



RESEARCH ARTICLE

Edmund Rack: master of knowledge, scientific societies and social networks in eighteenth-century Bath

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Abstract

This article presents Bath as an urban crucible for global visitors, ideas and cultural brokers like Edmund Rack, a Quaker and former shopkeeper (1735/36–87). Rack seized opportunities to use his social networks to forge a scientific community in Bath. A study of members of Rack's Bath Philosophical Society shows science was a pathway to social mobility for dissenters, physicians and men of marginal backgrounds. Scientific knowledge became the property of non-elites, whose interests over-rode socio-economic differences. The impact of knowledge brokers and Bath on eighteenth-century social and urban history is, thus, seen anew in its local, national and global contexts.

Excitement was in the air in the British spa town of Bath in March 1780. In a dark room outfitted with an electrical machine, members of the Bath Philosophical Society (hereafter BPS) gathered to discuss 'phosp[h]orial light and...electricity'. Minutes show the experiments were so absorbing that the meeting lasted four hours. The topic was proposed by William Herschel (1738–1822), the astronomer, who was soon to discover the planet, Uranus. A former shopkeeper, Edmund Rack (1735/36–87), the society's secretary and driving force, set up a committee 'to resolve problems in electricity as...pointed out personally by Dr Priestley'. Rack's reference was to the scientist, Joseph Priestley, who was a frequent visitor to Bath (see [Figure 1](#)).¹

The participants found 'that divers kinds of bodies being exposed...to the sun's rays and instantly drawn into the dark room would retain their light near a minute'. When Rack wrote on a sheet of paper and 'pressd it with a hot smoothing iron', its light 'appeared near a minute all on fire & the writing was very legible'. Other

¹ Bath Record Office, Archives and Local Studies, B 920 RAC, E. Rack, 'A disultory journal of events &c. at Bath' (hereafter DJ), typescript, 1779–80, 14 and 28 Jan. [1780]. I thank Anne Buchanan and the archivist of the Bath & West of England Society for assistance and permission to publish Rack's portrait. Herschel's papers are in J.L.E. Dreyer (ed.), *The Scientific Papers of Sir William Herschel* (2 vols., London, 1912), vol. I, xxiii, lxxv–cvi. See [n. 24](#) for a revision of Rack's birth date.



Figure 1. Portrait of Edmund Rack, founder of the Bath & West Agricultural Society, by Lewis Vaslet (1781). See [n. 24](#) for current research about Rack's birth date.

substances were exposed to light and 'exactly minuted by a stop watch': live fish, mosses, funguses, bread, lump sugar, leeks, dried wood, red herring, silk handkerchiefs, alum, garden roots, fossils, spar and minerals.²

²DJ, 22 Mar. 1780. Priestley was residing at Bowood House, Calne, Wiltshire, with the earl of Shelburne.

Why, one may ask, was Rack's society founded in a spa town dedicated to pleasure? Why was its meeting led by an unschooled Quaker, and why was he respected by well-known scientists?³ Rack had settled in Bath five years earlier in 1775, at age 40. Yet, why he chose Bath has been unexplained and his early life has been a mystery. All we know is that he was born in rural Norfolk to humble parents and lacked formal schooling. Yet, his love of learning led him to educate himself and write poetry and prose.⁴

This article uses Rack's intellectual activities in Bath to make two important arguments about urban and social history in eighteenth-century Britain. First, the city was far more than a scandalous spa. It was an urban crucible for the sophisticated visitors and global ideas that were drawn into the whirling vortex of its society. Into this melting pot came cultural trespassers and aspiring mediators, who found ways to expand knowledge in a city ripe for change. By enlisting serious people, who craved meaningful pursuits, cultural brokers like Rack fostered social and economic improvement. They also laid early foundations for British provincial science, which have been hidden from view.⁵

Secondly, these intermediaries transformed the city by developing diverse social networks that flourished in the spa's welcoming environment. Naturally, Bath's role as the premiere international and national resort shaped all of its cultural institutions. Indeed, the constant inflow and outflow of anonymous people created the perfect milieu for the social mobility of urban non-elites. A study of the founding members of the Bath Society (1779–87) shows how Rack's social networks functioned: who was in them, what interests they pursued and how members worked together. It also reveals surprising results about the status and occupations of the founders. Physicians, dissenters and men with a range of marginal backgrounds soon dominated the society. Hence, the BPS offered a pathway to social mobility and created a distinct scientific culture. It also offers a fresh look at the intellectual development and social alliances of eighteenth-century urban society.

Rack's achievements are an ideal lens through which to view these claims. He was one of numerous cultural brokers or go-betweens who strove to increase scientific knowledge in their native and host locales.⁶ Indeed, his passion for knowledge governed every aspect of his life, and he longed to circulate information for the public good. In our age, he claimed, we 'are favour'd with more excellent communications of knowledge; and have access to those sources of information from which the purest principles of science are drawn and the sublimest human happiness is deriv'd'.⁷ When ill health struck, he refused to become depressed for

³The term 'scientist' is used to denote years of development before its coinage in the 1840s. 'Scientia' meant knowledge, whose dissemination was Rack's goal, which adds to its relevance here.

⁴W.P. Courtney, rev. A.P. Baker, 'Edmund Rack', *Oxford Dictionary of National Biography* (ODNB), www.oxforddnb.com, accessed 27 Nov. 2025; Revd J. Collinson, *The History and Antiquities of the County of Somerset...and an Actual Survey Made by the Late Mr. Edmund Rack* (3 vols., Bath, 1791), vol. I, 77–82.

⁵P.J. Corfield, 'Georgian Bath: the magical meeting place', *History Today*, 40 (1990), 26–33. I thank Corfield for support over many years. W.J. Williams and D.M. Stoddart, *Bath – Some Encounters with Science* (Bath, 1978).

⁶S. Schaffer et al. (eds.), *The Brokered World: Go-Betweens and Global Intelligence, 1770–1820*, Uppsala Studies in History of Science, 35 (Sagamore Beach, MA, 2009).

⁷DJ, 14 Mar. 1780.

‘the treasures of true science & learning remain when every other enjoyment vanishes as a vapour’.⁸

Among Rack’s many achievements were the foundation of two enlightened societies based on scientific experiments that exist today and the publication of at least 20 books and pamphlets, along with large quantities of poetry and prose. His global networks including evangelicals and abolitionists, as well as economic and social reformers, further enhanced his reputation as a passionate propagator of ideas. Before the pre-Bath and international stages of Rack’s life were revealed in this article, he appeared to be an ambiguous, minor figure, striving for acceptance.⁹ New information positions him as a transnational man of letters, whose friends, like Priestley and Herschel, supported his vision and held him in high esteem.

The next section outlines the methodologies used in this article. Then, Rack’s early years in Essex and London are reconstructed by following clues left by authors and publishers in the capital’s books, newspapers and periodicals. Next, we see how Rack became the leader of Bath’s intellectual community by founding two societies and achieving literary success. The conclusion assesses his role as a cultural broker.¹⁰

Microhistory and the history of knowledge

This article looks anew at Bath in its local, national and global contexts at a time when a widely diffused culture, based on science and empiricism, heightened hopes of living in a new enlightened age, albeit one that caused destabilizing change.¹¹ The techniques of Italian microhistorians are used to fill in the gaps of Rack’s pre-Bath life, explain why he chose to live there and understand how he met his goal to circulate knowledge through a strategic plan.

Thus, this article answers Francesca Trivellato’s question: ‘Is there a future for Italian microhistory in the age of global history?’ with a resounding ‘yes’.¹² It places urban change, social mobility and the history of knowledge into a deeper, wider canvas and permits the combining of micro- and macro-scales of analysis. It also confirms Giovanni Levi’s belief that ‘history must be the science of generalized questions and localized answers’, which are found by close readings for clues.¹³

⁸DJ, 13 Feb. 1780.

⁹L.E. Klein, ‘Hierarchy and the techniques of the mediator: Edmund Rack in Bath 1775–87’, *Cultural and Social History*, 10 (2013), 489–510; R. Porter, ‘Science, provincial culture and public opinion in Enlightenment England’, *Journal for Eighteenth-Century Studies*, 3 (2008), 20–46, at 33. Klein’s study viewed Rack’s success in the framework of politeness, whilst Porter thought Rack used science to gain cultural prestige.

¹⁰For Bath history, see A. Barbeau, *Life & Letters at Bath in the Eighteenth Century* (London, 1904); R.S. Neale, *Bath 1680–1850: A Social History* (London, 1981); D. Gadd, *Georgian Summer: The Rise and Development of Bath* (Newbury, 1987); P. Borsay, *The Image of Georgian Bath, 1700–2000: Towns, Heritage and History* (Oxford, 2000); H. Burlock *et al.* (eds.), *Bath and Beyond: The Social and Cultural World of the Georgian Assembly Room* (New York, 2025).

