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## Magic, Alchemy and the Medical Economy in Early Modern England: The Case of Robert Fludd's Magnetical Medicine

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This chapter is about the commerce between physicians and patients, angels and demons, and the living and the dead. In 1656 Nicholas Culpeper, the prolific medical author and audacious critic of the College of Physicians, spoke from the grave. He had been dead for two years, and his voice issued from a brief, satirical pamphlet called Mr Culpeper's Ghost. His ghost affirms that alchemy provides a key to understanding natural philosophy and to preparing medicaments. He also wonders whether chymical remedies are appropriate for all cases, or whether conventional Galenic and Hippocratic ones are more reliable.<sup>2</sup> He began to have these doubts when on a walk through heaven he bumped into Robert Wright, former apothecary to Robert Fludd. Fludd was an eminent London physician and prolific philosophical author who had died in 1637. '[T]hough a Trismegistian-Platonick-Rosy-crucian Doctor', Wright reported of his employer, he 'gave his Patients the same kind of Galenical Medicaments, which other Physitians in the Town ordinarily appointed'. Even when he himself was ill, Wright insisted to the ghost, Fludd only used Galenic therapeutics.<sup>3</sup>

Culpeper's ghost continued his stroll and bumped into Dr Fludd, who was engaged in heated debate with Raymond Lull, the thirteenthcentury Spanish philosopher to whom numerous alchemical treatises were attributed, and Johann Baptista Van Helmont, an alchemical reformer who had lived in the Spanish Netherlands until his death in 1644. These three great men were talking about the weapon salve and 'plotting' to invent a 'universal magnetic medicine' for fevers. As the weapon salve could be used to cure a wound by anointing a bloodstained weapon with a sympathetic unguent, so the 'universal magnetic medicine' would cure a fever by being placed in a chamber pot. As the blood conveyed the virtues of the unguent to the wounded body, however great the distances between them, so the urine conveyed the virtues of the 'magnet' to the fevered body.4 Culpeper's ghost internupted this vital discussion to ask Fludd whether Wright's report was true. Yes, the dead theosopher-physician confided to the dead medical reformer, Galenical medicaments were indeed best.

This chapter makes sense of this scenario. In 1656 a printed pamphlet reported conversations between dead people, conversations in which Robert Fludd confirmed that whatever his philosophy, he practised Galenic medicine; and in which he plotted the invention of a 'universal magnetic medicine' to cure illnesses through action at a distance. Printed books feature throughout this account, but I will leave the concern for their place in the medical marketplace to others.5 My project is to present the history of 'magnetical medicine' in seventeenth-century England as a case study with which to consider the complexities of the early modern medical economy. I will suggest that a more inclusive model is needed, one that encompasses exchanges both between physicians and their clients and between these people and the spiritual realms.

Conventional physic depended on a medical economy in which the dynamic between the patient and the practitioner was defined according to the four humors and their correspondences. Chymical philosophies, whether Paracelsian, Helmontian, Platonic and otherwise magical, often foregrounded the analogy between the microcosm (man's body) and the macrocosm (the cosmos), spelling out an elaborate 'œconomy' of health and healing. Magnetical medicine did this in the extreme. As one contemporary proponent noted, it 'depends [on] the whole *œconomie*, and every change in sublunary things'. 6 Magnetical medicines worked by sympathy, drawing the powers of the cosmos into the human body, sometimes through chymical, sometimes through human ingredients. In this system, the human body was located within a domestic economy of production and consumption, and a spiritual economy of good and evil. The physician had the power to mediate between the living and the dead.7

Debates about humoral and chymical medicine had occupied the medical community since the 1570s. From its foundation in 1518, the College of Physicians had defined itself through the enforcement of its Privilege to regulate the practice of medicine within a seven-mile radius of London. It consolidated its powers in the 1580s, faced an initial crisis following the ascension of James VI and I in 1603, joined forces with him, and against the City guilds, to establish the Society of Apothecaries in 1618, saw attempts by Parliament to curtail its authority in the 1620s, and reached the height of its powers under Charles I in the 1630s.

Prudently, with the turmoil of the 1640s and 1650s, the College ceased to enforce its privileges and instead sought to strengthen its identity as a society of learned medicine.8 Throughout this period the use of chymical remedies by unlicensed practitioners was a persistent problem 9 In the revolutionary decades an influx of chymical, hermetical and Paracelsian philosophies combined with the increasing availability of vernacular books to make irregular practitioners more visible, if not more numerous. Chymical physicians and astrologers, like Culpeper. railed against the College. In 1655 the College allied itself with Oliver Cromwell in a new bid for power, and in the spring of 1656 they began to crack down on the 'empirics'. 10 While commenting on long-term disputes, Culpeper's ghost was protesting against the College's efforts to reinstate its authority over print and practice.11

The chymical remedies that feature in these power-struggles are often seen as a major contributing factor to the emerging medical marketplace in seventeenth-century England. 12 Some members of the College endorsed chymical remedies, while others did not; but, however varied the philosophical positions of its individual members, the College was unequivocal in its objections to breaches of its privileges. Throughout the century, pills, powders and waters promising universal, immediate and gentle effects became increasingly available on the streets of London. These products fit neatly within a marketplace model. 13 They are commodities, bought and sold in a monetary transaction between a medical practitioner and his or her client. These practitioners often called themselves 'chymical physicians'; their critics, especially the College of Physicians, labelled them 'empirics'. Though many of them lacked university credentials, as their self-designation suggests, they adopted the demeanour of learned physicians, proffering advice and expounding philosophies of medicine. 14 Historians have often considered the trade in chymical remedies and the exposition of chymical philosophies separately.<sup>15</sup> It is a premise of this study that the medical economy was defined both through disputed medical practices and through contested ideas.

