

SLEEPERS AWAKE: THOMAS MOFFET'S CHALLENGE TO THE COLLEGE OF PHYSICIANS OF LONDON, 1584

by

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Received opinion has it that the Paracelsian movement in England did not rise much above the level of quackery before the seventeenth century. This view, represented by Allen G. Debus and Paul H. Kocher, is based on the apparent lack of contemporary critical debate of Paracelsian theory; there was, they suggest, a limited tolerance of chemical therapy, but little interest in the underlying challenge to traditional Galenism.¹ But Charles Webster has claimed that the only full-length Paracelsian apologia in English, Richard Bostocke's *Difference between the auncient physicke and the latter physicke* (1585), was not an isolated effusion but a sign of

a general cultural shift which brought about the revitalization of alchemy and generated new confidence in the capacity of man to cure his ills and attain command over nature.

Webster has demonstrated that books and manuscripts dealing not only with practical chemistry, but also with the new concepts and metaphysical theories of Paracelsus, were widely disseminated in college libraries in Oxford and Cambridge and strongly represented in John Dee's library at Mortlake. Among these works, those of Thomas Moffet are prominent.²

The career of Thomas Moffet (1553–1604), naturalist, physician, and man of letters, provides important evidence for the vigorous promotion of a radical Paracelsian approach to medicine in England during the 1580s. He is best known today as the author of the pioneering *Insectorum theatrum* (posthumously published in 1634), but he also wrote an entertaining dietary treatise, *Healths improvement* (also published posthumously, in 1655).³ Personal physician to Mary Herbert, Countess of Pembroke,

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¹ A. G. Debus, 'The Paracelsian compromise in Elizabethan England', *Ambix*, 1960, 8: 71–97; *idem*, *The English Paracelsians*, New York, F. Watts, 1966, pp. 70–81; P. H. Kocher, 'Paracelsan medicine in England: the first thirty years (ca. 1570–1600)', *J. Hist. Med.*, 1947, 2: 451–80.

² Charles Webster, 'Alchemical and Paracelsian medicine', in *Health, medicine and mortality in the sixteenth century*, ed. Charles Webster, Cambridge University Press, 1979, pp. 330–4. William Paddy donated copies of Paracelsus' *Works* and Moffet's *De anodinis medicamentis* and *Nosomantica Hippocratea* to the library of St John's College, Oxford. On Paddy see Donald S. Pady, 'Sir William Paddy, M.D. (1554–1634)', *Med. Hist.* 1974, 18: 68–82.

³ *Insectorum sive minimorum animalium theatrum* . . . , London, 'T. Cotes et venales ap. B. Allen', 1634. To be referred to as *The theater of insects*, the 1658 English translation by John Rowland: Edward Toppell, *The*

he wrote a significant early biography of her brother, Sir Philip Sidney (*Nobilis*, 1593), and the long and fascinating georgic poem *The silkwormes, and their flies* (1599). In 1584 he threw down his challenge to the medical establishment of the day in his “apologetic dialogue” *Of the validity and pre-eminence of chemical medicines*.⁴

Moffet, the son of a London haberdasher, had gone abroad to study medicine in Basle after completing a Cambridge MA in 1576. There he came under the influence of Theodor Zwinger and Felix Platter,⁵ and aroused the ire of the faculty by making too obvious an attack on Thomas Erastus, anti-Paracelsian *par excellence*, in his MD thesis.⁶ He determined to campaign for the new doctrine in his native country, but first set up in practice in Frankfurt and toured Italy and Germany to build up experience and extend his scientific connections.⁷ In the course of these travels he met Godfrey Achiutius, Petrus Monavius, Thaddaeus Hajek, and Joachim Camerarius, jun. Like so many Englishmen abroad, he stayed in Strasburg with Johannes Sturm, and was introduced there to Robert Sidney. In 1580 he returned to England, got married, busied himself with setting up a laboratory, and built up a fashionable practice. But he and his friend Peter Turner had some initial difficulty in being recognized by the College of Physicians. The Annals of the College for 3 November 1581 record that Moffet was to pay a fee of £8 annually for four years before being admitted as a candidate, and that legal action would be taken against Turner for practising for a whole year while refusing to be examined.⁸ It took another full year before matters were resolved between Turner and the College: in December 1582 it was decided that on a payment of £30 he would be recognized and the past forgotten.

Alchemy was clearly in the forefront of Moffet’s mind when he examined some of the rarities Drake had brought back from his circumnavigation of the globe in September 1580. The astonishing amount of treasure Drake had amassed gave Moffet the opportunity of making, in a letter to Platter, a playful remark on the aspirations of the alchemists: Drake, he wrote, had found the philosophers’ stone, and all frustrated

history of four-footed beasts and serpents: describing at large their true and lively figure . . . collected out of the writings of Conradus Gesner and other authors . . . whereunto is now added, The theater of insects; or, lesser living creatures: as bees, flies, caterpillars, spiders, worms, &c . . . by T. Muffet, London, E. Cotes for G. Sawbridge, etc., 1658. The latter treatise: Healths improvement: or, rules comprizing and discovering the nature, method, and manner of preparing all sorts of food used in this nation . . . corrected and enlarged by Christopher Bennet . . ., London, Th. Newcomb for Samuel Thomson, 1655.

