

# Collectors of natural knowledge: the Edinburgh Medical Society and the associational culture of Scotland and the North Atlantic world in the 18th Century

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## Abstract

This paper reappraises the role of medical clubs and societies in the production and consumption of knowledge in 18th-century Scotland and the wider North Atlantic world. It focuses on the Edinburgh Medical Society, founded in 1731 by Alexander Monro *primus*; and on the student Medical Society, founded in 1734 and constituted in 1737 as the Medical Society of Edinburgh, ultimately becoming the Royal Medical Society of Edinburgh in 1778. The paper examines how Monro, as editor of the transactions of the Edinburgh Medical Society, sought to adapt medical learning to a world of polite sociability; and how that world came under pressure in the student Medical Society, where prevailing orthodoxies, such as the system of Herman Boerhaave and, later, William Cullen, were challenged. In the febrile atmosphere of the 1790s, William Thomson accused the Royal Medical Society of Edinburgh of promoting visionary theories and abandoning the proper experimental method in medical science. Yet with its overarching commitment to the sceptical and empirical principles laid down by the Royal Society of London (founded in 1660), the Royal Medical Society of Edinburgh provided a model for the establishment of similar clubs and societies on both sides of the Atlantic.

**Keywords:** Edinburgh Medical Society, knowledge, Monro *primus*, politeness, Royal Medical Society of Edinburgh, sociability

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## Introduction

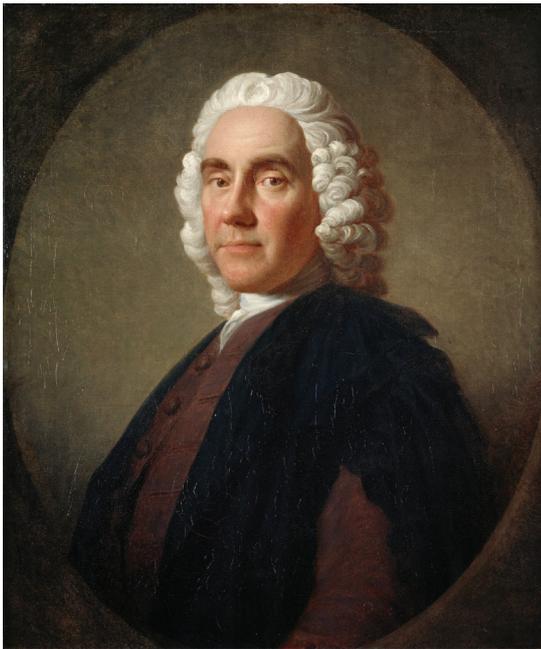
Historians have long been concerned with the role of clubs and societies in 18th-century Scotland. Davis D. McElroy published his pioneering survey of the various clubs and societies of the Scottish Enlightenment in 1969.<sup>1</sup> Since then, several essays by Nicholas Phillipson have exerted considerable influence, particularly his contention that, in the aftermath of the Anglo-Scottish Union of 1707 and the loss of Scotland's parliament, clubs devoted to agrarian improvement and intellectual discussion were to fulfil a kind of 'para-parliamentary' or 'para-political' function, as surrogates for a lost legislature.<sup>2,3</sup> Roger L. Emerson has also contributed several important studies of Scotland's post-Union associational culture, such as his account of The Society for Improving Arts and Sciences and particularly Natural Knowledge, commonly known as the Edinburgh Philosophical Society.<sup>4–7</sup> A better understanding of such clubs, he argues,<sup>4</sup> 'allows us to see more clearly how science figured in the Scottish Enlightenment – for whom, and for what reasons, it was important' (pp. 154–55).

More recently, Peter Clark has shown how the growth of clubs and societies in Britain from the late 17th century served to generate a renewed consciousness and pride in the urban community, as towns became engines of new political, intellectual and other ideas.<sup>8</sup> The sociable exchange facilitated by societies and other urban spaces, and by the proliferation of print culture, became increasingly important in the 18th century as a model and a practice of how community could be created.<sup>9</sup> In Scotland, as Alexander Broadie observes, clubs and societies provided a context 'for discussions and debates between philosophers, theologians, lawyers and scientists – thinkers representing the whole gamut of Enlightenment interests'.<sup>10</sup> Such exchange enabled the circulation of information, the collision of ideas and sentiments, and the discussion of new theories.

This paper reappraises the role of medical clubs and societies in the production and consumption of knowledge in 18th-century Scotland and the wider North Atlantic world.<sup>11,12</sup> It focuses on the Edinburgh Medical Society, founded in 1731 by Alexander Monro *primus*, professor of anatomy at the

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**Figure 1** Alexander Monro of Auchenbowie ('Primus'), 1697–1767 (c. 1750) Allan Ramsay © National Portrait Gallery

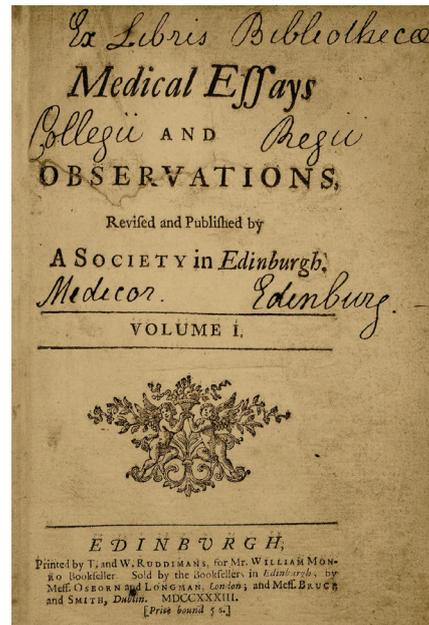


University of Edinburgh (Figure 1), and 13 other doctors; and on the student Medical Society, founded in 1734 and constituted in 1737 with a total of 10 members as the Medical Society of Edinburgh, ultimately becoming the Royal Medical Society of Edinburgh in 1778.<sup>13,14</sup> Both societies were socially exclusive by reason of place, occupation and gender, their institution marking an attempt by their founders to provide a vocationally specific associational space.<sup>15</sup> However, as publishing societies, they created an arena in which medical practitioners, students and apprentices could participate in the Scottish metropolis in absentia, in the virtual conversations that modern print culture made possible. New, or transformed, genres of writing emerged to support these conversations, such as the 'medical essay' that Monro helped to create and popularise as editor of, and contributor to, the Edinburgh Medical Society's transactions.

