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JAMES PETIVER'S 'JOYNT-STOCK': MIDDLING AGENCY IN URBAN COLLECTING NETWORKS

by

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This article explores the complexities of James Petiver and Hans Sloane's relationship with one another and their shared contacts, examining the ways in which their networks overlapped but also, crucially, differed from one another. It shows that, though they had common interests and institutional memberships, Petiver ultimately occupied a different urban world from Sloane, a middling, trade-orientated stratum of society with its own forms of sociability and business, credit and advancement. It was this position that helped Petiver bridge a range of gaps in elite scholarly exchange, making himself indispensable through his effective mediation between different urban groups and access to spaces beyond Sloane's reach. It argues that greater attention needs to be paid to the imbrication of middling interests and agencies that operated across London's natural history communities, in order to prompt us to think more carefully about the strategies and interests of those who tried to navigate them.

Keywords: Hans Sloane; James Petiver; collecting; urban; agency; networks; natural history

INTRODUCTION

As the eponymous Transactioneer in William King's early eighteenth-century satire, the thinly veiled caricature of Hans Sloane, is made to exclaim:

> And Mr. Pet—r is, Gad he is every thing. He's the very Muffti, the Oracle of our Club. For my part I never saw any thing like him exactly … Sir, he and I are all one. You must know we club Notions, laying them up in a kind of Joynt-Stock, and have all things in common: Sometimes he draws, and sometimes I, as we have occasion. But he pays in most plenteously. By my good-will I would never be without him. I call him the Philosophick *Sancho*, and he me *Don*. I own I have learnt more of him than ever I did at Orange, or any where else.[1]

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1 William King, *The Transactioneer* (London, 1700), p. 34, available from Early English Books Online, https://eebo.chadwyck.com/home (accessed 27 March 2019).

Though undoubtedly designed to insult both parties, King's description of their personal and professional friendship is revealing in its formulation. This Sloane calls the apothecary James Petiver his 'Muffti'—a chief priest, created by a Turkish emperor. Petiver is placed in the role of a servant, a favoured courtier whose power comes from a seemingly mystical foresight. This has, essentially, defined how contemporaries and historians have assessed Sloane and Petiver's joint collecting activities and public image. In return for the innumerable 'baubles' and 'trinkets' he supplied to Sloane, and the business he undertook on his behalf, Petiver was able to gain positions within valuable spaces for 'proper' scholarly exchange, such as the Royal Society and the Chelsea Physic Garden. He showed off these social advantages through the *Philosophical Transactions* as well as his own catalogues, including the *Musei Petiveriani,* printed from 1695 to 1703 (both of which publications *The Transactioneer* repeatedly pillories).[2]

Whereas Arnold Hunt and others have lately challenged the notion that Petiver was disorganized and unscholarly, this article is concerned with exploring the interests and attitudes that underlie such assertions.[3] For King, the assumed parity created by Petiver's public pretensions and Sloane's private dependency represented a laughable reversal of roles between master and servant, scholar and tradesman. This complaint was founded in a popular contemporary concern regarding the wider disruption wrought on society by commerce, characterized by the growing power of merchants and shopkeepers (not least apothecaries such as Petiver) and risky new financial schemes, as well as forms of capital and credit that allowed them to swindle their unsuspecting customers.[4] The 'joynt-stock' company, for example, was an increasingly powerful form of urban association, with individuals organizing themselves for the purpose of conducting international trade, pooling resources, sharing risk, diversifying investments and increasing profits.[5] Many early modern guilds, such as the Stationers' Company and the Society of Apothecaries, set up such stock companies to oversee 'the production of a politically sensitive product that was relatively new to the marketplace and had considerable potential for financial gain.'[6] King was therefore using 'joynt-stock' explicitly to mock Sloane and Petiver, alluding to the uneasy elision of modern commerce and sub-standard scholarship he saw in their acquisitive alliance, and echoing wider criticisms of the 'Projecting Humour' of the age and, specifically, the Royal Society.[7]

2 Zacharias Von Uffenbach, *London in 1710: from the Travels of Zacharias Von Uffenbach* (trans. and ed. W. H. Quarrel and M. Mare), p. 135 (Faber & Faber, London, 1934); Raymond P. Stearns, *James Petiver: promoter of natural science* (Proceedings of the American Antiquarian Society, Worcester, MA, 1952).

3 Arnold Hunt, 'Under Sloane's shadow: the archive of James Petiver', in *Archival afterlives: life, death and knowledge-making in early modern British scientific and medical archives* (ed. Vera Keller, Anna Marie Roos and Elizabeth Yale), pp. 194–222 (Brill, Leiden, 2018).

4 John Smail, 'Credit, risk and honour in eighteenth-century commerce', *J. Br. Stud.* **44**, 439–456 (2005); Anne L. Murphy, *The origins of the English financial markets: investment and speculation before the South Sea Bubble* (University of Cambridge Press, 2009); Jonathan Sheehan and Dror Wahrman, *Invisible hands: self-organisation and the eighteenth century*, ch. 3 (University of Chicago Press, Chicago, 2015).

5 William A. Pettigrew and Tristan Stein, 'The public rivalry between regulated and joint stock corporations and the development of seventeenth century corporate constitutions', *Hist. Res.* **90**, 341–362 (2017).

6 Anna Simmons, 'Trade, knowledge and networks: the activities of the Society of Apothecaries and its members in London c.1670–c.1800', *Br. J. Hist. Sci.* **52**, 273–296 (2019); Samuel Garth, *The Dispensary* (London, 1699), available from Early English Books Online, https://eebo.chadwyck.com/home (accessed 27 March 2019); Penelope K. Corfield, 'From poison peddlars to civic worthies: the reputation of apothecaries in Georgian England', *Social Hist. Med.* **22**, 1–21 (2009).

7 Daniel Defoe, *An Essay Upon Projects* (London, 1697), p. 24, available from Early English Books Online, https://eebo.chadwyck.com/home (accessed 27 March 2019); James Delbourgo, 'Listing people', *Isis* **103**, 735–742 (2012); Richard Coulton,

Recent scholarship has emphasized the importance of shared systems of exchange to the history of early modern scientific work. Whether corporate and somewhat regulated or loose, informal and opportunistic, mutual personal and professional interests moved objects and information from around the world across ever-shifting commercial and scholarly networks.[8] Sloane's and Petiver's correspondence overlapped extensively, yet there are interesting disparities in how they interacted with shared correspondents and proximal institutions, revealing their different urban experiences, objectives and strategies for acquiring material, as well as their perceived identities. This article examines their relationship in more detail and, in doing so, complicates our understanding of the structures of early modern exchange and the role of middling 'agency' in the circulation of knowledge.

We know that agents or 'go-betweens' acted with varying levels of authority and agency within a wide range of political, commercial and scholarly networks: that is, with the ability to represent and work in their own interests as well as on behalf of others, usually their social superiors.[9] The most successful intermediaries were those who could broker relations between different groups, enabling them to enrol others into the systems of power and knowledge within which they themselves operated. The more contacts that intermediaries could gather on behalf of their patrons, the better able they were to ingratiate themselves. But it is important to remember that agents sought such connections on their own terms, acting in their own interests as much as those who sponsored or supported them. These interests were determined by their own social and emotional frameworks, as well as interconnecting, changing and occasionally conflicting cultures of advancement.[10]

We need to think in more detail about how the local—and particularly the urban—influenced early modern natural history exchange, beyond the mere provision of fodder for elite scholars. Valentina Pugliano has recently asserted the importance of considering apothecaries in terms of different qualities of exchange and status within the shop-visiting 'Republic of Naturalists' (a phrase coined by Pugliano), connected but separate from the Republic of Letters: 'throughout the period it became common even for apothecaries and physicians indifferent to the study of nature to resort to the expanding natural historical network for their professional work, requesting from naturalists recipes, rare ingredients, and newly printed pharmacopoeias.'[11] Examining the many different ways in which urban

'"The Darling of the Temple-Coffee-House Club": science, sociability and satire in early eighteenth-century London', *J. Eighteenth-Cent. Lond.* **35**, 43–65 (2012); Mordechai Feingold, 'Projectors and learned projects in early modern England', *Seventeenth Cent.* **32**, 63–79 (2017); Koji Yamamoto, *Taming capitalism before its triumph: public service, distrust, and 'projecting' in early modern England* (Oxford University Press, 2018).

8 Alice Marples and Victoria Pickering, 'Patron's review: exploring cultures of collecting in the early modern world', *Archs Nat. Hist.* **43**, 1–20 (2016).

