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The Royal Society of London and the Royal College of Physicians: The Struggle for Intellectual Dominance in Restoration London

A common theme in the histories of the College of Physicians and the Royal Society is that the two organisations became involved in a fractious competition for learned and medical institutional supremacy in London in the early years of the Restoration. The College of Physicians was concerned that the Royal Society was critical of the College's Galenic medical tradition, and - as a new learned institution with aspirations to erect a college devoted to the pursuit of the new experimental philosophy - that the Royal Society had positioned themselves in direct competition with the College of Physicians for intellectual dominance. This article will re-examine this perception, mostly from the point of view of the Royal Society and its Fellows, using one of the key texts used by the Royal Society to promote their organisation: Thomas Sprat's *History of the Royal Society of London for the Improving of Natural Knowledge*. Begun in 1663/1664 and eventually published in 1667, this text reveals that the Royal Society's focus was not on competing with the College of Physicians, nor was there an institutional aim to undermine the College's position as a medical authority. Rather, the preoccupation of the Royal Society in this period was to gather membership and wealthy benefactors to facilitate the realisation of the goal of founding a college, and thereby ensure the organisation's long-term future. They adopted what amounted to marketing methods to access a popular consumer interest in rare and curious natural objects and artefacts, both foreign and

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domestic, by offering potential members an opportunity to access the more esoteric knowledge of students of the natural world. In addition, the primary aim of the Royal Society was to improve knowledge for the good of all mankind, and that included the areas of knowledge traditionally preserved by the College of Physicians. In terms of the Society's relationship with the College, the sense of conflict and competition was more of a perception of the College than an actual conflict. This was derived from the College's own insecurities. From the 1650s onwards, the College of Physicians faced both internal and external challenges which struck at the core of its identity as the preeminent medical institution in London; attacks on its perceived monopoly, criticisms of the Galenic medical tradition, and its difficulties in obtaining ratification from Parliament of its new charter, all combined to leave the College in a particularly vulnerable state. The founding of the Royal Society, therefore, could not have come at a worse time. However, for its part, the Society did not perceive of the College as either a threat or a competitor; there is evidence that the Royal Society considered the College of Physicians, if not as an ally, at least as potentially, a companion or complementary institution, not a competitor.²

Much has been written about the conflict between the Royal Society and the College of Physicians during the first decade of the Restoration. The Society's first charter stated that their '...studies are to be applied to further promoting by the authority of experiments the sciences of natural things and of useful arts...'³ This new experimental philosophy and some of the Fellows' vocal rejection of the reliance upon the authority of the ancients – particularly Aristotle – created an atmosphere of

² Unless otherwise indicated, the Royal Society will at times be referred to as 'the Society', and the College of Physicians as 'the College'.

³ Translation of the First Charter, granted to the President, Council, and Fellows of the Royal Society of London, by King Charles the Second, A.D. 1662, on the website of The Royal Society of London, <https://royalsociety.org/about-us/governance/charters/> (accessed 06/08/2015).

intellectual tension, particularly in medical circles.⁴ There can be no doubt that the Society's Fellows' specific criticism of Aristotelian natural philosophy, and of ancient learning in general, seemed to directly conflict with the foundations of the College of Physicians' academic medical learning. Traditions of Galen and Hippocrates underpinned the College's approach to the practice of physic, and indeed was the basis upon which it was founded and received its first charter in 1518.⁵ The Royal Society's challenge to that academic tradition potentially undermined the professional stature of physicians as preeminent medical practitioners, especially in the increasingly crowded medical marketplace. The Society's apparent siding with the apothecaries and the chemical physicians was seen as a further attempt to undermine the College's intellectual position. It did not help that some Fellows of the Society were openly critical of physicians, and highlighted the limitations of their medical knowledge. In *Some Considerations Concerning the Usefulness of Experimental Natural Philosophy*, first published in 1663, Robert Boyle, who was a founding member of the Royal Society, argued that many physicians displayed a resistance to the value of wider use of medicines, with often dangerous consequences. He recounted the anecdote of a physician who, when asked why he did not use more 'Generous remedies', rather than 'those *common Languid ones*' which seemed to be making him so much worse, the physician replied, '*Let him die if he will, so he die secundum artem*'.⁶ For Boyle, the 'Therapeutical' part of physic, which was the basis of the physician's treatment, would be much improved when more attention was paid to the 'Physiological, Pathological, and Semiotical' parts as

⁴ See for instance, Michael Hunter, *Science and Royal Society in Restoration England* (Cambridge: Cambridge University Press, 1981), Chapter 6, esp. pp. 138, 144 - 45. Also Harold J. Cook, *The Decline of the Old Medical Regime in Stuart London* (Ithaca: Cornell University Press, 1986), Chapter 4, esp. pp. 164 - 82.