### The Edinburgh Medical Society

The purpose of the Edinburgh Medical Society was to promote the improvement of medical knowledge. Although the minute books of the Society have not survived or are lost, Monro's manuscript 'Life [...] by Himself'<sup>13</sup> provides some information concerning the Society's origins, and its connection with the Edinburgh Infirmary 'for the poor laboring under Diseases' (p. 84), which Monro had founded as a teaching hospital in 1729. The idea for the Society arose, Monro recalls, around the time of the opening of the hospital and the establishment of a 'regular Register' of Infirmary case histories. It was envisaged that these cases might be extracted from the register and published in 'such a Collection of Essays and Observations as would compose a Volume from time to time'. For this purpose, the medical professors at Edinburgh University, 'associating themselves' with nine other physicians and surgeons in the city, formed the Edinburgh Medical Society, with Monro as Secretary (p. 87). The activities of the

**Figure 2** *Medical Essays and Observations, Revised and Published by a Society in Edinburgh* [ed. Alexander Monro], title page © Royal College of Physicians of Edinburgh



Society helped to create a complex network of sympathetic relationships between medical practitioners in the city and beyond. Participation in Society meetings could also serve to focus and release the civic virtue of a medical elite in a post-Union world. Members met monthly in Edinburgh from 1731 to 1732, and discussed cases drawn from their practices and correspondence as well as from the Infirmary register. While the meetings were of a socially restricted character, members had a cosmopolitan outlook, and the Society sought to be as useful in its specialised field as the royal societies of London, Paris, Berlin and St Petersburg. Like them, it hoped to accumulate observations, experiments and reports that were to be 'as free of polemics and bad manners as they were plain and clear in style'<sup>4</sup> (p. 157).

As Secretary, Monro invited contributions from 'all, of whatever Country, who desired to promote the Knowledge of Medicine', to the Society's proceedings: *Medical Essays and Observations, Revised and Published by a Society in Edinburgh* (5 vols in 6, 1733–1744) (Figure 2).<sup>16</sup> The series title gives prominence to the literary form of the essay, which Robert Boyle, natural philosopher and founding Fellow of the Royal Society, had adopted from the Anglo-French tradition of Michael Montaigne and Francis Bacon as a way to write about natural philosophy.<sup>17</sup> Like Boyle, Monro saw the essay as the best form suited to discuss the particular and the unfinished. It was a generic option that 'perfectly conveyed ongoing knowledge making rather than the previously completed and conceptualized systems of knowledge', and it allowed for a strong element of autobiography or personal point of view.<sup>18</sup> Some of the essays were composed by Monro 'from several different Letters of Gentlemen whose Names they bear'. This circumstance, Monro noted in his 'Life',<sup>13</sup> gave a 'sameness of Language' to the contributions 'which some were surprised at in so many Scotsmen of different Counties' (p. 87).

The Edinburgh Medical Society members dedicated the first volume of their proceedings 'To Sir Hans Sloane, Bart. President; and To the Council and Fellows of the Royal Society of London, For Improving Natural Knowledge', whom they praised for having wrought 'an advantageous Change in Natural Knowledge', and one which they sought to emulate:

The glorious Example given to the World by the Royal Society, has made such an advantageous Change in Natural Knowledge since the Middle of last Century, that the first Fruits of all Labours of this kind become in Justice due to the first and great Promoters of it.

The just Sense of this determines us to offer to your Protection the following Sheets, designed to improve one Branch of that extensive Science of Nature, which you cultivate, with so much Honour to your selves, and Advantage to Mankind. We are, Gentlemen, Your most obedient, and most humble Servants. The Collectors.<sup>19</sup>

The use of the designation 'The Collectors' at the end of the dedication is a rhetorical strategy that serves to link the activities of the Edinburgh Medical Society to a pan-European culture of collecting. Sloane and other virtuosi associated with the Royal Society were noted collectors of objects of natural history and other curiosities.<sup>20,21</sup> Collecting was also popular among the pharmacists, botanists, medical doctors and professors of medicine who lived and worked in Leiden, where many Scottish medical students pursued their education.<sup>22,23</sup> Like many of his contemporaries, Monro had studied medicine at Leiden University under Herman Boerhaave, the leading physician of his age, and would have been familiar with the University's remarkable natural historical collections, such as the mini-*Wunderkammer* in the long gallery of the Hortus botanicus, as well as with the curiosities of the town's anatomical theatre.<sup>24,25</sup> Monro also records of his Leiden sojourn in his 'Life' that Boerhaave furnished him with an introduction to Frederik Ruysch, professor of botany at the Athenaeum Illustre, Amsterdam. Ruysch showed Monro his collection of anatomical preparations, and Monro studied Ruysch's methods of injecting specimens (known as 'the Ruyschian art').<sup>13,26</sup> On his return to Edinburgh, Monro built up his own private collection of anatomical preparations, specimens and models at Edinburgh to support his teaching practice.<sup>27</sup> Monro's editorship of *Medical Essays and Observations* may be seen as an extension of his other collecting activities. The essays and observations gathered in the series' volumes are designed to recruit readers as virtual witnesses to experimental phenomena.

Comprising 40 articles in total, the first volume of *Medical Essays and Observations* was authored by physicians, surgeons and surgeon-apothecaries practising in Scotland, Ireland and England, or serving in the British army. Nineteen contributors were based in Scotland. Of these, three held professorial posts in the newly established medical faculty of Edinburgh University: Andrew Plummer, professor of medicine; John Innes, professor of medicine; and Monro. Seven other contributors were based in Edinburgh: John Douglas, surgeon;

John Drummond, physician and formerly president of the Royal College of Physicians of Edinburgh; Joseph Gibson, surgeon at Leith, and professor of midwifery for the city of Edinburgh; John Kennedy, surgeon-apothecary; Robert Lowis, physician; William Porterfield, fellow of the Royal College of Physicians of Edinburgh; and an unnamed apprentice surgeon-apothecary. The other contributors from Scotland were medical practitioners in Cumnock, Glasgow, Jedburgh, Kelso, Kinross, Moffat, and St Andrews. One contributor was a physician in Ireland: Edward Barry of Cork. Two were based in England: William Cockburn, an Edinburgh-educated Scottish physician then working in London, who was also a fellow of the Royal Society; and Gilbert Waugh, physician at Kirkleatham, Yorkshire. One contributor was a surgeon in General Joseph Sabine's Regiment. The geographical distribution of the contributors to the first volume suggests Monro's openness from the beginning of the project to essays and observations from medical practitioners who had not necessarily attended the Society's meetings in Edinburgh.

Monro sought to smooth the style of his contributors, and to advance politeness on the model of Richard Steele's and Joseph Addison's *The Spectator* (1711–1712). However, he was not always entirely successful in his attempts to submit medical learning to models of polite conversation and edification. A case in point is 'Article XXIV: An Essay on Mr. Garengot's good Manners and universal Learning, inscrib'd to the Memory of Dr. Friend [sic], by ——— Prentice to a Surgeon Apothecary in Edinburgh'. This mounts a defence of the recently deceased English physician John Freind, whose earlier published remarks on aspects of the French anatomist-surgeon René-Jacques Croissant de Garengot's theory and practice had provoked Garengot to reply in a new edition of his *Traité des opérations de chirurgie* [*A Treatise of Chirurgical Operations*, first published in 1720; revised edition 1731]). 'Regard [...] for the Memory of the learned Dr. Friend [sic]' had induced Monro to accept the article for publication; but he notes that the student's style contravenes the rules of the Society:

This young Gentleman either misunderstands our Proposals, or forgets the Promise in his Preamble, of *using no Expression which might trespass against the Rules laid down to our Correspondents*: For we must think that he has not shunned offensive Terms and personal Reflexions, even when he pretends to make great Compliments [...]. We Desire no more such may be sent us, otherwise their Authors need not expect we will publish them.<sup>28</sup>