In what follows I will argue that Fludd's careers as an established London physician and internationally renowned author of theosophical books need to be understood as parts of the same project. His practices were consonant with his philosophy. This is clear from his involvement in printed disputes about the weapon salve, books well-thumbed by historians for their natural philosophical and theological content but untouched for their practical and medical import. While arguing about the powers of nature and the devil, Fludd also presented evidence about his practice of magnetical medicine. 16 This system was fully, and lucidly expounded in a text by one of his followers, probably William Maxwell. 17 In Maxwell's work we find instructions for how to make the 'universal magnetic medicine' that Fludd, Lully and Van Helmont discussed from the world beyond in 1656. To practise magnetical medicine was to control an economy of bodily products and spiritual forces.

Late one night in early 1631 a pair of title pages of a pamphlet were nosted on either side of the door of Robert Fludd's house in London. 18 To post a printed page was to advertise. Playbills, plague regulations, title pages of newly printed books and posters describing the powers of universal medicines, and where they could be purchased, were tacked up throughout London. 19 The text flanking Fludd's door was Hoplocrisma-spongys: Or, a Sponge to Wipe Away the Weapon-Salve, by William Foster, a Buckinghamshire divine. Foster had been set to the task, he says, by a pair of surgeons, John Scott and Edward Charley.<sup>20</sup> Rivalry between physicians and surgeons may have occasioned Foster's pamphlet, though it seems not to have been a response to a specific conflict between Fludd, the College or the Company of Barber-Surgeons.<sup>21</sup> Foster complained that the practice of using the weapon salve was taking over the country. He decried its advocates as practising superstitious, demonic magic, and singled out Fludd for particular recriminations. Fludd had defended the weapon salve in a three-page digression on the mystical properties of blood in a Latin work of 1623, Anatomiæ amphitheatrum.<sup>22</sup> This, and his other writings, sparked a literary feud abroad, beginning with Marin Mersenne, the Parisian mathematician and physicist, objecting to Fludd's defense of Rosicrucianism and calling him a 'cacomagus', or evil magician. Fludd replied in 1629, then Pierre Gassendi, another French natural philosopher, took up Mersenne's position, and Fludd again countered.<sup>23</sup> Foster's book appeared in the midst of this feud, drawing on Mersenne's and Gassendi's texts, and Fludd swiftly responded with Doctor Fludds Answer unto M. Foster Or, The Squesing of Parson Fosters Sponge (1631). Fludd argued, in short, that the weapon salve worked by natural, not demonic powers.24

The Foster-Fludd dispute and the larger debates about the weapon salve that occupied some major theologians and natural philosophers in seventeenth-century Europe are well known. The properties of the weapon salve were first promoted in the Pseudo-Paracelsian Archidoxes (1570), then received broader circulation in Giovanni Battista Della

Porta's Magia Naturalis (1589) and Oswald Croll's Basilica Chymica (1608); in 1594 Andreas Libavius, a German physician, condemned the salve as demonic. In a 1608 treatise Rudolf Goclenius the Younger, a Calvinist professor from Marburg, dedicated an entire work to the salve arguing that it worked through the sympathetic and antipathetic principles of natural magic. Goclenius's work was expanded in a 1613 edition, to which Jean Roberti, a Flemish Jesuit theologian, replied in 1616, arguing that the weapon salve worked through demonic powers. They continued this dispute, exchanging seven tracts, and eventually drawing Johann Baptista van Helmont, the Belgian physician who would become famous for his interpretation of Paracelsianism and would converse with Fludd and Lull in heaven, into the controversy.25 Previous studies of these debates have focused on their concern for defining the limits of what was natural and what was demonic, not on the definitions of medicine that they entailed. The weapon salve was rich fodder for proponents of Jesuit physics, Platonic correspondences. Paracelsian sympathies, and, later, experimental philosophers. When the title page of Foster's pamphlet was posted on the front door of Fludd's house, the force of these learned debates was brought to bear on the local politics of medical practice in London. Someone was signalling Fludd's participation in the metropolitan medical marketplace, advertising that he was a proponent, and perhaps also a practitioner, of demonic magic and challenging him to defend himself.

Fludd was an eminent London physician with a reputation for strange ideas. He was born to a gentry family in Kent in 1574, studied in Oxford in the 1590s, then travelled throughout Europe from 1598 to 1604 or 1605. He visited Rome in 1602, where he met a Swiss humanist engineer called Master Greuter who taught him the secrets of 'magnetical experiments'.26 In 1605, at the age of 29, he settled in London and petitioned the College of Physicians for a licence to practise physic. In November 1605 they examined him 'in both galenical and spagyrical [alchemical] medicines' but found him 'not satisfactory enough in either'. It was typical for the College to send people away with a reading list; it was unprecedented for them to examine someone in alchemical medicine, a decision that reveals that complex attitude of the College and its members to alchemy. In February 1606 the College deemed Fludd 'not uneducated', but by May the Censors had received a report that he 'had boasted much about himself and his chemical medicaments and looked down with contempt on galenical medicines'. He denied the charges 'with the utmost confidence', and was warned 'to think and speak modestly about himself, and respect the Fellows of

the College'. Eventually, in 1608, Fludd would become a Fellow of the College.27 Foster's pamphlet would provide an occasion for his colleagues to 'jeer' and 'scoff' at him, but, for the most part, he played the part expected of a Fellow of the College of Physicians: in 1616 he assisted in inspecting the wares of apothecaries, in 1618 he endorsed the publication of the Pharmacopoeia Londoniensis, in 1620 he gave the annual anatomy lecture, and he held the office of Censor in 1618-19. 1627-8 and 1633-5.<sup>28</sup>

Fludd's early encounters with the College reveal his chymical pursuits and his arrogant demeanour. These characteristics are also evident in the many books that he published abroad.29 These are lavishly illustrated with the famous engravings that have made Fludd the poster-boy of Renaissance Platonism. A 1636 account describes him as 'a learned Doctor, well esteemed at home for his practicall skill in Physick, and much honoured abroad for his learned Bookes in Print'. 30 Baldwyn Hamey the Younger, a contemporary physician, similarly describes Fludd's overally signed telephone and solvow smin dual talents.