9 Marika Keblusek and Badeloch Noldus (eds), *Your humble servant: agents in early modern Europe* (Uitgeverij Verloren, Hilversum, 2006); Simon Schaffer, Lissa Roberts, Kapil Raj and James Delbourgo (eds), *The brokered world: go-betweens and global intelligence, 1770–1820* (Science History Publications, Sagamore Beach, 2009); Brinda Charry and Gitanjali Shahani (eds), *Emissaries in early modern literature and culture: mediation, transmission, traffic, 1550–1700* (Routledge, Abingdon, 2009); Marika Keblusek, 'Mercator sapiens: merchants as cultural entrepreneurs', in *Double agents: cultural and political brokerage in early modern Europe* (ed. Marika Keblusek and Badeloch Noldus) (Brill, Leiden, 2011).

10 Elisabeth Heijmans, 'The agency of empire: personal connections and individual strategies in the shaping of the French early modern expansion (1686–1746)', PhD thesis, Leiden University (2018); Hannah Wills, 'Joseph Banks and Charles Blagden: cultures of advancement in the scientific worlds of late eighteenth-century London and Paris', *Notes Rec. R. Soc. Lond.* **73**, 477–497 (2019) (doi:10.1098/rsnr.2018.0060).

11 Valentina Pugliano, 'natural history in the apothecary's shop', in *Worlds of natural history* (ed. Helen Anne Curry, Nicholas Jardine, James Andrew Secord and Emma C. Spary), p. 51 (Cambridge University Press, 2018); Florike Egmond, 'Apothecaries as experts and brokers of knowledge in the sixteenth-century network of the naturalist Carolus Clusius', *Hist. Univ.* **23**, 59–91 (2008);

networks interacted with scholarly ones not only improves our understanding of the knowledge culture of the early modern city, but also nuances our discussion of authority, agency, and mediation in international exchange.[12]

This exploration of Petiver and Sloane does not assume an inherent social hierarchy that could be subverted (and, thus, ridiculed), but rather interrogates the complexities of their working relationship with one another and their shared contacts. It will demonstrate that, though they had common interests and institutional memberships—and do seem to have been genuine friends—Petiver ultimately occupied a different urban world from Sloane, a middling, trade-orientated stratum of society with its own forms of sociability and business, credit and advancement. It was this position that helped Petiver bridge a range of gaps in elite scholarly exchange, making himself indispensable through his effective mediation between different urban groups. His commercial occupation and local associations gave him a better understanding of how to behave in certain spaces and with certain people who might otherwise be hostile (or at least utterly indifferent) to scholars. Sloane's perceived high social status and centrality meant that certain contacts and networks were closed to him—on the basis of propriety—but, crucially, these remained open to Petiver.[13] Such discussion is not intended to reaffirm the traditional separation between commerce and scholarship, but rather to illuminate the imbrication of interests and agencies that operated across London's 'Republic of Naturalists'. It helps explain why Petiver was, in the words of Arnold Hunt, remarkably 'explicit about the quid pro quo that [collecting] entailed', and sometimes even highlighted his trade background, as when he dismissed Baron von Uffenbach's special introduction 'on the pretext that he had to be in the Hall of the Society [of Apothecaries] by nine o'clock'.[14] Uffenbach underestimated the significance of these kinds of professional activities for a tradesman such as Petiver.

Petiver's status was not primarily dependent on his adoption of certain social codes, but rather on how he made use of his professional contacts and middling friendships in pursuit of his own interests, something that could either help or hinder his more scholarly associates.[15] In this, his activities reflect the inherent double-meaning of the word 'agent', and the significant expansion of the concept in the early eighteenth century, partly influenced by financial developments.[16] It is therefore quite possible that Sloane and Petiver understood themselves as 'Brother Transactioneers' or colleagues in a quasi-commercial undertaking, each with their own responsibilities, networks and functions, their private interests brought

Dániel Margócsy, *Commercial visions: science, trade, and visual culture in the Dutch Golden Age* (University of Chicago Press, 2014).

12 Jim Bennett and Rebekah Higgitt, 'London 1600–1800: communities of natural knowledge and artificial practice', *Br. J. Hist. Sci.* **52**, 1–14 (2019).

13 The question about the relative status and wealth of Sloane and Petiver during the 1690s and 1700s (before Sloane's fame sky-rocketed in the 1710s with his ascent to a baronetcy) is an interesting one. Though famed as a published author, Sloane had come from a relatively modest Irish upbringing and initially trained as an apothecary. His wealth came, largely, from his wife's plantation expanded through investment: James Delbourgo, in *Collecting the world: the life and curiosity of Hans Sloane*, pp. 186–190 (Allen Lane, London, 2017). As a popular apothecary, Petiver was likely to have been well-off, yet regularly requested money for specimens and certainly suffered a series of financial disappointments in the early 1700s, the stress of which damaged his health: Stearns, *op. cit.* (note 2), p. 248.

14 Hunt, *op. cit.* (note 3), p. 199; Uffenbach, *op. cit.* (note 2), p. 135.

15 Patrick Wallis, 'Competition and cooperation in the early modern medical economy', in *Medicine and the market in England and its colonies, c.1450–c.1850* (ed. Mark Jenner and Patrick Wallis), (Palgrave Macmillan, Basingstoke, 2007).

16 Nathan Bailey's *Dictorium Britannicum: or more compleat universal etymological English dictionary* (London, 1736) contained eight varying definitions ranging across social, corporeal, natural and metaphysical realms of early modern life. See also: Sheehan and Wahrman, *op. cit.* (note 4), p. 77–78.

together for shared profit in a 'joynt-stock'.[17] It was Petiver's distinctive ability to work flexibly between ranks and across spheres that ensured his importance to Sloane as well as many others across London's natural history communities and beyond.

Middling nature

James Petiver's social environment was that of an upwardly mobile urban tradesman of the middling sort. One of the many points of consternation for William King was that Petiver was 'the Darling of the Temple-Coffee-House-Club,' a club of botanically inclined Royal Society Fellows who met to discuss and exchange plants. This club was certainly, as Richard Coulton describes, a distinctly metropolitan entity 'in which relationships between learning, aspiration and urbane sociability were constructed and exploited by men such as Petiver.'[18] Yet this was only one such space in which Petiver was able to further his botanical and collecting interests. In July 1706, Petiver wrote to fellow apothecary Samuel Doody: 'Sir, You are desired to meet some Friends at the Shipp Ale house in Butchers Row Temple Barr tomorrow night at 7 in order to resolve on our General Herbarizing.'[19] Doody, another member of the Temple Coffee House Club, had been elected to the Royal Society alongside Petiver on 27 November 1695. These elections were thanks, in part, to their services to Sloane: King's Transactioneer states that Petiver is 'a F. of the R. S. indeed! I made him so. 'Tis my way of Rewarding my Friends and Benefactors. We may begin to call it Our Royal-Society.'[20] It is unclear whether the Temple Club had disbanded by the point that *The Transactioneer* was published in 1700, but Petiver and Doody chose to meet at an ale-house close to the site to begin a collecting trip, likely an official outing of the Society of Apothecaries. Local herborizing had been an essential component of an apothecary's training and social life since its popularization in the early seventeenth century by Thomas Johnson and John Parkinson.[21] Petiver's continuing practice of herborizing with other middling merchants, apothecaries and surgeons was just one of the ways in which his social world overlapped yet remained distinctive from Sloane's.

Another note in Petiver's hand reads: 'Sirs we meet this evening between 6 & 7 at Waltons Coffee house in Warwick lane the corner of Newgate Markett in order to goe from thence to morrow morning at 4 of the Clocke to Chistlehurst bogg a herbarizing.'[22] It is addressed to 'Mr. Dandridge, Mr. Miller, Mr. Tindsley and Boucher', all of whom Petiver would have previously encountered through his professional duties, and this example thus serves to illuminate part of Petiver's urban and associational environment. It is not clear who Mr Tindsley was; the 'Miller' in question is either a young Philip Miller, the Southwark seedsman who would become head gardener of Chelsea Physic Garden and author of the extremely popular *Gardeners Dictionary*, or else his father, a Scottish market gardener in

17 Andrea Wulf, *The brother gardeners: botany, empire and the birth of an obsession* (Windmill, London, 2008).

18 Coulton, *op. cit.* (note 7), p. 47.

19 James Petiver, letter to Samuel Doody, 16 July 1706, Sloane MS 3335, f. 28, British Library, London.

20 'My humble service to the clubb particularly to Mr Charleton, Dr Robinson & Mr Doody': British Library, Sloane MS 4036, f. 126: William Sherard to Hans Sloane, 11 June 1692; King, *op. cit.* (note 1), p. 33.