⁴ *The silkwormes, and their flies: lively described in verse, by T. M., a Countrie Farmer . . ., London, V. S. for N. Ling, 1599; De iure et praestantia chymicorum medicamentorum dialogus apologeticus . . . Frankfurt, Heirs of A. Wechel, 1584.*

⁵ On Zwinger, see Carlos Gilly, ‘Zwischen Erfahrung und Spekulation: Theodor Zwinger und die religiöse und kulturelle Krise seiner Zeit’, *Basler Z. Gesch. u. Altertumskunde*, 1977, 77: 57–137, especially pp. 109–11 on Moffet.

⁶ R.-H. Blaser, ‘Un rare témoignage de fidélité envers Paracelse à Bâle: les *Theses de anodinis medicamentis* du médecin anglais Thomas Moffet (1578)’, in *Current problems in history of medicine*, ed. R. Blaser and H. Buess, Proceedings of the XIXth International Congress for the History of Medicine, Basle, Karger, 1966, pp. 502–12.

⁷ Manfred E. Welti, ‘English-baslerische Beziehungen zur Zeit der Renaissance in der Medizin, der Naturwissenschaften und der Naturphilosophie’, *Gesnerus*, 1963, 20: 105–30.

⁸ ‘Annals of the Royal College of Physicians of London’ (‘RCP Annals’), translated by J. Emberry, typescript lodged at the Library of the Royal College of Physicians of London, vol. 2, fol. 1.

alchemists should join him on his next voyage.⁹ It was not long before Moffet himself was abroad again, renewing his continental scientific connections. From June to December 1582, he accompanied Peregrine Bertie, Lord Willoughby of Eresby, on an embassy to Frederick II of Denmark.¹⁰ The ostensible purpose of the embassy was to invest the king with the Order of the Garter, but it was also hoped to enlist his aid for the Duke of Anjou against the Spanish forces in the Netherlands.¹¹ Apart from acting as Willoughby's physician, Moffet was anxious to make contact with Petrus Severinus (Peder Sørensen) and Tycho Brahe. Severinus, an associate of Zwinger's, had been crucially influential in rehabilitating Paracelsus in the 1570s with his *Idea medicinae philosophicae* (Basle, 1571), in which the "bombastic" alchemist's doctrines are represented in elegant Latin prose.¹² It was to him that Moffet would dedicate the apologetic dialogue we have now to consider.

The *De iure et praestantia chymicorum medicamentorum* was the climax of the long period of preparation, study, practice, and accumulation of apparatus and medicines, after Moffet's graduation in Basle early in 1579. The work was directed both at a European and also a specifically English audience: the conservative medical establishment buttressed by the College of Physicians.¹³ Moffet, it is true, published it in Frankfurt, the centre of the North European book trade, and it was to be many times reprinted in Laurence Zetzner's influential *Theatrum chemicum*.¹⁴ Undoubtedly it succeeded as a cosmopolitan work, being cited in turn by such authorities as Libavius and du Chesne.¹⁵ But it was also intended to draw the English medical fraternity into the continental arena. At one point, perhaps more in hope than conviction, Moffet included "nostra tota divisa orbe Britannia"¹⁶ in a list of countries that, in the modern age, "omnium artium dominae & sospitatrices florent".¹⁷ The work ended with an imaginary letter to "Endymion Luddipolensis", a letter which constituted, in effect, a progressive appeal to the outdated and idle London College:

neque unquam sera nimis est ad bonos mores via: vel in senectute hac tua fundos vendito, mare conscendito, exteros adito, fornaces aedificato, Chemicam discito, novam medicinam haud opinione fluctuantem, sed sensibus confirmatam colito.¹⁸

⁹ Letter to Platter, London, 12 Feb. 1581: Basle University Library, MS Fr.-Gr. II 19, 128.

¹⁰ The visit to Elsinore is recorded in *Healths improvement*, op. cit., note 3 above, pp. 66, 234.

¹¹ See especially the letter from W. Waad to Walsingham, 2 Aug. 1582, in the *Calendar of state papers, Foreign, Elizabeth I*, vol. 16, May-Dec., 1582, ed. A. J. Butler, 1909, pp. 215-17.

¹² See Francis Bacon, *Works*, ed. James Spedding, R. L. Ellis, and D. D. Heath, 14 vols., London, Longman, 1857-74, vol. 3, p. 533. Bacon, though repelled by Paracelsianism, was impressed by this work.

¹³ This fact was overlooked in accounts of the work by Debus, *English Paracelsians*, op. cit., note 1 above, pp. 71-6; and Charles Nicholl, *The chemical theatre*, London, Routledge and Kegan Paul, 1980, p. 66.

¹⁴ Vol. 1 (Ursel, C. Sutorius, 1602, etc.).