He continually supported, outside the custom of his colleagues, an amanuensis and apothecary at his house; the latter mixed and distributed medicines by day, the former received ideas that he had at night; in both of [these endeavours] he kindled not a little envy of himself; moreover, by his night studies, which was his custom to profusely produce, he seemed to undertake more work than our common people wished to enjoy; they mostly overlooked him because of the tediousness of reading him, and their prejudice against wasting time and oil, and because of the Cabalistic, rather than Peripatetic nature his writings are said to smack of, and because of the rather fervent character of the man, in whom many failed to find judiciousness.31

By day he worked as an eminent, and unconventional, London physician, by night he wrote weighty Latin philosophical books. Thomas Fuller, the seventeenth-century clergyman and historian, identified a consonance between Fludd's writings and practices, and suggested that his arcane language had a therapeutic impact:

His Books written in Latine are great, many and mystical. The last some impute to his Charity, clouding his high matter with dark language, lest otherwise the lustre thereof should dazle the understanding of the Reader. The same phrases he used to his Patients;

and, seeing conceit is very contributive to the working of Physick. their Fancy, or Faith natural, was much advanced by his elevated expressions.32

Remember, though, that in 1656 Culpeper's ghost insisted that Fludd's practices were Galenic, not chymical, a proposition that drives a wedge between his ideas and practices. Many historians have concurred with the ghost, portraying Fludd as leading a double life in which he main. tained the semblance of philosophical and medical conformism at home while parading in print as a prolific and controversial philosopher abroad.33 However, a careful reading of Fludd's works demonstrates that by night he wrote about magnetical medicine, and by day he practised it. In theory, and in practice, he located himself at the centre of a medical economy in which the physician managed the domestic products and spiritual forces necessary to heal his patients.

The weapon salve is the key to understanding how magnetical medicine works. The standard recipe, following the pseudo-Paracelsian Archidoxes, goes like this. Take two ounces of skull moss (the moss growing on the skull of man who had died violently; hanging is good), an ounce and a half of mummy (human flesh; more about this later), two ounces of man's fat, half an ounce of man's blood, two drams of linseed oil, an ounce of oil of roses, an ounce of bole armeniac, and an optional ounce of honey and a dram of bull's fat. Mix these together into an ointment. As the name suggests, this salve is used to heal wounds. Once a day anoint the bloodstained weapon or, if it is not available, a stick dipped in the blood of the wound. Keep the wound clean and bind it with a dressing dipped in the wounded person's urine. The ointment works, Croll, an expounder of Paracelsian doctrine, explains, 'by the magnetique attractive power of the Salve, caused by the Starres, which by the mediation of the ayre, is carried and adjoyned to the Wound, that so the Spirituall operation thereof my be effected'. It does this according to the sympathy of nature, influence of the celestial bodies and a natural balsam in every man that has a healing power.<sup>34</sup> Like a magnet, magnetical medicine, of which the weapon salve is one example, works at a distance; this is why it is also called sympathetic or magical medicine.35

Critics of the salve objected, to generalize, that its powers could be explained neither by the strength of nature nor the art of medicine; rather, knowingly or not, a practitioner who used the salve entered into a pact with the devil. This pact was signalled by the human ingredients mummy, fat, blood - contained in the salve. 36 'Magicall and divelish actions', concludes Daniel Sennert, a Wurttemberg professor of medicine, 'are covered, and shifted in under the vaile of Magnetique actions'.37 Human ingredients, however, were typically bought and sold alongside herbal, chymical and animal products. Whether exotic or local, preserved or fresh, seldom did these goods carry a magical or demonic value.

Alchemical and Paracelsian medicine was usually chemical. Preparations of mercury, antimony (what we call stibium) and lac sulphuris (milk of sulphur) were sold by apothecaries and administered by surgeons throughout London. Alchemical and Paracelsian remedies also included herbs purified through distillation, and, as is less often noted, animal or human ingredients. 38 Mummy, or 'mummia', was the most common of these, though it was also employed within humanist therapeutics. By the sixteenth century, mummy was for sale in apothecary's shops throughout Europe. Whether this substance was human flesh or the bitumen that exuded from preserved bodies, what virtues this substance held, and how it had been sourced had been debated since at least the tenth century. Paracelsus defined two sorts of mummy. Corporeal mummy was human flesh; spiritual mummy was the vital force within all beings. He also, as an early advocate of local produce, preferred mummy from his native land. This was to be sourced from the body of a person who had died violently, thereby ensuring that the corporeal mummy retained the healing power of the spiritual mummy.<sup>39</sup> This is the sort of mummy used to make the weapon salve.

While opponents of the salve objected that the use of human ingredients signalled a pact with the devil, proponents of sympathetic remedies, at least from the 1620s, were divided about whether human ingredients should be used, and if so, of what sorts. Some practitioners reported the healing virtues of a salve made without any human ingredients at all.40 A sympathetic powder, with vitriol as its crucial ingredient, was in use throughout Europe. Kenelm Digby, the experimental philosopher, claimed to have acquired the secret of such a powder in Florence in the early 1620s, and soon after to have introduced it into England. 41 Others, such as Andreas Tentzel (fl. 1625) and Fludd, as we will see, pursued the Paracelsian virtues of mummy while stressing that ingredients from a healthy, living human body could also be put to good use. 42 'Blood was key. It contained the principle of salt, and, according to the Paracelsian doctrine of the tria prima, all things were made from salt, sulphur and mercury.

Fludd's 1623 digression on the weapon salve in Anatomiæ amphitheatrum was about the powers of blood, and the virtues of blood and other human ingredients remained a major concern in his subsequent writings.