21 Thanks to the efforts of John Ray, too, it was slowly becoming enfolded into scholarly medical teaching at the English universities: Stuart Max Walters, *The shaping of Cambridge botany*, ch. 2 (Cambridge University Press, 1981); T. D. Whittet, 'Sir Thomas Clarges, apothecary and envoy', *J. R. Soc. Med.* **81**, 464–467 (1988).

22 James Petiver, undated note, Sloane MS 3336, f. 11, British Library, London.

Deptford.[23] Joseph Dandridge was a silk-painter who lived in Moorgate near his close friend Petiver, and they have been collectively described as the 'first generation of great British entomologists.'[24] In 1709, Petiver reported to the Royal Society that Dandridge had collected 1850 English insects, and Emmanuel Mendes da Costa later recalled that Dandridge 'had a fine collection of natural history, as fossils, birds, shells, &c.; but his chief display was in insects, well kept and judiciously arranged, and shewed them with great pleasure, and with instruction.'[25] Though Dandridge appears to have had no desire to become a Fellow of the Royal Society, Petiver regularly celebrated and supported his collecting. One of the stranger plates in Petiver's *Gazophylacium* (London, 1706) is dedicated to his 'Curious Friend' Dandridge (figure 1). In 1715, Petiver wrote to his long-suffering engraver, H. Terasson (who contributed to Petiver's 1717 *Papilionum Britanniae*) that he 'had some of Mr Dandridges Butterflies by me this month for you to grave & wonder you bring me not the 2 plates.'[26] After Petiver's death, John Lyle of Bristol wrote to Sloane to retrieve some of his manuscripts, writing also: 'I presume Sir I need not acquaint you that Mr Dandridge had a Bird of Mr Petivers to preserve for him wch I forgot to mention before.'[27] Dandridge also instructed Eleazar Albin in watercolours, allowing him to make brilliantly coloured copies of the drawings, insects and natural objects. In 1698, when the Royal Society clerk Jezreel Jones was given £100 by the Council for an expedition to Africa, the 'Barbary Drawings' Albin created of his collections allowed Sloane to keep a personal record of objects kept both inside and outside of the Repository.[28] Dandridge must have kept up all these connections for, 36 years after his trip with Petiver, he passed on his good wishes to Sloane in a letter to Joseph and Philip Miller.[29]

It seems likely that the other person on this herborizing trip was George Boucher, a surgeon later stationed in Port Mahon who contributed extensively to both Petiver and the Bishop Henry Compton's collections, and whose Balearic plants would eventually end up in the Sloane Herbarium.[30] In 1715, Petiver and Boucher travelled together from London

23 Hazel Le Rougetel, 'Philip Miller (1691–1771)', in *Oxford dictionary of national biography* (doi:10.1093/ref:odnb/18734) (accessed 8 January 2019); Richard Coulton, 'Curiosity, commerce, and conversation in the writing of London horticulturalists during the early-eighteenth century', PhD dissertation, Queen Mary University of London (2005).

24 Dandridge was a member (and possibly a founder) of the Aurelian Society, which used to meet at the Swan Tavern in Change Alley: David Elliston Allen, *The naturalist in Britain*, pp. 11–12 (Princeton University Press, 1976); Michael A. Salmon, *The Aurelian legacy: British butterflies and their collectors*, p. 101 (University of California Press, Berkeley, 2000).

25 Journal Book, JBO/11/f. 173, 13 July 1709, Royal Society, London; 'Notices and Anecdotes of LITERATI, COLLECTORS, &c. from a MS. by the late MENDES DE COSTA, and collected between 1747 and 1788', in *Gentleman's Magazine*, **111**, 514 (1812).

26 James Petiver, letter to H. Terasson, 12 May [1715], Sloane MS 3340, f. 141, British Library, London. See also: Richard Vane-Wright essay in this issue.

27 John Lyle, letter to Hans Sloane, 10 July 1718, Bristol, Sloane MS 4045, f. 129, British Library, London.

28 Alice Marples, 'Scientific administration in the early eighteenth century: reinterpreting the Royal Society's repository', *Hist. Res.* **92**, 12 (2019); 'Barbary: collections of its productions, with drawings by J. Jones and E. Albin', Sloane MS 4003, ff. 17–24, British Library, London. For Albin's copies of Jones' originals of Barbary insects, see: A. W. Franks's unpublished copy of Sloane's 'Miscellanies' catalogue (n.d.), British Museum, Department of Britain, Europe and Prehistory; Peter Murray Jones, 'A preliminary check-list of Sir Hans Sloane's catalogues', *Br. Libr. J.* **14**, 38–51 (1988). Unfortunately for Dandridge, Albin used many of his watercolours and notes on London spiders without permission for his own work: British Library, Sloane MS 3999: Joseph Dandridge, 'Description of English Spiders Captured in and Around London' (17th Century); Eleazar Albin, 'Description of English and Foreign Spiders' (1732), Sloane MS 4001, British Library, London.

29 Joseph Miller, letter to Philip Miller, 4 October 1743, Sloane MS 4081, f. 129, British Library, London.

30 George Boucher, letter to James Petiver, 10 June 1712, Port Mahon, Sloane MS 4065, f. 40, British Library, London; James Petiver letter to George Boucher (n.d.), Sloane MS 3338, f. 95, British Library, London; J. E. Dandy, *The Sloane herbarium* (British Museum (Natural History), London, 1958), p. 94.

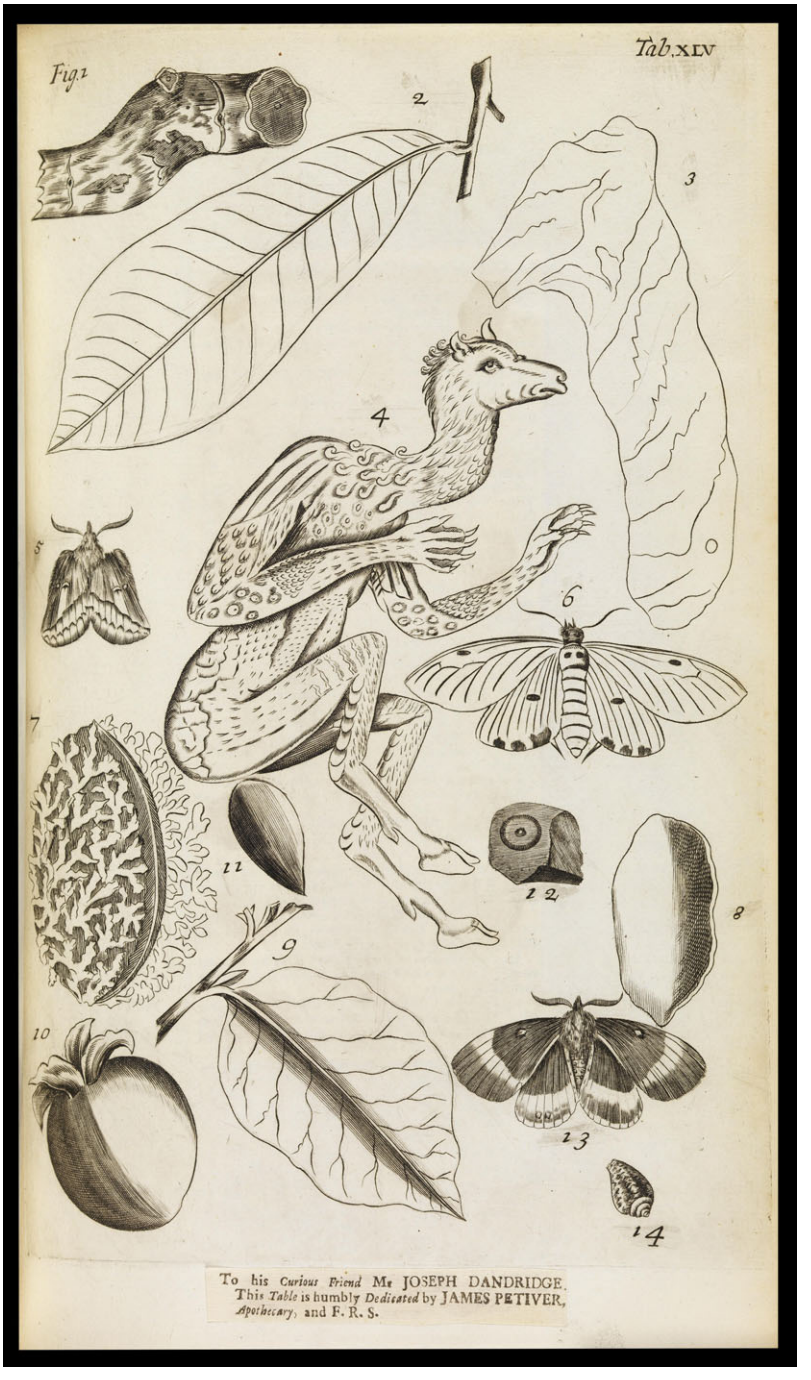

Figure 1. James Petiver, *Museum Petiverianum…Gazophylacii naturae & artis* (London, 1706), decade V, plate 45. (Online version in colour.)