⁵ Cook, *The Decline of the Old Medical Regime in Stuart London*, p. 71.

⁶ Robert Boyle, *Some considerations of the Usefulness of Experimental Natural Philosophy* (London, 1663), pp. 117 - 118.

well.⁷ In addition, Harold Cook cites research which seems to show that a significant proportion of the Society's activities were conducted by physician Fellows, and had medical interests.⁸

The Society's plans for erecting a college devoted to the pursuit of natural knowledge would certainly not have reassured the College of Physicians. Fellows such as Sir William Petty and John Evelyn had all expressed visions for a college before the Restoration, however the most recent articulation had come in 1661 from Abraham Cowley, not himself a Fellow, but a vocal supporter of the new philosophy.⁹ In *A Proposition for the Advancement of Experimental Philosophy*, Cowley gave detailed plans for the erection of a college and the employment of a suitable staff of natural philosophers whose efforts would be devoted to the improvement and correction of current knowledge and the development of new knowledge, inspired by the 'Solomon's House' of Sir Francis Bacon's *New Atlantis* (1620).¹⁰ Cowley's college also included an educational function, making provision for a number of places for young boys and teachers, who would be given a general education, but with a particular emphasis on the teaching of the new experimental philosophy.¹¹ Sprat, in his *History of the Royal Society*, acknowledged that the Society particularly favoured Cowley's plan, but without the educational function.¹² In addition, the Society's charter granted them

full power and authority to erect, build, and construct, or to make or cause to be erected, built, and constructed within our City of London, or ten miles of the same, one or more College or Colleges, of whatsoever kind or quality, for the habitation, assembly, and meeting of the aforesaid President, Council, and Fellows of the

⁷ Ibid., p. 117.

⁸ Cook, *The Decline of the Old Medical Regime*, p. 165.

⁹ Sir William Petty, a physician, had a vision for a college which will be discussed later. John Evelyn to the Hon. Robert Boyle, Robert Boyle, 3 September 1659, *Diary and Correspondence of John Evelyn, F.R.S.*, Vol. III, ed. William Bray (London, 1887), pp. 116 – 20.

¹⁰ Abraham Cowley, *A Proposition for the Advancement of Experimental Philosophy* (London, 1661).

¹¹ Ibid., pp. 43 – 53.

¹² Thomas Sprat, *The History of the Royal Society of London for the Improving of Natural Knowledge*, 3rd edition (London, 1722), pp. 59 – 60. The educational aspect of Cowley's could also have raised concerns with some members of the universities.

aforesaid Royal Society, and of their successors, for the ordering and arranging of their affairs and other matters concerning the same Royal Society.¹³

Such a college could easily have been seen by the College as a potential threat to their status, particularly as such a college would have been located in the environs of London.

The question arises though: was it the Royal Society's intention to supplant or undermine the College of Physicians? There is evidence to suggest that particularly in the period of 1663 to 1664, the Society had other concerns that they were pursuing very vigorously. The Society in this period to all appearances achieved a great deal. They had obtained a first charter for their organisation and a second charter which further defined their duties and privileges, as well as the support of the King, and a growing and diverse membership. They were even starting to attract the attention of learned men abroad.¹⁴ Their main concern though was the lack of funding. The Society could raise a certain amount of funding from the admission fees for new members and the charge of a weekly subscription towards the cost of experiments; however, apart from the occasional gift or donation to the Society, it had no other income. Charles II was not forthcoming with funds, although he did make attempts to help the Society in this way.¹⁵ With no state funding the Royal Society was concerned that their aspirations for their college and the practice of the experimental philosophy would be put in jeopardy. Their response then was to embark on a process of promotion, beginning with election of Thomas Sprat to the Society for the purpose of writing a 'history' of the Society.

Guided in large part by John Wilkins and widely considered by historians to be an apology for the

¹³ Translation of the First Charter, Royal Society website. This privilege was also confirmed in the second charter issued in 1663.

¹⁴ Thomas Birch, *The History of the Royal Society of London for Improving of Natural Knowledge, From Its First Rise* (London, 1760), p. 26.

¹⁵ Charles gave the Royal Society permission to approach the Duke of Ormonde who was engaged in obtaining reparations from the Irish. The Royal Society's president Viscount Brouncker dispatched a letter to Ormonde, although it does not appear to have been successful. See *Ibid.*, pp. 168 – 69. In a supplemental charter of 1669, Charles also gave to the Royal Society lands and buildings on a site in Chelsea. However the Royal Society eventually sold the property back to the King.

