appointed Assistant Lecturer, to Thomas Garnett (1766–1802), at the Royal Institution on 16 February 1801.

¹⁸ Samuel Taylor Coleridge, 'Frost at Midnight' (1798), 1. 52, in *The Collected Works of Samuel Taylor Coleridge* (ed. Barbara E. Rooke and others, gen. ed. Kathleen Coburn), 16 vols (Princeton University Press, 1969–2001), vol. 16: 1, pt. 1 (*Poems (Reading Text): Part 1* (ed. J. C. C. Mays)), p. 455.

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Oh that the organiser of the universe *pleasurable sensation* or *love* would give to impressions exactly the same laws of motion as it has given to ideas, then should my torpid organs that now rest confined in a *prison* of *civilisation* ie a house, be where their ideas are, with you, wandering over majestic mountains, cooled by the breezes of health, or sleeping upon brown leaves beneath the unclouded heaven or floating on lakes coloured by the suns of evening.¹⁹

Davy's letter is conspicuously florid and poetic. A humble pen becomes 'the instrument of distant communion'; 'ideal organs' and 'you & some other ideal aggregates' both reach, grandly, towards the impossible. As Davy continues, his language becomes increasingly high-flown, and his idealization (or perhaps idolization) of Coleridge becomes more pronounced: a house becomes a '*prison* of *civilisation*', and Coleridge is imagined, as a kind of roaming poet-sage, as master of a sublime natural scene.

Davy's letter to his fellow poet and philosopher Coleridge clearly has its reader-it is a reader whom Davy wishes to please and, indeed, emulate. In notebook 21B,20 dating from 1800, we-Davy's twenty-first-century reader-find him in similarly philosophical form, speculating in the same year as the letter to Coleridge on the 'mysterious formation of organs'21 in unborn babies, and on the development of 'the empire of the mind before birth'. The title of Davy's short study reveals, from the outset, that inchoateness—unfinishedness-is a key characteristic of the 'noteness' of this work: 'Hints towards a Treatise to be entitled Observ^s on Education & on the formation of the Human intellect dessigned for the use of Parents & Instructors'. This is not quite a treatise; rather, it is merely 'Hints towards a Treatise' (my emphasis). A treatise has formal, systematic regularity, progressively exploring a given subject of philosophical enquiry in long-form; Davy's 'Hints' lack this regularity; indeed, it is not entirely clear where the 'Hints' end in the notebook, and the 'Hints' themselves, which are decidedly short-form, are interspersed with unrelated observations. The 'Hints' also have an intended audience: 'for the use of Parents & Instructors'. Over the course of the dozen-or-so pages that make up the 'Hints', Davy speculates widely, taking in questions such as: when does perception begin? What type/types of pre-natal perception exist? Is there such a thing as pre-natal identity?:

We must not date the commencement of the perceptive existence of the Infant from the moment of his birth alone.—The spark of life has been kindled by a number of feelings perceived during the mysterious formation of organs. a number of impressions of touch of taste of smell & perhaps of sound have existed in his mind & left behind them ideas, pleasure & pain has been associated with them. ... The most important of the ideas which have been formed in the womb is perhaps the great tangible idea of the fluid [?or] yeilding membranes which have circumvolved the foetus in the womb.—Perhaps this is the conscious being the undefinable something called I round which the visible & tangible ideas of organs rally after the Child has made an entrance into the world of visible agency.²²

21 Ibid., p. 3.

22 Ibid., p. 3–4.

¹⁹ Note also the further parallels between Davy's letter and 'Frost at Midnight', first published in September 1798: 'thou ... shalt wander like a breeze / By lakes and sandy shores, beneath the crags / Of ancient mountain, and beneath the clouds, / Which image in their bulk both lakes and shores / And mountain crags...' (II. 54–58).

²⁰ RI MS HD/21/B, Royal Institution of Great Britain.

The general focus on 'perception', 'pleasure', and 'pain' will put us in mind of Davy's philosophical forerunners: David Hartley (bap. 1705, d. 1757), who published his *Observa-tions on Man* in 1749,²³ is an obvious influence, but we can go back further, through David Hume (1711–1776), John Locke (1632–1704), René Descartes (1596–1650), all the way back to Epicurus (341 BCE–270 BCE). Coleridge's admiration of Hartley is well known; Davy seems to have imbibed some Hartley here, perhaps via Coleridge. Where Hartley has 'vigorous Impressions from the cold Air, the Hands of the Midwife, &c. may excite the strong Respiration and Crying which take place upon Birth ordinarily',²⁴ Davy has 'At the moment that the child enters into the world new pains are produced: those of cold of respiration of hard bodies'.²⁵ Hartley writes that 'a Power of obtaining Pleasure, and removing Pain, will be generated early in Children, and increase afterwards every Day';²⁶ Davy enumerates some of those pleasures:

New pleasures visible ones, pleasures of taste coalescence of the uterine pleasures with the maternal pleasures. Pleasures of sound voice of the mother. desire produced by the pain of hunger connected with the ideal pleasure of sucking.—Pleasure of action connected with the visible ideas of his organs & of the music the person who moves.²⁷

Davy's focus on the 'organs', mentioned three times in the letter to Coleridge, is there in Hartley too: *Observations on Man* has five sections on the senses, and four of them open with an assessment of the 'extent' and 'powers' of each sense-organ. Hartley writes: 'The new-born Child is unable to walk on account of the want of Strength to support his Body As he gets Strength, he advances likewise in the Number and Variety of compound Motions of the Limbs'.²⁸ Davy too plans a section on 'how a child learns to move his limbs'.²⁹ Clearly, Davy is privately 'working things out' here, martialling his philosophical reading and philosophical conversations, as he plans his treatise. The fragmentary nature of the 'Hints', with Davy seldom going into detail, means that this particular notebook entry remains tantalizingly suggestive. Is Davy perhaps planning, in the vein of Jean-Jacques Rousseau (1712–1778), an *Émile*-like work, presenting a system of education for producing something of an ideal citizen? A later passage in the 'Hints', which lists several of Davy's own interests—alongside poetry and chemistry, we have fishing and shooting³⁰—might be taken to suggest so.