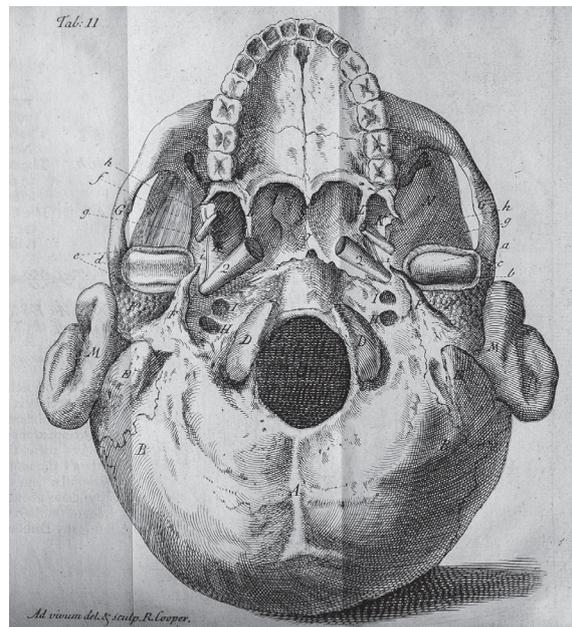
Monro finds himself compelled to interrupt the student's performance. 'We must here stop this young Man's Career [sic]', he declares. Yet as there remained 'two or three Observations' in the manuscript that he believed 'may be of some Use', he takes 'the Freedom to strip them of their jocular Air, and communicate them in a plain Dress' (1: 255–6).

In his own contributions to the first volume of *Medical Essays and Observations*, Monro sought to apply the Royal Society's empirical principles to anatomy. He evidently worked closely

with Richard Cooper, an established line engraver practicing in Edinburgh, who, in 1729, had established the Edinburgh School of St Luke, the earliest academy of artists in Scotland. The illustration shown here, in Article XI, by Monro, on the lower jaw, is engraved by Cooper and signed by him not only with the conventional 'del. & sculp.' (drawn and engraved) but also with the phrase 'Ad vivum' ('According to the living', or 'From life') (Figure 3).<sup>29</sup> Although the subject is plainly dead, the signature emphasises that Monro's observations were first hand, not borrowed from others. Cooper's illustrations, as directed by Monro, eschew the practice of Ruysch's still life assemblages, which had combined the act of demonstration and display with the stylistic and emblematic meanings of *vanitas* art.<sup>30,31</sup> Instead, they are closer in style to those of Gerard de Lairesse, who had provided drawings for the anatomical atlas *Anatomia humani corporis* (1685), by Govard Bidloo, professor of anatomy at Leiden University. The illustrative plates represent the human figure both in living attitudes and as dissected cadavers, the latter signalling a move away from the traditional Vesalian model of figures set within landscapes to a more detailed, naturalistic depiction of anatomical structures.<sup>32</sup> Monro also emphasises the importance of conversation and exchange to the production of anatomical knowledge. '[T]he Opening of the Mouth', he notes, 'does not only depend on the Motion of the lower Jaw downwards, but also on the superior Jaw being raised up by the Muscles which extend the Head back: This Fact is strongly denied by the Generality of Anatomists, and really passed unobserved by me, till my ingenious Friend and *quondam* Pupil, Dr. John Pringle made me remark it' (1: 139).

After the publication of the first volume of transactions in 1733, the Society ceased to exist as an active club with a cooperating membership participating in monthly discussions. '[T]he whole Care of the Collection', Monro recalled,<sup>13</sup> 'was taken by the Secretary, without any other Member seeing any of the Papers except what some of them were Authors of 'till after they were printed' (p. 87). Under Monro's editorship, volume two appeared in 1734, volume three in 1735, and volume four in 1737. Despite Monro's specific encouragement of contributions from all those with a desire to promote the knowledge of medicine, regardless of nationality, and his offer to furnish translations of any submissions written in French or Latin, essays published in these volumes were predominantly authored by medical practitioners based in Scotland.<sup>16,33</sup> Nevertheless, many of the essays engage with continental European theory and practice. For example, William Porterfield's 'An Essay concerning the Motions of our Eyes', published in two parts in volumes three and four of the series, systematically attacks the Cartesianism of Boerhaave and his Edinburgh followers, and shows clear evidence of the influence of Claude Perrault, an anti-Cartesian physiologist who was a founding member of Louis XIV's Académie des Sciences.<sup>34,35</sup> Monro also included in each volume an article on discoveries and improvements in medicine in the previous year; an article on recently published medical books; an article on promised books; and an article on societies recently formed for the improvement of medicine. His concern in each case

**Figure 3** Illustration by Richard Cooper to Article XI of *Medical Essays and Observations*, 1: 124–56 (insert to p.156): 'Remarks on the Articulation, Muscles and Luxation of the Lower Jaw, by Alexander Monro, Professor of Anatomy in the University of Edinburgh, and F.R.S.' © Royal College of Physicians of Edinburgh



was with developments in continental Europe as well as in Britain and Ireland.

Because of ill-health, Monro decided to relinquish *Medical Essays and Observations* after completing the fourth volume, but he was persuaded by his friend Colin Maclaurin, professor of mathematics at Edinburgh University, to publish one further volume as 'an Introduction to a Society, which [Maclaurin] proposed shou'd succeed the medical one on the more extensive Plan of taking in all the Parts of natural Knowledge and the Antiquities of Scotland' (p. 88).<sup>13</sup> This society became the Philosophical Society, drawing in gentry and professional men, and lasting until 1783 as the forerunner of the Royal Society of Edinburgh.<sup>36</sup> Monro would edit the first volume of the Philosophical Society's transactions with the assistance of David Hume: *Essays and Observations, Physical and Literary: Read before a Society in Edinburgh and Published by Them* (1754).<sup>37</sup>

*Medical Essays and Observations* gained a wide readership. The anonymous reviewer for the French periodical *Bibliothèque raisonnée des ouvrages des savans de l'Europe* noted in 1739 that the series would be of interest not only to medical practitioners but to the broader Republic of Letters.<sup>38</sup> Translations appeared in French (editions in 1733–1744, 1740–1747), Dutch (1739–1741), Italian (1751–1762) and portions appeared in German (1749); and the work was praised by the Swiss physician, anatomist and bibliophile Albrecht von Haller, who claimed that the essays 'are such, that no physician can well be without them'. The series also popularised the genre of the medical essay and, in its reports on improvements in medicine made since the previous volume, provided a model for later specialist medical publications.<sup>4,39</sup>