to Lymington, where they stayed for several weeks. Boucher appears to have been showing Petiver his birthplace, as the apothecary wrote: 'We met with little here observable, but in the Churchyard Mr Boucher an Elm wch is midling growth wch he knew 35 years ago and thinks it not much more grown.'[31] This was one of several short-range trips Petiver embarked upon around this time: we know he visited Bristol in 1712 and in 1715 went botanizing in Cambridge with his kinsman James Sherard. He appears to have greatly enjoyed exploring Portsmouth, Poole and the other southern coastal settlements with Boucher. Along Hurst beach they found 'divers strang' shells in coloured clay, 'many of them towards the tops of the cliffs wch was 20 or 30 yards from the highest sea, & what was more observable there was none to be found on the sands, tho we nicely lookt for them.'[32] They took a pleasure boat to dredge up 'between 2 or 300 large oysters' and make drawings of them. They observed salt-panning and ship-building and stayed or dined with various sea captains, as well as Boucher's brother. Together with Petiver's local herborizing trips, this maritime socializing reveals more middling forms of homosocial interaction which were founded in natural enquiry but based on shared commercial and professional practices.

Mediating the East India Company: the case of Samuel Browne's plants

Petiver's familiarity with maritime society and commerce made him an extremely useful agent for members of the scholarly community, who were often competing for access to materials and information with other urban individuals.[33] Natural knowledge was, after all, extremely profitable. The East India Company, for example, amassed information, designed experiments, and drew on a wide range of expertise to better understand the natural resources they traded.[34] Company men depended upon scholars, including natural historians, for valuable information about how to exploit new territories and commodities in the marketplace. Yet these relationships were often uneasy, susceptible to breaking down as a result of clashes of interest or perceived encroachment on property rights. Throughout the eighteenth century, despite extensive interactions between members, there was only ever limited success at fostering scientific cooperation between the East India Company and the Royal Society.[35] James Delbourgo makes the point that, while Sloane had a great number of Asian curiosities in his collection, he obtained these only by 'deftly cultivating contacts with those running the Company, as well as those challenging it.'[36] Most of these objects were obtained through informal payment to poor Company surgeons, rather than via the merchants and supercargoes who oversaw the Company's business overseas.

Petiver, on the other hand, was deeply involved in the growing international trade of drugs and plants, and thus tended to enjoy closer connections with all manner of seafarers, from

31 Petiver's travel account, Sloane MS 3340, ff. 138–144, British Library, London.

32 *Ibid.*, f. 140.

33 See Kathleen Murphy's essay in this special issue for more information on James Petiver's relationships with mariners.

34 Anna Winterbottom, 'An experimental community: the East India Company in London, 1600–1800', *Br. J. Hist. Sci.* **52**, 323–343 (2019).

35 John Gascoigne, 'The Royal Society, natural history, and the peoples of the "New World(s)", 1660–1800', *Br. J. Hist. Sci.* **42**, 539–562 (2009).

36 Delbourgo, *op. cit.* (note 13), pp. 217, 212–224, 245.

captains to deckhands, throughout his professional career.[37] As we have seen, such associations reverberate throughout Petiver's letters. In one of Boucher's letters from Port Mahon he mentions that 'Adam Stanfell Carpenter to the Fortune Storeship bound to Deptford has a box with two of your Books & one bottle of Small Insects, with a Letter to my Lord [Bishop] of London enclos'd in one to your self.' He also asks Petiver to use his influence over Henry Compton to secure him a pension.[38] In 1700, Jacob Bobart, head gardener of the Oxford Botanic Garden, wrote to thank Petiver for his good office in being 'instrumental to my enjoyment of so good acquaintances', informing him that he had been carefully looking after the seeds Petiver had sent him: 'those East Indians being very nice with us.'[39] Robert Ellis, one of the three individuals of Charleston in Carolina who regularly went out exploring and creating collections for Petiver, wrote in 1705 that his friend Captain Walker

> prays you to stand his friend to prefer a Petition in his name to the Lord High Admirall of England for a salary being paid him for executing a Commission from England for the Judge of the Admirality Court for the Bahamahs bearing date the 13 May 1701 executed by him till July 1703 at wch time the Island was taken and he ruined and undon by the French and Spaniards and if you do him any service I shall take it done as to my selfe.[40]

These contacts were also what made Petiver so valuable to Sloane, to the Royal Society and the wider botanical community, providing access to materials, individuals and experience not necessarily available to the more gentlemanly Fellows (or, at least, not so quickly and efficiently deployed).

One important example of the role that Petiver played in the mediation of urban exchange networks—particularly between the East India Company and the Royal Society—is found in the tug-of-war over Samuel Browne's package of plants in late 1698. Browne was a Company surgeon stationed in Fort St George (Chennai), and commissioned to collect medicinally useful plants from the area and send them to England, encapsulating a certain kind of commercial knowledge that was valuable to the Company. He had come to Petiver's attention through another ship's surgeon, Richard Sambach, and the two had corresponded since 1690.[41] A letter from Petiver to Browne, dated 24 September 1698, which discussed the 46 specimens Browne had made at Unanercoonda (about 12 miles from Fort St George), was published that month in the *Philosophical Transactions*.[42] The prefatory advertisement for this volume, likely issued at the end of the run, stated that the East India Company, having also received from Browne 'a very considerable Collection' together with some of his Observations, 'have very generously and for the Publick Good, presented them to the Royal Society of London' who intended, in turn, to present them to the public once all reports had been gathered and the specimens themselves 'preserved from

37 Harold J. Cook, *Matters of exchange: commerce, medicine and science in the Dutch Golden Age* (Yale University Press, New Haven, 2007); Patrick Wallis, 'Exotic drugs and English medicine: England's drug trade, c.1550–c.1800', *Social Hist. Med.* **25**, 20–46 (2012).

38 George Boucher, letter to James Petiver, 10 June 1712, Port Mahon, Sloane MS 4065, f. 40, British Library, London.

39 Jacob Bobart, letter to James Petiver, 15 April 1700, Oxford, Sloane MS 3321, f. 36, British Library, London.

40 Robert Ellis, letter to James Petiver, 14 February 1705, Carolina: W. H. G. Armytage, 'Letters on natural history of Carolina 1700–1705', *South Carolina Hist. Mag.* **55**, 59–70, 63 (1954).

41 Sebestian Kroupa, 'Ex Epistulis Philippinensibus: Georg Joseph Kamel SJ (1661–1706) and his correspondence network', *Centaurus* **57**, 240 (2015).

42 James Petiver, 'An Account of some Indian plants, &c. With their names, descriptions and vertues; communicated in a letter from Mr James Petiver, Apothecary and Fellow of the Royal Society; to M. Samuel Brown, Surgeon at Fort St. George', *Phil. Trans. R. Soc. Lond.* **20**, 313–335 (September 1698).

corruption in the Repository, where recourse may be had to them by the curious, so soon as they are put into such a Condition, as not to suffer by being handled.'[43] But this courteous narrative, emphasizing the Royal Society's curation of the collection, belies several clashes of vested interest.