Society, the actual primary function of the *History* was initially to promote the Royal Society with the aim of attracting members and wealthy benefactors.¹⁶ They did this by trying to exploit a current consumer boom.

By the latter half of the seventeenth century, there was a widespread, although largely urban, consumer interest in the rarities and curiosities. These included strange or unusual objects, artefacts and even living creatures from the newly explored worlds in the Americas and the East, as well as those to be found closer to home in Britain and on the Continent. Wealthier people made collections of such things in ‘cabinets of curiosities’, and there was a thriving market for such items throughout Europe. In addition, the urban centres in England, including London, were rapidly expanding, with a corresponding growth in the access to and the demand for luxury and rare items. This consumer demand extended to the purchase of a variety of mechanical and scientific devices, such as ingenious and elaborate clocks, automata, as well as telescopes and mathematical instruments. This interest in the natural – or unnatural – world included a fascination with ‘monstrosities’, that is, monstrous births of humans and animals, producing offspring with strange deformities or unusual traits.¹⁷ Evelyn, a gentleman with a strong interest in the study of nature and later Fellow of the Society, described seeing many of these in his diary. In 1651 he viewed a Mr Morine’s collection of rarities, which included ‘coralls, minerals stones and natural curiosities’, as well as a collection of scarabs and insects and ‘the head of the ryneceros bird which was very

¹⁶Although eventually published in 1667, Sprat actually began his text in 1663/1664, a time when the Royal Society had not suffered any widespread criticism of its activities. The worst they had to endure was the fun that the King made of the Royal Society at court. The approximate date that Sprat began writing the *History* also predates a waning of enthusiasm for the Royal Society, as well as some of the sharpest criticism of the Royal Society from Henry Stubbe and Meric Casaubon; Stubbe’s main criticisms were indeed in response to the *History*. Evidence in the text indicates that Sprat becomes more defensive of the Royal Society’s activities, and the text becomes more of an apology, about halfway through Part Two.

¹⁷ Lorraine Daston and Katharine Park, *Wonders and the Order of Nature 1150 – 1750* (New York: Zone Books, 2001), Chapters 5 and 6; Linda Levy Peck, *Consuming Splendour: Royal Society and Culture in Seventeenth-Century England* (Cambridge: Cambridge University Press, 2005), esp. p. 17, pp. 22-23; Peter Borsay, *The English Urban Renaissance: Culture and Royal Society in the Provincial Town 1660 – 1770* (Oxford: Clarendon Press, 1989), esp. p. 200 – 23.

extravagant, and a butterfly resembling a perfect bird'.¹⁸ Evelyn further described seeing a sheep with six legs, a goose with four legs, and even a woman who was covered in hair.¹⁹ The Society itself had an interest in such things, particularly in animals not seen in Britain, as well as reports of strange or marvellous events and people with unusual physical traits. They were also very keen to gather reports about natural phenomena from abroad, and to request that travellers to distant parts collect information and conduct experiments and report back to the Society.²⁰ The Society even had its own collection of curiosities and other natural objects in its repository.

This then was the market that the Royal Society hoped to exploit, and it used Sprat's *History* to do so. Sprat makes a specific appeal to 'gentlemen, free and unconfin'd'. Potential members could join a Fellowship of men encompassing the professions, merchants, tradesmen and artisans, as well as aristocrats and gentlemen. The social and vocational diversity of the Fellowship indicated that the Society welcomed all types and degrees of men, and their presence actually supported the Society's aims of producing and advancing all kinds of knowledge without prejudice.²¹ Gentlemen were particularly to be welcomed because their education meant that they were more likely to view new knowledge and the new philosophy with an open and unfettered mind.²² Sprat also directed attention to the Society's apparent adoption of Cowley's plan for a college, specifically noting that such a plan required a large financial investment, and hinting that this text was a means of attracting the attention of one or more wealthy benefactors. Ideally they would have liked to attract their own Sir Thomas Gresham, whose will included a substantial bequest for the founding of Gresham College in 1597, where the Royal Society held their meetings.

¹⁸ John Evelyn, *The Diary of John Evelyn, Esq., F.R.S. From 1641 – 1705.6 With Memoir*, ed. William Bray, Esq. (London, 1895), p. 211.

¹⁹ *Ibid*, p. 253, p. 200, p. 277. Evelyn also described an enjoyable visit to Mr Palmer at Gray's Inn to view his collection of 'good telescopes and mathematical instruments', see *Ibid*, p. 277.

²⁰ For example, Birch, *History*, pp. 8 – 10, p. 19.

²¹ Sprat, *History*, pp. 65 – 70.