¹⁵ Andreas Libavius, *Alchemia . . . opera e dispersis passim optimorum autorum, veterum et recentium exemplis potissimum . . .*, Frankfurt, J. Saur for P. Kopff, 1597, sig. B4^r; and Joseph du Chesne (Quercetanus), *Ad veritatem hermeticae medicinae ex Hippocratis veterumque decretis ac Therapeusi . . .*, Paris, A. Saugrain, 1604, p. 14.

¹⁶ "Our own Britannia, cut off from the whole world". *De iure*, op. cit., note 4 above, p. 67.

¹⁷ "[Which] are flourishing as mistresses and deliverers of all the arts". *Ibid.*

¹⁸ "Nor is it ever too late to change to better ways: even in this old age of yours, sell your estates, take to the sea, go abroad, build laboratories, study chemistry, cultivate the new medicine that does not float about on a sea of opinion but is established by the evidence of the senses." *Ibid.*, p. 110.

Endymion, the aged physician, represents the sleeping profession in London (“Luddipolis”).¹⁹ The letter’s argument, for the benefits of foreign travel to the young physician, was surely a deliberate attack on the College’s policy of discouraging study abroad by making it more expensive and time-consuming to obtain a fellowship without an English medical degree.²⁰

Several features of the Paracelsian movement are illustrated by the *De iure*. One is the tendency to obscurantism, based on distrust of the Galenists and their policing methods. Chemista, Moffet’s persona in the dialogue, lives in a remote, barren retreat and is deeply suspicious of the motives of his enquirer, Philerastus (“lover of Erastus”). It seems other enquirers have come from Galenist “Athens” to be initiated into chemical secrets, only to return to their colleagues and sneer (p. 16). Elsewhere in the dialogue Chemista relates how the “summus pontificiorum archiatros”²¹ tried to discredit him and his two friends, Penny and Turner, and took charge of their patient.²² After denouncing their chemical prescription as useless, he used it himself three days later on the same patient, with fatal results. The incident is said to have taken place a year previously; the interfering physician was no doubt a senior Fellow of the College of Physicians, and the patient a nobleman’s retainer. These experiences help to explain that secretiveness of the Paracelsians to which Andreas Libavius was to object in the first epistle of his *Rerum chymicarum epistolica forma descriptorum*.²³ In Christopher Hill’s view, it showed courage to sign one’s full name to a Paracelsian publication in England.²⁴ But Moffet himself showed some sympathy with the frustration of the outsider confronted with chemistry’s new esoteric terminology. Even after Chemista explains that a new science has the right of coining new words and demonstrates that all the names are etymologically sound, Philerastus is given the last word, comparing his experience to one who is invited to a feast only to be frightened away “by imaginary ghosts and spectres” just as he is about to sit down (pp. 27–8).

The Galenists are the ones who are retreating from real debate, Moffet declared, because they are concerned only to wrangle senselessly over conflicting authorities:

Quos si nunc interrogas, quo tandem pacto sensibilia corpora ex elementis non sensibilibus, acida ex insipidis fiant, non respondent, *veni, tange, vide, oculum digitumque adhibe: sed, crede, contemplare, imaginare, illudque Aristotelicum perdisce.*²⁵

¹⁹ “Lud’s town”. Moffet, too, in the persona of the author of the letter to Endymion, claims to be “Luddipolensis”. *Ibid.*, p. 105.

²⁰ Webster, *op. cit.*, note 2 above, p. 171; see also Harold J. Cook, *Decline of the old medical regime in Stuart London*, Ithaca, Cornell University Press, 1986, pp. 72–3.

²¹ “The chief physician, the very highest of the established profession”. *De iure*, *op. cit.*, note 4 above, pp. 53–4.

²² Thomas Penny was a close family friend and prominent entomologist, whose observations Moffet incorporated in his *Theater of insects*.

²³ *Rerum chymicarum epistolica forma ad philosophos et medicos . . . descriptorum . . .* Frankfurt, J. Saur for P. Kopff, 1595, vol. 1. See Owen Hannaway, *The chemists and the word*, Baltimore, Johns Hopkins University Press, 1975, pp. 117–24. Moffet referred to Libavius’ work in the margin of *The silkwormes, and their flies*, *op. cit.*, note 4 above, p. 47.

²⁴ *The intellectual origins of the English Revolution*, Oxford, Clarendon Press, 1965, p. 29, n. 6.

²⁵ “If you ask them, by what process, after all, material bodies come into existence from immaterial elements, or acidic things from those without taste, they do not reply, ‘Come, touch, see, use your eyes or your fingers’, but, ‘Take it on trust, contemplate it, reflect on it, use your imagination, learn thoroughly this or that Aristotelian dictum.’” *De iure*, *op. cit.*, note 4 above, p. 73.

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When it came to ancient authors, Moffet was no iconoclast, but he did require traditional learning to be subject to the scrutiny of modern scientific enquiry. The Paracelsians indeed claimed to be reviving the pristine Hermetic tradition of medicine; hence Bostocke's title, in which "the latter Physicke" refers in fact to the Galenists. But inasmuch as the Paracelsian movement was a new development, Moffet compared the modern medical scientist to a raven taking a point of vantage at the top of the house, looking, to the other ravens on the ground, like a tiny sparrow, but able to see further and more accurately (pp. 83–4).