## The Royal Medical Society of Edinburgh

The activities of the Edinburgh Medical Society, and of Monro as Secretary to the Society and as professor of anatomy at Edinburgh University, form an important context to the founding of the student Medical Society (later the Royal Medical Society of Edinburgh). In a letter of 14 October 1782 to the English physician and philanthropist John Coakley Lettsom, the Edinburgh-educated Scottish physician and antiquarian William Cuming, then practicing medicine in Dorchester, England, describes the particular circumstances surrounding the establishment of the student society. Lettsom was collecting materials for his life of the English physician and naturalist John Fothergill, a contemporary of Cuming at Edinburgh. In 1734, Cuming's fellow medical student, Alexander Russell, acquired, in exchange for money, the body of a young woman, 'a stranger, just then dead by a fever of ten days standing'. Russell communicated this news to Cuming and four other students: George Cleghorn, Alexander Hamilton, James Kennedy, and Archibald Taylor. Cuming sought and acquired Monro's permission to lodge and dissect the body in Edinburgh University's anatomy theatre. After completing the dissection, the six students spent a social evening in a tavern during which the idea for a club was put forward:

Archibald Taylor proposed, that we six, who had been long familiarly acquainted, [...] should meet once a fortnight, early in the evening, at our respective lodgings; and that a Dissertation in English or Latin on some medical subject, at the choice of the Society, should be composed and read at each of those meetings, to which such objections as occurred to the rest of the company should be made, which the author was to obviate in the best manner he could.<sup>40</sup>

Argument and dispute on medical topics is imagined and recalled in this account of the club's origins within a framework of social relationships governed by the principles of friendship. This framework would be crucial to the Society's self-understanding.

Formally constituted in 1737 with 10 members as the Medical Society of Edinburgh, the Society held regular meetings in a tavern until around 1741, when it was granted permission by the managers of the Royal Infirmary of Edinburgh to hold its meetings in a room in the new hospital building, designed by William Adam (on what would become Infirmary Street).<sup>14</sup> The Society moved to its first hall in Surgeons' Square (1775–1852), then to its second hall in Melbourne Place (1852–1966), then to a temporary home in Hill Square belonging to the Royal College of Surgeons of Edinburgh (1966–1975), to its present site in the Student Centre, Bristo Square (1975–).<sup>41,42</sup> The purpose of the Society was to supplement the students' formal medical education and to promote 'an ardour for medical inquiries'; it soon built up a flourishing membership (comprising ordinary, extraordinary, corresponding, and honorary members), as well as an impressive library.<sup>43</sup> 'Every student of a certain standing',

observed Fothergill (in his 'An Essay on the Character of the Late Alexander Russell, M.D. F.R.S. Read before the Society of Physicians, the 2d of October 1769'), 'who distinguished himself by his diligence, capacity, and conduct, was initiated into this little assembly.'<sup>44</sup> The Society would include many colonial Americans, who came to study medicine at Edinburgh University. Benjamin Rush, for example, who, on his return to North America, would become a prominent physician in Philadelphia and a signer of the Declaration of Independence, was elected to the Society as an ordinary member on 21 March 1767.<sup>45</sup> Benjamin Franklin, whose connection with Scotland was a 'real and decisive one', and whose influence ensured that 'the main flow of American students should be to Edinburgh rather than to the [European] continent', was made an honorary member of the Society on 10 February 1787.<sup>46,47</sup>

The Society required its members to write papers and defend their opinions in discussions. Through participation in Society meetings, it was believed, members would learn to combat 'prejudice and error, however sanctified by antiquity and authority', and 'to love and esteem each other and to cement the bonds of true friendship', a friendship that would be 'sincere and durable' inasmuch as it was founded on 'a virtuous and liberal intercourse'.<sup>48</sup> Society meetings generated a significant archive of manuscript dissertations and reports. Manuscript comments in Latin, composed and signed by members of the Society, on individual aphorisms by Hippocrates, also survive; a few of the aphorisms are quoted in Greek as well as in the better known Latin translation.<sup>49</sup> Visitors were invited to the part of meetings designated 'public'; selected addresses to the Society by prominent physicians were published as pamphlets. The Society's style became increasingly disputatious in the 1770s, but there remained at the ideological level, as John Christie describes, a 'corporate' counterpoise to the Society's 'agonistic thrust': 'Through shared debate, the limitations of the individual were perceived to be transcended, while prejudice was more easily overcome'.<sup>50</sup>

Reviewing the early history of the Medical Society in an 'Introductory Address' to its members, delivered on 2 November 1771, Andrew Duncan, professor of medicine at Edinburgh University, observed: 'Reason, philosophy, and experiment were the [Medical Society's founders'] constant and [...] only guides. By these means, by such men, and in this place, were the foundations of the Boerhaavian doctrine first shaken.'<sup>51</sup> Duncan presented the Society as a forum in which orthodoxies could be overturned; he also endowed the Society with a continuous critical tradition – a claim that the extant dissertations of the mid-18th century do not in fact substantiate.<sup>52</sup> Of his professorial colleagues in the Edinburgh medical faculty he declared:<sup>51</sup>

They know, that in this room their opinions are compared without partiality or prejudice. They are not ignorant of the freedom with which objections to the doctrines they teach are here started; and they approve of your endeavours to impugn these doctrines. In every particular in which their

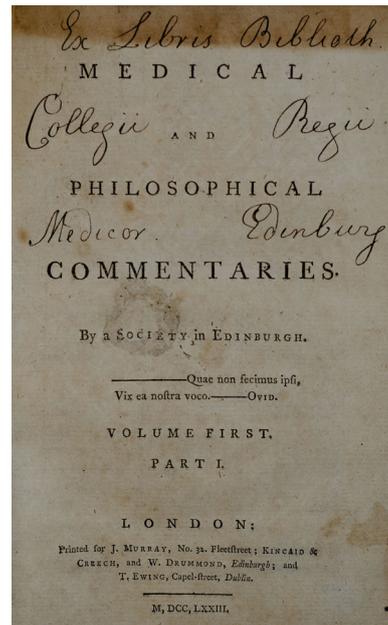
patronage can be of any service, it is always cheerfully afforded. (p. 12)

Duncan sought to enhance the status of the Society by encouraging, in 1779, the publication of papers either read at its meetings or sent as correspondence.<sup>14</sup> This proposal did not come to fruition, partly because Duncan had only recently launched his own *Medical and Philosophical Commentaries: By a Society in Edinburgh* (1773–1795) (Figure 4).<sup>53,54</sup> Nevertheless, selected Edinburgh University medical student dissertations were published in the collection *Thesaurus Medicus* (1778–1785) (the first two volumes were produced by William Smellie at his own expense before Charles Elliot took over the project from him and, with the assistance of the Royal Medical Society of Edinburgh, eventually issued the work in four volumes with Smellie as printer).<sup>55</sup>

By the early 1780s, growing partisanship and rancour among members of the Medical Society came to conspire against its founding principles of friendship. 'At stake in Edinburgh at the time', Guenter B. Risse notes, 'was the growing antagonism between students partial to the ideas of [William] Cullen and those who believed in the newly minted doctrines of his former student, John Brown [...], a long-standing member of the Society since 2 May 1761.' When some of the contents of the Society's internal debates were leaked to the *Edinburgh Evening Post*, a non-disclosure rule was approved by the Society, and a lawsuit against the *Edinburgh Evening Post* was pursued by the Society's Cullenian-leaning leadership. The lawsuit was ultimately unsuccessful. Nonetheless, in bringing legal action, the students anticipated Thomas Percival's 'ethical injunctions of professional *esprit de corps*', in his *Medical Ethics: or, A Code of Institutes and Precepts, Adapted to the Professional Conduct of Physicians and Surgeons* (1803), and the argument that 'disputes should not be communicated to the public at large'.<sup>56,57</sup>