¹¹P. Burke, ‘Historicizing the self, 1770–1830’, in A. Baggerman *et al.* (eds.), *Controlling Time and Shaping the Self: Developments in Autobiographical Writing since the Sixteenth Century* (Leiden, 2011), 11–32, at 14.

¹²F. Trivellato, ‘Is there a future for Italian microhistory in the age of global history?’, *California Italian Studies*, 2 (2011), <https://escholarship.org/uc/item/0z94n9hq>, accessed 27 Nov. 2025; and F. Trivellato, *The Familiarity of Strangers: The Sephardic Diaspora, Livorno and Cross-Cultural Trade in the Early Modern Period* (New Haven, 2009).

¹³G. Levi, ‘Frail frontiers?’, *Past & Present*, 242 (2019), issue supplement 14, J.P. Ghobrial (ed.), *Global History and Microhistory*, 37–49, at 45.

As in previous work on younger son and Levant Company merchant, John Verney, in 1993¹⁴ and William Hutton, an unschooled prolific author, in 2018,¹⁵ answers are found by analysing documents of ordinary people, which do not contain predictable narratives or fit into standard categories. In 1977, Edoardo Grendi called these documents ‘exceptionally normal’. He believed historians could use them to uncover hidden cultural meanings, social structures and lives of people who seemed exceptional, but were considered normal in their own settings. Moreover, the unique behaviours found in these texts triggered numerous bursts of record-making that allow readers to observe both deviance and social norms.¹⁶

The phrase ‘normal exceptions’ is now used widely, but it means different things to different scholars and is often reinterpreted to apply to ordinary people. Indeed, Grendi’s article reveals concepts that apply directly to Edmund Rack. In ‘Micro-analisi e storia sociale’, he points to a pattern of group divergence in the form of brokers, who mediate between the community and the larger society.¹⁷ Edmund Rack’s epistolary journal provides exactly that data, as it describes Rack’s role as a cultural intermediary. It contains a detailed account of Rack’s greatest success: the founding, impact and relationships of members of the BPS. Since it is the only surviving fragment of a much larger manuscript, Rack may have saved it for posterity. As it records the ‘normal discontinuities, contradictions, and fragmentations of the historical fabric’, it fits the definition of an exceptionally normal document.¹⁸

Through a wide range of other sources, I follow Grendi’s instructions and map the members of Rack’s social networks, who spanned the globe in many walks of life.¹⁹ Additional analysis of BPS founding members enables the creation of connected histories that fan out and back, to and from East Anglia, London, Bath, Philadelphia and the Atlantic trading world, Europe, Africa and the East Indies.²⁰ As Rack

¹⁴Edoardo Grendi’s concept of normal exceptions was cited in my 1993 Princeton University, Ph.D. thesis later published as S. Whyman, *Sociability and Power in Late Stuart England: The Cultural Worlds of the Verneys 1660–1720* (Oxford, 1999), 11 n. 33. It stated that ‘younger sons, like John [Verney], comprise a neglected category that aptly exemplifies Grendi’s ideas’.

¹⁵S. Whyman, *The Useful Knowledge of William Hutton: Culture and Industry in Eighteenth-Century Birmingham* (Oxford, 2018).

¹⁶I thank Trivellato for pointing out Grendi’s focus on the document. I am grateful that she allowed me to see an early version of her forthcoming, English translation and accompanying article. E. Grendi, ‘Micro-analisi e storia sociale’, *Quaderni storici*, 12 (1977), 506–20, English translation by F. Trivellato; E. Grendi, ‘“The normal exception”: “microanalysis and social history”’, *History & Theory*, 65 (2026), in press. Grendi notes that an exceptional document may become exceptionally normal precisely because it is relevant. See also F. de Vivo, ‘Microhistories of long-distance information: space, movement and agency in early modern news’, *Past & Present*, 242 (2019), 179–214, at 209.

¹⁷Grendi, ‘Micro-analisi e storia sociale’, 512.

¹⁸Edmund Rack, DJ; Grendi, ‘Micro-analisi e storia sociale’, 512; C.G. De Vito, ‘History without scale: the micro-spatial perspective’, *Past & Present*, 242 (2019), 348–72, at 362. Rack’s journal was written to an unknown relative or friend in Essex.

¹⁹Sources include Rack’s journal, writings and scattered papers. Bath Record Office, Georgian Newspaper Project, <https://www.batharchives.co.uk/georgian-newspaper-project>, accessed 27 Nov. 2025; membership lists of Quaker and other committees, officers and organizations, minutes of meetings, indexes to periodicals and letters. For letters in social networks, see S. Whyman, *The Pen and the People: English Letter Writers 1660–1800* (Oxford, 2009).

²⁰Bath Record Office, 0465/1, Papers of the Bath Philosophical Society provided names for biographical analysis. E. Rothschild, *An Infinite History: The Story of a Family in France over Three Centuries* (Princeton, 2022).

communicated with people from many nations, his membership in a Quaker community steeped in disseminating knowledge truly mattered. It offered information networks and literary activities, but also erected religious tensions that simmered beneath the surface throughout the century.

The methods of microhistory confirm that Rack's urban universe was far larger than the polite world of a spa. In fact, his unlikely choice of a town of pleasure was an ideal place for his scientific societies. By 1700, Bath had shifted from a declining textile town to a rising spa of 3,000 people that drew visitors to drink the waters and doctors to treat them. Queen Anne's four visits, ending in 1703, stimulated the rebuilding of the city. New assembly and pump rooms were followed by upgrades to streets, sanitation, housing and visitor amenities. In the 1720s, John Wood Sr's building plans set new Palladian standards, as seen in his classical Queen Square.

By the 1720s, Bath also became a magnet for scientific lecturers, who were keen to teach people about Newtonian gravitation, optics, mechanics and electricity. J.T. Desaguliers (1705–82), later Fellow of the Royal Society (FRS), gave lessons using prisms, air pumps and model engines. Benjamin Martin (c. 1704–82) offered courses at his 'experimental room' and James Ferguson's (1710–76) astronomical classes made an impact on William Herschel.²¹ Gradually, circulating libraries, theatres, gardens and public walks replaced rough country venues and pursuits. Like all spas, its newness and potential for economic gain bred a competitive service-based economy that welcomed private investment.²²

This renewal of an aging infrastructure was enhanced by the arrival of Richard 'Beau' Nash, as master of ceremonies in 1705. His creation of 'the company' as the basic unit of social interaction required loyalty to Nash as master of ceremonies and adherence to the rituals he invented. It also brought some order to a town marked by scandal, drink and gambling.²³ As dates, events and characteristics of Nash's earlier rise to power are compared with Rack's own trajectory, it will become clear that Nash became an instructive role model for Rack, as he chose to move to Bath. But first, clues must be followed in order to lift the veil hiding Rack's pre-Bath years.

Rack's early life in Essex and London

Rack was born in central Norfolk to observant Quaker parents in Ellingham in 1736.²⁴ His father, Edmund, was 'a labouring weaver', whilst his mother, Elizabeth (1700–84) was 'well-known for...preaching'. In 1739, after the death of her three children and husband, she left her remaining son, Edmund, at age four, 'in the care of

²¹T. Fawcett, 'Science lecturing in Georgian Bath', in P. Wallis (ed.), *Innovation and Discovery: Bath and the Rise of Science* (Bath, 2011), 144–6; A.J. Turner, *Science and Music in Eighteenth-Century Bath, Catalogue of an Exhibition in the Holburne of Menstrie Museum, 22 September – 29 December 1977* (Bath, 1977), 53.

²²S. Vasset, *Murky Waters: British Spas in Eighteenth-Century Medicine and Literature* (Manchester, 2022); W. Ison, *The Georgian Buildings of Bath from 1700 to 1830* (Bath, 1969).

²³J. Eglin, *The Imaginary Autocrat: Beau Nash and the Invention of Bath* (London, 2005).