Another representative feature of the *De iure* is the association of the new medicine with the Reformation, though Moffet was more restrained in this regard than Bostocke. Where Bostocke speculated on the theological implications of the rival theories,²⁶ Moffet invested the moral virtues of the campaign with religious significance. Perseverance in using reason to win over one's opponent and the effort, sacrifice, and energy needed in the search for truth and application of knowledge were for him the attributes of the truly Christian scientist. For example, Chemista reads out the inscription on his building: *BASILICA CHEMICORUM; CONTRA QUAM OMNES GALENISTARUM COLONIAE NON PRAEVALEBUNT*.²⁷ Philerastus finds fault with the building's lack of ornamentation, which does not seem to suit such an advertisement, but Chemista rejects external splendour, both because it argues "ambition, not philosophy, foolishness, not knowledge" (pp. 20–1), and because such Mediterranean extravagance would be out of place in northern Europe. At the end of the prefatory epistle to the students of chemistry, Moffet called for divine help "ad Ecclesiam nostram medicinamque perfecte repurgandam",²⁸ and once Philerastus is rechristened Philalethes ("lover of truth"), the pious fraternity between him and Chemista becomes a trifle suffocating. But the mood of the work is dominated by a sustained emphasis on evidence, reason, education, and objective re-evaluation of authority. In many respects the language, feeling, and argument anticipate Bacon's more famous appeal for the *Advancement of learning*. In particular, the *De iure* is remarkable for its satiric pungency and for the telling use of metaphors, as in this representation of the Galenists' dependence on authority:

Tamen video plerosque avitae doctrinae nimios aestimatores, ad Patrum
authoritatem veluti Meniam aliquam columnam confugere, atque illud
Pythagoreorum telum, αὐτὸς ἔφα.²⁹

As so often with Moffet, there is something mischievously comical even in this quite serious argument. In subtlety and insight his attack is infinitely superior to Bostocke's pious lucubrations.

²⁶ For a discussion of the Paracelsian attacks on Galenist "materialism", see Paul H. Kocher, *Science and religion in Elizabethan England*, New York, Octagon Books, 1969, pp. 250–3.

²⁷ "The basilica of the chemists, against which all the outposts of the Galenists shall not prevail".

²⁸ "For the perfect reformation of our church, medicine". *De iure*, op. cit., note 4 above, p. 12.

²⁹ "I see many of them esteeming too highly the doctrine of the ancients, fleeing to the authority of the Fathers as if to some Menian column, and appropriating that weapon of the Pythagoreans, 'He himself said it.'" Ibid., p. 80. The Menian column was a pillar in the Roman forum, at which thieves and refractory

The reception of the *De iure* on the continent was mixed. While the students to whom Moffet addressed the 'Epistola ad lectorem' responded with enthusiasm, the more mature Johannes Crato von Krafttheim protested against "deliria ista, qualia Mufettus & alii proferunt".³⁰ He was personally offended that Moffet, who had previously expressed great admiration for him,³¹ had ranked him with the anti-Paracelsians, aligned against Zwinger and Platter, whereas he had been experimenting publicly with chemicals before he even knew the name Paracelsus.³² Perhaps understandably, he was contemptuous of the work: if Moffet thought he was going to fetter his opponents with such a dialogue, he was naive, for in it was "Nulla . . . demonstratio, . . . Nulla terminorum connexio in argumentis, Paralogismi autem pueriles plurimi".³³ Crato's personal objection may have been justified: as an enthusiast Moffet was too eager to assign to one side or the other members of an older generation to whom the battle lines appeared quite differently. Neither Zwinger nor Platter are today remembered as ardent Paracelsians. As for Crato's assessment of the argument of the *De iure*, he seems to have misunderstood its purpose, which is not concerned with demonstrating the fundamental truth of Paracelsian chemistry, but rather with secondary, broadly political matters of obstructionism; and the method of argument, by analogy, illustration and Socratic questioning, is rhetorically skilful even if, in Crato's judgement, not scientifically handled.

In England, Moffet felt that his opponents, incensed by his "apology", would stop at nothing to discredit him. He was surprised in July 1584 to find, having paid his fourth annual fee of £8 to the College of Physicians, that although he had been promised the next vacancy for a Candidatship, others were to be preferred before him. He wrote a spirited letter of protest to the president, Dr Gifford, implying that the fellows were trying to disqualify him on a technicality because he was just the sort of godly and progressive young physician who would disturb the genteel atmosphere of that privileged society:

Doth any man except that I have not visited the Colledge for that place?³⁴ let them remember that I did three yeares since: and yet indeed I visited not 2 or 3 of them, being suche manner of men as I will not vouchsaiffe to speak unto, nor to bid them god speede. Doth any one feare lest I stepping in to your Society, will marre their musick and Jollyty? If he be a papist, he hath cause to support it, for I hate him with an unfainid hatred because he is an enemy to the truth of god and so consequently to our prince. But if he be a Protestant, god forbid I should do otherwise unto him, then unto the Ball of myne owne ey for he is the child of god and drawing in the same yoke.

slaves were scourged, and to which (perhaps more significantly for Moffet's purposes) bad debtors were summoned.