Writing under the pseudonym Thomas Newte, the Scottish author William Thomson criticised as a failure of method the climate of dissension and factionalism that had come to prevail at the meetings of the Royal Medical Society of Edinburgh in his *Prospects and Observations; On a Tour in England and Scotland: Natural, Oeconomical, and Literary* (1791). '[I]t is a misfortune', he wrote, 'that the Students of Physic, a science which depends so much upon experiment, should be misled; first by framing visionary theories in their own brains, and then producing and tenaciously defending them in their public Societies; where their object [...] is often victory rather than for the discovery of truth.'<sup>58</sup> Excessive faith in theory, Thomson suggests, impedes progress and prevents the establishment of medical science on a solid foundation. Thomson's description of the activities of the Edinburgh medical students draws on the language of anti-Jacobin polemic, which opposed British 'common sense' to 'French theory'.<sup>59</sup> There are also parallels between Thomson's attack on the Royal Medical Society and the comments, earlier in the century, of the Church of Scotland minister and historian Robert Wodrow on the spread of student clubs in Glasgow in his diary entry for February 1725:

**Figure 4** *Medical and Philosophical Commentaries: By a Society in Edinburgh* [ed. Andrew Duncan], 20 vols (London: Murray; 1773–95), 1: title page. © Royal College of Physicians of Edinburgh



The students, who affect to be persons of bright parts, have a Club they call the Eleutherian Club, and some others affect the name of the Anti-Capadocian Club, because the Capadocians were willing to surrender their liberties tamely to the Romans. The clubs are like to have a very ill influence on religion. People meet in them without any solid grave person to moderate, and give a loose to their fancy and enquiries, with (out) any stated rule of them or any solid principles. They declaim against reading, and cry up thinking.<sup>60</sup>

Student clubs were considered dangerous by such commentators as Wodrow and Thomson because of their association with free-thinking. However, members of the Royal Medical Society continued to defend their right to explore any medical topic or opinion. 'Every member', declared the pseudonymous author of *A Guide for Gentlemen Studying Medicine at the University of Edinburgh* (1792), 'ought to adopt the famous adage [from Horace's *Epistles*], 'Nullius addictus jurare in verba magistri,' ['Bound to swear the tenets of no particular master'] for the great object in the establishment of the medical society, was to discuss without restraint the opinion of eminent teachers and authors.'<sup>61</sup> With its overarching commitment to the sceptical and empirical practices laid down by the Royal Society, the Royal Medical Society provided a model for the establishment of similar clubs and societies on both sides of the Atlantic, notably in Edinburgh, London and Philadelphia.<sup>14</sup>

North American medicine had a particularly strong Scottish influence in the 18th century: many Scottish practitioners emigrated to colonial America and large numbers of American students crossed the Atlantic to study in Scotland.<sup>62,63</sup> When the Edinburgh-educated Philadelphia physician John Morgan outlined his proposals, at the commencement ceremony of the College of Philadelphia in May 1765, for 'transplanting

*Medical Science* into this seminary, and for the improvement of every branch of the healing art', he suggested that, in the field of medical education, Philadelphia should emulate Edinburgh. '[T]he reputation of that place', he declared, 'is raised to such a height, that, to their immortal honour, it already rivals if not surpasses that of every other school of Physic in Europe'.<sup>64</sup> The trustees accepted Morgan's proposals and appointed him the first professor of the theory and practice of medicine in the College of Philadelphia's new Medical School, which formally opened in the autumn of 1765. Ten of the School's first professors had attended the Edinburgh Medical School. 'Under their tenure', as Deborah C. Brunton observes, 'Scottish teaching methods and ideas dominated the Philadelphia curriculum until the turn of the century.'<sup>65</sup>

A few months after the Philadelphia Medical School had formally opened, Morgan founded, on 14 February 1766, the Philadelphia Medical Society. Its object, Morgan told a prospective member, was 'the Advancement of medical Literature amongst us and our mutual Improvement in the healing Art'. To this end, the Society met weekly 'to Converse on Medical Subjects in the several Branches of Physick, as well as to cultivate a friendly Intercourse with each other'.<sup>66</sup> That same year, Philadelphia's medical professors promoted the establishment of a student society known variously as the Hospital Medical Society from its place of meeting, and the Junior Medical Society from the status of its members; it followed the model of the Medical Society of Edinburgh in that members were required to write papers and defend their opinions in discussions. Other medical societies established in Philadelphia on the pattern of the Medical Society of Edinburgh included the American Medical Society, which, founded in 1770, offered membership to graduate physicians as well as to students. At least two papers read to the Society were published in the *Columbia Magazine* – one on scrofula (in May 1790), the other on hepatitis (in July 1790).<sup>67</sup> Although the American Revolution encouraged Philadelphia's professors to stop simply replicating British and continental European ideas and to construct a self-consciously American medicine, the similar requirements of medical students led to continued parallel development at the Edinburgh and Philadelphia schools long after the original links between the institutions had been broken.<sup>65</sup>

Extant letters and journals of members and former members of the Medical Society of Edinburgh also demonstrate the influence of Edinburgh's medical societies on the production and consumption of knowledge in the American colonies. The 1744 travel journal of Alexander Hamilton, one of the founding members of the Medical Society of Edinburgh, provides an illustration of this. A student of Monro, Hamilton received his medical degree from Edinburgh University in 1737, having completed a dissertation on bone disease.<sup>68</sup> He left Scotland in late 1738 for the American colonies, settling in Annapolis, Maryland, where he established an active medical practice. Touring the American colonies to the north with his slave Drumo in the summer of 1744, Hamilton seized on opportunities to debate natural knowledge in convivial settings, as he would have done in Edinburgh. In his journal,

he also evaluates the ideas, practices and opinions of the individuals he encounters through the lens of his Edinburgh medical training. Hamilton's route would eventually take him as far north as York on the coast of Maine, and as far inland as Albany before returning home.

In Boston, Hamilton attended meetings in a local tavern of the Physicall Club, a medical society founded in 1726 by the Scottish-born, Leiden-educated Boston physician William Douglass. Visiting the Club on 6 August 1744, Hamilton commented in his journal on the combative nature of 'physical heretics' such as Douglass, who 'talked very slightly of Boerhaave'. Hamilton surmises that Douglass was a disciple of the Scottish physician and poet Archibald Pitcairne, a professor in the medical faculty at Leiden University from 1692 to 1693. '[A]s some warm disputes had subsisted betwixt Pitcairne and Boerhave [sic] at his leaving the professional chair of Leyden', Hamilton notes, 'when turned out by the interest of K: William (for Pitcairne was a strenuous Jacobite) he bore Boerhaave a mortall grudge afterwards and endeavoured all he could to lessen his interest and deminish [sic] his character'. On 10 August 1744 Hamilton recorded in his journal that Douglass had given a 'physical harangue' at a meeting of the Physicall Club upon 'a late book of surgery published by Heyster' (the German anatomist and surgeon Lorenz Heister, author of *Chirurgie, in welcher alles, was zur Wund-Artzney gehöret [...] abgehandelt und [...] vorgestellt warden* [1719], the first English translation of which had been published in London in 1743). 'I saw [the book] recommended in the Physicall News from Edinburgh', Hamilton observes, 'and the judgment of the literati in physic of that place preponderats [sic] with me all that D[ouglass] can say against it.'<sup>69</sup> Hamilton's reference to 'the Physicall News from Edinburgh' indicates the transatlantic reach of such works associated with the Edinburgh medical faculty as *Medical Essays and Observations*.