²² *Ibid*, pp. 72 – 73.

Sprat did acknowledge and praise the presence of physicians in the Society, but he provided this caveat: that the Society preferred gentlemen because they would not be inclined to serve their own professional interest in the areas of study they pursued.²³ Nonetheless, Sprat was careful not to alienate the substantial minority of physicians that formed the Society's membership, and praised the significant contribution physicians made to the Society's activities.²⁴ In seeking the membership of gentlemen, Sprat made it clear that such men need not be concerned that they did not have any formal qualifications to engage in the Society's activities, and in fact, they could even – through non-experimental activities – be involved in the production of new knowledge. The emphasis here was that while academic and learned qualifications - such as those possessed by members of the professions - were an asset, they were not a necessity. For the price of admission and a weekly fee, potential members could purchase the opportunity to not only marvel at natural objects and natural phenomena, but they could also perform experiments and investigations to attain a clearer understanding of them.

Sprat's text also indicated that the Society's concerns lay in the problem of being taken seriously; or more specifically, in demonstrating that their experimental philosophy was capable of producing useful knowledge and technological improvements. The occasion of the King's mockery and criticism of the tardiness of their progress in producing new and useful knowledge, introduced a more defensive element to the promotional aspect of the text. Samuel Pepys described the incident in his diary:

the King come and stayed an hour or two laughing at Sir W. Petty, who was there about his boat; and at Gresham College in general; at which poor Petty was, I perceive, at some loss; but did argue discreetly, and bear the unreasonable follies of the King's objections and other bystanders with great discretion; and offered to take oddes against the King's best boates: but the King would not lay, but cried

²³ Ibid, pp. 66 – 67.

²⁴ Ibid, pp. 130 – 31.

him down with words only. Gresham College he mightily laughed at, for spending time only in weighing of ayre, and doing nothing else since they sat.²⁵

Their difficulty lay in the fact that their enterprise began as a voluntary, leisure association - in effect a private club; their charter gave them a legal public persona but it did not create a 'profession'. While their charter stated that they served a function for the public good, there was no attempt by Charles to grant them statutory duties or powers of regulation which would have confirmed their ability to truly promote natural knowledge to 'the advantage of the human race'.²⁶ As a result, the Society remained an organisation whose activities were dictated by the ability of its members to devote time and money to further its ends, with at first only two full time employees: secretary Henry Oldenburg, and curator of experiments Robert Hooke. Sprat was aware of the need to be taken seriously. He wrote of their activities: 'the Men of the World, and Business, ... esteem it merely as an idle Matter of Fancy, and as that which disables us from taking right Measures in human Affairs'.²⁷ He articulated in detail the process by which the Society produced its 'matters of fact', as a demonstration of the logical, organised and purposeful means by which the Society conducted its activities. They were no pedantic dabblers, but men with a serious purpose to work for the good of mankind.

It is this articulation of the Royal Society's methodology that has been seen as a direct challenge to the intellectual authority of the College of Physicians, which is arguably, the only area in which it could be argued that the Society was actively involved in competition with the College: that is, for

²⁵ Entry for February 1, 1663/64, Samuel Pepys, *The Diary of Samuel Pepys*, ed. by Richard Griffin Braybrooke (Kindle edition, 2011; from original publication, London, 1879).

²⁶ Translation of Second Charter. Royal Society website. At one point, Charles held out the possibility of the Royal Society having a kind of regulatory role in the form of vetting inventions put forward to receive a patent, but this came to nothing. See Birch, *History of the Royal Society*, p. 116.

²⁷ Sprat, *History*, p. 27.

the status of preeminent learned institution in London.²⁸ There is evidence though to show that the Society as an institution was not involved in any such competition, nor was that their aim. Rather the supposed conflict and competition, and the College of Physicians' loss of pre-eminence, was more a perception derived from the College's conservative leadership's own insecurities, which in turn were a result of the internal divisions which had been growing in the College, combined with the competition that the College faced in the medical marketplace. Changes in the College's leadership also resulted in a change in the perception of the threat of the Society to the College of Physicians' position.