³⁰ "Those ravings, of the kind Moffet and others produce". Letter to Zwinger, Breslau, 15 July 1585: Basle University Library, MS FR.-Gr. II 4, 66. Crato (1515–85) was physician to Maximilian II and a friend of Hubert Languet. Philip Sidney met him in Vienna in 1573–4. See James M. Osborn, *Young Philip Sidney*, New Haven, Yale University Press, 1972, pp. 99–100, 235.

³¹ See Moffet's letters to Monavius (1580–2), reprinted by Laurence Scholz in *Consiliorum et Epistolarum Medicinalium Johannis Cratonis a Krafttheim . . . liber tertius*, Hanover, Wechel, 1646, pp. 351, 354.

³² *De iure*, op. cit., note 4 above, p. 45; Crato to Zwinger, Breslau, 19 Nov. 1584 and 19 Jan. 1585: Basle University Library, MS Fr.-Gr. II 28, 51 and 52.

³³ "No proof, no consistency of terms in the arguments—just a lot of childish fallacies".

³⁴ A reference to the convention of visiting the Fellows before an election.

He went on to express his frustration in a striking manner:

If for moony you allow a man and disalowe him againe, when you list: if you draw on your fellowe brethren, with faire woordes as with baites and then having them on your hooke, pull the gutts and the lief out of their bellies surely well may you strengthen your selves with new lawes new taxes and newe freends.

Small wonder that the Fellows were offended by the tone of the letter and caused it to be copied into the Annals.³⁵ Nor did Moffet succeed in his purpose: Dr Hall of Oxford, and Dr George Turner, who had qualified in Venice, were admitted as Candidates on 4 September,³⁶ and he had to wait until 22 December of the following year.³⁷ Meanwhile, as Moffet hinted in the letter, the College was doing its best to make it more difficult for physicians who, like him, had qualified abroad, by trying to raise the fees they would have to pay for licentiates, candidacies, and fellowships. This move, though ostensibly concerned with standards in the profession, may well have been planned to limit the spread of Paracelsianism.³⁸

It is likely that it was after this disappointment that Moffet moved to Ipswich with his household.³⁹ His own competence soon came under attack. In 1585 one of his patients, Nicholas Beaumont, died after taking a julep he had prescribed. "Such is the malice of myne open adversaries", he wrote to Michael Hicks, secretary to Lord Burghley, "whom by writing I have chalenged a yeare since to defend their absurdities and ignorance . . . [that it] cannot be contayned in the bonds of honest dealing".⁴⁰ It was being put about that he was responsible for Mr Beaumont's death. The letter, dated 20 July 1585, from Ipswich, gives a detailed, rather fascinated, account of a dissection of the body in the presence of Beaumont's son, who declared himself satisfied that the cause of death had not been the pharmaceutical preparation. But his early decision not to continue the dissection disappointed Moffet's hopes of watching the opening of a skull, an operation which, performed by Felix Platter, had fascinated him on his arrival in Basle in 1577.

Ipswich had become an important centre of poor relief after the foundation of Christ's Hospital there in 1572. Theodore de Mayerne's tribute to Moffet's "many watchings and labours sustained for the publick good, in curing of the sick" may refer particularly to his stay there.⁴¹ Also in the city at this time was Timothy Bright, whose name is now associated with the invention of modern shorthand. He had been a contemporary of Moffet's at Trinity College, Cambridge,⁴² and had met Philip Sidney at Walsingham's

³⁵ 'RCP Annals', vol. 2, fols. 35–6, 23 July 1584.

³⁶ *Ibid.*, fol. 37; Sir G. N. Clark, *History of the Royal College of Physicians of London*, 3 vols., Oxford, Clarendon Press for the Royal College of Physicians, 1964–72, vol. 1, pp. 133–4. Clark wrongly supposed that the protest concerned the election of the Fellows Dodding and Randall on 25 June; Moffet explicitly referred to "Candidatships".

³⁷ 'RCP Annals', vol. 2, fol. 47b; William Munk, *The Roll of the Royal College of Physicians of London*, 2nd ed., London, The College, 1878, vol. 1, 1518 to 1700, pp. 91–3.

³⁸ Clark, *op. cit.*, note 36 above, p. 135.

³⁹ *Healths improvement*, *op. cit.*, note 3 above, p. 247.

⁴⁰ British Library, MS Lansdowne 107 art. 13.

⁴¹ Prefatory matter to his edition of Moffet's *Theater of insects*: *op. cit.*, note 3 above, sig. 4F2^r. See John Webb's introduction to *Poor relief in Elizabethan Ipswich*, Ipswich, Suffolk Records Society Publications, vol. 9, 1966, pp. 11–20.