As the 'Treatise' remained in 'Hint' form only, and as those 'Hints' are only lightly sketched, Davy's work on education and the formation of the human intellect leaves us with many more questions than it answers. It does, however, plainly show us the intellectual ambition—and, indeed, self-confidence—of the twenty-one-year-old Davy, and it nicely illustrates the complexity of working with his notebooks: this is not well-formed, anywhere-near-finished work. The 'Hints' are something of a case study of inchoateness in Davy's notebooks—this is, as suggested above, one of the key characteristics of 'noteness' in

- 26 Hartley, op. cit. (note 23), vol. 1, p. 112.
- 27 RI MS HD/21/B, p. 5.
- 28 Hartley, vol. 1, p. 256.
- 29 RI MS HD/21/B, p. 8.
- 30 Ibid., p. 10.

²³ David Hartley, Observations on Man, His Frame, His Duty, and His Expectations, 2 vols (S. Richardson, London, 1749).

²⁴ Ibid., vol. 1, p. 248.

²⁵ RI MS HD/21/B, p. 5.

Davy's work. The example of notebook 21B also shows that the question of audience as it relates to the notebooks can, especially in the case of apparently abandoned works-inprogress, be a complex one. We have something of a 'ghost audience' in the 'Hints' in that it never reached the 'parents and instructors' it set out to reach. Nor did it reach, for that matter, any contemporaneous readers (parents, instructors, or otherwise) of Davy's published works. Instead, it most recently reached us, Davy's present-day readers—an entirely unintended audience.

Reading different Davy notebooks alongside one another often leads us, inevitably, to reconsider and revise our earlier, isolated assessments. Notebook 22A,³¹ as the first page reveals, dates from 'about 1800' (note that a '2' is overwritten) 'when [Davy was] about ... 20' (a '2' is again overwritten) '& Earlier before he left Penzance' (which he did in October 1798) (figure 2).³²

This writing is in the hand of John Davy (1790–1868), Davy's brother and literary executor, which further complicates the question of audience sketched above: John has not only read this work in manuscript; he has also annotated it at a later date. The title-page states that this notebook contains 'Notes & Observations relating to existence'. On page 3, there is something of a half-title-page—'Observations relating to Existence'—followed by the beginnings of the formal apparatus of a treatise: 'Division 1st. of the Use of Words',³³ suggestive of, for example, Locke's *An Essay Concerning Human Understanding* of 1689.³⁴ Was this notebook perhaps used after the previous notebook, 21B, and is Davy reprising some of the areas of enquiry sketched in his prospectus for the 'Hints'? While we cannot be sure, it would appear so:

II Concerning Innate ideas.-

If by innate ideas be meant ideas existing in the mind of the infant before birth the strongest of all analogies would induce us to believe that they do exist, nothing can be more ridiculous than to suppose that the mind of the infant is a tabula rasa.—The sense of feeling must have been exercised to a great extent, probably those of taste & smell. & as the infant is circumvolved by a fluid fit for communicating vibrations consequently the child He must have heard a variety of sounds, and as his organisation is similar in the womb & the moment He is evolved from it ... there is every reason to suppose that an immense mass of tangible feeling must have been collected together during the formation of organs & the muscles of the child...³⁵

It now seems that Davy's work on the formation of the human intellect is not as inchoate as the isolated example of the previous notebook, 21B, would suggest. The passage above, in which Davy diverges from Locke as much as he converged with Hartley in 21B, illustrates the point that, in working with the notebooks as they have been transcribed, we, as interpreters of Davy's manuscripts, have been in a constant process of reassessment, of re-evaluation. To be sure, these are different notes to those in 21B. They are different in form, being longer; different in 'finishedness', being

³¹ RI MS HD/22/A, Royal Institution of Great Britain.

³² Ibid., p. 1.

³³ Ibid., p. 3.

³⁴ John Locke, An Essay Concerning Humane Understanding (Tho. Bassett, London, 1690). See, for example, the heading in Book III: 'Of Words or Language in General'.

³⁵ RI MS HD/22/A, pp. 5-6.

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Figure 2. RI MS HD/22 /A, p. 1.

more polished; and different in audience also, there being no mention of 'parents and instructors' here. But their essential, undeniable 'noteness'-these too are in a notebook-means that we have had to reassess our understanding of Davy's notebook

collection as new transcriptions have emerged; as Davy goes forward, we have had to go back.

As of the 'Hints' in notebook 21B, the 'Observations' in 22A-which, while it has a clear start-point, has no clear endpoint in this notebook, collapsing into a series of what might be subdivisions, or new digressions entirely-also leaves us with more questions than answers. Did Davy start out with the intention of possibly publishing this? The half-title page and the formal apparatus of a treatise might be taken to suggest so. What about that intellectual hierarchy of notes mentioned above? Are we to consider the more developed work in 22A somehow superior to, more valuable than, the apparently earlier attempt at elucidating similar ideas in notebook 21B? Do we need to perhaps rethink our *Émile* hypothesis when Davy apparently contradicts Rousseau in notebook 22A? ('General ideas terms what certain metaphysicians have called ideas arise from the association of analogy by a very simple operation<not> as Jean J^s Rousseau by a very complex one').³⁶ The comparison of notebooks 21B and 22A-both from a similar period, and both almost exclusively in Davy's handillustrates some of the complexity inherent in the process of reassessment that has been initiated by the emergence of new Davy notebook transcriptions. But, as a notebook from a slightly later period illustrates, the process of reassessment of Davy's notemaking becomes more complex with the addition of each 'new' notebook to the equation.

Notebook 06^{37} is a rather different artefact to 21B and 22A. It is a large laboratory notebook, used between 1805 and 1809, when Davy was conducting some of his most important researches at the Royal Institution (RI). Indeed, we might even question whether this is, in the same sense as the previous two notebooks, a 'Davy notebook' at all: although it is full of Davy's hand, it was actually the property of the RI, even though Davy treated it, and other laboratory notebooks, as his own.³⁸ The questions of intention and audience as they relate to notebook 06 are less confounding than in the cases of 21B and 22A: the purpose was to record experiments made in the laboratory, and the immediate audience or readership was those working in the laboratory. The notes are generically mixed: there is, of course, experimental detail, much of it dated, along with sketches of chemical apparatus, and working calculations; there are also lists of apparatus and chemicals needed and purchased, and other lists. In one of these lists, Davy sets out some clear directives:

Some Regulations with regard to the state of the Laboratory Every thing is to be put in its proper place in the evening, & every time to be arranged for the next days operations-

The fire to be lighted at 8 OClock & the Apparatus for the expts prepared by nine.³⁹

36 Ibid., p. 24.

37 RI MS HD/06, Royal Institution of Great Britain.

38 In his prefatory note to notebook 06, dated 4 December 1829, Michael Faraday (1791-1867) notes: '[Davy] occasionally tore away leaves [from the laboratory notebooks] upon which notes had been written that he might carry the data home for consideration'. For the 'future security' of notebooks 06 and 07, Faraday paginated them and recorded the number of pages in his prefatory note.