Browne, who was stepping down after long service and recent controversy, had sent the Unanercoonda collection of plants to Petiver in a private capacity, as he had done many times before. He was also dutifully sending materials to his employers, epitomized by the package in question which was sent to the Directors of the East India Company on the 20 September 1697 (figure 2).[44] As Browne's most assiduous private correspondent, it seems likely that Petiver was the one to alert the Royal Society of the arrival of this Company 'present' in London. It is recorded in the Society's Journal Book for 26 October 1698 that the Vice President, Sir John Hoskins, had been 'informed that some natural things were in the hands of the East India Company lately sent them from Fort St George. Mr [William] Bridgeman, Mr [Abraham] Hill, Mr [Alexander] Pitfeild, Dr Sloane & Mr Petiver were desired to goe to the E. India Company and beg of them the late present sent from the E Indies to them for the repository.'[45] The party seems to have been selected to strengthen the Royal Society's claim over these 'natural things', and to emphasize as much as possible their connection with international trade, maritime governance and the City of London. Bridgeman, whose father was a merchant and agent for the East India Company in Amsterdam, had been Secretary to the Admiralty since 1694. Hill was a wealthy merchant, a founding member of the Royal Society, and had served as Commissioner of Trade on the Board of Trade since 1696. Pittfield, too, came from a rich City family and had married into another (he was brother-in-law to Royal Society Secretary Richard Waller). Furthermore, he was a stockholder in the East India Company in both a private capacity and, as Treasurer from 1700 until his death in 1728, on behalf of the Royal Society's formal investments.[46]

Though knowledgeable about the plants in question, Sloane's experience of nautical politics was perhaps inferior to that of his companions. As Secretary, he had first been ordered to write a letter beseeching the Company to lend or donate the package to the Royal Society. He predictably appealed to a general public good, asserting the generic benefits to trade at the letter's finish:

> [The Royal Society] in a general meeting this Day commanded me to let you know that it may be of great Benefit to the Publick, that they should be preserved from Corruption, and Such accounts of them given, that the use of these medicines and Simples may be known to every body. If you please to favour them with them, they will take care that this shall be done. They hope likewise that you will please to direct others qualified to follow the laudable example of Mr Brown, who sent these. They think this may not only be to the Common advantage of all but by giving us the knowledge of new simples or other uses of those formerly known, may make a demand for new commodities or greater quantities of these formerly brought hither.[47]

43 *Ibid*.

44 Charles E. Jarvis, 'A seventeenth-century collection of Indian medicinal plants in the Natural History Museum, London', *J. Dept Museol. Univ. Calcutta*, **11/12**, 87–98 (2016); Anantanarayanan Raman, 'Plant lists from "Olde" Madras (1698–1703)', *Curr. Sci.* **115**, 2340 (2018).

45 Journal Book, JBO/10, ff. 84, 85, Royal Society, London.

46 Richard K. Bluhm, 'Remarks on the Royal Society's finances 1660–1768', *Notes Rec.* **13**, 82–103 (1958).

47 'A Letter from Dr Sloane to the East India Company concerning several patterns of Herbs and Drugs [no date]', LBO/12/17, f. 49, Royal Society, London.

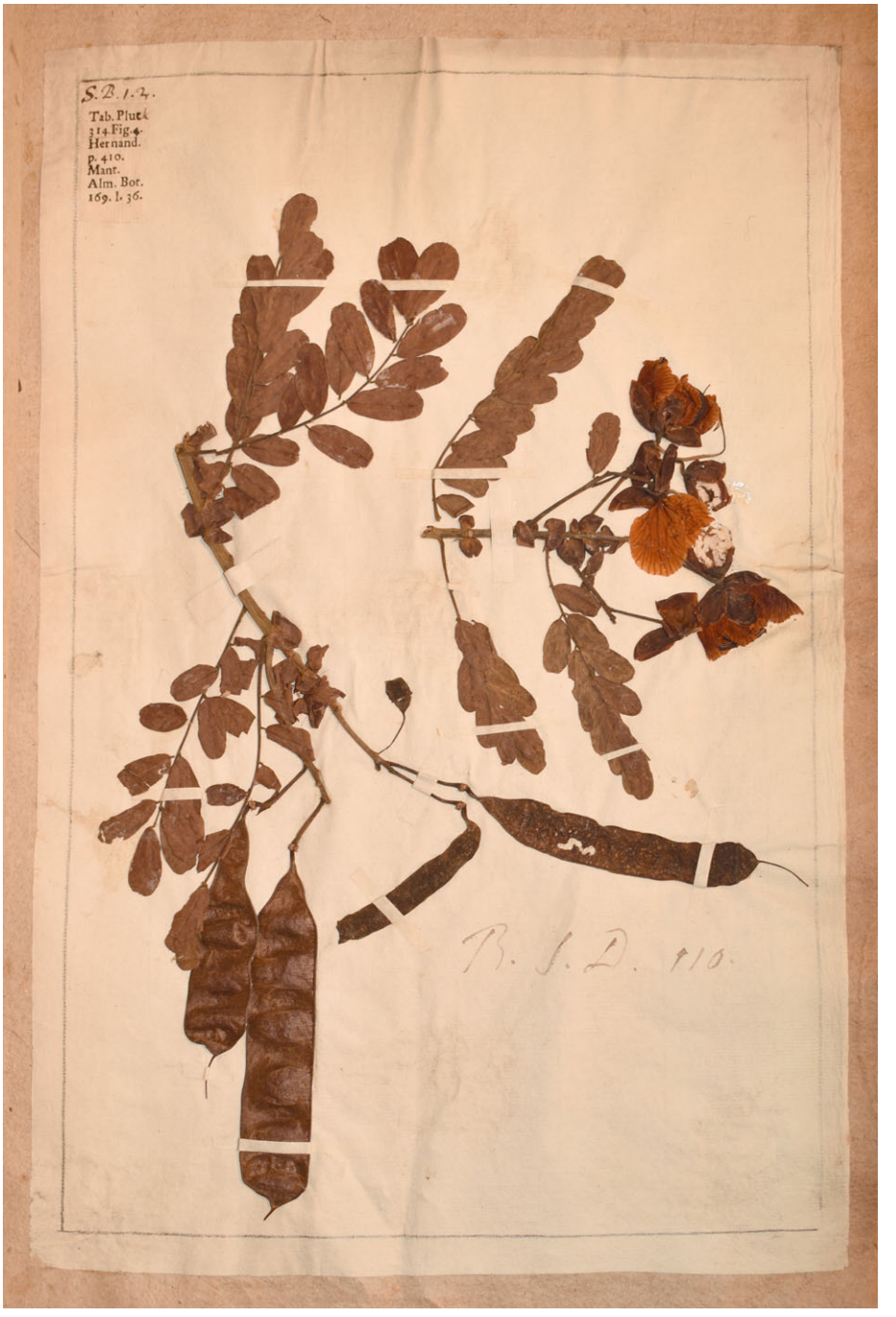

Figure 2. Peacock Flower (*Poinciana pulcherrima*) with annotation by James Petiver correlating with Samuel Browne's first account in *Phil. Trans.* of his Indian specimens. Natural History Museum. (Online version in colour.)

Sloane's appeal did not work. Neither this letter, the first trip, nor the informal visit that Hoskins and Sloane later paid the Company came to anything. A second official delegation was appointed on 16 November 1698. This, again, mainly contained individuals who had specific connections to overseas commerce. Hoskins, Bridgeman, Pittfield, Petiver and Sloane were this time joined by the highly influential former naval official Samuel Pepys, the diplomat William Aglionby, and John Houghton, the well-known apothecary, author, and advocate of free trade.[48] The added political weight of publicly notable figures alongside amassed commercial expertise seems to have finally done the trick as the package was successfully obtained and a thank you letter from Sloane duly sent.[49] On the 23 November the Society Journal Book records that 'Mr Pepys, Mr Pettiver, Mr [Samuel] Doody, Dr [Clopton] Havers & Dr Sloane were appointed a Committee to looke after putting in order the East India Collection now received from the E India Company & the same persons were ordered to return the thanks of the Society … Who had received the present of the Company.'[50] Petiver and Sloane were the only Fellows present in both delegations and the subsequent committee: Sloane was presumably required to attend in his capacity as Secretary, but Petiver was there on the strength of his epistolary intimacy with Browne, his knowledge of the movement of ships and goods, his network among Company servants, his understanding of commercial institutions and, finally, his botanical expertise particularly in reference to global *materia medica*. As Raymond Stearns reports, Petiver continued to be involved in mediating similar matters for the Society: he was appointed to the Committee designed to draw up instructions and queries for English envoys when Queen Anne directed that ministers and governors going abroad should do all they could 'towards promoting the design for which the Royal Society was first instituted.'[51] In this way, Petiver's commercial expertise added value to the Society, and assisted its Fellows in being able to successfully conduct their business with other powerful urban groups.