⁴² BA, 1567–8; MB, 1574; MD, 1579.

house in Paris during the St Bartholomew's Day massacre of 1572. To him he dedicated his *In physicam Gulielmi Adolphi Scribonii . . . animadversiones*, dating the epistle 16 March 1584, from Ipswich. Moffet, meanwhile, was working on his next book, the *Nosomantica Hippocratea*, which he dedicated to Peregrine Bertie, Lord Willoughby, on 1 August 1586. The work was published only in 1588, in Frankfurt, but had already been projected in 1585 when Willoughby, about to embark on another mission to Denmark, requested that Moffet bring this collection of Hippocratic recommendations to the notice of the medical profession at large (sig. A2^r).

The aim of the *Nosomantica Hippocratea* was to provide the layman with a digest of relevant Hippocratic advice, separated from other material and prognostications. In particular, Moffet had in mind noblemen like Willoughby, who, he hoped, would take a deeper interest in medical studies. If you go into their houses, he complained, you would find

Omnia denique in parato ad corpus saginandum, delectandum exercendumque instrumenta; sed quo animum corpusve vulneratum atque exulceratum curent, ne unum quidem.⁴³

Mars has need of the Muses, he added, giving an extra dimension to the contemporary preoccupation with combining martial and literary excellence.⁴⁴

Moffet also used the dedicatory epistle to respond to his critics, attributing their hostility to their ignorance of Hippocrates:

Vellem etiam omnes illos Doctores (qui me ob Chymicam apologiam virulenta rabia, execrabili furore, & conviciis mendacissimis figere pro virili certant) in Hippocratis scriptis cum eo fructu versatos, ut hanc mihi hypothesin e manibus praereptam ipsi melius tractassent.⁴⁵

He attacked the Galenists, who are enticed away from learning by the sport of Venus and the tables of princes, for their idleness and complacency. The passage ends with a wry complaint about the passing of the Golden Age, when knowledge could be acquired without effort.

As might be expected from the aims Moffet set himself, the *Nosomantica* was, like Bright's *Animadversiones*, strongly influenced by the Ramist concept of "method".⁴⁶ In an introductory epistle to the students in Basle he claimed that Hippocrates' writings are like aloes or lupins, good to eat but impossible to digest because of the bitter taste. It appears from this epistle that he hoped also to "methodize" Paracelsus. He demonstrated his independence of mind by comparing the Paracelsian writings to

⁴³ "Every instrument in readiness for fattening, pampering, and exercising the body, but of those by which they may cure the mind or body that is wounded or diseased, not even one". *Nosomantica Hippocratea, sive Hippocratis prognostica cuncta, ex omnibus ipsius scriptis methodice digesta*, Frankfurt, Heirs of A. Wechel, C. Marnius, and J. Aubrius, 1588, sig. A5^r.

⁴⁴ Cf. George Gascoigne's motto, "Tam Marti tam Mercurio".

⁴⁵ "I should like it if all those Doctors who are striving with all their powers to transfix me, on account of my Chemical apologia, with virulent madness, execrable rage, and lying insults, had so familiarized themselves with the Hippocratic writings that they might themselves have better handled this hypothesis they have ripped out of my hands". *Nosomantica Hippocratea*, op. cit., note 43 above, sig. A3^r.

⁴⁶ Zwinger corresponded with Ramus in 1572: Basle University Library, MS Fr.-Gr. II 5, 504.

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a corn mill in which chemistry and medicine had been crushed together. Following the epistle, some commendatory verses by Peter Turner stress the point about the confused state of the Hippocratic writings. The work itself consists of a digest, in nine books, and, at the very end of the work, a fold-out sheet containing a diagram or "table", entitled 'Methodi Ratio'. The Ramism of this work is significant in that it marks an interim stage between Moffet's earlier, polemical works, and the great organizing skills of his mature *Theater of insects* and *Healths improvement*. It is also worth noting that he anticipated somewhat the charge laid against the Ramists by Libavius, that they expended too much energy on method and not enough on original research.⁴⁷ Moffet is severe on intellectual idleness in the *Nosomantica*, and he and his friends were actively engaged in chemical experiments and entomology. The preoccupation with Hippocrates also reflected his desire to be associated with humanist Paracelsians like Severinus, who were anxious to avoid a merely iconoclastic approach to antiquity.⁴⁸

Moffet's return to London, probably in time to take up his Candidateship in December 1585, was attended with some excitement over the appointment of a successor to Peter Turner as physician of St Bartholomew's Hospital. Turner had resigned to become a Member of Parliament, and now the College of Physicians pressed the claims of Henry Wotton, son of the naturalist, for the place, only to be frustrated by the efforts of Francis Walsingham, Burghley, and Mildmay on behalf of Timothy Bright.⁴⁹ Turner, whom Moffet had known since his student days at Cambridge, was, like Wotton, the son of a distinguished naturalist, his father being William Turner, the Marian exile. Peter Turner later became physician to Walter Raleigh, and his son, in turn, was Professor of Geometry at Gresham College.⁵⁰ Moffet mentioned that he took part in collecting specimens of insects,⁵¹ but there was an even closer link between them. Turner was married to Pascha, daughter of Henry Parry, chancellor of Salisbury Cathedral; Moffet's younger brother Peter married her sister, Jane, and in due course named his own daughter Pascha.⁵²

Moffet's relations with the College of Physicians evidently improved as he established himself as a physician with influential connections. On 28 February 1588, he was finally elected a Fellow, and on 30 September, Censor.⁵³ He now took a more active part in the College's activities, attending Comitia meetings regularly throughout 1588 and 1589. He seems to have been on friendly terms with William Gilbert, later

⁴⁷ Andreas Libavius, in *Quaestionum physicarum controversarum inter Peripateticos et Rameos tractatus* . . . , Frankfurt, 1591. See Lynn Thorndike, *History of magic and experimental science*, 8 vols., New York, Columbia University Press, 1923–58, vol. 6, pp. 238–9.