39 RI MS HD/06, p. 76.

Although this, on an initial reading, is rather mundane stuff, it shows us a different aspect to Davy's notemaking. This is, of course, quite different to the speculative philosophy of the twenty-one-year-old Davy; it sheds light on Davy the professional experimentalist: meticulous, assertive, perhaps even a little domineering. Davy has, by this time, certainly found his voice. Later, in another laboratory notebook (07),⁴⁰ we see Davy in a similar, perhaps even more high-handed, mode:

No Exp^{1s} are to be made or carried on in the Laboratory without the consent & approbation of the Professor of Chemistry [i.e. Davy]; The attempt at original exp^{1s} unless preceded by <u>Knowledge</u> merely interferes with the progress of discovery (figure 3).⁴¹

Is this mundane stuff, in fact? Although it is rather different to the high-flown, self-consciously 'intellectual' stuff of the 'Hints' and the 'Observations', I contend that it is just as valuable. It speaks of how Davy viewed himself in a professional context—as a maker and enforcer of rules, as a director of research and, indeed, as a director of discovery itself—and of how Davy projected himself in a decidedly public, rather than possibly private, medium of writing. We might think back to how Davy wished to present himself in the letter to Coleridge: as one of deep poetic sensibility, as a fellow-feeler, and privileged communicator, of the 'majesty' of nature, of 'unclouded heaven' and the 'suns of evening'. We have the grandeur, and the grandiose, here in the laboratory notebook also ('Knowledge', underlined and with a capital 'K', 'the progress of Discovery'), but it is being put to quite different ends: to dictate, rather than to excite or inspire. Both the long, florid letter to the poet and the short, terse order in the reagent-stained pages of the laboratory notebook have much, despite their obviously differing degrees of 'literariness',⁴² to tell us about their author.

This brief survey of three Davy notebooks as experimental spaces or sites suggests three guiding principles in interpreting Davy's notebooks. First, inchoateness, unfinishedness, does not necessarily entail 'not useful-ness'. Consequently, the idea of an intellectual hierarchy of notes is unhelpful. All notes are essential parts of a larger picture. Second, the notebooks should be read in the context of the whole notebook collection, which, in transcribed form, at least, has only been very recently established. New understandings emerge as new cross-connections between notes and notebooks are made. Again, all notes are essential parts of a larger picture of genre: tying back into the principle that an intellectual hierarchy of notes is unhelpful, 'public', or 'to be perhaps published', philosophy can be 'false', woolly, wearily second-hand, and a private shopping list can be 'true', revealing, valuable because it is original. As a starting point, the underlying, unifying principle, given shape by this brief survey of Davy's experimental notebooks, should be this: notes should not be thought of as being somehow a 'second-class' type of writing. Furthermore, even aborted or failed experiments like the 'Hints' and 'Observations' can, as Davy well knew, reveal valuable truths.

⁴⁰ RI MS HD/07, Royal Institution of Great Britain.

⁴¹ Ibid., p. 299.

⁴² Difference does not, of course, necessarily entail incommensurability: Frederic L. Holmes, Jürgen Renn, and Hans-Jörg Rheinberger remind us of the important point that '[r]esearch notes ... *are* literary activities in their own right' (my emphasis). ('Introduction', in *Reworking the bench: research notebooks in the history of science* (ed. Holmes, Renn, and Rheinberger), pp. vii–xv (Springer, Dordrecht, 2003), at p. viii).

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Figure 3. RI MS HD/07, p. 299.

Getting things right: the notebook as sounding board

In his letter to Coleridge, Davy is participating in a process of projection: the 'communion', as Davy himself observes, is necessarily 'distant', and therefore Davy needs to project himself, to send something of himself or his persona, over a distance through the medium of writing. The process of projection, a key, early part of the larger process of what Golinski has termed 'self-fashioning', is active and intentional, and one that requires a degree of 'working out' at the outset; it is also one that we see evidence of elsewhere in Davy's notebook collection. Very occasionally, drafts of Davy's letters are found in

his notebooks—only 'very' occasionally, as the editors of Davy's letters, Tim Fulford and Sharon Ruston, note, as 'Davy did not, as a rule, write-or, at least, keep-drafts of his own letters; nor was he in the habit of making copies of them'.⁴³ A letter that exists as a single leaf, or a few leaves together, in 'single' form only (there are no extant additional copies), and, ideally, with the traditional extratextual markers of having passed through the postal system (a stamped postmark, other postal markings, evidence of a wax seal, and so on) is, being a discrete 'one-off', a pleasingly 'self-contained' type of manuscript: we, as readers of the text and extratext, can be confident of at least some details of the former life of the manuscript (its point of origin; the fact that it was actually sent by the author to its recipient, and the journey it likely took in transit; its point of arrival; and possibly its afterlife on its journey to the archive, if that can be traced). Additional features of discrete single- or several-leaf letters, such as a place- or date-specific watermark, can strengthen our hand, in reconstructing the past life of the manuscript, further. The type of letter described above is perhaps best categorized as a 'sent letter'; sent letters are, generally speaking, more 'simple' manuscripts. Drafts of letters in notebooks present the reader with a rather different, usually more complex proposition. Indeed, the 'letter in the notebook', which may be categorized as sent, in a later form, or unsent, is a curiously hybrid form of literary construction, one that exists and operates, often teasingly, in both private and public contexts while belonging assuredly to neither, and one that reminds us of the essential multivarious uses of the notebook as manuscript: as a repository and perhaps a testing ground for the author (the idea of the notebook as a repository is explored in greater detail below), and as a rich, at turns revealing and perplexing resource for the interpreter.