Co-creating knowledge through science and commerce

Petiver's intermediary role as agent for Browne and the Royal Society was not passive, but rather that of a co-creator of natural knowledge *through* communal practice and, explicitly, through the linking of science and commerce. So, for example, in order to contextualize a series of entries for 'Papilio Orientalis' ('Eastern Butterfly') in one published account, Petiver states:

> *These 3 last* Mr James Cuninghame *and* Mr Charles Perry, Surgeons, *brought me formerly from other parts in the* East Indies*, and I have since received them from* [Samuel Browne in] Fort St George. *N.B.* Most of the foregoing Insects being wholly new, I shall refer you for a farther Idea of them to their *Figures*, which I design with other *Animals* and *Vegitables*, in the succeeding Tables of my *Gazophylacium Naturae*.[52]

48 Naturally, only Pepys and Hoskins are recorded in the East India Company minutes, with everyone else forming the '&c': 18 November 1698, IOR.B.41, f. 693, British Library, London.

49 Hans Sloane, letter to East India Company. 23 November 1698, LBO/12/20, f. 57, Royal Society, London.

50 JBO/10, ff. 88, 89, Royal Society, London.

51 Stearns, *op. cit.* (note 2), p. 275.

52 James Petiver, 'An Account of Mr Sam. Brown, his third book of East India plants, with their names, vertues, description, &c … . To which are added some animals sent from those parts,'', *Phil. Trans R. Soc. Lond.* **22**, 862 (May–June 1701).

Petiver's additional descriptions were added to the sheets on which Brown's specimens were mounted, and placed in their original order into the Royal Society's Repository:

> for the inspection of the *Curious*, who are desired to handle them tenderly, lest they should be injured, and the good intentions of the *East India Company* and *Royal Society* be frustrated, which are, that they may last for the Information and *Use* of all inquisitive *Persons*, and be forthcoming on all occasions wherein they can be of *Service*.[53]

This description of the shared good intentions was part of the preface that Sloane provided in his capacity as editor–publisher of the *Transactions*. He explicitly links the aims and values of the Royal Society with those of the East India Company, seeking to reaffirm the necessity of unobstructed communication between commercial and scholarly worlds.

While emphasizing the importance of commercial exchange to the collection of knowledge, Sloane took care to demarcate the contributions of Browne and Petiver, emphasizing the latter's hard-won expertise:

> [Browne's] Observations shall have his name subscribed to them, to distinguish them from the Remarks, designed to be added by Mr Petiver, which will give his Thoughts and Discoveries concerning these Plants, he having observed 'em in other Collections, raised in England from Seeds, or described in Books already printed. He was thought the fittest person, as well for his great abilities in this kind, as that they were gathered at his desire, and that Mr Brown, who presented them to the Company, refers in some of these Books to some of the same kinds he had sent him before.[54]

Sloane deliberately represents Petiver's additions as being more valuable than Browne's because of their more scholarly nature, adding credit through the comparison of the initial observations with the collected stocks of botanical knowledge.

Though Sloane promoted Petiver's efforts, he also forcefully inserted himself into this economy of exchange, keen to articulate his own medical expertise and scholarly power in relation to the commercial networks that Petiver dealt with. So, after discussing the recent history of physicians in England using a root known to them as Cassumuniar, he went on:

> When I saw this Collection at East-India-house, I found amongst other things this Root by the name of Bengalle, and an account that it was much used by the Natives in the Indies. I told some Drugsters of this discovery, they sent for it, and have receiv'd it from the Indies by that name, and now it is better understood, as will appear in these papers, to be had in greater plenty, so that even the poorer sort of People may receive benefit by it at a more moderate price, and the Merchant receive advantage by trading in a new Commodity. This is one of many Discoveries which are already made by this Collection, which I hope will sufficiently excuse me to those worthy persons I mov'd to solicit in this affair that Honorable Company.[55]

Sloane here appears to be trying to place himself as the arbiter of the materials in question, demonstrating his control over commercial 'Druggists' and the 'worthy persons' he 'mov'd to solicit'. It is interesting that he does not name the individuals in question, such as Pepys or

53 Preface, 'An Account of part of a Collection of Curious Plants and Drugs, lately given by the East India Company', *Phil. Trans. R. Soc. Lond.* **22**, 580 (May–June 1700). The specimens moved to the British Museum and then the Natural History Museum in the nineteenth century.

54 *Ibid.*, 579–580.

55 *Ibid.*, 580–581.

Hoskins; we might speculate that this was, in part, tactful modesty on the Society's behalf, but also that it avoided bracketing such socially elevated 'movers' alongside a tradesman like Petiver.

Professional friendship

The vagaries of international exchange could put immense pressure on friendships. Browne wrote to Petiver on 30 September 1698, having received a furious letter from the apothecary accusing him of 'Negligence, forgetfullness and want of Gratitude' for the lack of an expected package.[56] Browne made it clear that the issues had been to do with the frigate (likely *The Fleet*), being unexpectedly dispatched from Bengall and not returning as planned, followed by 'a greater misfortune & worse disappointment in Capt. Thwaits with wch also I suppose ere this you are fully informed.' He protested against Petiver's allegation that he had tampered with a shipment of letters, specimens and spare books meant for Henrik Oldenland, a Danish employee of the Dutch East India Company at the Cape of Good Hope, admitting that his attempts at a shortcut had gone wrong:

> The Almighty knows I did it in hopes to do you a favour, in endeavouring to get a Speedier Passage for em to the Cape then Could Reasonably be expected by the round about way to England again … Afterwards being advised by the Dutch that Dr Oldenland was dead I used the Spare Books: but the Letter & Plants are still Ready which you Pleased to Command them Back … To be short it was the will of Providence to take from me the friendship of the only person in England whose Correspondence I counted & on whom I could firmly confide.

Browne spoke fondly of the 'candour' of their former correspondence and said:

> Believing by this time that it may Plainly appear that you had lesse cause to be angry then you Suppos'd, let us talke more familiarly and tho you will not Correspond with me in Plants Pray let not our Friendship dye. And if it may Suit your Convenience, furnish me with what news arises that I may have occasion for from England, a list of what I cheifely want I have here inclos'd, so that as yet if you have not provided what mention'd in any other Lists by the King William and Madrass Merchant.[57]

He sent another letter a few weeks later, reiterating his requests and reaffirming his commitment to Petiver. Though he had passed the main responsibility of collecting (along with his Company commission) to fellow surgeon 'Brother Buckly', he promised still to provide Petiver with information on 'any Plant whose virtue you may have a more than ordinary Curiosity to know I will endeavour your Satisfaction, and for your Past favours, as well as for those wch I am still apt to hope for, besides my thankful acknowledgement of the Same none Shall demonstrate a deeper and truer sense of Gratitude then.'[58] 'Brother Buckly' was Edward Bulkley, who would soon send to the Royal Society the Chinese surgery cabinet discussed by Sloane in several essays published in 1698 and 1699. Specimens from both Browne and Bulkley, as well as Father Georg Kamel (their contact in

56 Samuel Browne, letter to James Petiver, 30 September 1698, Fort St George, Sloane MS 4062, f. 290–291, British Library, London. This letter is regularly misreferenced as Sloane MS 4046, ff. 29–31: e.g. by Stearns, *op. cit.* (note 2), p. 289.

57 Samuel Browne, letter to James Petiver (18 October 1698, Fort St George), Sloane MS 3321, f. 17, British Library, London.