On his return home, Hamilton helped to form the Tuesday Club of Annapolis on the model of the Scottish social clubs with which he was familiar, such as the Whin-Bush Club (of which Allan Ramsay was poet laureate). The Tuesday Club gave Annapolis's intellectuals opportunities 'to talk seriously, to entertain visitors, to put on concerts, and to indulge in general high jinx'.<sup>70</sup> As club Secretary, Hamilton was responsible for taking the minutes, but he went beyond that, reworking the proceedings of the club multiple times to create his mock historical compendium, *The History of the Ancient and Honorable Tuesday Club of Annapolis*, an over 1600 page manuscript that remained unpublished until 1990.<sup>71</sup>

Several of the Tuesday Club members were physicians, including John Hamilton, honorary club member and older brother of Alexander Hamilton, who was educated in Edinburgh and Leiden; Richard Brooke, an occasional visitor, and one of the few colonial physicians to publish his clinical observations in British journals; and longstanding club member Upton Scott, who, having trained in Dublin and Glasgow universities, arrived in Maryland in 1753 as Governor Horatio Sharpe's private physician, and was from the

beginning a part of the privileged social elite.<sup>72</sup> Club visitors with interests in natural knowledge included the Scottish physician and itinerant lecturer Archibald Spencer, who read a paper at the club on the polypus on 11 September 1750; the Edinburgh-educated Maryland physician Adam Thomson, an emigrant Scot, who had developed a new method of smallpox inoculation, and who visited the club on 15 April 1746 and 30 September 1746; and Franklin, who visited the club on 22 January 1754.<sup>73</sup> Tuesday Club minutes, which include the names and contributions of individual members and visitors and the dates of their attendance, suggests continuities between the concerns of the Medical Society of Edinburgh and the Annapolis club. In the *History*, however, Hamilton uses the incidents of the society's supposed 'rise and fall' to 'parody world history, imperial politics, the state of learning, the public prints, philosophical speculation, and clubbing'.<sup>74</sup> As chronicler of the Tuesday Club, Hamilton becomes the mock-historian of British-American sociability.

## Conclusion

Hamilton composed the *History* for the shared amusement of members of the Tuesday Club among whom it circulated in manuscript. Although Hamilton's representation of association is satirical, the *History* nonetheless underlines the role of sociability in the production and consumption of knowledge in the 18th-century North Atlantic world. The *History* pays tribute to the sociable exchange facilitated by the Scottish clubs and societies that Hamilton had known in Edinburgh, by those he had encountered on his tour of the American colonies to the north of Maryland, such as the Physicall Club of Boston, and by the Tuesday Club itself.

Edinburgh represented an ideal sociability for some North American physicians. 'Perhaps there is at present no spot upon the earth', Benjamin Rush wrote to his son James Rush on 19 March 1810, 'where religion, science, and literature combine more to produce moral and intellectual pleasures than in the metropolis of Scotland.'<sup>75</sup> James Rush had followed in his father's footsteps by crossing the Atlantic to study medicine in Edinburgh. However, by the early 19th century, the reputation of the Edinburgh Medical School was on the wane.<sup>76</sup> 'Even in her anatomical school', Robert Mudie observed in *The Modern Athens: A Dissection*

*and Demonstration of Men and Things in the Scottish Capital* (1825), 'that upon which she rested her fame the longest and the most securely, the falling off has been great'.<sup>77</sup> Nevertheless, the archives of the Royal Medical Society of Edinburgh show that society members continued to value association and to view knowledge making as an ongoing collaborative process through the nineteenth century.

In his biography of Monro, published in the *Edinburgh Magazine and Review* in 1774, Smellie presents his subject as an exemplary figure for his attempts to harness sociability to intellectual and practical improvement: 'Few men were members of so many societies as our professor; still fewer were equally assiduous in their attendance on them, and in their endeavours to encourage every measure that tended to promote public utility.' Yet the names of the societies of which Monro was a fellow or member, which range from 'Fellow of the royal college of physicians of Edinburgh' to 'member of the royal academy of surgery at Paris' to '[o]ne of the ordinary managers of the Edinburgh society for promoting sciences, arts, and manufactures', are relegated to a footnote.<sup>78</sup> Smellie thus obscures the collective life of Edinburgh's institutions even as he pays tribute to his subject's part in them.

The literary remains of the Edinburgh Medical Society and the Royal Medical Society of Edinburgh show how these institutions served to connect and organise groups of people, and to generate and structure ideas and practices. They also suggest the richness of the print and manuscript culture of medical sociability in the age of Enlightenment. ①