In his 'letters in notebooks', we see Davy using his notebooks as a sounding board—as a means of testing the validity or likely success of a text before it is shared. We also see a hybridity of form: writing that has both public and private inflections while belonging assuredly to neither category, writing that reminds us of the essential multivarious uses of the notebook as manuscript. None of the three examples discussed in this section fall firmly into the category of the 'sent letter'; in fact, two of the examples exist in Davy's notebooks only, and the third exists in a Davy notebook alongside a later, separate typescript, with some variation, of uncertain origin. In November 1798, the nineteen-year-old Davy was recently arrived in Bristol, having extracted himself from his indenture as an apprentice apothecary-surgeon in Cornwall in early October. Two people were instrumental in getting Davy out of his indenture with the Penzance apothecary-surgeon John Bingham Borlase (1753-1813) and to Bristol: Davies Giddy (1767-1839), a minor member of the Cornish gentry with mathematical and scientific interests; and Thomas Beddoes, who gave Davy his first scientific publication in 'An Essay on Heat, Light, and the Combinations of Light' in 1799, and who was keen to employ Davy as superintendent of the fledgling MPI. Based in Bristol with Beddoes, it perhaps comes as little surprise that, as far as we know, the first person that Davy chose to write to-after his mother, Grace Davy (1752-1826), of course-was Giddy.

The draft fragment of this letter, Davy to [?Davies Giddy], dated [November 1798],⁴⁴ in notebook 13E⁴⁵ shows the young Davy addressing his 'dear Friend'⁴⁶ Giddy respectfully,

46 Ibid., p. 33.

⁴³ CLHD, vol. 1, p. ccxlvi.

⁴⁴ Humphry Davy, Letter to [?Davies Giddy], [November 1798] (draft), in CLHD, vol. 1, pp. 13-14.

⁴⁵ RI MS HD/13/E, Royal Institution of Great Britain.

tentatively, almost half-apologetically: 'I thought it would be useless to write to you before I had something of importance to communicate-And even now I hardly know of any thing that will interest you, your love of Science & your patronage of improvement will however I think render intelligence of any discovery or invention pleasing to you'. The news Davy has to provide in the draft letter is, indeed, slight: subscriptions to the MPI have increased, and negotiations for a premises which 'shall I suppose to able to provide for 8 or 10 in patients & for as many out ones as we can procure' are underway. From the evidence we have, Davy did indeed think it 'useless' to send this particular letter: the draft letter ends abruptly, and, while the next notebook page is torn out, there is no evidence that Davy continued the letter on the torn-out and now-lost leaf. A much longer letter to Giddy, dated 12 November 1798,⁴⁷ followed; this letter, the manuscript now lost, is clearly a descendent of the ur-letter-text in notebook 13E. Instead of 'I thought it would be useless to write to you before I had something of importance to communicate', we now have 'I have purposely delayed writing until I could communicate to you some intelligence of importance concerning the Pneumatic Institution'; instead of describing Giddy as a 'love[r] of Science & [a] patron[] of improvement', Davy has him as 'a friend to science and mankind'; the exact same phrase 'We are negociating for a house in dowrie square' appears, with some minor variation in the capitalization of the place-name only, in both versions of the letter; there are many other parallels also.

While the language of the later letter is more polished, and more detail is provided, it is the very existence of the draft letter in notebook 13E, and the fact that the unfinished draft breaks off abruptly, that is especially revealing in this case: it would appear that Davy was keen to get this particular letter, intended for a man he respected, right; whether he decided to stop in the notebook because he thought it was not going right is moot. The key point is that Davy chose to use his notebook as a testing ground before writing to a man he considered his 'dear Friend'. In this way, we see a vulnerability in the young Davy-keen to make the best impression, tempering his 'My dear Friend' to 'Dear Sir' in the later letterthat we do not see in, for example, the later regulations to his assistants in the laboratory notebooks, discussed above. The draft letter is especially private in that it was written in a personal notebook and then rejected without sending; the later letter in the form of the lost manuscript is somewhat less private in that it was shared with Giddy; the later letter in the form of the text that came down to us, first published in John Ayrton Paris's (1785-1856) Life of Davy,⁴⁸ is public. So, here we have another answer to the question, how did Davy use his notebooks? In this case, it was as something of a testing ground even in the context of personal friendship. This brief, private notebook entry demands a reconsideration of the by-now-long-cemented public notion, recently explored by Geoffrey Cantor,⁴⁹ of 'Davy the imperious'.

The example of the aborted draft letter to Giddy in notebook 13E perhaps speaks of a young man making his way in the world, keen to show a former mentor that he is doing well. Another example of a draft letter, from notebook 13C,⁵⁰ used during 1801–1802,

⁴⁷ Humphry Davy, Letter to Davies Giddy, 12 November 1798, in CLHD, vol. 1, pp. 14-16.

⁴⁸ John Ayrton Paris, *The Life of Sir Humphry Davy, Bart. LL.D. Late President of the Royal Society, Foreign Associate of the Royal Institute of France. &c. &c.*, both 1 vol. (4to) and 2 vols (8vo) (Henry Colburn & Richard Bentley, London, 1831).

⁴⁹ Geoffrey Cantor, 'Humphry Davy: a study in narcissism?', *Notes Rec.* **72**, 217–237 (2018); see especially the section 'How others saw Davy' (pp. 222–225).

⁵⁰ RI MS HD/13/C, Royal Institution of Great Britain.

when Davy was in his early twenties, shows us another side of the young Davy again. The draft letter is simply addressed 'My dear Sir',⁵¹ and begins: 'The little boy who brings you this letter is my brother—It is my desire & it is my mothers desire that he should become your pupil'.⁵² Davy's only brother was John Davy, an army doctor and editor of *The Collected Works of Sir Humphry Davy*⁵³ (hereafter *CWHD*) after Davy's death, and Davy acted the father to John (which John freely acknowledged) following the death of the boys' actual father, Robert Davy (born 1746), in 1794, when Davy was approaching his sixteenth birthday.⁵⁴ Davy continues in his notebook:

I fear his mind at present is in a very uncultivated state; but He seems to possess sensibility: which I have been accustomed to consider as the foundation of all power & activity.—Under your tuition at all events, He must be improved & if he does does is not <capable of> becoming learned, He will at least become virtuous ...⁵⁵

The draft letter closes with the rather touching 'if indeed the benefits He may derive from you are at all analogous to those which his brother has derived He will never forget his instructor'. Although the draft letter in notebook 13C lacks the formal apparatus of a valediction, the sense of an ending here is strong. The intended recipient was a Monsieur Dugart (forename and dates untraced), a French émigré and Catholic priest who taught French to both Davy and John.