58 Victoria Pickering, 'Putting nature in a box: Hans Sloane's "Vegetable Substances" collection', pp. 131–139, PhD thesis, Queen Mary University of London, 2016; Anna Winterbottom, *Hybrid knowledge in the early East India Company world*, ch. 4 (Palgrave Macmillan, London, 2016).

the Philippines), are now found in the Sloane collections at the Natural History Museum, having been purchased by him upon Petiver's death.[59]

With negotiations between the Royal Society and the East India Company then underway, Petiver began his letter from around November 1698 with a playful apology for his

> several passionate Expressions, occasioned by hated disappointments wch my Nature cannot easily burden; And as repenting Sinners ought not to recriminate, so I will endeavour to forget & silently pass by (tho hard it is) the Collection you designed me, wch the Company has deprived me of, I hope the consideration of these disappointments will make some excuse for me, & [^to make up these Losses] engage you for the future to be more frequent and ample in your Collections to me.[60]

It seems clear that Petiver considered the package that Browne had sent to the East India Company to be properly intended for him, on account of his and Browne's personal association. Petiver was careful to distinguish the close and real friendship he had with Browne from that of his more superficial connections, based on social advancement:

> I should be less solicitous with other Persons, many of wch thinke it more their interest than mine to serve me, I am designing to doe every Person the Justice as to acknowledge them for discoveries from whom I first receive them, as you may see by the printed Letter I have addressed to you … Mr Charles Petty, who if he has got me something as he tells me, is the only Person in these several East India Shipps that has made any Collections, I find most of them before they come to the Indies have forgot their promises, I must therefore get you to remind them when they arrive of collecting whatever Plants, Shells & Insects they shall meet with in any place they touch at (Fort St George only excepted because there only I depend on you).[61]

Petiver then thanked Browne for the five pieces of muslin he had sent, though he had not received the gift, 'the rest being in the most Honorable Companys warehouse during their dispotick pleasure. To avoid wch for the future let not what you send me be Companies goods, but rather Collections of Plants, Shells, & Insects wch [^will come readily to me &] be more acceptable then Diamonds or Gold.'[62] This kind of manoeuvring around institutional structures or regulations was typical in the early modern trading world, with informal (often illegal) exchanges posing a serious challenge to centralized state powers who struggled to maintain control of individual agency across their official trading networks.[63] Though on excellent terms with many employees, Petiver regularly expressed his frustration with the institution itself, for example, writing to Jacob Bobart in 1706 that he was 'somewhat dishearted from holding a Correspondence to those [^remote] parts [such as Fort St George] since I have 4 or 5 vellum of Plants wch have lain about 6 months in the East Companies hands without hitherto being able to procure them. I shall

59 Hans Sloane, 'An Account of a China Cabinet, Filled with Several Instruments, Fruits, etc. Used in China: Sent to the Royal Society by Mr. Buckly, Chief Surgeon at Fort St. George', *Phil. Trans. R. Soc. Lond.* **20**, 390–92 (1698); Hans Sloane, 'A Further Account of the China Cabinet', *Phil. Trans. R. Soc. Lond.* **21**, 44 (1699); Hans Sloane 'A Further Account of What Was Contain'd in the Chinese Cabinet', *Phil. Trans. R. Soc. Lond.* **21**, 70–72 (1699); James Delbourgo, '"Exceeding the Age in Every Thing": placing Sloane's objects', *Spont. Generations* **3**, 46–47 (2009); Kroupa, *op. cit.* (note 41).

60 James Petiver, undated letter to Samuel Browne, Sloane MS 3333, ff. 216–222.

61 *Ibid.*, f. 221.

62 *Ibid.*, f. 222.

63 Sanjay Subrahmanyam (ed.), *Merchant networks in the early modern world* (Ashgate, Aldershot, 1996); Michael N. Pearson, *The world of the Indian Ocean, 1500–1800* (Ashgate, Burlington, 2005); Cátia Antunes and Amélia Polónia, *Beyond empires: global, self-organizing, cross-imperial networks, 1500–1800* (Brill, Leiden, 2016).

be glad to hear suddenly from them.'[64] Petiver often appealed to his correspondents in this way, creating bonds through shared knowledge of difficulties of long-distance transportation and Company politics. Though Petiver used his familiarity with the Company to his own advantage—successfully securing access to Browne's package while generating a great deal of thanks and esteem from the Royal Society in the process—he still resented the way the institution interfered with the operation of his own personal and professional networks. Yet, thanks to the nature of his connections, the depths and varieties of his friendships across the commercial world, Petiver was uniquely well-placed to manoeuvre around many of the setbacks he faced. This, in turn, made him indispensable to the scholarly community in general, and Sloane in particular.

Plugging the gaps

The case of Samuel Browne's package demonstrates how difficult it was to disentangle the muddle of private, communal and institutional interests in international scientific exchange, and the importance of careful negotiation in resolving disputes or surmounting obstacles. Petiver's middling position—his saturation in urban culture and commerce—ensured his effectiveness. It also influenced how individuals in his and Sloane's shared networks viewed their identities and roles in relation to one another. This can be observed in some of the many occasions where Sloane and Petiver's private collecting activities overlapped with one another, or with other urban institutions like the Royal Society. Take the case of the Royal Society Clerk, Jezreel Jones, on his 1698 trip to Africa. As I have demonstrated elsewhere, little was asked of Jones by the Society itself on this trip (or the one that followed in 1701), but he sent masses of material back to both Sloane and Petiver in a private capacity.[65] In preparation, Petiver wrote to his friends and associates, such as the schoolmaster and botanist Robert Uvedale, using seeds from his own collection to support Jones's mission:

> a Gentleman I some time since intimated to you of his intentions for Barbery, goes thitherwards this Weekend, he is a Person I know will endeavour to serve all his friends. I am assured amongst the rest you & Mr [John] Watts may depend on a share, he is very desirous of having some Garden seeds along with him, to make Friends withal when he comes there, if therefore out of your plenty you will be pleased to spare him a few of each, they will be very acceptable to him, & I doubt not but he will in some Measure return the favour … I herwith send you a few fresh East India seed, & in a very little time you may expect as many more.[66]

Despite their long association and many interactions at the Royal Society as Clerk and Secretary, Jones remained relatively stiff with Sloane throughout his letters, requesting money, giving him formal reports and offering his 'Dutyfull respects to all the [^Honorable and] Worthy Gentlemen his Benefactors.' At the same time, Jones was appealing to Petiver to help him 'plead his case' for not sending Sloane his journal, and to soothe his worthy patrons on his behalf.[67] Jones and Petiver also appear to have spent Jones's last hours before his second trip at

64 James Petiver, letter to Jacob Bobart, 29 August 1706, London, Sloane MS 3335, f. 30, British Library, London.
65 For a fuller account of Jones's 1698 and 1701 trips and collections, see: Marples, *op. cit.* (note 30), pp. 9–12.
66 James Petiver, undated letter to Robert Uvedale, Sloane MS 3334, f. 11, British Library, London.
67 Jezreel Jones, letter to James Petiver, 2 April 1702, Sloane MS 4063, f. 76, British Library, London.

a tavern called 'The Gun'.[68] Meanwhile, Jones gave Sloane his apologies that 'the abruptness of time would not suffer me to take my leave of you in person by waiting on you, but Mr Pettiver saw me take the water.'[69]

Jones's comments reveal a glimpse not only of Petiver's sociability, but also of the bustling life of the Thames and its docks, with all the to-and-fro of goods and people. Collectors such as the merchant William Courten would loiter around ships or at the Custom House, speaking to sailors and gathering intelligence, snapping up books and specimens at a lower price than might be offered even a few yards further inland.[70] Often, they had to hunt for lost or seized specimens. In August 1718, for example, John Woodward sent Sloane the third volume of Johann Jakob Scheuchzer's *Helvetiae historia naturalis oder Naturhistorie des Schweitzerlandes*, a present from the author, along with 'the Box of Amber & other Fossils, wch I light of by Chance, last week, at the Custom-House … I have not medled with any of them. They are the Same that Dr Breynius formerly sent.'[71] A month later, he wrote again: ''Twas by meer accident, that, a while ago, being at the Custom-House, I discovered that Box Dr Breynius designd the Things, 2 or 3 years ago, to you & me jointly.'[72]

Historians have spent so much time thinking about how patronage relates to material gains and expanding networks of credit, that we have ignored the ways in which increasing power and responsibility isolated collectors, removing them from certain urban spaces of exchange and trade. In his later years, for example, Sloane was unable to get down to the waterside as often as he had in his youth. When seeking a lost packet of books sent from Utrecht, for example, Sloane had to write directly to one John Lloyd at the Searcher's Office, who answered:

> I have done all in my power to find out the Packet of books you mention … said to be by a Gentleman at Leyden to put on board the Hannah & Zipporah by Captain John Cranwell at Rotterdam. I have inspected the Books at his Majesties' Warehouse. I have several times discoursed the Captain, & likewise the Broker of the Ship, who both assure me they know not nor remember such a thing. They both tell me there was a Box sent in the Ship that voyage which you seem to intimate, but they saw that box open'd which [^had] nothing in it but 2 or 3 periwigs.[73]

Sloane's desirability as a patron actively prevented other exchanges from occurring, as ever-growing numbers of correspondents awaited his response. He became increasingly unavailable to socially inferior naturalists, as the botanist and woollen trader Samuel Brewer discovered in 1731, prompting him to write to Joseph Dandridge with some exasperation: 'I have a vast Number of new … mosses & plants & should have sent them with these had Sir Hans told me by answering my last letter that they would have been acceptable & goe into such hand as

68 Jezreel Jones, letter to Hans Sloane, 15 March 1701, Sloane MS 4038, f. 144, British Library, London; Jezreel Jones, letter to Hans Sloane, 2 April 1702, Sloane MS 4038, f. 150, British Library, London; Jezreel Jones, undated, Sloane MS 4059, f. 76, British Library, London. A decade or so later, Petiver writes to ask a favour from his kinsman 'Captain Jones': James Petiver, letter to Jezreel Jones, 26 April 1715, Sloane MS 3340, f. 144, British Library, London.