²⁴I thank the Library of the Society of Friends, London (LSF) for access to the *Dictionary of Quaker Biography* (DBQ) and manuscript collections and Tim Wales for documentary research. Though 1735 is often cited as Rack's birth year, he was born on 26 Feb. 1736, The National Archives (TNA), RG 6/1212, fol. 21v, register of births for the Quaker Norwich Monthly Meeting, 1650–1797, 26th of 12th month 1735 [/36]). I use the LSF dates (1735/36–1787). Rack died in Bath on 22 Feb. 1787 and was buried in the Quaker Burial Ground at Bathford. TNA, RG 6/124, fol. 37r, Bristol and Somerset, Monthly Meeting, marriages, 1776–94; Collinson, *History and Antiquities*, vol. I, 77–82.

friends' and became 'a lively & acceptable minister' for the rest her life. Yet, Rack's supportive Quaker community and his interests in nature, science and self-education helped him become an independent youth.²⁵ He was apprenticed to a shopkeeper in nearby Wymondham, knowing little more than arithmetic. Then he found employment 51 miles from London in a shop in Great Bardfield, Essex, owned by the widow, Agnes Smith. They soon married and Rack became a provincial shopkeeper at a time when agricultural reform was improving East Anglian farming, a knowledge Rack would use to start the Bath & West of England Society (hereafter BWS).²⁶

Great Bardfield supported a growing Quaker congregation. Known for dissent, it was also home to Methodists. More than a century had passed since George Fox founded the Quaker movement. It expanded in the 1650s after the Civil War. But Quaker rejection of the established church and unpopular traits in dress and speech led to persecution and imprisonment after the Restoration. The Toleration Act of 1689 allowed only conditional worship and barred Quakers from universities, public office and juries. Thus, a period of more passive Quietism followed after the 1690s.²⁷

Still, though some Quakers wished to live separately, the reality was more diverse. During the eighteenth century, Quakers expanded geographically, became influential in commerce and industry and developed a range of positions on war, slavery and social reform. As Rack's life reveals, the urge for quiet self-transformation rising from Christ's 'inner light' conflicted with the urge to transform the world through humanitarian action.²⁸

When Rack moved to Essex, he developed his first network of Quaker friends, who were also members of London's literary world during the 1760s and 1770s. It was easy to get transport from Essex to the capital, and easier to get published. Over 100 new monthly magazines appeared between 1760 and 1779, expanding the number of successful authors, who produced poetry and prose.²⁹ 'There is scarcely a wretch', wrote the Scribbler, 'upon the surface of the earth, but who...thinks himself qualified to be a Poet.' One of them, who published anonymously, was Edmund Rack.³⁰

Because we lack details of autodidacts' methods, we must piece together fragments of how Rack's self-education prepared him to be an author. From the Quaker

²⁵LSF DBQ, Elizabeth Rack's parents attended Wymondham Monthly Meeting. She lived with Rack in Bath from 1775 to 1784. Rack's siblings were John, b. 1732, Hannah, b. 1734, Thomas, b. 1737.

²⁶Essex Record Office, D/ABW 116/1/94, will of Agnes Smith, 24 Nov. 1803. William Grover (1752–85) of Stansted Mountfitchet, Essex, was Rack's apprentice. *Selections from the Letters and Other Papers of William Grover; Preceded by a Biographical Notice of His Life* (London, 1828); J. Stobart and L. Bailey, 'Retail revolution and the village shop c. 1660–1860', *Economic History Review*, 71 (2018), 393–417; T. Plowman, 'Edmund Rack: the society that he founded and the company that he kept', *Journal of the Bath & West & Southern Counties Society*, 8 (1913–14), 1–38, at 7–9.

²⁷W.C. Brathwaite and H.C. Cadbury, *The Beginnings of Quakerism* (Cambridge, 1955); W.C. Brathwaite, *The Second Period of Quakerism* (York, 1961); S. Angell and B.P. Dandelion (eds.), *The Oxford Handbook of Quaker Studies* (Oxford, 2013), especially ch. 4; R.R. Healey, 'Quietism Quakerism, 1692 – c. 1805', 47–62, at 48.

²⁸G. Cantor, *Quakers, Jews and Science: Religious Responses to Modernity and the Sciences in Britain 1650–1900* (Oxford, 2005); E. Sahle, *Quakers in the British Atlantic World, c. 1660–1800* (Woodbridge, 2021); A. Raistrick, *Quakers in Science and History: Being an Account of the Quaker Contributions to Science and Industry* (London, 1950); S. Holton, *Quaker Women* (London, 2007).

²⁹E.W.R. Pitcher, *Discoveries in Periodicals 1720–1820: Facts and Fictions* (Lewiston, 2000), 274–90; *Monthly Miscellany; Or Gentleman and Lady's Complete Magazine*, 2 (1774), introduction.

³⁰The Scribbler, 'Ambition that makes writers of us all', *Monthly Miscellany*, 2 (1774), 9.

community. he received literacy, reading materials and a love of learning. In his *Mentor's Letters Addressed to Youth*, written while he was still in London, he described his own regimen of self-improvement through reading, writing, conversation and moral training. His literary pursuits reveal why so many people longed to become authors. For most, the answer was self-improvement based on knowledge of the arts and sciences. Writing poetry was also a highly regarded way of expressing deep emotions in a flowing metered manner. For all, imitating the style of well-known poets was a popular exercise that stirred the intellect.³¹

For Rack, literary and social life amongst like-minded Quakers were tightly linked together. As a practising Quaker, Rack automatically acquired another network of London merchants, who traded with Britain's colonies, became early abolitionists and later supported his Bath societies. He was often found in the Quaker corner of London's Carolina Coffeehouse on Birchin Lane, with his 'little flock' of merchants, printers, booksellers and self-styled philosophers. They published poems in *The Monthly Ledger*, shared an interest in North America and soon became prominent in Quakerism's liberal wing.³²

As these London merchants prospered, they gained international contacts. In 1783, Rack's closest Quaker friends set up the first London Abolition Committee and later convinced Thomas Clarkson (1780–1846) and William Wilberforce (1759–1833) to join them in their opposition to the slave trade.³³ Indeed, London and Philadelphia Quakers functioned as a transatlantic community with families, ministers and publications flowing in both directions.

Rack's unknown ties explain why, in 1779, he asked the former slave, Ignatius Sancho, for permission to print his letters to the East Indies and Philadelphia 'in a collection of Letters of Friendship'. Rack hoped the letters 'might convince proud Europeans, that the noblest gifts of God...are not confined to any nations of people'. As a member of a transnational network, Rack saw himself as an agent, who spread knowledge across the world.³⁴

In the same year, Rack published an anonymous essay on William Penn. It was appended to the second edition of *Caspipina's Letters* (a code name for American independence). *Caspipina's* author, Reverend Jacob Duché of Philadelphia, was a board member of Benjamin Franklin's Library Company and ordered its books from Joseph Woods, a lifelong friend of Rack.³⁵ Woods sold Rack's writings, sent him books and criticized his poetry as too effusive.³⁶ Another close friend, James Phillips,

³¹E. Rack, *Mentor's Letters, Addressed to Youth* was likely written in 1772 or 1773 in London.

³²J. Jennings, *The Business of Abolishing the British Slave Trade 1783–1807* (London, 1997); E.W.R. Pitcher (comp.), *The Monthly Ledger 1773–76: An Annotated Register of the Contents* (Lewiston, 2022).

³³Forthcoming work will discuss early impacts on abolition by Rack's anti-slavery networks. C. Brown, *Moral Capital: Foundations of British Abolitionism* (Chapel Hill, 2006); B. Carey and G. Plank, *Slavery and Abolition* (Urbana, 2014). LSF, MS VOL. 327, Thompson-Clarkson Collection, vol. 2, no. 9, minutes of slave-trade committee, 1782–84.

³⁴B. Carey, 'The hellish means of killing and kidnapping: Ignatius Sancho and the campaign against the abominable traffic for slaves', in B. Carey et al. (eds.), *Discourses of Slavery and Abolition: Britain and Its Colonies* (Houndmills, 2004), 81–95, at 91 n. 38.

³⁵*Caspipina's Letters; Containing Observations on a Variety of Subjects...Written by a Gentleman Who Resided Some Time in Philadelphia. To Which Is Added the Life and Character of William Penn, Esq* (2 vols., Bath, 1777), vol. II, 108–234; Jennings, *Business*, 6, 16.

³⁶Jennings, *Business*, 1–5, 13–16; LSF MSS Matthews, box A1/5, letters from Joseph Woods, 1774–1812; Joseph Woods, *Thoughts on the Slavery of the Negroes* (London, 1784).

printed the Friends Society's official publications and anti-slavery tracts.³⁷ 'However low we rank', wrote Woods, 'as Merchants or Philosophers, we are desirous to be esteemed.'³⁸

Both Woods and Rack esteemed another lifetime member of the 'flock', the preacher, William Matthews (1747–1816) of Coggeshall, Essex. In 1770, Rack and Matthews joined their London friends at a wedding, where Matthews had the honour of reading a toast in verse. Matthews, the son of an Oxford shoemaker, kept a Quaker boarding school in Essex. Though too poor to attend school himself, he soon became a charismatic London preacher and a member of Rack's growing network of Quaker ministers.³⁹

From 1773 to 1775, Woods, Matthews and Rack sent anonymous poetry and prose to a new journal, *The Monthly Ledger*. Rack, alone, wrote a staggering 103 entries with the support of its publisher Thomas Letchworth (1738–84), who was also a Quaker minister. Matthews' many publications, which include a life of Letchworth, reveal the deep faith of many Quakers, who questioned London's disciplinary control and wished to integrate into society.⁴⁰ Both Matthews and Rack were influenced by the Enlightenment and adopted a moderate form of Quietism that historians might call rational religion. Claiming roots in George Fox's stress on ethics and education, rational Quakers functioned successfully after 1750 between the poles of reason and revelation.⁴¹

At the same time, there was a central drive to restore Quaker purity relating to business practices, intermarriage and non-payment of tithes. Quaker letters show that the London Meeting grew more rigid, and cases of disownment rose dramatically. 'Only the ESSENTIAL parts of religion can be dictated', stated Matthews. 'Otherwise, there is "PERSECUTION". I...HAVE DETERMINED TO BE FREE.' Unsurprisingly, he was expelled from the Society of Friends for heterodox opinions in 1783. Luckily, unnoticed by biographers, he had already followed Rack to Bath, where he opened a brewery and coal yard, and succeeded him as secretary of the BWS.⁴²

References reveal that Matthews was the second member of Rack's hidden trio, who met in London, worked together in Bath and served as executors at their deaths. The third member was a publisher of London's *Monthly Miscellany*, Richard Cruttwell (1747–99) of Bath. He was also the new owner of the *Bath Chronicle*. In 1761, at age 14, Cruttwell was apprenticed to a London printer, John Carnan.⁴³ In 1768, he

³⁷J. Phillips, *Books Sold by James Phillips, Bookseller, Stationer and Printer in George Yard, Lombard Street...* (London, 1791); Jennings, *Business*, 7. Phillips printed many of Rack's publications.