Famously Fludd drew extensively on the analogy between the heart and the sun, and was the first author to make favourable reference to William Harvey's account of pulmonary circulation. 43 Blood, Fludd explains throughout his writings, is the animating principle. When God breathes his spirit into man, the spirit moves in the blood, feeding man's fat, flesh and bones. The essence of blood is the 'glew of life' It is a mystical, balsamic, volatile salt. This salt is also present in flesh fat, bones and the excretions of the body, substances carrying a value by virtue of their vital properties.44 THE RESTRICT OF THE PROPERTY OF THE PARTY OF

Fludd depicts his medical cosmology in a pair of engravings from Medicina Catholica (1629-31). In 'The Fortress of Health' man is healthy: in 'The Invasion of the Fortress of Health' (Illustration 5.1), he is ill.45 The images follow the same scheme. In 'The Fortress' a man kneels at the centre of the image, four angels (Michael, Gabriel, Raphael and Uriel) COMMISSION OF THE PROPERTY OF THE PROPERTY OF SECURIORS OF

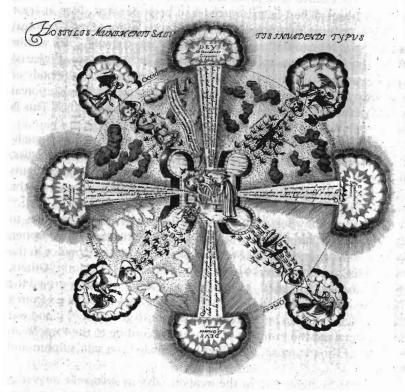


Illustration 5.1 Robert Fludd, Medicina Catholica, Tract. II, Sect. 2, 344, reproduced by permission of the Wellcome Library, London.

guard the four turrets, and all of the walls are intact. The man prays to God and God responds, speaking in Biblical verses. Each of the angels repels a demon, blown in from the four corners of the globe. The winds, Fludd explains, embody the occult forces emanating from the celestial hodies. These forces are governed by angels and demons, and each has specific properties: the northern wind is cold and dry, causing things to contract; it is countered by the warm and moist winds of the south that dilate and dissipate. With every breath, man inhales air infused with these spirits, and so long as the forces of good and evil are evenly matched, so long as the walls of the fortress are not breached, he remains healthy.46

If there is an invasion, as depicted in Illustration 5.1, man takes to his bed and calls his physician. The physician adopts the pose in which he was trained. He takes the pulse and inspects the urine. By identifying the humoral imbalance within the body, he can measure which evil forces are at work. In this case the southern wall has fallen, the demon Azazael has slipped past Uriel, and the western corner is also under threat. Once he has identified the nature of the forces at work, the physician's task is to rebuild the walls and ensure that the angels return to their stations. He does this, Fludd explains, by restoring the vital spirits, or beams, to man's body. This is possible with the use of a microcosmical magnet, of which the weapon salve is one example. Just as William Gilbert's De Magnete (1600) had demonstrated that the Earth was a giant, macrocosmical lodestone, so Fludd's Mosaical Philosophy (1638) presented practical proofs and experimental conclusions to demonstrate the principles of the microcosmical, living magnet.<sup>47</sup> Gilbert showed the hidden virtues of the lodestone; Fludd the invisible beams linking man and the cosmos.

The engravings of 'The Fortress of Health' and 'The Invasion of the Fortress of Health' are emblems of the bodily and medical economies. The physician judges which cosmic forces are affecting the body of man, and prescribes therapies to rectify the imbalance of good and evil, hot and cold, moist and dry. How did he do this? What did it mean to practise magnetical medicine, to use a microcosmical magnet? Remember that Foster had complained that the use of the salve was growing every day more common (so that I have seene the Salve in the very hands of women)'.48 Fludd confirms Foster's worries, assuring his readers that Sir Nicholas Gilbourne (his brother-in-law), Captain Styles, Sir Bevis Thewell, a Mr Deptford and other notable gentlemen had cured more than a thousand cases with the salve and other magnetical medicines. 49 Fludd reported these cases not as evidence of the popularity of the cure, but to 'prove' that it worked by natural and angelic

principles; the salve was made without superstitious ceremonies or magical ingredients.50

While defending the principles of magnetical medicine, Fludd also upheld the medical hierarchy. Just as he specifies that the cases noted above concerned gentlemen practising, for the most part, in the country, so Fludd endorsed John Evans' antimonial cup while specify. ing that it was to be used by people who did not have access to a physician. This vessel was to be filled with wine, left by the fire over night and drunk in the morning. The effect was a gentle purge. Evans advertised his cup in a 1634 book that was destroyed on order of the College of Physicians. Fludd, holding office as a Censor, was instrumental in this.51 A couple of years later, Fludd informed the College that these cups were for sale at the sign of the magpie in Gunpowder Alley.<sup>52</sup> Evans published this work again in 1642, now with endorsements by numerous learned gentlemen, including Fludd. Fludd's comments are suitably diffident. He states that the heat causes the liquor to imbue the virtues of the cup; that when drunk this liquor purges noxious humors; and, he concludes, that this cup will prove beneficial to people who cannot consult a physician or apothecary, either because they live in the country or they lack funds. 53 Thus speaks an elite physician, coyly distancing the use of Evans's antimonial cup from the therapies available to his own patients.

What then, if anything, do we know about Fludd's medical practices? As already noted, Fludd acknowledges an intellectual debt to one Master Greuter, the humanist engineer whom he met in Rome in 1602 and who taught him 'the best of my skill in those practices: ... hee delivered this magneticall experiment unto me, as a great secret, assuring me that it was tried in his Country'. 54 Usually he distances himself from the cases he reports, perhaps because of his standing as a London physician. He credited John Kellet, a freeman-apothecary, with curing a gentlewoman with an abdominal tumor by stroking it with the hand of a corpse. Fludd simply allowed the woman and Kellet access to a body that he had stored in his house in preparation for his delivery of a public anatomy lesson. 55 Similarly, a wise, religious, and aged gentleman in the country had perfected a sympathetic cure for jaundice. He would mix the patient's urine with ashes, roll the paste into balls, insert strands of saffron into them, and put them some place safe. In two cases, Fludd reports, he had his patient's urine sent to this man, who accordingly cured them.56