⁴⁸ Gilly, op. cit., note 5 above, pp. 97–109, citing the complaint against Paracelsus that not even Hippocrates and Aristotle, universally acclaimed as the leading medical and scientific writers of antiquity, were free from his condemnation.

⁴⁹ Sir Geoffrey L. Keynes, *Dr. Timothie Bright, 1550–1615*, London, Wellcome Historical Medical Library, 1962, pp. 1, 6–7; Clark, op. cit., note 36 above, pp. 139–40; Norman Moore, *The history of St Bartholomew's Hospital*, London, C. A. Pearson, 1918, vol. 1, pp. 428–33.

⁵⁰ For an admiring assessment of this group of friends, see Hardin Craig, *The enchanted glass* (1936), repr., London, Basil Blackwell, 1952, pp. 103–4; and Hill, op. cit., note 24 above, pp. 59–60.

⁵¹ *Theater of insects*, op. cit., note 3 above, sig. 4F5^r and p. 1104.

⁵² *DNB*, s.v. Peter Turner; Oxford, Bodleian Library, MS Ashmole 799, fol. 130 (the Moffet pedigree).

⁵³ 'RCP Annals', vol. 2, fols. 64b, 68b.

President of the College and author of the *De magnete*.⁵⁴ On 19 March 1588, it was resolved that Moffet and three others should form a delegation to Walsingham to protest against what was felt to be an infringement of the privileges of the College by the Mayor and Aldermen, who had commanded the Fellows to bear and provide arms.⁵⁵ More significantly, the College decided to follow continental example in projecting a Pharmacopoeia to standardize pharmaceutical practice. In October 1589 the task was delegated to a number of committees, with Moffet appointed as one of the team responsible for “Extracta, Sales, Chemica, Metallica”.⁵⁶ George Urdang has claimed that this decision “electrified the physicians and pharmacists in the whole of Europe” because it aimed to set the standard for the whole country. The authority of previous Pharmacopoeias had been restricted to their city of origin—Augsburg, Nuremberg, or Cologne—and they had not included such Paracelsian remedies as vegetable salts, extracts, and chemical compounds for internal use. The London decision was innovative and daring, and Urdang gives the credit to Moffet.⁵⁷

The Pharmacopoeia failed to materialize then, but was revived in the reign of James I, and finally appeared in 1618. One of those involved then was Theodore de Mayerne, royal physician, who was later to publish Moffet’s *Theater of insects*. He appears to have become interested in Moffet’s work through contact with a certain Darnell, who had been Moffet’s apothecary and was named as one of those required to attend the College’s Pharmacopoeia committee daily in 1618.⁵⁸ From Darnell Mayerne obtained not only the manuscript of *The theater of insects*, but also a large number of prescriptions and formulae which he copied out under the titles, ‘Praxis Mouffeti’ and ‘Pharmacopoei . . . Mouffeti’.⁵⁹ Moffet had clearly made an attempt to get his pharmaceutical information in good order.

His career as a medical controversialist effectively came to an end with the introduction of the Pharmacopoeia project, but two further incidents involving him are recorded in the annals of the College. The first occurred on 30 June 1590, when the meeting of the Comitia of the College of Physicians was held in his house in London, after a “sumptuous feast”.⁶⁰ One of the matters of business was the reading of a letter from Robert Devereux, the Earl of Essex, to whom Moffet was by then attached: the following year he joined him in the Normandy campaign.⁶¹ In the letter,

⁵⁴ *Theater of insects*, op. cit., note 3 above, pp. 1123, 1149; *Healths improvement*, op. cit., note 3 above, p. 80.

⁵⁵ ‘RCP Annals’, vol. 2, fol. 67.

⁵⁶ *Ibid.*, fol. 76a, 10 Oct. 1589; on the Pharmacopoeias, see Munk, op. cit., note 37 above, vol. 3, 1801 to 1825, pp. 371–7.

⁵⁷ ‘How chemicals entered the official Pharmacopoeias’, *Archs int. Hist. Sci.*, 1954, 7: 303–14; Antonia McLean, *Humanism and the rise of science in Tudor England*, London, Heinemann Educational, 1972, pp. 205–6; Clark, op. cit., note 36 above, vol. 1, pp. 220–30; and William Brockbank, ‘Sovereign remedies: a critical depreciation of the 17th-century London Pharmacopoeia’, *Med. Hist.*, 1964, 8: 1–14.

⁵⁸ ‘RCP Annals’, vol. 3, fol. 32b, 20 Feb. 1617/18; Clark (op. cit., note 36 above, vol. 1, p. 228) names him “Darnelly”.