One of the most serious challenges to the College of Physicians' authority in both medical and learned affairs came from the group of physicians who formed the Society of Chemical Physicians. These men, who were supporters of the teachings of Jean Baptista Van Helmont which advocated a focus on the use chemical remedies for the treatment of disease, tried unsuccessfully to convince the College to abandon its sole adherence to Galenic medicine. This resulted in the Chemical Physicians' attempts to obtain a charter from Charles for their breakaway organisation. Physician Thomas O'Dowde published a short tract in 1665, providing case histories of patients who were treated with chemical medicines for a variety of diseases and complaints, as well as a declaration setting out the aims of the new Society of Chemical Physicians. The Chemical Physicians had some significant support at Court at this time, with signatories to their declaration including the Archbishop of Canterbury, the Duke of Ormonde and the Duke of Buckingham. Among the physicians who were signatories to the declaration was Nicholas Le Febvre, who was chemist to the King, and O'Dowde,

²⁸ See P. B. Wood, "Methodology and Apologetics: Thomas Sprat's 'History of the Royal Society'", *The British Journal for the History of Science*, Vol. 13, No. 1 (March 1980) pp. 1 – 26, esp. p. 2. Charles Webster argued that the Royal Society succeeded in supplanting the College of Physicians within a few years of the Restoration. See Charles Webster, "The College of Physicians: "Solomon's House" in Commonwealth England", *Bulletin of the History of Medicine*, Vol. 41, No. 5 (Sept. 1967), pp. 393 – 412, esp. pp. 411 – 12.

who was groom of the King's Chamber.²⁹ The declaration in O'Dowde's text proclaimed the virtue of chemical medicines as serving the best interests of patients:

Whereas after sufficient Experiment, it is found most true, that *Chymical Medicines* well prepared, and as well applied, are above all others, the safest, pleasantest, and most effectual means, both for the Conservation of Health, and Cure of all Diseases whatsoever...

To the end therefore, that Patients may not spend themselves, their precious time and money in vain; and also that the licentious Abuses of Impostors may hereafter be detected, We whose Names are hereunto subscribed, do resolve and promise to our uttermost Abilities, to preserve and advance the Honour and Credit of this Profession of *Chymical Physick*.³⁰

It must be noted that many of the courtiers who were signatories were also Fellows of the Royal Society, including the Duke of Buckingham, the Earl of Northampton, the Earl of Carlisle and the Earl of Elgin, as well as Sir Kenelm Digby who was very active in the Royal Society in this period. Significantly however, is that none of the physicians who signed the declaration were known to be Fellows of the Royal Society. Clearly their support for the use of chemical medicines was not directly inspired by the Royal Society's activities, except that like the Royal Society, the Chemical Physicians urged that they were acting for the public good.

Beyond the divisions revealed by the rise of the Society of Chemical Physicians, there were other deep divisions within the College between conservative adherents of the traditional learning, and those who wished the College of Physicians to further embrace the new experimental philosophy. Francis Glisson, Christopher Merrett, George Ent and Thomas Wharton for example were Fellows

²⁹ Thomas O'Dowde, *The Poor Man's Physician, Or the True Art of Medicine, As it is Chymically prepared and administered, for healing the several Diseases incident to Mankind* (London, 1665), pp. 93 – 94. See also Harold J. Cook, "The Royal Society of Chemical Physicians, the New Philosophy, and the Restoration Court", *Bulletin of the History of Medicine*, Vol. 61, No. 1 (Spring 1987), pp. 61 – 77. Cook demonstrates that the situation for both the Chemical Physicians and the College was further complicated by the overlap of support amongst courtiers for their organisations, as well as for the Royal Society.

³⁰ O'Dowde, *The Poor Man's Physician*, p. 93.

of both organisations, with Glisson and Ent forming part of the College's leadership in this period, and Merrett serving as librarian of the College. On the other hand, men like Baldwin Hamey and Sir Edward Alston were vehemently opposed to what they saw as moves to replace the traditional learning with the new philosophy. However, support for the new philosophy actually long predated the founding of the Royal Society. William Harvey's pioneering anatomical researches, which resulted in the mapping of the human circulatory system at the beginning of the century, led the way in introducing a more experimental way of working to the practice of physic.³¹ The group of physicians who had gathered in Oxford around Harvey in the late 1640s and 1650s, and whom Robert G Frank termed the 'Oxford physiologists', included Walter Charleton and Petty, both of whom went on to become founding and original Fellows of the Royal Society.³² In 1657, in his *Immortality of the Human Soul*, Charleton wrote in praise of the learned advances of both the Fellows of the College of Physicians and of the Oxford group.³³

Given the details he provided of its activities, this Oxford group was probably the Oxford Philosophical Club, which met first in the lodgings of William Petty, then those of Wilkins at Wadham College, Oxford, and finally in the lodgings of Boyle. This group was one of the precursors of the future Royal Society. Indeed, Petty himself proposed a new college back in 1647, in *The Advice of W.P. to Mr Samuel Hartlib For the Advancement of Some Particular Parts of Learning*. Petty proposed the establishment of a 'Nosocomium Academicum or an Hospitall', which was effectively a teaching

³¹ Charles Webster has argued that the College was able to maintain its intellectual authority by claiming to be heirs of both Harvey and Francis Bacon. See Charles Webster, *The Great Instauration: Science, Medicine and Reform 1626 – 1660*, 2nd ed. (Oxford: Peter Lang Publishing Inc., 2002), p. 315. Also Robert G. Frank Jr., "The Image of Harvey in Commonwealth and Restoration England" in *William Harvey and His Age: The Professional and Social Context of the Discoverer of the Circulation*, ed. Jerome J Bylebyl (Baltimore, MD.: Johns Hopkins University Press, 1979), pp. 113 – 16.