In the rare instances where Fludd draws on his own use of magnetical medicine, he reports experiments that he conducted on his own body. One of these, in Mosaical Philosophy, describes the magnetical properties of different sorts of mummy. 'I collected a portion of this Northern mummy', he begins, meaning mummy imbued with airy, cold properties of the north pole, 'namely of the flesh of a man strangled in the aire, in which the spiritual Mummy, was Centrally contracted by cold, and I applied it typically unto the part of my body, which was nearest unto its natural position'. That is, if the flesh came from the inner thigh of the corpse, so Fludd applied it to his own inner thigh. It felt cold, and gradually sapped the heat and vivifying spirit from his body. He removed it, noting its change in 'smell and view', then prepared more pieces of mummy in the same manner, 'for the use of mine own body'. These were virtuous patches, possessing a magnetical power that could be used to prepare 'a singular medicine for mans health and conservation'. Were he to become ill, he could apply a previously prepared patch to the afflicted area.57 Earlier in the treatise Fludd had noted the powers of mummy, stating 'that by a right application of the fleshy parts of a dead man's carcass unto a live man, (if the application be long) it will make the live man faint and feeble ... [I]t will suck or draw forth of the live man the spirituall Mummy in a visible manner'. This substance can be gathered, as he gathered his own vital spirit into the patches of mummy, into 'a very pretious and wholsome Panacea or generall medicine'.58 If, however, the person out of whom this spirit is extracted is not healthy, the result will be a microcosmical magnet that conveys harm and ill health.

Whatever Fludd told Culpeper in heaven, this was not Galenic medicine. This was magnetical medicine, harnessing vital beams and redirecting them to alter, for good or ill, the health of the body.

For evidence of how the practice of magnetical medicine fitted within the medical economy of seventeenth-century London, we need to return to Fludd's house in Coleman Street. Last time we were there it was in the early months of 1631, when Foster's title page was posted on either side of Fludd's front door. Now it is sometime after that date but before Fludd's death in 1637. This time we go through the front door and into one of the parlours. Here we find, perhaps not coincidentally, a scene similar to the one that Culpeper's ghost portrayed in 1656.59 Fludd and two other men are debating how to make a magnet with medicinal virtues, that is, a microcosmical, living magnet. There were four methods to make such a magnet, attributed to Paracelsus and Tentzel.60 First, take the dung of a sound man, dry it in a shady place until it no longer stinks. Second, cut a piece of warm flesh from a man who has died violently, and dry it. Third, obtain as much blood from healthy, living men as you can, let it congeal, pour off the liquid (setting it aside for later), dry it in the shade, moisten it with the liguid, dry it again and repeat until all of the liquid has been used. The ingredients of a fourth method are a great quantity of dung and some urine from a healthy man, as much sweat as you can obtain, taken from healthy bodies using linen cloths or a sponge, and some fresh blood. This concoction, like the previous one, is to be subjected to a process of wetting and drying. All of these methods to make a medicinal magnet involve the use of human matter, but while the first, third and fourth drew material from healthy men, the second required that the source had died violently. One might object that this was not only cruel but also difficult to obtain. It was this second magnet that these three men were discussing. Fludd said that if it were placed near a man's heart, 'he could not suffer it longe'. He similarly warned the readers of Mosaical Philosophy, we should recall, about the dangers of a sustained application of mummy. On this occasion, when asked to explain the uses for such a magnet, Fludd would not answer, regretting having said so much.

This information - about how to make a microcosmical magnet and about the discussion with Fludd - was reported by one of the men sitting in Fludd's parlour. His name might have been William Maxwell.<sup>61</sup> The other man was Sir Edmond Stafford, a gentleman with some alchemical expertise who lived in London and summered in the country, about whom almost nothing else is known.<sup>62</sup> Maxwell is similarly obscure. He was probably Scottish and he probably wrote the treatise on magnetical medicine in which the above conversation is described. The work almost certainly dates from 1631 to 1639.63 It circulated without an author, title or date, was printed twice in 1656 under different names and titles.<sup>64</sup> In one of these it was attributed to Dr John Everard (1584?-1640/41), the Protestant preacher known for his alchemical expertise. 65 In the Latin edition, printed in Frankfurt in 1679, it was attributed to Maxwell, and for convenience I will consider him the author.66 This work provides the clear and systematic account of how to practise magnetical medicine that is lacking in Fludd's writings.

Here is what Maxwell's treatise says. 67 Book 1 contains 'An hundred Aphorisms: containing all the whole body of Natural-Magic: being the Key to open that which followeth in Sympathetick-Medicine'. Book 2 consists of twelve 'conclusions', like 'columns, to support the Noble frame of Magical-Medicine'. These explain how the soul produces corporeal beams that flow within and beyond every living body. Book 2, Conclusion 5 contains the central premise of the work: 'That the excrements of the hodies of living creatures retain a portion of the vital spirit; and therefore we cannot deny them life, and this life is the same species that the life of the creature is of, and propagated from the same soul.' Book 3, the bulk of the work, is about 'The Method of Curing by Sympathy', beginning with 'Of the things necessary for a Physitian before he undertake the Practice of Magical-Physick.'68 In some versions 'the practice of magical physic' reads 'the practice of magnetic cures', suggesting that some scribes wished to stress the natural basis of the art.69

The conversation between Fludd, Stafford and Maxwell about the different ways to make microcosmical magnets occurs in Book 3, Chapter 11, 'Of the Magnet necessary in this Art'. This is a transitional chapter. Chapters 1-5 describe how magnetical medicines might be used within the framework of conventional remedies. For instance, Maxwell notes that, with the exception of some ointments, magnetical purges have not yet been discovered. There are also chapters on blood-letting, cauteries (largely dismissive) and comfortative medicines, all of which are encoded in alchemical terms. Chapter 6 focuses on the art of magnetical medicine itself, concluding 'This one thing I would especially commend unto thee, as the greatest secret in this whole Art, (viz.) That medicines from mens bodies, if they be rightly used, can do the greatest matters in this Art; and therefore with great diligence, enquire what parts or excrements of the body conduce to what disease .... 'These are known through a system of signatures, as catalogued by Croll in a work on 'sagacious herbs'.70 Chapter 7 specifies the astrological timing for gathering herbal and human ingredients. Chapters 8, 9 and 10 describe 'transplantation' and 'naked application', procedures to move malevolent spirits from a diseased body into another object.