The language of Davy's draft letter speaks of paternalistic care ('I fear ...'), and of his desire to do the best for the 'little' one who is depending on him ('at a future period He will thank you'). While the letter in Davy's notebook is, of course, revealing of Davy, the main focus here is John: though his mind is 'uncultivated', he possesses 'sensibility'; he will hopefully become 'learned', but, if not, 'at least ... virtuous'. If the draft letter in notebook 13E was Davy's way of telling Giddy that he was doing well, this draft letter is Davy's way of telling Dugart that he cares deeply about his brother's education, and that he is keen for John to derive the benefits of Dugart's tuition that Davy derived himself some years previously. Again, it is the very existence of this draft letter in a notebook given over largely to dense, technical notes on the chemistry of tanning—one of Davy's preoccupations in 1801–1802, leading to a publication in the *Philosophical Transactions of the Royal Society* in 1803⁵⁶—that is especially revealing. Even when Davy was on the cusp of leaving the MPI for the RI, taking up his post at the latter in March 1801, the business of home still needed to be attended to, and the matter of John's education was clearly of such importance—and Dugart was perhaps, like Giddy, held in such esteem by Davy—that it was necessary to

53 John Davy (ed.), The Collected Works of Sir Humphry Davy, Bart. LL.D. F.R.S. Foreign Associate of the Institute of France, etc., 9 vols (Smith, Elder, London, 1839–1840).

54 See Andrew Lacey, 'New light on John Davy', Ambix 66, 195-213 (2019), especially p. 7.

55 RI MS HD/13/C, pp. 116–115.

56 'An account of some experiments and observations on the constituent parts of certain astringent vegetables; and on their operation in tanning', *Phil. Trans. R. Soc. Lond.* **93**, 233–273 (1803).

⁵¹ Ibid., p. 116.

⁵² In an illuminating chapter on the home (specifically the home of the naturalist John Ray (1627–1705), his wife Margaret Ray, and their daughters) as a site of knowledge production, Elizabeth Yale conceives of 'the projection of [a] household onto a sheet of paper' by means of letter-writing. We see much the same here, over a century later, in Davy's draft letter, even though Davy was no longer living under his mother's roof (Elizabeth Yale, 'A letter is a paper house: home, family, and natural knowledge', in *Working with paper: gendered practices in the history of knowledge* (ed. Carla Bittel, Elaine Leong, and Christine von Oertzen), pp. 145–159 (University of Pittsburgh Press, 2019), at p. 151).

get this letter right also, necessitating a draft. The presence of the remnants of a torn-out page immediately following the end of the draft letter (as was the case in notebook 13E) is rather tantalizing: perhaps it is a coincidence, or perhaps it is significant. We do not know. What we do have, though, is another answer here to the question, how did Davy use his notebooks? In this case, it was as something of a testing ground in the context of an important family matter. Again, there is not much of 'Davy the imperious' to be seen here; rather, we have a quite poignant insight into 'Davy the responsible', which stands as a welcome counterpoint to the numerous examples we have of his less-than-edifying treatment of those with whom he took umbrage.⁵⁷

The draft letter to Dugart is a fairly 'clean' text—there are only small deletions here and there, and one longer deletion, which takes out the sentence '& his [i.e. John's] mind will be formed by good and regular habits', perhaps hints at Davy's keenness to make the best impression on John's prospective teacher. From the evidence of the manuscript, the short draft letter to Dugart was written in one sitting—the ink is regular in colour, and the hand is consistent. Another draft letter, in notebook 22C,⁵⁸ used *ca* 1805, shows Davy in a rather different light again: in this letter, to Sir Francis Baring (1740–1810), a merchant and Director of the East India Company, and one of the wealthiest men in Britain, Davy takes pains to make his points precisely, and he apparently took to drafting on at least two separate occasions. The subject of the letter, finally dated 3 October 1805, was the formation of the London Institution, on which Baring had clearly sounded out Davy, now established in his position at the RI, during a previous meeting.

The letter text in Davy's *Collected Letters* is based on June Fullmer's early typescript of Davy's letters; neither the original letter nor a photocopy of the original has been found. The version of the letter in 22C is rough and fragmentary, and entered in the notebook 'out of order'—as readers, we can see that Davy was committing his ideas to paper to quickly, and only around two-thirds of the notebook draft made it into the final letter. Davy appears to have started drafting the letter, in pencil, on p. 138. Below is the typescript text of the first paragraph (presumably that which was sent to Baring), and, for comparison, pages 138 and 137 of the notebook, where Davy starts drafting. The typescript text is as follows:

Sir

I felt very much flattered by the desire you expressed of receiving in writing some of the ideas which I stated in the objects of the London Institution when I had the honour of seeing you here. I have had the subject ever since very much in my mind & I should have had the pleasure long ago of making the communication had I not been prevented by the continued hurry of a long journey.—

In all, this is fairly polished: warm, respectful, and a little apologetic for having kept Baring waiting. The notebook text is as follows:

I have had the subjects of the conversation which I had the honour of holding with you in London very much at heart & I should [xxxx] in in conformity to your request have

⁵⁷ Chief among them, of course, being George Stephenson (1781–1848). See Davy's letters of 1815–1817 in *CLHD*, vols 2 and 3. On the increasingly acrimonious nature of the 'safety lamp controversy', see Andrew Lacey, 'Rethinking the distribution of cultural capital in the "safety lamp controversy": Davy vs Stephenson in letters to the Newcastle press, 1816–17', *J. Lit. Sci.* 9, 1–18 (2016).

⁵⁸ RI MS HD/22/C, Royal Institution of Great Britain.