³² Robert G. Frank Jr., *Harvey and the Oxford Physiologists: Scientific Ideas and Social Interaction* (Berkeley, CA: University of California Press, 1980). See esp. pp. 43 – 57 which emphasises the relationship between the physicians and students around William Harvey and their connections with the circle at Wadham College around John Wilkins, John Wallis and Robert Boyle.

³³ Walter Charleton, *The Immortality of the Human Soul, Demonstrated by the Light of Nature in Two Dialogues* (London, 1657), pp. 34 – 48.

hospital, to include not only physicians, but also surgeons, apothecaries and nurses. The physicians would be the preeminent practitioners who directed the activities of the other staff, but crucially would be expected to learn from the others as well.

[The physician] shall have an influence upon all the rest, and all the rest reciprocally upon him, so that he being made acquainted with all the Histories taken in the Hospitall, Laboratory, Anatomical Chamber, garden, &c. may give the reason of the most notable Phenomena hapning in either of them.³⁴

Like the Society of Chemical Physicians and others in the College of Physicians who supported the new philosophy, Petty believed that physicians could maintain their superior position in the medical world and serve the public good, if they supplemented their traditional learning with new knowledge. The pre-existence of interest in the new philosophy suggests that conservative elements in the College simply transferred their concerns about the new philosophy to the organisation which was its leading exponent, namely, the Royal Society. In part that may have been because many of the men who had been involved in changing the intellectual direction of the College in the 1650s – including men like Petty and Charleton – had gone on to become Fellows of the Royal Society. Despite the College's commitment to the traditional learning, it does not seem to have wanted the Society to gain the knowledge and methods of men like Petty and Charleton either. They effectively wanted to have their intellectual cake, and eat it too!

The College of Physicians was also facing a crisis of identity and purpose in its difficulties in passing its charter, and in the increased competition it faced in the medical marketplace. This crisis could be traced to the radical ideas of the Interregnum. The College was viewed as having a monopoly on the practice of medicine conferred on it by an abandoned monarchy, keeping the best medical

³⁴ William Petty, *The Advice of W.P. to Mr. Samuel Hartlib for The Advancement of some particular Parts of Learning* (London, 1647), pp. 9 – 17, esp. p. 13.

knowledge in the hands of a select few, and preventing other practitioners from helping the people of London.³⁵ By the time of the Restoration the College's troubles over its charter were not over. Confusion and a reduction of privileges under Cromwell left the College a much weaker institution. The College hoped that the return of the monarchy would signal a return to the regulatory and supervisory status they enjoyed before the civil war. Their new charter, sent to Parliament in 1664, would have returned all of the College's previously held powers, as well as conferring new ones. In the event, despite the support at court of the Earl of Clarendon, the charter failed to pass Parliament. In addition, the Society of Apothecaries had asked the College to make amendments to its new charter, among other things, giving the Apothecaries powers to practice medicine in the event of there being no physician available. The College refused to accede to the Apothecaries' requests, and it has been suggested that this was a factor in the failure of their charter in Parliament.³⁶ In the end, it appears that the College's concern with the competition that the Apothecaries posed in the medical marketplace, disinclined them to confer any privileges which would put the College of Physicians at a disadvantage.³⁷

Throughout this period, it becomes clear that the College of Physicians lost its sense of direction, and a sense of a clear identity due to the changes in its leadership, which led the College at first in one direction then in another. At various times in its history from the late 1640s onwards, the College swayed between conservative adherence to the Galenic academic tradition, to a freer embrace of the new experimental philosophy and chemical medicine. The ethos of leaders often dictated the intellectual course of the College, ranging from the embrace of the new philosophy of Glisson, to its rejection by Hamey. The College of Physicians was riven by factionalism and division, with various groups whose ideas and approaches threatened to undermine the authority of the

³⁵ Cook, *The Decline of the Old Medical Regime*, Chapter 3.

³⁶ *Ibid.*, Chapter 4, esp. pp. 136 – 141.