Chapter 11, which is where we began, describes how to make the microcosmical magnet, Chapter 12 describes how to impregnate it with the vital spirit (strap it to your chest and play a vigorous game of tennis) and Chapter 13 describes how to manipulate the naked spirit without a magnet. Chapters 14-20 each consider bodily products: shit, piss, sweat, hair, nail pairings and teeth, spittle and snot, and blood and other such things (such as vomit, which has little merit). Throughout Maxwell describes the healing virtues of these products, as well as the dangers of allowing them to fall into the hands of a dangerous person or come into contact with foul spirits. Do not relieve Yourself, he warns, in the same place that an unhealthy person has.

Maxwell's work instructs its readers in the complexities of magnetical medicine. It also contains a possible explanation for why Culpeper's ghost suggested that Fludd's practices were Galenic. If he read Maxwell's work, 71 he recognized that though it promised a mild panacea like so many chymical remedies, it also upheld the conventional authority of the physician to maintain and restore his patient's health. And it extended the physician's role to that of master of the cosmic economy of vital beams. The physician who practised magnetical medicine judged the balance between angels and demons, redirected vital powers from dead bodies into living ones, and managed the production and disposal of bodily waste. Culpeper's ghost, I suspect, found the premises of magnetical medicine intellectually outlandish and the enhanced authority with which it invested the physician ideologically offensive.

Fludd's magnetical medicine provides a model for an expansive medical economy, but rather than investing the patient, as client, with the ability to choose her therapy, it endows the physician with the power to control the cosmic forces that govern health and disease. Just as Fludd depicted the 'Fortress of Health' and its 'Invasion', his friend Maxwell provided a systematic account of how the invisible beams that constitute the vital spirits work, and explained how to make and apply microcosmical magnets. This was magnetical medicine in theory and in practice. In Fludd and Maxwell's accounts, the physician is at the centre of the system, surrounded by angels and demons, managing an economy of bodily excretions and cosmic forces. If the patient is the primary agent within the model of the medical marketplace, choosing which remedies to buy and practitioners to consult, in the practice of magnetical medicine, the physician is central. With medicines sourced from the bodies of executed criminals or human waste, he manages the cosmic commerce necessary to preserve, or restore his patient's health.

## Notes

I thank Nick Popper and Joad Raymond for their detailed comments on this chapter, and the editors of the volume for many constructive readings and brutal excisions. Its argument was developed through talks at the Centre for the History of Medicine, University of Warwick, the Seminar in Early Modern Economic and Social History, University of Cambridge, and the American Association for the History of Medicine Meeting in Halifax, Nova Scotia, 2006.

1. Mr Culpeper's Ghost may have been written by Culpeper's publisher, Peter Cole. It seems to have been issued on its own (Wing C7523), to have been appended to several of Cole's productions (Wing P3328, C7549), and to

- have been re-set at least once (compare Wing P3328 and C7549). On ghost namphlets, see J. Raymond, Pamphlets and Pamphleteering in Early Modern Britain (Cambridge, 2003).
- 2. Culpeper's Ghost, 6. On the work, see: A. Debus, The Chemical Philosophy (Mineola, NY, 1977), 249-50; W. Huffman, Robert Fludd and the End of the Renaissance (1988), 19-20.
- 3. Culpeper's Ghost, 6-7.
- 4. Culpeper's Ghost, 8.
- 5. See Mary Fissell's essay in this volume and C. Webster, The Great Instauration, (1975), 264-73.
- 6. C. Irvine, Medicia Magnetica: Or, The Rare and Wonderful Art of Curing by Sympathy (Edinburgh, 1656), 23. On this text see Note 63 below.
- 7. L. Kassell, 'The Economy of Magic in Early Modern England', in M. Pelling and S. Mandelbrote eds, The Practice of Reform in Health, Medicine, and Science, 1500-2000 (Aldershot, 2005). 8. Cook, Decline; Pelling, Medical Conflicts.
- 9. A. Debus, The English Paracelsians (1965), 142-5; C. Webster, 'Alchemical and Paracelsian Medicine', in C. Webster ed., Health, Medicine and Mortality in the Sixteenth Century (Cambridge, 1979).
- 10. Cook, Decline, 121ff.; Webster, Great Instauration, 275-82. of army de states that
- 11. Culpeper's Ghost, 2-5.
- 12. Cook, Decline; Porter, Health.
- 13. Debus, English Paracelsians, 142-5; C. Webster, 'Alchemical and Paracelsian Medicine'.
- 14. Cook, Decline, 121-6; Cook, 'Good Advice'.
- 15. E.g. Cook, Decline; Debus, English Paracelsians.
- 16. On Fludd, see Huffman, Fludd; Debus, English Paracelsians (1965); Debus, The Chemical Philosophy (Mineola, NY, 1977); F. Yates, Giordano Bruno and the Hermetic Tradition (Chicago, 1964); idem, The Art of Memory (1966); P. Gouk, Music, Science and Natural Magic in Seventeenth Century England (New Haven, 1999); R. Westman, 'Nature, Art, and Psyche: Jung, Pauli, and the Kepler-Fludd Polemic', in B. Vickers ed., Occult and Scientific Mentalities in the Renaissance (Cambridge, 1984). On the weapon salve, Stuart Clark concludes that it attracted so much attention because scholars wanted to know 'On which philosophy is this remedy based?': Thinking with Demons (Oxford, 1997), 269-70.
- 17. See Note 63 below.
- 18. Fludd, Doctor Flydds Answer vnto M. Foster Or, The Squesing of Parson Fosters Sponge (1631), sig. [A3v].
- 19. See L. Kassell, Medicine and Magic in Elizabethan London (Oxford, 2005), 152; Pelling, Conflicts, 97-8 and passim.
- 20. Foster, Sponge, sigs. A2v, B1. Foster dedicated the work to Robert Dormer, first Earl of Carnarvon, a rising courtier with substantial holdings in Buckinghamshire (ODNB) and to the prominent surgeons Richard Wateson, Joseph Fenton, William Clowes Jr. and James Molines, all officers in the Barber-Surgeons' Company in the 1620s and 1630s, with Wateson and Clowes also holding royal offices, as well as Scott and Charley: S. Young, The Annals of the Barber-Surgeons of London (1890), 8. Thanks to Margaret Pelling for help in identifying Charley.