- I do not see that any wit consequences could usice from such a provision A would scarcely excite the yealoury of the English. Unioisities. I it would increase the complete atility & popularity of the medical lectures annually delayed in bondon. - Theme already made this after viry try & tedicans he have minute fints mont I sain reavery walks an apology for having delivered

Figure 4. RI MS HD/22 /C, p. 124 (rotated).

written to you concerning them some time ago had I not been prevented by the continued hurry of travelling I have now a [x] couple of hours of leisure I now seize the first opportunity of communicating my sentiments⁵⁹

The next page in natural reading order has this:

I am in being able to conform with your request Sir

-I felt very much flattered by the desire which you expressed of receiving these ideas which I had the honour of stating to you in conversation concerning the London Institution⁶⁰

Obviously, this is far less polished—it is fragmented and out of order, tentative in places (the deleted 'I have now a couple of hours of leisure'), a little too gushing in others ('I now *seize* the first opportunity ...' (my emphasis)). Davy's 'very much at heart' in the notebook does not make the final edit, 'very much in my mind' in the typescript being a little cooler, a little more appropriate for a letter setting out 'some of [Davy's] *ideas*' (my emphasis); in spite of this, Davy's 'I felt very much flattered' remains, perhaps betraying the fact that, for Davy, being asked by a figure such as Baring for his opinion on such a matter as the formation of a new institution, modelled on the RI, was still very much a great honour.⁶¹ A few pages later in notebook 22C, having apparently broken off for a while to make some rough notes, again in pencil, on geology, and to sketch some phoenix-like birds, Davy returns to the letter with an ink-pen, deleting a paragraph apologizing for 'ma[king] his letter very long & tedious',⁶² and making other substantive revisions as he goes (figure 4).

Again, here we see Davy using his notebook as something of a testing ground, honing and refining the text of a letter to a respected professional to whom Davy, now in office, might naturally appeal on matters of business such as this. The parts that Davy deletes are perhaps the most revealing: not wanting to appear too casual in 'I now have a couple of hours of leisure'; self-conscious of the fact that his letter is becoming 'long & tedious', and making the wise choice, in a long and tedious letter, of making the letter less long and less tedious by cutting that part out.

All three of the draft letters briefly considered in this section date from Davy's earlier years: 1798–1805, when Davy was in his late teens to mid-twenties. In addressing the question of how Davy used his notebooks, the examples presented here, taken together, tell us something concrete and important: that Davy's use of his notebooks changed over time. To reiterate a conclusion of the previous section, the idea that any kind of hierarchy of notebooks is useful, that some of Davy's notebooks are somehow more valuable than others, is unhelpful. Every notebook—which we can, with only very few exceptions, pin to a fairly well-defined period—reveals valuable details—personal, social, professional—of Davy of that period. Here, in these early years, we see Davy using his personal notebooks as a prop; as a means of getting things right, in overlapping personal, social, and professional contexts, of getting things right in the emerging roles that Davy, as a young man starting out in the world, was still getting to grips with; and as a means of reassurance, a means

62 RI MS HD/22/C, p. 124.

⁶⁰ Ibid., p. 137.

⁶¹ On the social conventions of letter-writing in an earlier period (the seventeenth century), see Jonathan Gibson, 'Significant space in manuscript letters', *Seventeenth Cent.* **12**, 1–10 (1997). While I am wary of the generalizing sweep of the idea of 'socially superior addressees' (p. 2), there are parallels between the leaving of 'significant space' in the seventeenth-century letter and the pains which Davy obviously took in drafting his letter to Baring; both represent an indicator of the esteem in which the letter-writer held the recipient.

of building confidence, a means of making sure that, in getting to the letter, he was saying precisely—eventually—what he wanted to say.

THE SHADOW OF DEATH: THE NOTEBOOK AS REPOSITORY

The notebooks examined up until this point, taken together but with the exception of notebooks 06 and 07, all speak of an 'emerging' Davy-of Davy becoming established. The early Davy notebooks are especially fascinating in that, during the period of their use, so much was in flux for Davy—he was establishing his domestic arrangements, his social networks, and the patterns of his professional career. The later notebooks, which have tended to receive less in the way of critical attention, are no less fascinating, however. Davy's later years—the last decade of his life—were characterized by, it is fair to say, a sense of professional disappointment and personal ill-health. Davy's Presidency of the Royal Society—a role he had coveted for much of his career, perhaps wishing to emulate a personal hero of his, Sir Isaac Newton (1642–1727)—was unimpressive. During his period of office (1820–1827), he had been embarrassed by the very public failure of his method to provide electrochemical protection to the copper bottoms of ships' hulls,⁶³ even taking to the pages of *The Times* in 1824 to provide, in a strikingly ill-advised and entirely 'unpresidential' move, a bitter point-by-point rebuttal of an article criticizing him in the same newspaper.⁶⁴ The last full year of Davy's presidency, 1826, came to an especially difficult end. News of Grace Davy's illness reached Davy, by letter from his sister Katherine Davy (1780-1860), in late May or early June; he wrote back on 2 June confessing to be 'much grieved & somewhat alarmed'.65 Later in June, Davy wrote again to Katherine, complaining that 'I am not very well'.⁶⁶ A tour of Ireland and Scotland in the late summer and early autumn, for 'restor[ation]', had proved frustrating—the lame right arm and hand that Davy mentioned in his 2 June letter to Katherine and which he attributed to rheumatism had prevented him from fishing.⁶⁷ Davy's mother died on 3 September. He again complained of ill health ('I have not been well lately')⁶⁸ in a letter to his oldest friend, Thomas Poole (1766–1837), in November, and Davy reported to Katherine in December that 'I have been very unwell ... I think it is probable I shall be obliged to go abroad for some months'.⁶⁹ In the last days of December, at a shooting party hosted by Henry Hall Gage, 4th Viscount Gage (1791-1877), at Firle, Davy suffered what John Davy describes as 'a paralytic attack':⁷⁰ this was the first of several strokes that would eventually kill Davy a little over two years later.

Notebook 14E,⁷¹ dating from 1827, is shot through with stark apprehensions of mortality—of the mortality of others, and of Davy's own mortality. The shadow of death lies on

⁶³ On this work, see Frank A. J. L. James, 'Davy in the dockyard: Humphry Davy, the Royal Society and the electro-chemical protection of the copper sheeting of His Majesty's ships in the mid 1820s', *Physis* **29**, 202–225 (1992).

⁶⁴ Humphry Davy, Letter to the Editor of *The Times*, 17 October 1824, in *CLHD*, vol. 3, pp. 493–495. Following the publication of Davy's letter, *The Times* pointed out the unbecoming nature of Davy's response; see note 1 in *CLHD*.