³⁸Jennings, *Business*, 14.

³⁹*Ibid.*, 4; Turner, *Science*, 90; J.W. Frost (ed.), *The Records and Recollections of James Jenkins* (Lewiston, 1984), 115, 507; TNA, PROB 11/1587/209, will of William Matthews, 1816.

⁴⁰Pitcher, *Monthly Ledger*, 225–306, at 279–86. The author index contains 103 items by Rack. Frost (ed.), *Records...of James Jenkins*, xxxvi–iii; W. Matthews, *The Life and Character of Thomas Letchworth, a Minister of the Gospel among the People Called Quakers* (London, [1786]).

⁴¹Angell and Dandelion (eds.), *Oxford Handbook*, 54–62; H. Barbour and J.W. Frost, *The Quakers* (New York, 1988), 98–106, 132–3.

⁴²W. Matthews, *An Explanatory Appeal to the Society in General and His Friends in Particular* (London, 1783), 43; Turner, *Science*, 90.

⁴³E.W.R. Pitcher, *The Monthly Miscellany, 1774–77: An Annotated Register of the Contents* (Lewiston, 2002); T. Fawcett, *Georgian Imprints: Printing and Publishing at Bath, 1729–1815* (Bath, 2008), 13, 30. Cruttwell was admitted to the Freedom of the Stationers' Company, the Livery and the English Stock.

invested a small inheritance in William Archer's *Bath Chronicle*; then he bought him out during a political crisis in 1769. This early intimacy between Cruttwell and Rack sheds new light on Rack's undetected ties to Bath. So, it is crucial to grasp how they helped each other in London and Somerset. Though historians assume Rack knew few people in Bath, his intimate friend would become the most powerful publisher in south-west England.⁴⁴

By 1774, Rack was contributing to the *Monthly Miscellany* and won two of its prizes for 'On the unchangeableness of the deity', signed Eusodorus and the 'Treatise of ghosts and apparitions', signed XYZ.⁴⁵ An analysis of the journal's index shows it published articles that were later recycled in the *Bath Chronicle* and Rack's writings. There were, thus, essays about agricultural reform, tensions in American colonies and even Quaker history,⁴⁶ authored not only by Quaker friends, but future founding members of Rack's Bath societies. As he formed yet another network with London publishers, editors, staff writers, contributors and the public, Rack received a practical printing-house education.

If we compare the dates of Cruttwell's entry into London publishing with events in Bath, we start to glimpse why Rack moved to Somerset in 1775. Cruttwell's London apprenticeship in 1761 was followed by the deaths of Beau Nash in 1762 and his unpopular successor Samuel Derrick in 1769. The resulting vacuum of Nash's absence set off a long political conflict over who should elect a new master of ceremonies. By 1768, when Cruttwell invested in Archer's *Bath Chronicle*, two warring sides were spreading scandalous news about their rival candidates. Sensing a rare opportunity to publicize a political crisis, Cruttwell bought out Archer in 1769.⁴⁷

His first act was to publish the lurid *Bath Contest*, compiled from previous *Chronicle* articles about the violent campaign. These illustrated reports led to rising sales and tempers. 'Never was such a Scene of Anarchy and Confusion remembered in this City', the *Bath Contest* declared. 'The Mayor was sent for to appease the tumult [and] the Riot-Act read 3 times.' A print showed a shouting woman praising her choice: 'He shall be King, or I'll poison ye all.'⁴⁸

In London, Rack watched the crisis and saw a gap in Bath's leadership. Oliver Goldsmith's popular *Life of Nash* had just been published. Read together with

⁴⁴H.A. Cruttwell, *The Chronicle of Crotall, Cruthall, Cruttall or Cruttwell* (Camberley, [1933]), 64–75; p. 68 notes Cruttwell's St James Street offices. Rack used this address when he came to Bath, confirming their prior connection (<https://archive.org/stream/chronicalofcrotall00crut/chronicalofcrotall00crutdjvu.txt>, accessed 27 Nov. 2025).

⁴⁵*Monthly Miscellany*, 2 (1774), 237–9, signed by 'Eusedorus, Bardfield, Essex', and 254–5, signed 'XYZ'; E.W.R. Pitcher, 'The many pseudonyms of Edmund Rack in the *Monthly Ledger* (1773–76) and *The Sentimental Magazine* (1773–76)', in Pitcher, *Discoveries*, 274–91. I have found 29 pseudonyms used by Rack.

⁴⁶J. Priestley, 'Address to dissenters', 40; 'Advantages of debating societies', 63; 'Medical memoirs' by John Coakley Lettsom, a future member of the BPS, 100; 'Verses on Mr Taylor's pictures at Bath', 128; 'Agriculture', 297; 'American independence', 313; 'Account of Quakers', 316; 'Principles of Mr. Penn', 333; 'Farmers' by Arthur Young, 345; Ignatius Sancho, 'Letter', 448, in *Monthly Miscellany*, 2 (1774), Index to the Letters, Essays and Poetry, 414–17.

⁴⁷Nash died 3 Feb. 1761/62; Samuel Derrick died 28 Mar. 1769. S. Derrick, *Derrick's Jest or the Wits Chronicle...Dedicated to the Public* (London, 1769); H. Burdock, 'Electing the Arbiter Elegantiarum in Bath and beyond: power, politics and the 1769 Bath Contest', in Burlock et al. (eds.), *Bath and Beyond*, 131–61.

⁴⁸*The Bath Contest, Being a Collection of All the Papers, Advertisements, &c. Published before and since the Death of Mr. Derrick by the Candidates for the Office of Master of Ceremonies...Digested in Regular Order* (Bath, 1769).

Cruttwell's pamphlets, they presented a playbook about how power in Bath had been won and lost by a newcomer like Nash. There were similarities between Nash's and Rack's characters and situations. Both emerged anonymously at critical junctures. Both had ambiguous backgrounds and needed to live off their position, but their self-assurance won the day. Both found capable allies and advanced themselves socially by exploiting economic change. Bath's acceptance of dissenters and newcomers also attracted Rack.⁴⁹

By the late 1760s, Bath's population of 10,000 was developing new cultural institutions, experiments in science and technology and ties to global empires. John Wood's son was transforming Bath into a Palladian community on an unprecedented scale. Its circuses and crescents were filled with professional and middle-class residents, scientific lecturers, physicians and international men of science. Their conversations about fossils, planets, medical treatments and inventions were staples of Bath's broad integrated culture. There was 'no place in the world', it was claimed, 'where a person might introduce himself, on such easy terms, to the first people of Europe'.⁵⁰ In 1790, there were at least 25,000 visitors.⁵¹

By 1774, Cruttwell thought the spa was entering a glorious new stage and Rack saw the chance to start a new life. In 1775, he swiftly recycled his unsigned verse into a volume of published poems.⁵² He arrived in Bath as an author, whose networks were filled with printers, preachers, abolitionists, future scientists, global traders and ties to international societies. With help from Cruttwell and Matthews, Rack would fulfil his mission to become Bath's first master of knowledge.⁵³

The Bath & West of England Society (BWS)

Once hidden links between both halves of Rack's life are revealed, it is clear that he arrived in Bath with key skills and contacts. As his journal is read in the context of his

⁴⁹Similarities were revealed through independent research using methods of microhistorians including detecting clues and patterns of common names, locations, experiences, upward mobility and reading, especially in publications authored by members of Rack's networks and also constructing parallel timelines. Nash's allies were Thomas Harrison owner of the assembly rooms and the architect John Wood Sr. Eglin, *Imaginary Autocrat*, 121–2, 161; O. Goldsmith, *The Life of Richard Nash, of Bath, Esq; Extracted Principally from His Original Papers* (London, 1762).

⁵⁰Eglin, *Imaginary Autocrat*, 230.