- 21. Fludd suggests that Foster, because he was the son of a barber-surgeon, wished to 'curry fauour' with the Barber-Surgeons' Company: Flvdds Answer, 120–2; his full discussion of Foster's motives runs on pp. 115–31, where he insinuates that Scott and Charley were not wholly invested in Foster's project. Fludd had encountered Scott in 1618, at the first meeting in which Fludd was a Censor: Annals, 117. This, and many other cases that 1 cite from the Annals, are also noted in Pelling, Conflicts. Fludd had several conflicts with surgeons in the College, e.g. Annals, 246; 314; 316–17. I have not explored the possibility of rancour or jealousy following an unspecified service that Fludd provided for the crown in 1629, for which Charles I granted him a house and some land in Suffolk: Calendar of State Papers Domestic, Charles 1, 1628–9, 570, cited in Huffman, Fludd, 34. For tensions between the physicians and surgeons in the 1620s, see Cook, Decline, 98.
- Fludd, Anatomiæ amphitheatrum (Frankfurt, 1623), 236–9; see also Debus, 'Robert Fludd and the Use of William Gilbert's De Magnete in the Weapon Salve Controversy', JHM, 19 (1964) 392, 394.
- 23. Debus, Chemical Philosophy, 266-76; Huffman, Fludd, 62ff.
- 24. On Fludd and the weapon salve controversy, see esp. Debus, Chemical Philosophy, 279–90 and Debus, 'Fludd'. See also W. F. Bynum, 'The Weapon Salve in Seventeenth Century English Drama', JHM, 21 (1966); Daniel Stolzenberg, 'The Sympathetic Cure of Wounds' (M.A. thesis, Stanford University, 1999) (which the author kindly sent me along with further references).
- C. Z. Camenietzki, 'Jesuits and Alchemy in the Early Seventeenth Century', Ambix, 48 (2001). See also Debus, 'Fludd', 390-2; Debus, Chemical Philosophy, 246, 303ff.; W. Pagel, Joan Baptista Van Helmont (Cambridge, 1982), 8-13; Stolzenberg, 'Sympathetic Cure of Wounds'; L. Thorndike, A History of Magic and Experimental Science (New York, 1923-41), vols. 6-8, passim.
- 26. Flvdds Answer, 133; Fludd, Mosaicall Philosophy, 257. On Greuter see C. H. Josten, 'Robert Fludd's Theory of Geomancy and his Experiences at Avignon in the Winter 1601 and 1602', Journal of the Warburg and Courtauld Institutes, 27 (1964); Westman, 'Nature, Art and Psyche', 178.
- 27. Annals, 175, 181, 183, 211. On Fludd, see also Annals, 198, 201, 206, 210.
- 28. Flvdds Answer, 122-3; ODNB; Pelling, Medical Conflicts, 28.
- 29. Fludd's major works include: *Utriusque cosmic ... historia* (Oppenheim, 1617–26); *Medicina Catholica*, (Frankfurt, 1629–31); and *Philosophia Moysaica* (Goudae, 1638). An English translation, *Mosaicall Philosophy*, was printed in 1658. He was also embroiled in several print disputes.
- 30. Baker, 'To the Reader', in Sennert, Weapon-Salves Maladie, sig. [A3v].
- 31. 'Bustorum aliquot Reliquae', Royal College of Physicians, London, MS 149; BL, Sloane MS 2149, cited in Huffman, Fludd, 174.
- 32. Thomas Fuller, The History of the Worthies of England (1811), vol. 1, 503-4, cited in Huffman, Fludd, 174-5; cf. Flvdds Answer, 47.
- 33. E.g. Debus, Chemical Philosophy, 246, 249-50; Huffman, Fludd, 18, 22, 24, 29.
- 34. These details are drawn from Sennert, Weapon-Salves Maladie, 2-11 (quotation 4).
- For magnetical medicine that predates the Paracelsian weapon salve, see Pliny, Natural History, bk. 36, chs. 16–17; William Gilbert, De Magnete (1600), bk. 1, chs. 1, 14, 15. For broader discussions about magnetical