⁶⁵ Humphry Davy, Letter to Katherine Davy, 2 June 1826, in *CLHD*, vol. 3, p. 599.

⁶⁶ Humphry Davy, Letter to Katherine Davy, [27 June 1826], in *CLHD*, vol. 3, pp. 603–604.

⁶⁷ Humphry Davy, Letter to Thomas Andrew Knight, 8 September [1826] (fragment), in CLHD, vol. 3, pp. 608-609.

⁶⁸ Humphry Davy, Letter to Thomas Poole, 1 November 1826, in *CLHD*, vol. 3, p. 615.

⁶⁹ Humphry Davy, Letter to Katherine Davy, 9 December 1826, in CLHD, vol. 3, pp. 619–620.

⁷⁰ John Davy, *Memoirs of the life of Sir Humphry Davy*, 2 vols (Longman, Rees, Orme, Brown, Green, & Longman, London, 1836), vol. 2, p. 221.

⁷¹ RI MS HD/14/E, Royal Institution of Great Britain.

this notebook, which Davy carried with him on the journey to the Continent that he had mentioned to Katherine, through Italy and Carniola (present-day Slovenia). Davy travelled with John, who acted as his physician, but without his wife Jane Davy (1780-1855), from whom he had become increasingly estranged. The first fifteen pages of notebook 14E contain diary entries dating from 28 June to 10 July 1827. In this section, Davy, with empirical precision, makes notes of ambient temperatures and other meteorological conditions, lists the various places he has visited on his travels (while 'the mountains of the Tyrol and Appenzel [are] very grand seen over the top of the lake',⁷² 'Constance [is] little worth seeing'),⁷³ and keeps a record of the fish he has caught. That Davy is ill is evident: twice, he writes 'vald[e] miser'74 ('very miserable'), and he also complains of headaches and inflamed eyes. The diary section, written over the period in which he communicated his intention to resign the Presidency of the Royal Society to Davies Gilbert (formerly Davies Giddy),75 soon peters out into a section of blank pages. Turning the notebook over, and reading from back to front, reveals a quite different use: on p. 186, under the heading 'Ravenna. March 18 1827', Davy has written: 'Frags of Verses copied from other Books' (figure 5).

Over the following 140 pages, reading backwards, back towards the diary section, Davy enters copies of a range of poems composed over a period of years, as well as adding some new compositions that speak of his present concerns. Here, amongst other poems, we have texts of 'On the Death of Lord Byron' (1824), 'To the Wandle or Vandalis' (1825), 'The Massy Pillars of the Earth' (?1818), 'Thoughts After the Ingratitude of the Northumbrians with Respect to the Safety Lamp' (undated, but after 1816), and 'The Eagles' (?1821); all were composed before 1827.

If there is a common theme running through the poems Davy has chosen to copy, it is perhaps best summed up by two rough drafts of 'new' poems in the notebook, both entitled 'Thought'. The second of these begins:

Man thirsts for immortality, the mind Which feeds on hope applies its loftiest powers In framing [?plans crude] & undefined Of Earthly greatness or Elisian bowers It seeks the durable & whilst the day Framing its [?xxxx] organs wastes the purpose high It seeks by mighty monuments to stay The flow of time & of Mortality. –⁷⁶

While the sense is lost a little owing to the conjectural reading of two words in the first stanza and an illegible word in the second stanza, Davy seems to be suggesting that man

⁷² Ibid., p. 13.

⁷³ Ibid., p. 14.

⁷⁴ Ibid., pp. 2, 8.

⁷⁵ Humphry Davy, Letter to Davies Gilbert, 1–2 July 1827, in *CLHD*, vol. 4, pp. 36–38: 'I feel it would be highly imprudent and perhaps fatal for me, to return, and to attempt to perform the official duties of President of the Royal Society. And as I had no other feeling for that high and honourable situation, except the hope of being useful to society, so I would not keep it a moment without the security of being able to devote myself to the labour and attention it demands. I beg therefore you will be so good as to communicate my resignation ... in November ...; stating the circumstances of my severe and long continued illness, as the cause' (p. 36). Gilbert was a Vice-President of the Royal Society, and acted in Davy's place during his European trip.

⁷⁶ RI MS HD/14/E, pp. 121-120.

Ravenna Tray of Vence apres from Mer Book. London untre a he ad 1. 1814. Such at then might in they pour a pride nouts of the each who the carine May they streets the flas the Uncering tide of burg thansaid, les they must shy Breater life a motion, this the Tabel ware hay lofty arches

Figure 5. RI MS HD/14/E, p. 186 (rotated).

attempts to achieve immortality, a form of 'durab[ility]', through the construction of 'mighty monuments'. Their purpose is to 'stay/The flow of time & of Mortality'. Of course, as Percy

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Bysshe Shelley (1792–1822), a reader of Davy's, observed in his 'Ozymandias' of 1818, this is folly, mere hubris. So too for Davy, as the following line of the fragmentary draft reveals: 'Yet *vain* His hopes and *vain* His aspirations' (my emphases). The first draft takes up a similar theme:

The hope that other ages which in light More glorious than those feeble beams which shine in this [?our/wan] twilight Shall distinctly see what we imagine And [?but] feebly hope The world immutable in which alone Wisdom is found. the life & light of things The breath divine creating power divine The One of which the human intellect Is but a type, as feeble as that image Of the bright sun, seen on the bursting wave. Bright but without distinctness Evanescent yet imaging <in passing showing> its glorious origin <& distant source. ->⁷⁷

In Platonic mode, the mutable world, the world of human perception, is but 'twilight'; the 'human intellect', or the mind, is but a 'type' of something more 'glorious', more 'distant'-a reflection of a 'divine' 'world immutable' from whence it came. The second draft dwells on man's futile efforts to 'stay' mutability; the first speaks, with 'hope', of a 'glorious' (twice) realm of 'The One', a realm of immortality, to which man will, the speaker plainly hopes if not quite explicitly suggests, return when our twilight of life finally succumbs to the darkness of death. Thus, Davy's reader finds him poised between two liminal worlds-a world of mutability and dying, which it is folly to resist, and a world of immutability and glory, which was once our 'source'. From this death-facing cast of mind, as Davy darkly ruminates on his current state of illness (earthly 'waste') and fondly imagines a return to 'The world immutable in which/alone/Wisdom is found', emerged his fundamental impulse to begin a process of preservation. In 'copying verses from other books', Davy is acknowledging that the shadow of death is upon him-he is, in notebook 14E, effectively beginning the process, after the shocks of the second half of 1826, of putting his literary affairs in order. The notebook therefore becomes a repository-a place in which earlier materials, supplemented by newer materials, can be collected and arranged in such a way that it speaks to his current (grave) concerns. Davy is no longer, as he was in the notebooks considered in the earlier sections, experimenting or working things out; he is now beginning, through a process of copying, emending, and augmenting his texts, to cement his literary and philosophical legacy. Davy would continue to do so in other post-1826 notebooks: almost without exception, they contain draft material towards his last works, Salmonia (1828) and Consolations in Travel (1830, published posthumously).