³⁷ For a discussion of the medical marketplace in London, see *Ibid.*, Chapter 1.

College and its ability to fulfil its role as the supreme medical and learned authority in London. In such a state, the conservative elements which came to dominate the College in the decade following the Restoration, and which rejected the advances of the Society of Apothecaries, would also have viewed the Royal Society with unmitigated hostility, and would have foiled any efforts by the Society to establish cordial relations. The Royal Society became the focus of the College of Physicians' concerns, insecurities and uncertainties, because to conservative minds in the College, the Society and the experimental philosophy that it promoted, was the source of all of the College's problems. In fact, its aim of improving the old knowledge of the ancients, and producing new knowledge meant that the hostility of not only the College, but also of the universities was an inevitable by-product of its intellectual goals.

What then of the Royal Society? Was there anything in its actions or those of its Fellows which justified the College of Physicians' hostility? Analyses of the Society's activities in this period have suggested that the Royal Society was indeed encroaching on the College's learned territory. Experiments in medical subjects such as anatomy and physiology, experiments conducted by physicians, and medical papers read at meetings formed a substantial part of the Society's activities.³⁸ However, the key to understanding the nature of the Society's activities lies in its full name: The Royal Society of London for the Improving of *Natural Knowledge*. The term 'natural knowledge', interpreted in the light of the Society's activities as described in its journal books, actually encompassed a breadth of topics, far more expansive than what in modern times would be classified as 'science'.³⁹ This would inevitably have led to an overlap in the areas of research of the College of

³⁸ Ibid., p. 165 and footnote 88.

³⁹ It is beyond the scope of this article to discuss the full implications of what the Royal Society considered to be 'natural knowledge'. However, suffice to say that the minutes of the Society's meetings illustrate that 'natural knowledge' did not only include knowledge gained from the study of nature, but also knowledge of mankind's interaction with, and sometimes manipulation of objects in nature. Thus this could include the chemical experiments conducted by Robert Boyle and the study of cider making completed by John Beale.

Physicians and the Royal Society, if Charleton's description of the areas of research adopted by the College is accurate. Even here though, the Society demonstrated an awareness that they may have offended the College with their lines of research.⁴⁰ Later, after the devastating effects of the outbreak of plague in 1665 and the fire of 1666, Fellows of the Royal Society continued to regard the College as potential allies. In 1670, Merrett, Fellow of both the Society and the College of Physicians, wrote *A Short Reply to the Postscript, &c. of H.S.*, in which he refuted the claims made against the Royal Society by Stubbe, particularly Stubbe's claim that the Society intended to absorb the College into their own organisation. In the text, Merrett claimed that after the fire which destroyed the College's buildings and damaged Gresham College, he and Daniel Colwall, a merchant and also Fellow of the Society, proposed to both the College of Physicians and the Royal Society

that a common place of meeting might be erected at the common charges of them both; which design none of our College but judged to be much for their advantage, and most of the R. S. approved at first, but upon second thoughts rejected; urging that both the name of the place and honour would be wholly the Physitians, and therefore never endeavoured to incorporate the Physicians into their Royal Society, a thing very incongruous and absur'd in it self; because *his Majesty* had established them as two Corporations with distinct Lawes and Government.⁴¹

The Royal Society is depicted by Merrett as trying to defend the College of Physicians' identity and autonomy, not undermine it. Further, Sprat implies in *History*, that there was a perception held by the Society that the College of Physicians' work was complementary to the Society's activities. He wrote of the contributions of the physicians:

This they have done, though they have also in *London* a College peculiar to their *Profession*; which ever since its first Foundation, for the Space of a hundred and fifty

⁴⁰ As late as January 1680/81, the Royal Society tried to avoid any conflict with the College of Physicians. At a meeting of the Royal Society's council on 19 January, the president Sir Christopher Wren proposed "that there might be an anatomical committee: to which Dr. Croune objected the college of physicians." See Birch, *History*, p. 65.

⁴¹ Christopher Merrett. *A Short Reply to the Postscript, &c. of H.S.* (London, 1670), pp. 2 -3.

Years, has given the World a Succession of the most eminent *Physicians* of *Europe*. In *that* they confine themselves to the Advancement of *Physick*: But in *this*, they have also with great Zeal and Ability promoted this *universal Inspection*, into all *natural Knowledge*.⁴²

So for the Royal Society, physicians were valued not necessarily for their medical knowledge, but for their broad intellectual abilities and commitment to learning.