⁵¹For Bath's urban renaissance, see P. Borsay, *The English Urban Renaissance: Culture and Society in the Provincial Town 1660–1770* (Oxford, 1989), and his later seminal works, especially P. Borsay et al. (eds.), *New Directions in Urban History: Aspects of European Art, Health Tourism and Leisure since the Enlightenment* (Munich, 2000); P. Borsay, 'Georgian Bath: a transnational culture', in P. Borsay and J.H. Furnée (eds.), *Leisure Culture in Urban Europe 1700–1870* (Manchester, 2016), 93–116. See the bibliographies in Borsay with R. Sweet, *The Invention of the English Landscape, c. 1700–1939* (London, 2025); and R. Sweet and J.H. Furnée, 'Peter Borsay: an appreciation', *Urban History*, 48 (2021), 380–5. For visitor experience, see Revd J. Penrose, *Letters from Bath, 1766–67* (Gloucester, 1983). Women, who could not be included in this article, were influential in Bath's politics, charities, sociability and literary circles. See A.E. Herbert, 'Gender and the spa, space, sociability and self at British health spas, 1640–1714', *Journal of Social History*, 43 (2009), 361–83; Vasset, *Murky Waters*; R.A. McCormack, 'Leisured women and the English spa town in the long eighteenth century: a case study of Bath and Tunbridge Wells', University of Aberystwyth Ph.D. thesis, 2015. For Caroline Herschel's scientific impact, see M. Hoskin (ed.), *Caroline Herschel's Autobiographies* (Cambridge, 2003).

⁵²E. Rack, *Poems on Several Subjects* (London, 1775).

⁵³I. Baird (ed.), *Social Networks in the Long Eighteenth Century: Clubs, Literary Salons, Textual Coterie* (Newcastle-upon-Tyne, 2014); P. Findlen (ed.), *Empires of Knowledge* (London, 2019).

Quaker, London and transnational backgrounds, familiar people and activities emerge. It is now possible to draw a map of Rack's personal networks. They show how once he settled in Bath he developed a step-by-step pragmatic plan. The following narrative is based on evidence that unveils Rack's strategy to establish the BWS and improve society by circulating knowledge.⁵⁴

Earlier, Nash's ascent to power gave Rack a blueprint for his own rise to fame – this time by founding his societies and becoming a leader of Bath's intellectual community. In 1777, he established the BWS, which gave him entrée into the enlightened residential leadership needed to establish his own authority. Its success led to the creation in 1779 of the more select BPS that attracted scientists like Priestley and Herschel and drew international attention.

The BWS still exists today and Rack was confident it would succeed. As an Essex shopkeeper, he had observed the rise and fall of agricultural prices and profits. He saw East Anglian farmers thrive by using new methods, and he knew Somerset's husbandry was outdated.⁵⁵ By 1777, his networks included agricultural reformers and European agricultural societies from Ireland to Russia. He used his knowledge of the publishing world to market his reforms. Historians have overlooked Rack's genius in creating information in many print formats, all crucially printed by Cruttwell.⁵⁶

First, Rack wrote articles calling for agricultural reform. Then, a proposal for a formal society appeared in Cruttwell's *Farmer's Magazine* and the *Bath Chronicle*, along with the Bristol, Salisbury, Gloucester and Sherborne newspapers. In response, 39 people attended the first meeting in November, 1777, including a few grandees and numerous non-elites interested in agriculture. Rack read a supportive letter from Alexander Hunter of the York Agricultural Society, whilst the scientific lecturer, John Arden, offered instruments for experiments.⁵⁷

Members soon led trials on the society's farm and studied Rack's chart of local plants according to Linnaeus' categories. To create regional statistics for his later survey of Somerset, Rack published a list of queries sent to sheriffs and local leaders in four counties. His aim was 'to show the superiority of the Newly Improv'd...mode of Farming...from real facts and Experiments...This', wrote Rack, 'would be of more essential service to the public than whole volumes of theory.'⁵⁸ This crucial step enhanced his development as a reformer and creator of local knowledge.

Rack publicized the new society in annual lists of officers, committees and rules. After the first meeting, a powerful, unnoticed, subgroup drafted Rack's future plan. Tellingly, four of its five members were Rack and Matthews, along with Cruttwell and

⁵⁴The original society was called The Bath Society. The name was changed several times as its goals and membership expanded. Bath & West of England Society, *Rules and Orders of the Society, Instituted at Bath, for the Encouragement of Agriculture, Arts, Manufactures, and Commerce* (Bath, 1777).

⁵⁵[E. Rack], 'An essay on the origin and progress of agriculture in different ages and nations', in *Letters and Papers on Agriculture, Planting &c. Addressed to the Society Instituted at Bath for the Encouragement of Agriculture, Arts, Manufactures, and Commerce within the Counties of Somerset, Wilts, Gloucester, and Dorset, and the City and County of Bristol* (14 vols., Bath, 1780–1816), vol. II, 314–49, at 345.

⁵⁶Today it is the Royal Bath & West of England Society. Plowman, 'Rack', 1–38; K. Hudson, *The Bath & West: A Bicentenary History* (Bradford-on-Avon, 1976).

⁵⁷*The Farmer's Magazine and Useful Family Companion*, 2 (1777); *Bath Chronicle*, 7, 14, 21, 28 Aug. 1777; Plowman, 'Rack', 11, 13.

⁵⁸Plowman, 'Rack', 19–21, 26; *Queries from the Bath Agricultural Society, answers to which are respectfully requested, addressed to the High Sheriff...or to E. Rack, Secretary* (Bath, [1780]).

his brother. As secretary, Rack controlled all communications and was paid £50 a year, plus £30 to use his house for exhibits and books.⁵⁹

Unlike other farming groups, Rack and Cruttwell published the first of 14 volumes of the society's transactions from 1780 to 1816, based on Rack's expanding international correspondence-book. This achievement set the BWS apart from other institutions and contributed to its longevity. The agricultural innovator, Arthur Young, offered public praise: 'A society that does not publish its transactions may be of a partial, limited...utility, but can never diffuse the knowledge it rewards.' Essays, prizes and reports of experiments sent from local contributors won an international reputation for the society. In 1780, Count Komhove, sent by Russia's empress to study British agriculture, examined Rack's exhibition of models and machines. The count joined Bath's society as an honorary correspondent, and sent publications and seeds. Rack and Komhove represent a pattern of go-betweens, who knitted local and transnational societies into an interdependent global community.⁶⁰

The Bath Philosophical Society (BPS)

In 1779, after attending Arden's lectures on Electricity, Air, Chemistry, Astronomy, Hydrostatics and Globes, Rack founded the BPS for 'the Discovery of Truth; and to improve the Mind by reciprocal Communications of Knowledge'. It will be 'quite select', he wrote. 'We admit none but men of...learning in the different branches of science – Myself and Matthews excepted. *We* join to learn wisdom.' Though Rack's journal shows he had well-developed plans for a new institution, he shrewdly gave credit to the wealthy, respected Thomas Curtis from Gloucestershire, whom he called 'the Father of this Society'. Curtis had all the social trappings Rack lacked, including a country house, Bath townhouse, a governorship of the General Hospital and the Pauper Charity, as well as a shared interest in botany. Most important, Rack had groomed Curtis for leadership when he founded the BWS, where Curtis served as its vice president.⁶¹

Figures 2 and 3 list 27 founding members from 1779 to 1787 with their status and occupations. The next section reveals what activities they undertook and how they worked together to create an innovative scientific culture.⁶² Constantine Phipps, Lord Mulgrave (FRS and Fellow of the Society of Antiquaries) held the sole title. A close friend of Joseph Banks, an MP for Huntingdon and a naval commander, this capable man had explored the Arctic regions. A witty socialite and popular speaker,

⁵⁹*Rules and Orders of the Society* (Bath, 1777); Plowman, 'Rack', 13, 20.

⁶⁰*Letters and Papers*; Plowman, 'Rack', 12; DJ, 8 Feb. 1780. See P. Clark, *British Clubs and Societies 1580–1800: The Origins of an Associational World* (Oxford, 2000), for the development of groups like Rack's societies.

⁶¹DJ, 22, 27, 28, 31 Dec. 1779, 8 Feb. [1780]; Turner, *Science*, 67, 89, rule VI; [E. Rack], *A Respectful Tribute to the Memory of Thomas Curtis, Esq* (Bath, 1784), 4; Plowman, 'Rack', 42.

⁶²Turner, *Science*, 81–109 (83 members list, 88–9 rules); T. Fawcett, 'Bath scientific societies and institutions', in Wallis (ed.), *Innovation and Discovery*, 155–7; DJ, 31 Dec. 1779; H.S. Torrens, 'The four Bath philosophical societies 1779–1959', in R. Rolls *et al.* (eds.), *A Pox on the Provinces* (Bath, 1990), 180–8, at 182–3. Torrens added 4 members to the 27 members making in all 12 medical men who formed 40% of the society. The fourth Philosophical Society, now the Bath Royal Literary and Scientific Institution (BRLSI) celebrated its 200th anniversary in 2025, <https://www.brslsi.org/about-us/>, accessed 10 May 2025.