Richard Yeo writes, referring to the early modern period, of 'the function of notes both as memory prompts and permanent records'.⁷⁸ Davy is certainly creating

a 'permanent record' (or as permanent as paper and ink can be) in notebook 14E. In the context of the complex interrelationships of writing and memory, there is, almost certainly, something deeper than the mere setting down of 'prompts' at work in Davy's later notebooks, however. At the turn of the nineteenth century, William Wordsworth (1770-1850), a former acquaintance and recent correspondent of Davy's,⁷⁹ writes of the 'renovating Virtue'80 of what he terms 'spots of time' (XI. 258)moments that are deeply impressed, and remain particularly vivid over time, in the memory. Revisiting our own spots of time, as Wordsworth has it, 'nourish[es]' and 'repair[s]' the mind; doing so 'enables us to mount/When high, more high, and lifts us up when fallen' (XI. 264–268). Recording our spots in time in writing, Wordsworth suggests, 'enshrine[s] the spirit of the past/For future restoration' (XI. 342–343). In the midst of the internalized gloom of his Continental trip, Davy seemingly derived comfort from revisiting his own spots of time, and, as life seemed to be slipping away from him, of 'enshrin[ing] the spirit of the past', the spirit of better days gone by, for the future nourishment, repair, and restoration that, as he continued to struggle with illness, he knew would surely be necessary.⁸¹

Conclusions: the notebook as lifelong companion, and the 'round, unvarnished' Davy

Davy used his notebooks throughout his life for a range of purposes, and those purposes changed as Davy's life changed. The earlier notebooks are marked for their range of intellectual experimentation, taking in not only chemistry, but other interests also, including natural science more widely, poetry, and, as we have seen, philosophy. As Davy became established, in the personal, social, and professional parts of his life, he used his notebooks as something of a confidant, as a means of testing and getting things right before communicating with others. In later life, when Davy had become an established public figure, his use of notebooks became entwined with an imperative—increasingly pressing, as his health failed—to define and fix his legacy. Davy's notebooks were companions—literally, in that he kept them with him throughout his life,⁸² and more figuratively, in that he used them to set down some of his most intimate observations, speculations, and imaginative creations. Of course, in exploring the question of how Davy used his notebooks, this article has only scratched the surface; there is much more work to be done in all areas. The Davy Notebooks

⁷⁸ Richard Yeo, 'Introduction', *Intellect. Hist. Rev.* **20** (Special Issue: 'Note-Taking in Early Modern Europe'), 301–302 (2010), at p. 302. For a succinct history of the writing and uses of notes, see Ann Blair's article, 'The rise of note-taking in early modern Europe', in the same issue (pp. 303–316).

⁷⁹ On Davy's and Wordsworth's relationship, see CLHD, vol. 1, p. ccv; see also letter to William Wordsworth, 5 December 1825, in CLHD, vol. 3, pp. 570-571.

⁸⁰ William Wordsworth, *The thirteen-book Prelude* (ed. Mark L. Reed), 2 vols (Cornell University Press, Ithaca, NY, 1991), vol. 1, p. 301, XI. 260. Subsequent references to *The Prelude* are to this edition and volume, and book and line numbers are given parenthetically in the body of the text.

⁸¹ I am not suggesting that Davy read the poem that would later, after Wordsworth's death, be entitled *The Prelude*, which remained unpublished until 1850, in manuscript. Rather, I am suggesting that Davy shared Wordsworth's appreciation of the 'restorative' effects of accessing memory through writing.

⁸² The importance that Davy invested in his notebooks is reflected in the fact that he clearly had a number of previously used notebooks with him (from which he copied into notebook 14E) when he travelled to Europe to recuperate in 1827. They were very much, to adopt Matthew Daniel Eddy's phrase, 'dynamic artifacts ... used over time and space' (*Media and the mind: art, science, and notebooks as paper machines, 1700–1830* (University of Chicago Press, 2023)).

Project has made the conditions for doing this work much more favourable: we will soon have a full, searchable corpus of Davy's notebook writings.

We were not the first to use Davy's notebooks, of course. John Davy referred frequently to his brother's notebooks in writing his Memoirs of the Life of Sir Humphry Davy and in compiling CWHD.⁸³ John's use of the notebooks, however, was not uncoloured by personal interest. In presenting texts of Davy's writings, John, ever the faithful brother, occasionally omitted details that he considered controversial or unflattering; in his treatment of the texts, present-day editors would also find some of his typically Victorian editorial practices questionable. Our edition will have the advantage of presenting, for the first time, a 'round, unvarnished' Davy-Davy in his own write, to use Miller's words-which will complicate the long-established, rather burnished image of Davy so effectively constructed by John a little under two hundred years ago. We now know, from recently recovered manuscript materials, both letters and notebooks, that Davy was a more complex character than the published sources suggest: he was ambitious, reckless, impulsive, brilliant, arrogant, fallible. Seeing Davy in a truer light can make for occasionally uncomfortable reading; this is surely outweighed, however, by the fact that, for the first time, we now have almost all of the materials to hand to better understand the remarkable intellectual trajectory of one of the most fascinating, chameleonic figures in early-nineteenth-century culture.

DATA ACCESSIBILITY

This article has no additional data.

DECLARATION OF AI USE

I have not used AI-assisted technologies in creating this article.

83 For *Memoirs*, see note 70. For *CWHD*, see note 53, above. John Davy also made use of the notebooks which had only recently come into his possession following the death of Jane Davy in 1855 in *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) (John Churchill, London, 1858).