This is not to ignore individual Fellows who were vocal critics of both physicians and of the ancient learning which the College of Physicians held dear. Boyle's criticisms were noted above; however it is worth considering that Boyle's criticisms of individual physicians did not extend to the profession as a whole, much less the College of Physicians. Writing further on the physician described above, Boyle made clear that he did not consider the one bad physician to represent all:

For such an unprofitable way of proceeding, to which some lazy or opinionated Practizers of Physick (I say *some*, for I mean not *all*) have, under pretence of its being safe, confined themselves [to using safe but ineffectual remedies]...⁴³

Assertions are made by both the publisher and Boyle that the intention was not to offend. In 'The Publisher to the Reader', Robert Sharrock defended the publication as being concerned with matter which served the public good. In particular, he defended Boyle's criticism of physicians:

it might be look'd upon as unbecoming for Him to meddle with the Physitians Art, of which he never did (nor could by reason of his Native Honour) make any profession. But the Oppositions being raised upon points of Curiosity in Ceremony and outward *Decorum*, were of little weight, when the forementioned Noble Offices of Charity and doing good were in the other Scale.⁴⁴

⁴² Sprat, *History*, p. 130.

⁴³ Boyle, *Considerations*, p. 118.

⁴⁴ Robert Sharrock, 'The Publisher to the Reader', in Boyle, *Considerations*, pp. sigA4r – sigA4v.

Again, the emphasis here is on public good as being at the forefront of the aims of those who support the experimental philosophy. It could be argued that such claims of public good were mere rhetoric, when the Royal Society by its very nature was designed to undermine the College of Physicians. However, many of those who were most vocal in calling for change in the practice of physic were themselves physicians, as well as Fellows of the Society, and they were equally clear in condemning some of the practices of the Apothecaries. They argued for change on the basis of being medical practitioners, not Fellows of the Royal Society. Their concern was for the good of the profession and the stature of the College of Physicians, and for public benefit as well.⁴⁵

Joseph Glanvill was a vocal and unrestrained apologist for the Royal Society and the new philosophy in texts such as *Scepsis Scientifica* (1665, based on an earlier text *The Vanity of Dogmatizing*, 1661), and *Plus Ultra* (1668). In both of these texts, Glanvill vehemently rejected ancient learning in favour of the new philosophy, largely on the basis that the new philosophy banished the dogmatic thinking and endless disputing of university scholastic approach to the natural world. The new experimental philosophy would produce new, correct knowledge based on the results of experiments and direct experience of natural phenomena. It was Glanvill's assertive over-exuberance as well as his actual assertions which seem to have been so offensive to some physicians both inside and outside of the College of Physicians.⁴⁶ Over-exuberance aside, the rejection of ancient learning in favour of knowledge gained from experiment and observation was a view shared by many in the Society, and

⁴⁵ See for example, T.M., *A letter concerning the present state of physic, and the regulation of the practice of it in this kingdom* (London, 1665). It is not known who T.M. was but his extravagant praise of the Royal Society suggests he was a Fellow. See also Jonathan Goddard, *A Discourse Setting Forth the Unhappy Condition of the Practice of Physick in London* (London, 1670); Christopher Merrett, *A Short View of the Frauds, and Abuses Committed by Apothecaries; As well in Relation to Patients, as Physicians: And Of the only Remedy thereof by Physicians making their own Medicines* (London, 1669).

⁴⁶ Stubbe, one of the most vocal critics of the Glanvill and the Royal Society was one; Hamey was reputed to be another.

can be traced back to the writings of the man whose ideas for the reform of natural philosophy influenced the nature of many of the Society's activities: Sir Francis Bacon.

The first decade of the Restoration was an increasingly uncertain time for both the College of Physicians, as well as for the Royal Society, particularly by the end of the decade. Neither organisation was entirely successful in their attempts to establish themselves quite as they wished, and the perception of the supposed conflict and competition between the two organisations must be viewed within this context. The College's attempts to regain pre-eminence, and the Royal Society's attempts to devise a credible and useful persona of their own, were hampered by factors within and outside of their control. For conservatives in the College of Physicians, the source of their frustration was the divisions which they believed were created by the exponents of the new experimental philosophy, the institutional promoter of which was the Royal Society. Thus the Society became the embodiment of all of the College's insecurities and defensiveness against those who strove to undermine their role and stature in the intellectual and medical world of London. From 1670 the writings of Stubbe and the refutations of Glanvill served to inflame this perception further. The College's woes can be traced, not to a real conflict with the Royal Society, but to their difficulty in deciding what was more important: being seen as the superior learned institution in London, or regaining the powers and privileges which had originally made them the superior medical institution in London. The Royal Society did not actively try to add to the College's woes; it did in fact try to work with, or at least alongside the College. However, by its very nature it could not help but provide another challenge to the College of Physicians' dominance in the study of nature.

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