<u>Member</u>	<u>Status/Occupation</u>
1. Hon. Hugh Acland (1728-1805)	Gentry
2. John Arden (1702-1791)	Science lecturer
3. Mr. [Henry] Atwood [1741-1814]	Medicine
4. Charles Blagden (1748-1820) honorary	Medicine
5. John B. Bryant (fl 1779-1792)	Instrument maker
6. James Collings (c 1721-1788)	Gentry
7. Thomas Curtis (c 1739-1784)	Gentry
8. William Falconer (1744-1824)	Medicine
9. John Henderson (1757-1788)	Educator
10. William Herschel (1738-1822)	Astronomer
11. John Coakley Lettsom (1744-1815) honorary	Medicine
12. John Lloyd (1749-1815)	Science lecturer
13. Mathew Martin (1748-1838)	Naturalist
14. William Matthews (1747-1816)	Business (Quaker minister)
15. Caleb Hillier Parry (1755-1822)	Medicine
16. Thomas Parsons (1744-1813)	Artisan
17. Constantine John Phipps (Lord Mulgrave) (1744-1792)	Titled
18. Joseph Priestley (1733-1804)	Clergy (Unitarian)
19. Samuel Pye	Medicine
20. Edmund Rack (1735/1736-1787)	Author
21. Samuel Rogers (1731-1790)	Clergy (Anglican)
22. Benjamin Smith (fl 1779-1807)	Science lecturer
23. John Staker (c 1731-1784)	Medicine
24. John Symons (1740-1811)	Medicine
25. John Walcott (1755-1831)	Geologist
26. John Walsh (1726-1795)	Naturalist
27. William Watson (1744-1824)	Medicine

Figure 2. Bath Philosophical Society – members 1779–87.
Source: A.J. Turner, *Science and Music in Eighteenth-Century Bath, Catalogue of an Exhibition in the Holburne of Menstrie Museum, 22 September – 29 December 1977* (Bath, 1977), 86. A list established by H.S. Torrens.

<u>Member</u>	<u>Status/Occupation</u>	<u>%</u>
Medicine	9	33
Science Lecturer	3	11
Gentry	3	11
Clergy	2	7
Naturalist	2	7
Artisan	1	4
Astronomer	1	4
Author	1	4
Business	1	4
Educator	1	4
Geologist	1	4
Instrument Maker	1	4
Titled	1	4
<u>Total</u>	<u>27</u>	

Figure 3. Bath Philosophical Society – members 1779–87 – status and occupation.

his scientific interests grew out of his explorations and concerns for the welfare of seamen.

Only three gentry joined him at the table: Hugh Acland, the posthumous son of a baronet; James Collings, who attended London's Club of Honest Whigs and whom Rack called 'a walking library'; and Thomas Curtis.⁶³

The clergy supplied just two members: Anglican Samuel Rogers, a published poet with Cambridge degrees and the Unitarian, Joseph Priestley, whose scientific discoveries and religious activism were well known. Yet, dissenters comprised at least nine members, or a third of the BPS, including the expelled Quaker preacher, Matthews, who ran a coal yard and brewery, several Methodists and a Baptist. Tellingly, nine different chapels and meeting-houses bore witness to Bath's religious diversity.⁶⁴

Nine energetic physicians dominated the group including Henry Atwood, Charles Blagden (honorary), William Falconer, John Coakley Lettsom (honorary), Caleb Hillier Parry, Samuel Pye, John Staker, John Symonds and William Watson. Several were dissenters, who had trained in Scotland and were open to social and religious reforms. As they conducted experiments with each other, some gained wealth, status and political office.⁶⁵

Falconer, for example, led trials at the General Hospital on the effects of spa waters by gender and condition and wrote about classics, natural history and cottage design for farmworkers. When Falconer joined Parry (FRS) in testing domestic rhubarb as a cheaper drug alternative, Rack published their results in the 1786 BWS proceedings. Parry, a dissenter, led experiments on Graves disease and observed angina with Edward Jenner. Several doctors held public office. The surgeon, Symonds and Watson became Bath's mayor and were involved in town building speculations. Watson's paper on the blue shark appeared in the Royal Society transactions.⁶⁶

A second medical cluster linked to London featured Charles Blagden, the Royal Society secretary, who accepted Curtis' invitation to join. Blagden shared his ties to Joseph Banks and submitted papers that he likewise read to the Royal Society. Blagden recruited Quaker philanthropist, John Coakley Lettsom, founder of the Medical Society of London, who authored medical, biographical and historical works. BPS physicians had close ties with mainstream science, but were not

⁶³N.A.M. Rodger, Constantine John Phipps, second Baron Mulgrave in the peerage of Ireland and Baron Mulgrave in the peerage of Great Britain, *ODNB*, www.oxforddnb.com, accessed 27 Nov. 2025; Turner, *Science*, 90; DJ, 31 Dec. 1779. Hugh Acland: J. Foster (ed.), *Alumni Oxonienses: The Members of the University of Oxford, 1715–1885* (Oxford, 1887–88); DJ, 31 Dec. 1779; Torrens, 'Four Bath philosophical societies', 183.

⁶⁴Arden, Henderson, Lettsom, Matthews, Parry, Parsons, Priestley, Rack and Walcott were dissenters. Turner, *Science*, 92; P. Ford and R. Rolls, 'Airs and waters', in Wallis (ed.), *Innovation and Discovery*, 26–31. Collinson, *History and Antiquities*, vol. I, 77, lists nine congregations: Lady Huntingdon's, Mr Wesley's, Mr Whitfield's, Baptists, Quakers, Independents, Moravians, Roman Catholics and Unitarians.

⁶⁵R. Rolls, 'Looking for evidence: medicine in Georgian Bath', in Wallis (ed.), *Innovation and Discovery*, 32–41.

⁶⁶A. Borsay 'William Falconer', and S. Glaser, 'Caleb Hillier Parry', both in *ODNB*, www.oxforddnb.com, accessed 27 Nov. 2025; C.H. Parry, 'Experiments relative to the medical effects of Turkey rhubarb, and of the English rhubarbs, No. I and No. II made on patients of the Pauper Charity', in *Letters and Papers*, vol. X1, 431–53; Turner, *Science*, 92, 94; W. Watson, 'An account of the blue shark together with a drawing of same', *Royal Society Philosophical Transactions*, 68 (1778), 789–90.

dependent on metropolitan doctors. They co-existed in a mutually supportive relationship.⁶⁷

Three science lecturers contributed educational experience and far-flung networks throughout Britain. Science lecturing was finally reputable in light of new British discoveries in the sciences. The Welsh philosopher, John Lloyd (FRS), who taught astronomy, and Benjamin Smith, who sold scientific instruments, now joined the Protestant, John Arden, whose Catholic parents had disinherited him and forced him to earn a living. Arden's comprehensive lectures were performed with instruments such as an 'Electrical Orrery of his own invention'. His talks included a separate evening course to 'accommodate People in Business'. Methodist John Henderson, another educator drawn to occult studies, also attended.⁶⁸

Though all members studied nature, Matthew Martin and John Walsh (both FRS) specialized in similar ground-breaking work as professionalization of naturalists took place. Each man published studies of electric fish, laying the foundation for electrophysiology. Bath's 'first geologist', Methodist John Walcott, studied Bath's geological strata filled with Jurassic rocks and fossils. As Walcott climbed peaks with Rack, he explained the origins of artefacts they collected. Walcott's publications, aided by Mathew Martin, influenced future geologists.⁶⁹

A driving force of the BPS was the astronomer, William Herschel, who gave 32 papers from January 1780 to March 1781. His idea that the heavens' chain of development was analogous to the biological system of growth, maturity and death was basically correct. Watson met the self-taught Hanoverian by chance in the street where he had set up a telescope. Herschel first reported his discovery of Uranus to the BPS. Later, Watson gave him access to his London house and introduced him to the royal family.⁷⁰ Herschel also relied on an aspiring soap maker with building skills, John B. Bryant, to help him construct instruments.⁷¹

At the low end of the status spectrum lay Thomas Parsons, son of a Baptist stone cutter, who worked in the family business – a reminder of Nash's rules of mixed social engagement, which lay hidden in other towns, but are revealed in Bath. Parsons studied the origins of fossils and had artistic ambitions. He was the likely author of letters to London journals on natural history topics.⁷²

⁶⁷D.P. Miller, 'Sir Charles Blagden', and J.F. Payne, 'John Coakley Lettsom', both in ODNB, www.oxforddnb.com, accessed 27 Nov. 2025; Turner, *Science*, 86, 88.

⁶⁸Fawcett, 'Science lecturing in Georgian Bath', 147–50, 156, 224; DJ, 22 Dec. 1779; Turner, *Science*, 86; J. Sambrook, 'John Henderson', in ODNB, www.oxforddnb.com, accessed 27 Nov. 2025.