- medicine, see: Debus, 'Fludd', 389n; H. Schott, 'Paracelsus and van Helmont on Imagination', in G. William and C. Gunnoe eds, *Paracelsian Moments* (Kirksville, MO, 2002).
- 36. Foster, Sponge, 7-8, 18-19; Sennert, Weapon-Salves Maladie, 13-14, 17, 26.
- 37. Sennert, Weapon-Salves Maladie, 29; see also Foster, Sponge, 32; cf. Flydds Answer, 116.
- 38. On remedies and ingredients: C. Webster, 'William Harvey and the Crisis of Medicine in the Jacobean Age', in J. Bylebyl ed., William Harvey and His Age (Baltimore, 1979), 11–14; Stolzenberg, 'Sympathetic Cure of Wounds'; Thorndike, Magic, vol. 8, 413–20; A. Wear, Knowledge and Practice in English Medicine, 1550–1680 (Cambridge, 2000), ch. 2.
- 39. K. Dannenfeldt, 'Egyptian Mumia: The Sixteenth Century Experience and Debate', Sixteenth Century Journal, 16 (1985).
- 40. Foster, Sponge, 54-5; Sennert, Weapon-Salves Maladie, 8-9.
- 41. Kenelm Digby, A Late Discourse ... Touching the Cure of Wounds by the Powder of Sympathy, trans. R. White (1658), 11–14, 5–6; ODNB. See also Nathaniel Highmore, A Discourse of the Cure of Wounds by Sympathy, appended to The History of Generation (1651), 134. See also Stolzenberg, 'Sympathetic Cure of Wounds'; Thorndike, Magic, vol. 7, 503–8.
- 42. Andreas Tentzel, Medicina Diastatica (Jena, 1629); trans. Ferdinando Parkhurst, Medicina Diastatica or Sympatheticall Mumie (1653). On Tentzel, see Thorndike, Magic, vol. 8, 414–15. Tentzel abstracts Paracelsus's teachings on mummy, and I suspect that he is borrowing Petrus Severinus's notion of transplantation as a theory of morbidity and applying it to the production of remedies, on which see J. Shackelford, A Philosophical Path for Paracelsian Medicine (Copenhagen, 2004), 177, 183–5 and passim. Perhaps there is a longer-term history to be written about a shift from exotic to local to domestic ingredients.
- 43. Webster, 'Alchemical and Paracelsian Medicine', 18-19.
- 44. Flvdds Answer, 102; Memb. 3, 6-16.
- 45. Fludd, Medicina Catholica, Tract. II, Sect. 2, 308, 344.
- 46. Fludd, Mosaicall Philosophy, 90-97, 160ff.
- 47. See Debus, 'Fludd'; S. Pumfrey, Latitude and the Magnetic Earth (Cambridge, 2002).
- 48. Foster, Sponge, sig. A3. On the popularity of the weapon salve, see K. Thomas, Religion and the Decline of Magic (Harmondsworth, 1973 [1971]), 225.
- 49. Flvdds Answer, 108–44, passim. I have not been able to identify any of these men. Digby famously claimed that every country barber in Europe knew the formula for the weapon salve: Late Discourse, 14.
- 50. Flydds Answer, 108-9, 114.
- 51. John Evans, The Vniversal Medicine: Or the Vertues of the Antimoniall Cup (1634); Annals, 420, 421.
- 52. Annals, 444, cited in Webster, 'Harvey and the Crisis of Medicine', 12.
- 53. John Evans, The Universall Medicine: Or, the Virtues of the Magneticall, or Antimoniall Cup (1642), sig. C3v.
- 54. Flvdds Answer, 133; Mosaicall Philosophy, 257.
- 55. Fludd, Mosaicall Philosophy, 255. Thanks to Patrick Wallis for identifying Kellet.
- 56. Fludd, Mosaicall Philosophy, 287; cf. Flvdds Answer, 141.

- 57. Fludd, Mosaicall Philosophy, 248. Earlier Fludd reported that he had Cured himself of a persistent ache in the back of his hand by anointing it with the 'crude quintessential balme of wheat', though he regretted not pursuing the virtues of this substance with further experiments: Fludd, 'A Philosophical Key', in A. Debus ed., Robert Fludd and his Philosophical Key (New York, 1979) f. 56v. cited in Huffman, Fludd, 23.
- 58. Fludd, Mosaicall Philosophy, 219.
- 59. For another echo in Culpeper's Ghost, see Tentzel, Medicina Diastatica, 116.
- 60. For one, see: Tentzel, Medicina Diastatica, chs 5 and 6, 58-60.
- 61. For some unconvincing suggestions about Maxwell, see Ron Heisler, 'Robert Fludd: A Picture in Need of Expansion', Hermetic Journal (1989). I have not pursued Maxwell in the Scottish medical records.
- 62. Most of what we know about Stafford comes from: Bodleian, MS Ashmole (hereafter Ashm.), 358.7, p. 66. Compare the versions in Irvine, Medicina Magnetica, 60, and Boulton, Medicina Magica, 106, which do not mention Stafford.
- 63. It includes a reference to the Foster-Fludd exchange of 1631, while the conversation must have taken place before Fludd's death in 1637, and the author specifies that he wrote the treatise within two years of it. If, however, the conversation is fictional, then the work could date from as late as 1648, when Ashmole made his copy.
- 64. Ashm. 358.7, pp. 88-91 (quotation p. 89). The two 1656 editions are Boulton, Medicina Magica (Wing 3833A) and Irvine, Medicina Magnetica (Wing I1053). A variant of Boulton mistakenly records '1665' on the title page (Wing B3833B). These are variants of the same text. Ashm. 358.7, pp. 1-108 is at least partially in Ashmole's hand, with corrections by him. He completed his transcription in July 1648 (C. H. Josten ed., Elias Ashmole, Autobiographical and Historical Notes, Correspondence, and Other Sources (Oxford, 1966), vol. 2, 490). Authorship of the work has been erroneously attributed to him: W. Black, A Descriptive, Analytical and Critical Catalogue of the Manuscripts Bequeathed unto the University of Oxford by Elias Ashmole (Oxford, 1845), 270. BL, MS Sloane 1321 is similar to Ashm. 358.7, and lacks date, title and author; BL, Sloane 2220, ff. 251v-65 contains only the aphorisms and conclusions (cf. Thorndike, Magic, vol. 7, 320, n. 219). BL, Sloane 643 ff. 1-17b contains Dr S. Bellingham's extracts from Boulton's edition. These texts are discussed in: Thorndike, Magic, vol. 8, 418-21 and ODNB, s.n.
- 65. Boulton, 'To the Reader', sig. [A4v], states that he obtained the work from a friend, Mr M. B., a gentleman of Kent. Similar themes run throughout Magnetical Medicine and a hermetical treatise annotated by Everard and published by Ashmole, The Way to Bliss (1658).
- 66. De Medicina Magnetica libri III (Frankfurt, 1679). Its publisher corresponded with Henry Oldenburg about the text in 1677 (A. R. Hall and M. B. Hall eds, The Correspondence of Henry Oldenburg (1986), vol. 13, 339-40). On this edition, see: Thorndike, Magic, vol. 8, 419–20. For evidence of the confusion about the authorship of the various versions of this text, see: BL, Sloane 696, ff. 2. 18v. 20.
- 67. The three books appear in different sequences in the different versions. Here I follow Irvine.

- 68. Irvine, 42ff; Ashm. 358.7, pp. 49ff.
- 69. Boulton, 71.
- 70. Irvine, 64–5; Ashm. 358.7, p. 71. See also Boulton, 185–95.
- 71. The evidence is circumstantial. As noted above, the scene in which Fludd converses with Lull and Van Helmont in Culpeper's Ghost seems to parody the scene in Magnetical Medicine, and the works were both printed in the late spring or early summer of 1656.