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## References

- 1 McElroy DD. *Scotland's Age of Improvement: A Survey of Eighteenth-Century Literary Clubs and Societies*. Pullman: Washington State University Press; 1969.
- 2 Phillipson N. Hume as Moralist: A Social Historian's Perspective. In: Brown SC, editor. *Philosophers of the Enlightenment*. Brighton: Harvester Press; 1979. p. 140–61.
- 3 Phillipson N. Adam Smith as Civic Moralist. In: Hont I, Ignatieff M, editors. *Wealth and Virtue: The Shaping of Political Economy in the Scottish Enlightenment*. Cambridge: Cambridge University Press; 1983. p. 179–202.
- 4 Emerson RL. The Philosophical Society of Edinburgh, 1737–1747. *Br J Hist Sci* 1979; 12: 154–91.
- 5 Emerson RL. The Philosophical Society of Edinburgh, 1748–1768. *Br J Hist Sci* 1981; 14: 133–76.
- 6 Emerson RL. The Philosophical Society of Edinburgh, 1768–1783. *Br J Hist Sci* 1985; 18: 255–303.
- 7 Emerson RL. The Scottish Enlightenment and the End of the Philosophical Society of Edinburgh. *Br J Hist Sci* 1988; 21: 33–66.
- 8 Clark P. *British Clubs and Societies 1580–1800: The Origins of an Associational World*. Oxford: Oxford University Press; 2000.
- 9 Mee J. *Conversable Worlds: Literature, Contention, and Community 1762 to 1830*. Oxford: Oxford University Press; 2011.
- 10 Broadie A. Introduction: What was the Scottish Enlightenment? In: Broadie A, editor. *The Scottish Enlightenment: An Anthology*. Edinburgh: Canongate Classics; 1997. p. 3–31.
- 11 Jenkinson J. *Scottish Medical Societies 1731–1939: Their History and Records*. Edinburgh: Edinburgh University Press; 1993.
- 12 Emerson RL, Wood P. Science and Enlightenment in Glasgow, 1690–1802. In: Withers CWJ, Wood P, editors. *Science and Medicine in the Scottish Enlightenment*. East Linton: Tuckwell Press; 2002. p. 79–142.
- 13 Erlan HD. Alexander Monro, primus. *University of Edinburgh Journal* 1954; 17: 77–105.
- 14 Gray J (Guthrie D, editor). *History of the Royal Medical Society 1737–1937*. Edinburgh: Edinburgh University Press; 1952. p. 2, 25.
- 15 Shapin S. The Audience for Science in Eighteenth-Century Edinburgh. *History of Science* 1974; 12: 95–121.
- 16 [Monro A, editor.] *Medical Essays and Observations, Revised and Published by a Society in Edinburgh*. 5 vols in 6 (vol. 5 in 2 parts). Edinburgh: Ruddimans, 1733–44; 2: iii–iv (p. iii) (The Preface).
- 17 Preston C. *The Poetics of Scientific Investigation in Seventeenth-Century England*. Oxford: Oxford University Press; 2015. p. 78.
- 18 Smith PH, Schmidt B. Introduction: Knowledge and Its Making in Early Modern Europe. In: Smith PH, Schmidt B, editors. *Making Knowledge in Early Modern Europe: Practices, Objects, and Texts, 1400–1800*. Chicago: University of Chicago Press; 2007. p. 1–16.
- 19 [Monro A, editor.] *Medical Essays*. 1: iii–iv (Dedication).
- 20 Swann M. *Curiosities and Texts: The Culture of Collecting in Early Modern England*. Philadelphia: University of Pennsylvania Press; 2001. p. 81–90.
- 21 Hanson CA. *The English Virtuoso: Art, Medicine, and Antiquarianism in the Age of Empiricism*. Chicago and London: University of Chicago Press; 2009.
- 22 Underwood EA. *Boerhaave's Men: At Leyden and After*. Edinburgh: Edinburgh University Press; 1977.
- 23 Goslings WRO. Leiden and Edinburgh: The Seed, the Soil and the Climate. In: Anderson RGW, Simpson ADC, editors. *The Early Years of the Edinburgh Medical School*. Edinburgh: Royal Scottish Museum; 1976. p. 1–18.
- 24 Swan C. Making Sense of Medical Collections in Early Modern Holland: The Uses of Wonder. In: Smith PH, Schmidt B, editors. *Making Knowledge in Early Modern Europe: Practices, Objects, and Texts, 1400–1800*. Chicago and London: University of Chicago Press; 2007. p. 199–213.
- 25 Huisman T. *The Finger of God: Anatomical Practice in 17th-century Leiden*. Leiden: Primavera Press; 2009.
- 26 Lawrence C. Alexander Monro primus and the Edinburgh Manner of Anatomy. *Bull Hist Med* 1988; 62: 193–214.
- 27 Alberti SJMM. A History of Edinburgh's Medical Museums. *J R Coll Physicians Edinb* 2016; 46: 187–97.
- 28 [Anon.] An Essay on Mr. Garengot's good Manners and universal Learning, inscrib'd to the Memory of Dr. Friend [sic], by ——— Prentice to a Surgeon Apothecary in Edinburgh. In: [Monro A, editor.] *Medical Essays*. 1: 242–57.
- 29 Monro A. Remarks on the Articulation, Muscles and Luxation of the Lower Jaw. In: [Monro A, editor.] *Medical Essays* 1: 124–56 (insert to p. 156).
- 30 Rock J. Richard Cooper Sr and Scottish Book Illustration. In: Brown SW, McDougall W, editors. *The Edinburgh History of the Book in Scotland: Volume 2: Enlightenment and Expansion 1707–1800*. Edinburgh: Edinburgh University Press; 2012. p. 81–90.
- 31 Hansen JV. Resurrecting Death: Anatomical Art in the Cabinet of Dr. Frederik Ruysch. *Art Bulletin* 1996; 78: 663–79.
- 32 Bidloo G. *Anatomia humani corporis*. Amsterdam: Someren; 1685.
- 33 [Monro A, editor.] *Medical Essays and Observations: Revised and Published by a Society in Edinburgh*. 2nd ed, corrected, 5 vols in 6 (Edinburgh: Ruddimans, 1737–44), 2: iii–iv (p. iii) (The Preface).
- 34 Porterfield W. An Essay concerning the Motions of Our Eyes. In: [Monro A, editor.] *Medical Essays* 3: 160–262; 4: 124–294.
- 35 Wright JP. Materialism and the Life Soul in Eighteenth-Century Scottish Physiology. In: Wood P, editor. *The Scottish Enlightenment: Essays in Reinterpretation*. Rochester: University of Rochester Press; 2000. p. 177–97.
- 36 Campbell N, Smellie RMS. *The Royal Society of Edinburgh (1783–1983): The First Two Hundred Years*. Edinburgh: The Society; 1983.
- 37 Wood P. Introduction. In: *Essays and Observations, Physical and Literary*. Reprint edition: Bristol: Thoemmes Press; 2002 (Edinburgh: Hamilton and Balfour, 1754–71). p. v–xvii.
- 38 [Anon.] Article VII. *Bibliothèque raisonnée des ouvrages des savans de l'Europe* 1739. 20: 451–78.
- 39 [Smellie W]. A Life of the Celebrated Dr Monro, Late Professor of Anatomy in the College of Edinburgh. *Edinburgh Magazine and Review* 1774; 1: 302–306, 337–43.
- 40 Pettigrew TJ. *Memoirs of the Life and Writings of the Late John Coakley Lettsom*. 3 vols. London: Longman, 1817. 3: 289, 290.
- 41 National Register of Archives (Scotland): Royal Medical Society of Edinburgh, NRA(S)/3882.
- 42 Kaufman MH. *Medical Teaching in Edinburgh during the 18th and 19th Centuries*. Edinburgh: Royal College of Surgeons of Edinburgh; 2003. p. 153–63.
- 43 Minutes of the Royal Medical Society of Edinburgh, 4 August 1778; cited in [Stroud W]. History of the Medical Society of Edinburgh. In: *List of Members, Laws, and Library Catalogue of the Medical Society of Edinburgh*. Edinburgh: William Aitken; 1820. p. iii–ci (p. xviii).
- 44 Fothergill J. *The Works of John Fothergill, M.D. [...] With Some Account of His Life*. By John Coakley Lettsom. London: Dilly; 1784. p. 425–38.
- 45 'Benjamin Rush'. In: *Laws and List of the Members of the Medical Society of Edinburgh*. Edinburgh: William Smellie; 1788. p. 74.
- 46 Hook H. *Scotland and America: A Study of Cultural Relations 1750–1835*. Glasgow and London: Blackie; 1975, p. 22.
- 47 'Benjamin Franklin'. In: *Laws and List of the Members of the Medical Society of Edinburgh*. Edinburgh: William Smellie; 1788. p. 108.
- 48 Blane G. Address to the Medical Society of Students at Edinburgh, Upon Laying the Foundation of their Hall, April 21st 1775. In: *A Short Account of the Commencement, Progress, and Present State, of the Buildings Belonging to the Royal Medical Society of Edinburgh*. Edinburgh: Neill; 1819. p. 21–32.
- 49 National Register of Archives (Scotland): Royal Medical Society Edinburgh: NRA(S)/3882/5/1, 3882/5/2, 3882/5/3, 3882/5/8, 3882/5/9, 3882/5/10, 3882/5/15. The surviving manuscript dissertations date back to 1751.
- 50 Christie J. Edinburgh Medicine in the Eighteenth Century: The View from the Students. *Bull Soc Social Hist Med* 1976; 19: 13–5.
- 51 Duncan A. Introductory Address to the Medical Society of Students at Edinburgh Read 2d of November 1771. In: *A Short Account of the Commencement, Progress, and Present State, of the Buildings Belonging to the Royal Medical Society of Edinburgh*. Edinburgh: Neill; 1819. p. 5–19.
- 52 Lawrence C. *Medicine as Culture: Edinburgh and the Scottish Enlightenment*. Unpublished PhD thesis, University College London; 1984.
- 53 [Duncan A, editor.] *Medical and Philosophical Commentaries. By a Society in Edinburgh*. 20 vols. London: Murray; 1773–95 (title pages vary [v.7 onwards entitled *Medical Commentaries*]).