⁶⁹Anon., rev. A. MacConnell, 'Matthew Martin', H.S. Torrens, 'John Walcott', and E.I. Carlyle rev. A. MacConnell, 'John Walsh', all at www.oxforddnb.com, accessed 27 Nov. 2025; Turner, *Science*, 89–90, 93–4; Fawcett, 'Bath scientific societies', 156; Matt Williams, 'Of canals and quarries: the Bath geologists', in Wallis (ed.), *Innovation and Discovery*, 42–3; DJ, 7 Jan. 1780; J. Walcott, *Description and Figures of Petrification Found in the Quarries, Gravel Pits, etc. Near Bath* (Bath, 1779).

⁷⁰F. Ring, 'Telescopes and astronomy, the Herschels in Bath', in Wallis (ed.), *Innovation and Discovery*, 55–69, at 58, 61–3; F. Ring, 'The Bath Philosophical Society (BPS) and its influence on William Herschel's career', *Cosmos and Culture*, 16 (2012), 45–52; Turner, *Science*, 26–7 (Caroline Herschel), 95, 130; E. Winterburn, 'Philomaths, Herschel, and the myth of the self-taught man', *Royal Society Notes and Records*, 68 (2014), 207–25.

⁷¹Turner, *Science*, 87; Ring, 'BPS', 50.

⁷²L.E. Klein, 'An artisan in polite culture: Thomas Parsons, stone carver, of Bath, 1744–1813', *Huntington Library Quarterly*, 75 (2012), 27–51; Turner, *Science*, 90.

At least 9 of the 25 members had to overcome social barriers: Arden, Bryant, Herschel, Lloyd, Martin, Matthews, Parsons, Smith and Rack. As the group's cultural broker in charge of organization, Rack shaped the society's dominant characteristic – its members' diversity and often marginal backgrounds regarding wealth, social status and religion. It is thus useful to ask how this prosopological study fits into the marginality model espoused by Ian Inkster, John Morrell and Arnold Thackray regarding northern Philosophical and Literary Societies.

Their theory suggested that marginal groups such as dissenters, manufacturers and medical men often dominated urban societies in search of increased socio-economic status. BPS colleagues fitted this model in some respects. Yet, Bath's context as a world-class resort that integrated global ideas and groups of people was different.⁷³ Naturally, a leading spa would produce a distinct intellectual environment.

Paul Elliott's concept of the 'creative class' stressed these urban differences and applied the marginality model to Georgian scientific societies. He claimed that the unusual productivity of some disadvantaged social groups was due to their peripheral position in society and their need to express alternative values through cultural activity.⁷⁴

Elliott's model makes sense when we look at a cluster of BPS members who had common interests, but widely different backgrounds. Indeed, three of the most powerful participants, Priestley, Herschel and Watson, worked closely with three members with lower social status, Bryant, Arden and Rack. The six men were brimming with new ideas and reinforced each other's energy, as they built and used scientific instruments.

Bryant, a local soap maker, who was also called an electrician and astronomer, helped Herschel find double stars. He soon became an instrument maker, who created and sold optical devices. Bryant donated his electrical machine that threw out zig-zag streams of lightning from the end of the conductor and cost over £100.⁷⁵

On 31 December 1779, Rack attended Bryant's demonstration of his machine assisted by Herschel, Watson and Arden. A week later, Bryant presented his 'new & very curious experiments' at the society's meeting. Rack thought 'some of them were quite new & astonishing, such as firing pistols, ca[r]tridges, &c, & lighting candles by electrical sparks'. Astronomy and electricity thus drew members together and gave marginal men status.⁷⁶ Arden also grew in stature as he lectured on the value of experiments as 'the most effectual Means speedily to improve all arts and sciences'.⁷⁷

Behind every discussion lay the manager, Rack, who bound the sub-group into a collaborative unit. As a marginal man himself, in regard to religion and socio-economic

⁷³I. Inkster, *Scientific Culture and Urbanisation in Industrialising Britain* (Aldershot, 1997); A. Thackray, 'Natural knowledge in cultural context: the Manchester model', *American Historical Review*, 79 (1974), 672–709; I. Inkster and J. Morrell (eds.), *Metropolis and Province: Science in British Culture 1780–1850* (London, 1983); P. Elliott, 'The origins of the "creative class": provincial urban society, scientific culture and socio-political marginality in Britain in the eighteenth and nineteenth centuries', *Social History*, 28 (2003), 361–87, at 381, shows that Manchester's founders were at least 17% urban gentry and 32% Anglican clergy. Bath was more like York, Norwich, Nottingham and Derby regarding its focus on improvement and inclusivity.

⁷⁴Elliott, 'The origins', 375–81.

⁷⁵Ring, 'BPS', 50; Ring, 'Telescopes and astronomy'; Fawcett, 'Bath scientific societies'; and F. Fawcett, 'Biographical notes', in Wallis (ed.), *Innovation and Discovery*, 55–69, 156–7, 203; Turner, *Science*, 87.

⁷⁶DJ, 31 Dec. 1779; 7 Jan. 1780; 14 Jan. 1780.

⁷⁷Turner, *Science*, 86.

status, Rack fostered interactions between creative members with complementary viewpoints. Their presence suited his Quaker tolerance and access to social networks of men with unconventional backgrounds. The result was a group who built social relationships through scientific experiments.

BPS founders also boldly networked with outsiders. In 1782, Collings and Watson undertook industrial espionage of a rival steam engine in Radstock, near Bath on behalf of Matthew Boulton and James Watt. Collings attended a Lunar Society meeting, whilst Watson sponsored Watt's election to the Royal Society. The latter, Rack crowed publicly, had only five members at its start 'and those five not superior in learning and genius to most of our members'.⁷⁸ Thus, Rack used the society to foster pride in Bath and its educated citizens.

Rack's pivotal role as a cultural broker cannot be ignored. As secretary, he was literally at the centre of Bath's cultural networks, receiving mail, guests and 'sealed papers drop't in a Box for discussion'.⁷⁹ 'Original Essays' were encouraged, as well as 'candid Criticisms on new scientific and philosophical Publications and new translations from Foreign Authors'. Rack controlled content by suggesting topics he knew well. He did this openly and secretly through anonymous letters or dropping hints to friends. Hence, Herschel's first talk was about measuring the growth of corallines, not astronomy. Rack's journal reveals that he had asked Herschel to present it after gaining access to a book on the topic, so he appeared to be an expert at the meeting.⁸⁰

Rack's literary achievements

By the 1780s, Rack had become a respected author. At least 20 publications covered subjects from turnips to personal salvation. Rack's *Mentor's Letters* had sold 3,000 copies in four editions by 1785.⁸¹ His *Essays, Letters and Poems* of 1781 recycled his anonymous London writings and had several hundred subscribers.⁸² Rack's editorship of the agricultural society's transactions established him as an author with transnational influence.

In 1788, Rack's 'Essay on the origin and progress of agriculture' was a crowning achievement. It included current research reports from foreign societies including the Dublin society, 15 French societies and their 20 allied groups, the societies of Russia, Sweden, Italy, Spain and Germany and visitors studying agriculture from Sardinia, Poland, Denmark and the duchy of Wirtemberg. Finally, Rack's annual lists of honorary and corresponding members proclaimed his transnational networks.⁸³

Rack's literary reputation also spread to America. From 1786 to 1789, his essays were reprinted in the *American Herald*, making him its most frequently published author. Rack's involvement with Cruttwell's publications gave him constant access to

⁷⁸H.S. Torrens, 'The Winwoods of Bristol: part 1, 1767–88', *Bristol Industrial Archaeology Society Journal*, 13 (1980), 9–17, at 11, 13; Torrens, 'Four Bath philosophical societies', 183; Fawcett, 'Bath scientific societies', 156–7; DJ, 31 Dec. 1779.

⁷⁹DJ, 27, 28, 31 Dec. 1780; Turner, *Science*, 88–9.

⁸⁰DJ, 4, 5, 13, 14, 21, 28 Jan. 1780; Turner, *Science*, 95; J. Ellis, *An Essay towards the Natural History of the Corallines* (London, 1755).

⁸¹Rack, *Mentor's Letters* (2nd edn, Bath, 1777; 3rd edn, Bath, 1778; 4th edn, Bath, 1785).

⁸²E. Rack, *Essays, Letters and Poems* (Bath, 1781).