69 Jones, *op. cit.* (note 68), f. 199.

70 Sachiko Kusukawa, 'William Courten's lists of "Things Bought" from the late seventeenth century', *J. Hist. Collect.* **29**, 10 (2017).

71 John Woodward, letter to Hans Sloane, 5 August 1718, Gresham College, Sloane MS 4045, f. 139, British Library, London.

72 John Woodward, letter to Hans Sloane, 3 September 1718, Gresham College, Sloane MS 4045, f. 145, British Library, London.

73 John Lloyd, letter to Hans Sloane, 13 March 1733, Searcher's Office, Sloane MS 4053, f. 181, British Library, London.

would have described them.'[74] The botanist David Krieg wrote to Petiver from Riga after having failed to get his patron's response to his request for books, saying:

> Now while I know that Dr Sloan is always very much occupied with his own business & practice; but in the mean time I am allways assured of your friendship & sincerity, though I did not hitherto entertain the same according to my duty, being very much hindered by my laborious office, of which I beg your pardon a thousand times.[75]

Here, Petiver was perceived to be the more reliable correspondent, engaged both as a subordinate to Sloane and also as a free agent involved in the same networks and, crucially, in a better position to aid their shared contacts.

Petiver's dedication to the dissemination of natural historical information—about plants, about people, about where collections were located across networks—was what ensured his access to materials. In 1702 Sloane wrote to Richard Richardson, claiming that Petiver had shown him a letter from Richardson which gave him leave to engrave Richardson's rock plants and other natural things in his 'Decades', presumably the *Gazophylacium*. As a result, Sloane had been forced to give Petiver his copies of Richardson's drafts 'desiring him to take great care of them, and to see what of them yet have been taken notice of. I was very willing,' Sloane said, 'that he should have them, because of his great industry and collections of the like nature, though I did design to have them published in the Transactions; but they may be again published or referred to from thence, for they are very fine and very curious.'[76]

Another example relates to the fate of a female Indian elephant, which had been touring Europe, arrived in Britain in 1683, before ultimately collapsing and dying outside Dundee in 1706. It was quickly dissected by local surgeons, including a correspondent of Sloane's, Patrick Blair, who helped local butchers skin the elephant, creating a mounted skeleton for exhibition in Dundee as well as a stuffed specimen which would eventually be placed on display in the Hall of the Royal Society.[77] Blair wrote to Sloane in something of a panic when he learned that the man delivering his gift manuscript of '*Osteographia Elephantina*; A Full and Exact Description of All the Bones of an Elephant, Which Died Near Dundee' had presented them first to James Petiver:

> I acknowledge Mr Petiver next to yourself was the only person in London I could let [^first] have the perusal but it was an oversight in the Gentleman to deliver unto another first what was humbly dedicated and to be presented to you. I put so much confidence in Mr Petiver as to hope he'll be assisting to you bth in getting the treatise undertaken and published and if by good providence they have fall'n in his hands when I did not design them I hope you'll excuse the error and make the best of the Event.[78]

The care that Blair took to make sure Sloane did not take offence reflects some of the tensions stoked by Petiver's growing power and indispensability for more elite naturalists, and the blending of his business with Sloane's.

74 Samuel Brewer, letter to Joseph Dandridge, 1731, Sloane MS 4051, f. 266, British Library, London.

75 David Krieg, letter to James Petiver, 12 February 1708, Riga, Sloane MS 4064, f. 158, British Library, London.

76 John Nichols, *Illustrations of the literary history of the eighteenth century*, p. 270 (Cambridge University Press, 2014), available from https://doi.org/10.1017/CBO9781139895637.009 (accessed 27 March 2019).

77 Christopher Plumb, '"Strange and Wonderful": encountering the elephant in Britain, 1675–1830', *J. Eighteenth-Cent. Stud.* **33**, 525–543 (2010).

78 Patrick Blair to Hans Sloane, 17 July 1709, Dundee, Sloane MS 4042, f. 17, British Library, London.

It was understood by contemporaries that Sloane was owed priority in London's natural history networks because of his wealth and power: for, as William Sherard darkly remarked to Richard Richardson, 'in Sir Han's [hands] … all things centre.'[79] Yet, the power that Petiver had accumulated through his own business, and by consistently ministering to the needs of the extended natural history community, meant that an ever-growing number of individuals sought him out to conduct their business quickly and efficiently. In 1707, for example, Richard Middleton Massey sent Sloane a strange stone from the River Ribble in North Yorkshire, asking him whether Petiver wanted to include it in his publications.[80] Sloane appears to have assented, because a month or so later, Massey wrote again with details of the delivery and restated his hope that Petiver would insert it into his *Gazophylacium*, and that this would win Massey enough respect to be admitted as a Fellow to the Royal Society.[81] Petiver was held in such regard by Sloane and others that, upon occasions such as this, Sloane could be enlisted to act as a mediator for Petiver.

Conclusion

Though Sloane and Petiver shared interests, collections and friendships, their management of their networks differed in ways that were informed by their individual circumstances and priorities. Petiver's urban locale was of a different nature from Sloane's, representative of more middling cultures of collecting and characterized by a closer association with commercial urban groups, such as the East India Company. This influenced not only how Petiver behaved but also how he was approached and used by various members of London's natural history communities to access individuals, networks and institutions that were unavailable to elite scholars such as Sloane. Petiver's importance grew as Sloane steadily accumulated too many contacts to cultivate with intensity, reminding us that 'go-betweens' are not simply those who could articulate 'relationships between disparate worlds or cultures by being able to translate between them', but also between different segments *within* local communities.[82]

Petiver and Sloane worked together to ensure that the ever-increasing demand for natural information and resources was answered. Between them, they developed a 'joynt-stock' of contacts that allowed each of them to pursue their own interests while stepping in to support the other as required. In *The Transactioneer*, the caricature of Sloane states 'I own I have learnt more of him than ever I did at Orange, or any where else.' Petiver gave him access to the inner workings of a more commercial urban world than that which was the habitual milieu of an accomplished metropolitan physician. Petiver, in turn, used these alliances to pursue his own interests, drawing on the same resources as Sloane and working to improve them: 'He and I are all one.'[83] They did this on the understanding that the goals they did share could be met through the promotion of better communication between commercial and scholarly urban worlds. This reflected not only the contemporary understanding of the limitations of individual knowledge, but also the structure of commercial companies. Employees within such companies were responsible for different

79 William Sherard, letter to Richard Richardson, 6 April 1723: Nichols, *op. cit.* (note 76), p. 270.
80 Richard Middleton Massey to Hans Sloane, 6 October 1707, Sloane MS 4041, f. 20, British Library, London.
81 Richard Middleton Massey, letter to Hans Sloane, 24 November 1707, Sloane MS 4041, f. 37, British Library, London.
82 Schaffer *et al.*, *op. cit.* (note 9), p. xiv.
83 King, *op. cit.* (note 1).

areas of administration, management and delivery, yet pooled their expertise and networks. Joynt-stocks were designed to maintain member rights and interests through a harmonious combination of individual enterprise and communal bonds, maximizing and coordinating (and thus improving) members' access to the materials, knowledge and contacts required for profit while protecting the independence of informal initiatives.[84] Petiver's understanding of these qualities in his own professional practice and in relation to the wider natural history community are summed up by his valediction in a letter to William Sherard in 1706: 'May you dayly increase Sir both in the Riches of Wealth & Nature, may all your Correspondents be true to their promises & may their performances never miscarry. May they be frequently brought [^you] both neat & numerous … & may I have a share amongst them.'[85]

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84 Richard Grassby, *The business community of seventeenth-century England*, pp. 404–407 (Cambridge University Press, 1995).
85 James Petiver, letter to William Sherard, 7 November 1706, London, Sloane 3335, f. 35, British Library, London.