- 54 Chalmers I, Tröhler U, Chalmers J. Medical and Philosophical Commentaries and its Successors. In: Chalmers J, editor. *Andrew Duncan Senior, Physician of the Enlightenment*. Edinburgh: National Museums Scotland; 2010. p. 36–55.
- 55 Brown SW. William Smellie: A Printer's Life. In: Brown SW, McDougall W, editors. *The Edinburgh History of the Book in Scotland: Volume 2: Enlightenment and Expansion 1707–1800*. Edinburgh: Edinburgh University Press; 2012. p. 52–60.
- 56 Risse GB. The Royal Medical Society versus Campbell Denovan: Brunonianism, The Press, and the Medical Establishment. In: *New Medical Challenges During the Scottish Enlightenment*. Amsterdam: Rodopi; 2005. p. 105–32.
- 57 Percival T. *Medical Ethics: or, A Code of Institutes and Precepts, Adapted to the Professional Conduct of Physicians and Surgeons*. Manchester: Russell; 1803.
- 58 [Thomson W.] *Prospects and Observations; on a Tour in England and Scotland: Natural, Oeconomical, and Literary*. By Thomas Newte, Esq. London: Robinson; 1791. p. 365–66.
- 59 Simpson, D. *Romanticism, Nationalism, and the Revolt against Theory*. Chicago and London: University of Chicago Press; 1993.
- 60 Wodrow R. *Analecta; or, Materials for a History of Remarkable Providences; Mostly Relating to Scotch Ministers and Christians*. 4 vols. Edinburgh: Printed for the Maitland Club; 1842–43. 3: 183.
- 61 Johnson J. *A Guide for Gentlemen Studying Medicine at the University of Edinburgh*. London: Robinson; 1792. p. 53.
- 62 Brock CH. Scotland and American Medicine. In: Brock WH. *Scotus Americanus: A Survey of the Sources for Links between Scotland and America in the Eighteenth Century*. Edinburgh: Edinburgh University Press; 1982. p. 114–26.
- 63 Rendall J. The Influence of the Edinburgh Medical School on America in the Eighteenth Century. In: Anderson RGW, Simpson ADC. *The Early Years of the Edinburgh Medical School*. Edinburgh: Royal Scottish Museum; 1976. p. 95–124.
- 64 Morgan J. *A Discourse upon the Institution of Medical Schools in America*. Philadelphia: Bradford; 1765. p. 2, p. 29.
- 65 Brunton DC. The Edinburgh and Philadelphia Medical Schools. In: Sher RB, Smitten JR, editors. *Scotland and America in the Age of the Enlightenment*. Edinburgh: Edinburgh University Press; 1990. p. 242–58.
- 66 Philadelphia Medical Society to Dr Charles Moore, nd, Gilbert Collection of MSS Letters, III, 289, College of Physicians of Philadelphia; cited in Bell WJ. For Mutual Improvement in the Healing Art: Philadelphia Medical Societies of the 18th Century. *JAMA* 1971; 216: 125–9.
- 67 Bell WJ, Jr. For Mutual Improvement in the Healing Art: Philadelphia Medical Societies of the 18th Century. *JAMA* 1971; 216: 125–9.
- 68 Hamilton A. *Specimen medicum inaugurale, de morbis ossium ipsam substantiam afficientibus, ex causis internis oriundis* (Edinburgh: Ruddiman, 1737). The manuscript thesis is held in Edinburgh University Library (Special Collections, ATT.74.7.1/18).
- 69 Hamilton A, author; Bridenbaugh C, editor. *Gentleman's Progress: The Itinerarium of Dr. Alexander Hamilton 1744*. Chapel Hill: Published for the Institute of Early American History and Culture, Williamsburg, by the University of North Carolina Press; 1948. p. 131, 132, 137.
- 70 Emerson RL. Numbering the Medics. In: Emerson RL. *Essays on David Hume, Medical Men and the Scottish Enlightenment: 'Industry, Knowledge and Humanity'*. London and New York: Routledge; 2009. p. 162–224.
- 71 Hamilton A, author; Micklus R, editor. *The History of the Ancient and Honorable Tuesday Club*. 3 vols. Chapel Hill and London: Published for the Institute of Early American History and Culture, Williamsburg, Virginia, by the University of North Carolina Press; 1990.
- 72 Breslaw EG. Introduction. In: Breslaw, EG, editor. *Records of the Tuesday Club*, ed. Breslaw, Records of the Tuesday Club of Annapolis, 1745–56. Chicago: University of Chicago Press; 1988. p. xiii–xxxii (p. xxi).
- 73 Breslaw EG, editor. *Records of the Tuesday Club*. Chicago: University of Chicago Press; 1988. p. 26, 36, 229, 447.
- 74 Shields DS. British-American Belles Lettres. In: Bercovitch S, editor. *The Cambridge History of American Literature: Volume 1: 1590–1820*. Cambridge: Cambridge University Press; 1994. p. 309–43.
- 75 Butterfield LH, editor. *The Letters of Benjamin Rush*. 2 vols. Princeton University Press; 1951. 2: 1038.
- 76 Dingwall H. The Importance of Being Edinburgh: The Rise and Fall of the Edinburgh Medical School in the Eighteenth Century. In: Grell OJ, Cunningham A, Arrizbalaga J, editors. *Centres of Medical Excellence? Medical Travel and Education in Europe, 1500–1789*. Farnham: Ashgate; 2010. p. 305–24.
- 77 [Mudie R.] *The Modern Athens: A Dissection and Demonstration of Men and Things in the Scottish Capital. By a Modern Greek*. London: Knight and Lacey; 1825. p. 221.
- 78 [Smellie W.] A Life of the Celebrated Dr Monro, Late Professor of Anatomy in the College of Edinburgh. In: *Edinburgh Magazine and Review* 1 (March and April 1774), 302–306, 337–43.