⁸³[Rack], 'Origin and progress of agriculture', 339–45; *Rules, Orders, Premiums of the Bath Agricultural Society* (Bath, 1788).

international news. For example, the *Bath Chronicle* discussed the Declaration of Independence soon after its appearance.⁸⁴

Rack's role as an innovator of local knowledge practices is best seen in his survey of Somerset made in the 1780s for inclusion in Joseph Collinson's *History and Antiquities of the County of Somerset* (1791). Reverend Collinson (1757–93), an antiquarian from Cirencester, had attended Oxford, but knew little about publishing. He depended on Rack's local knowledge and networks, whilst Rack needed to earn money after a financial loss in 1781.⁸⁵

Rack based his survey on what he deemed scientific methods. In order to obtain onsite data, he visited 451 parishes on horseback over a five-year period, despite debilitating asthma. He also sent questionnaires to landholders and interviewed people of all ranks. Then, he recorded data in a set order of subject heads on to portable paper slips. Perhaps, he knew that Linnaeus used paper slips for his classification scheme, for Rack was a member of London's Natural History Society, the forerunner of the Linnaean Society.⁸⁶

With Cruttwell's help, Rack chose the production team using his local and London networks of farmers, landowners, artisans, artists, engravers, printers and publishers. Rack also gained hundreds of subscribers for Collinson's book.⁸⁷ In writing history, Rack wrote Collinson, 'we wish not to be content with mediocrity, when excellence can be attained'.⁸⁸

Rack paid a high price for distinction. He died at age 51, worn out by travel, before Collinson's country history was published. Sadly, Collinson omitted most of Rack's information in his scholarly tome, a sign of lingering tension between antiquarians and practitioners. Collinson had a traditional view of what constituted local knowledge, and who had the right to spread it. He praised Rack's abilities in the Bath section of his *History*, but also cited his humble parentage and 'the servilities of his station'.⁸⁹ Though Rack was respected by Bath's scientific community, Collinson was resistant to Rack's new research methods. This fact makes Rack's achievements even more remarkable. His original 'Survey' was finally published for the first time in 2011 by dedicated Somerset historians. Happily, his paper slips still survive.⁹⁰

⁸⁴Pitcher, 'Many pseudonyms', 281; *Bath Chronicle*, 22 Aug. 1776.

⁸⁵For the next sections, see Bristol Archives, MSS 32835, boxes 32a–c, uncatalogued papers, topographical notes and letters; Thomas Bonnor letters 1781–87, MSS 32835, box 32d. I thank Mary Milton for assistance. For Rack's previously unpublished survey, see M. McDermott and S. Berry (eds.), *Edmund Rack's Survey of Somerset*, Somerset Archaeological and Natural History Society (Taunton, 2011); J. Stobart, review, *Economic History Review*, 65 (2012), 1170–2; M. McDermott, 'Were Somerset parish churches physically neglected in the eighteenth century? An examination of the evidence in Edmund Rack's survey of Somerset', in A. Webb and A.F. Butcher (eds.), *Writing the History of Somerset* (Wellington, 2018), 161–76; Collinson, *History and Antiquities*, vol. I, ix, 81. The financial loss was due to an advisor's bankruptcy.

⁸⁶M. Krajewski, *Paper Machines: About Cards & Catalogs* (Cambridge, 2011); Society for Promoting Natural History, *Rules* (London, 2014), 1–53; The Linnean Society, <https://www.linnean.org/news/2020/08/26/the-linnean-society-s-precursor>, accessed 29 Nov. 2025; S. Müller-Wille and S. Scharf (eds.), *Indexing Nature: Carl Linnaeus (1707–1778) and His Fact-Gathering Strategies* (London, 2009). I thank Anthony Grafton for references to seventeenth-century users of paper slips.

⁸⁷There were almost 800 subscribers.

⁸⁸Bristol Archives, Bonnor Letters 1781–87, MSS 32835, box 32d, fols. 2, 55.

⁸⁹Collinson, *History and Antiquities*, vol. I, 77.

⁹⁰McDermott and Berry (eds.), *Survey*; *The Critical Review, or, Annals of Literature* (May 1793), 60.

Rack's role as cultural broker in Bath

Scientists like Priestley knew Rack was creating an innovative scientific community. Their respect for his leadership sends a signal that though we may find an unschooled Quaker an odd master of knowledge, they did not. And though we may find Bath an unlikely place for learning, they viewed it as an ideal time and place in which to implement Rack's vision of creating the BPS. For decades, Bath had welcomed social and economic change.⁹¹ Rack's self-education, outsider status and a political crisis helped him appreciate the spa's readiness for a scientific society. Thus, he was able to see the town anew from fresh angles.

Historians, too, can revise the way they write about Bath without relying on the well-worn framework of politeness. Like Grendi, they can use normal exceptions to discover local answers to big questions posed by Rack's achievements. How and why does knowledge circulate in eighteenth-century towns? How does it cease to be the exclusive property of elite individuals and become the possession of wider groups of people?⁹² What roles do cultural brokers play in creating local knowledge?

Rack would agree that 'enlightened science...would not have been possible without intellectual actors at the geopolitical peripheries, who were clever enough to be able to carve out roles as mediators and cultural interlopers, who...made possible the expansion of knowledge...on a scale that would have been inconceivable without them'. Clearly, Rack was a cultural broker, who bridged the tensions among three different cultures – East Anglian Quakerism, London's literary and print worlds and a transformed Bath seeking an enlightened society. He saw knowledge as a form of communication to be produced locally and then transferred to and from the wider world. The result was a global marketplace, where Bath was copied at home and abroad. At the same time, Bath absorbed and adapted French fashions, Italian music and ideas from its global visitors.⁹³

Rack's engagement with this marketplace reveals hidden links between his pre-Bath and later lives, as well as the rise of dissent, including rational Quakerism. These ties have become visible by using micro- and macro-analysis to explore Rack's religious, London and transnational contexts. With this added information, a new description of Rack's character emerges. No longer seen as a friendless stranger, who drifted into Bath by chance, anxious to fit into polite norms, he arrived as a man of letters with a mission. Once in town, he moved quickly to bring philosophical debate, economic improvement and social reform to Bath. Colonial affairs, including slavery, were also primary concerns.

New sources reveal how Rack developed his strategic plan. In fact, Rack spread knowledge in every stage of his life: first by absorbing Quaker habits of serial meetings, writings and networks; then by making knowledge in London's print world to recycle later in Bath. Rack's societies created spaces for intellectual discussion, public demonstrations and scientific experiments, which he advertised in the media. Finally, both parts of his life fused together as he surveyed his county, using skills and contacts gained in London.

Like Nash, Rack knew the spa was a perfect location for the social integration of exciting new forms of leisure. His societies included medical men interested in

⁹¹Borsay and Torrens also wrote tellingly about Bath's strong intellectual culture. This article uses the history of knowledge as a lens through which to view the city.

⁹²J. Secord, 'Knowledge in transit', *ISIS*, 95 (2004), 654–72, at 655.

⁹³C. Hesse, 'Towards a new topography of Enlightenment', *European Review of History*, 13 (2006), 499–508; Borsay, *Georgian Bath*, 93–116.

research, geologists searching for fossils, naturalists collecting flora and instrument makers, who sold telescopes. In fact, 'the town which...drew the largest audiences for science lectures...was not Birmingham, or Manchester, but Bath'. Members of Rack's societies ranged from a titled man to an artisan. Hence, Mr Thomas Parsons, a Baptist stone cutter, was invited to join the BPS.⁹⁴ My work thus challenges the trickledown theory of knowledge. As Rack functioned as a cultural broker, knowledge flowed in all directions.

In keeping with the diversity that was key to eighteenth-century urbanism, Bath enjoyed a unique scientific culture. Its cultural institutions were stimulated by its exclusive role as the premiere international and national resort. Bath was also a magnet for consumption, including scientific knowledge, which was seen as a way to improve society. People with money and leisure lived in a world-class townscape in an electrifying atmosphere that threw off zig-zag sparks and excitement, just like Bryant's machine.

Bryant's transformation from a soap maker to an inventor of optical instruments confirms that science was a pathway to social mobility in Bath. Members with a range of peripheral backgrounds, who started as minor participants, became major assets to men like Herschel and Priestley, likely throughout Britain. They slip into view in Bath because Rack encouraged interactions between men with different backgrounds and skills.

As they shared their creativity, former marginal men gained respect and their intellectual interests over-rode socio-economic differences. The result was a group who forged social relations through science and were welded into a scientific community. It was, therefore, possible for Rack to attract 27 talented colleagues, who wished to create local knowledge and send it across the globe.⁹⁵

The BPS laid foundations for later scientific groups based on enlightened debate. Four societies and a mechanics' institute existed before the 1820s, and both of Rack's societies still survive. Herschel's discovery of Uranus was reported first to the Bath Society. Then his paper was read by Watson to the Royal Society and won a Copley medal. At least 11 founders of the Bath Society were later elected to London's Royal Society or helped create new ones.⁹⁶

This article has claimed that eighteenth-century Bath was an ideal time and place for Rack to launch the BPS. It has also suggested that in the process of its founding, the knowledge the society generated was no longer the sole property of elites, but was created and consumed by valued colleagues, who had once been considered as marginal men. Rack's societies show the strength of Britain's provincial science. Before the Manchester and Newcastle societies even met, Rack had discussed electricity with Herschel and Priestley. He joins the global phenomenon of entrepreneurial go-betweens who became masters of knowledge over time and space.

⁹⁴Porter, 'Science, provincial culture', 33; Klein, 'An artisan in polite culture'.

⁹⁵P. Burke, *What Is the History of Knowledge?* (Cambridge, 2016).

⁹⁶BRLSI, <https://www.brlsi.org/about-us/>; Torrens, 'Four Bath philosophical societies; Turner, *Science*, 94, 130.