⁵⁹ British Library, MS Sloane 1888, fols. 184b–192.

⁶⁰ “*Lautum convivium*”: ‘RCP Annals’, vol. 2, fol. 83.

⁶¹ See *Healths improvement*, op. cit., note 3 above, p. 60, and Robert A. T. G. Cecil, *The manuscripts of the Most Honourable the Marquis of Salisbury, K. G. . . . preserved at Hatfield House, Hertfordshire*, Historical Manuscripts Commission, no. 9, London, 1883–, vol. 4, ed. R. A. Roberts, pp. 155, 174.

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Essex appealed to the testimony of “my physition Mr. Dr. Muffet”, on behalf of Leonhard Poe, an unqualified doctor in his employ. The College’s reply speaks for itself: they had examined Poe with all due regard to his Lordship’s favour, but

found him so utterly ignorant and unfurnished . . . as upon our credit we never remember so weak a man to have appeared before us. And albeit Mr. Muffet in respect of his dutie to your good Lord had before in deed something delt with us in his behalfe by letter: Yet beeing present at his examination and hearing his unexpected weaknes in so meane matters as were propounded unto him: was very much abashed and sorie, that he hed been woon to deale in so bad a matter.⁶²

It is unlikely that the matter was raised to embarrass Moffet in his own house, so one must assume that the incident was not thought to reflect on his character. At the very least it indicates that there was a point at which loyalty to Essex had to be sacrificed to professional pride.⁶³

Moffet’s last attendance of a Comitia meeting of the College of Physicians for nine years was on 20 January 1593.⁶⁴ He then entered the service of Henry Herbert, second Earl of Pembroke, and indeed the only significant mention of his name in the Annals from this time onward occurred in January 1595, when the Earl wrote to the College on behalf of a certain “empiric” named Powell, who had claimed success in curing Sir Charles Morison⁶⁵ of a tumour in the thigh when all others had failed. Moffet’s opinion of the unorthodox cure was recorded: astonished, he had remarked that diseases are not cured by what is said and written, but by “experientia”.⁶⁶ This report may have been an attempt to discredit Moffet for advocating an irresponsible form of trial and error, though Sir George Clark has taken it as an example of a general trend of scepticism towards the ancient medical authorities.⁶⁷ It is quite probable that Moffet maintained an interest in chemical medicine at Wilton, since Mary Herbert is said to have supported her own laboratory and employed Adrian Gilbert and “one . . . Boston, a good chymist”,⁶⁸ but he was evidently too much concerned with entomology and attending on the Countess to remain active as a propagandist.

In medicine, as in so many aspects of English public life, the 1580s had been years of conflict and uncertainty. There can be no question, now, but that in his first five years back in England Moffet had been carrying out a kind of crusade for the new medicine, and that his attitude to the College of Physicians had been, if not deliberately confrontational, at least touchy and suspicious. He was not the first to introduce Paracelsian ideas into England, but he was easily the most active, competent, and influential campaigner. By the time of his election as a Fellow and, soon thereafter, a Censor, of the College in 1588, he had established himself as a senior physician and won the respect of his colleagues. The introduction of chemicals into the London Pharmacopoeia can be taken as a mark of his success. It is important

⁶² The examination had been held on 18 May, in Moffet’s presence.

⁶³ Essex continued to press, unsuccessfully, for Poe’s acceptance for years afterwards.

⁶⁴ On 18 June 1598, he was recorded as absent, “*ruri*”: ‘RCP Annals’, vol. 2, fol. 132b.

⁶⁵ Of Cassiobury, Herts., son of Sir Richard Morison, the ambassador.

⁶⁶ ‘RCP Annals’, vol. 2, fol. 109b.

⁶⁷ Clark, *op. cit.*, note 36 above, vol. 1, pp. 169–70.

⁶⁸ John Aubrey, *Brief lives*, ed. Andrew Clark, 2 vols., Oxford, Clarendon Press, 1898, vol. 1, p. 311.

to recognize that despite the aggressiveness of his early approach Moffet was not an uncritical or ignorant enthusiast, and was quite willing to accept much that was valuable in the Galenist and Hippocratic traditions, as his subsequent medical writings, the *Nosomantica Hippocratea* and *Healths improvement*, amply testify. As early as July 1581, in a letter to Zwinger, he had registered his disapproval of a certain Talerus, whose fanatical defence of chemistry had led him to call Galen a devil and place Paracelsus amongst the gods.⁶⁹ Even the reference to which Crato took so much offence in the *De iure* was really designed to illustrate the latter's tolerance rather than to brand him as an anti-Paracelsian. Furthermore, Moffet was throughout his career consistently dismissive of those alchemists who were still in quest of the philosophers' stone, this attitude culminating in a full-blown satirical attack in *The silkwormes, and their flies* (pp. 44–7). In *Healths improvement*, again, he rejected the extreme view that mineral extracts could be substituted for normal food. His career, in short, projects the image of a passionate man with an open mind and a strong sense of humour.

⁶⁹ Basle University Library, MS Fr.-Gr. II 28, 232.