

Chapter 3

The Economy of Magic in Early Modern England

Lauren Kassell

When my mistress died, she had under her arm-hole a small scarlet bag full of many things, which, one that was there delivered unto me. There was in this bag several sigils, some of Jupiter in Trine, others of the nature of Venus, some of iron, and one of gold, of pure angel gold, of the bigness of a thirty-three shilling piece of King James' coin. In the circumference of one side was engraven, *Vicit Leo de tribu Judae Tetragramaton* +, within the middle there was engraven a holy lamb. In the other circumference there was Amraphael and three +. In the middle, *Sanctus Petrus, Alpha and Omega*.

A sigil is an amulet in the form of a metal seal depicting images or words, often worn around the neck or fixed in a ring. This episode is dated 1624 and appears in the 'autobiography' that William Lilly wrote at the behest of Elias Ashmole in 1668.¹ In 1620 Lilly had moved to London as a servant in the household of Gilbert and Margery Wright, a recently – and unhappily – married couple in their late sixties or early seventies (each had been married before). In 1622 Mrs Wright developed a swelling in her left breast, and Lilly nursed her for the next two years,

I would like to thank Robert Goulding and Anthony Grafton for inviting me to present a version of this paper at a colloquium on 'The Magic of Things' in Princeton in April 2003, and the participants for their comments; members of the early modern seminar at the Institute for Advanced Study, Princeton, for a lively discussion in February 2004; Margaret Pelling, Joad Raymond, Simon Schaffer, and Koen Vermeir for reading drafts; and Wyatt MacGaffey for teaching me about economic anthropology. Some of the research for this paper was supported by the Wellcome Trust.

1 *William Lilly's History of His Life and Times* (London, 1822), p. 32. This text figures briefly in Paul Delany, *British Autobiography in the Seventeenth Century* (London, 1969). For an account of the importance of astrology in the genres of life-writing, see Anthony Grafton, 'Geniture collections, origins and uses of a genre', in Marina Frasca-Spada and Nick Jardine, eds, *Books and Sciences in History* (Cambridge, 2000), pp. 49–68. Lilly appears in most accounts of astrology in early modern England. For a detailed discussion of his art, see Ann Geneva, *Astrology and the Seventeenth Century Mind: William Lilly and the Language of the Stars* (Manchester, 1995).

eventually using a pair of scissors gradually to cut away the mortified breast; she soon died, leaving him the sigil that she had kept in her armpit. Lilly copied down the inscriptions that he describes above, and sold the sigil for thirty-two shillings.²

From Margery Wright, Lilly acquired more than experience in the rudiments of surgery and a golden sigil. She introduced him to the occult arts. She had frequently visited cunning men to discover whether her husband would die before her; ‘this occasion begot in me [Lilly] a little desire to learn something that way, but wanting money to buy books, I laid aside these notions’.³ Simon Forman, the astrologer-physician who had died in 1611, had been one of these cunning men, and he had made the sigil that Wright left to Lilly. Wright’s previous husband had been haunted by the spirit of a murdered man which entreated him to cut his own throat, and so long as he wore Forman’s sigil around his neck the spirit desisted.⁴ Lodged in Wright’s armpit, the sigil was a token of her encounters with the powers of the occult. When Lilly copied its notations and cashed it in, he redeemed its material value, negated its sentimental value, and stripped it of its magical power, keeping that in the less precious, and less effective, medium of pen and paper. He could do this because the value of the sigil was not inherent to the object.

Ideally Lilly would have re-invested the thirty-two shillings in books of magic, but it was the best part of a decade before he did so. He continued in his service to Mr Wright, who soon remarried a woman called Ellen. During the plague of 1625, Wright fled the city and left Lilly in charge of the household. Lilly bought a bass viol and took lessons on how to play it, and he spent a lot of time bowling in Lincoln’s Inn Fields.⁵ His master died in 1627 leaving him twenty pounds a year, and Lilly married the widow, Ellen, though she was much older than he. She died in 1633, leaving him more than a thousand pounds. In 1632 Lilly had begun to study astrology under the tutelage of John Evans, and then to buy books to further his studies.⁶ In 1634 he spent forty shillings on a manuscript *Ars Notoria*, a text attributed to Solomon and containing images and orations for invoking angels who endowed one with the understanding of arts and sciences, perfect memory, and the eloquence to convey this knowledge.⁷

2 Lilly, *Life*, p. 34.

3 Lilly, *Life*, pp. 28–9.

4 Lilly, *Life*, pp. 33–4.

5 Lilly, *Life*, p. 46.

6 Evans later wrote a treatise on antimonial cups, and perhaps other works including a series of almanacs: Bernard Capp, *Astrology and the Popular Press* (London, 1979); Allen Debus, *The English Paracelsians* (London, 1965), p. 170; Margaret Pelling, *Medical Conflicts in Early Modern London: Patronage, Physicians, and Irregular Practitioners, 1550–1640* (Oxford, 2003), p. 69n.

7 For the importance of the *Ars Notoria* and its circulation in late medieval England see Frank Klaassen, ‘English manuscripts of magic, 1300–1500: a preliminary survey’, in Claire Fanger, ed., *Conjuring Spirits: Texts and Traditions of Medieval Ritual Magic* (Thrupp, 1998), pp. 3–31. See also Stephen Clucas, ‘John Dee’s angelic conversations and the *Ars Notoria*: Renaissance magic and mediaeval theurgy’, in Clucas, ed., *John*

This essay is about the definitions and values of magic that are inscribed in sigils like that which Forman made and Lilly sold. Through the activities of Forman, Lilly and Ashmole, it charts the trade in magical objects, texts, and knowledge in England from the 1580s to the 1680s. Sigils, the skills to make them, and the texts that preserved this expertise had a number of values, monetary, practical, natural historical, antiquarian and natural philosophical.⁸ I am using the term ‘economy’ to denote all of these values, and I will explain what I mean by this before returning to Forman, Lilly and Ashmole.

The value of things

By the time that Lilly sold the sigil, in 1634, the world was disenchanted. This is how Max Weber described the process of rationalization and systematization that resulted from the rise of Protestantism and capitalism. Weber used this notion differently at different times. In *The Protestant Ethic*, he described the inner loneliness afflicting Calvinists as the culmination of a process that had been initiated by Hebrew prophets and fostered by Hellenistic science, a process which eliminated magic from the world; salvation and redemption could no longer be found through the magic of the church.⁹ In ‘Science as a Vocation’ he described the outcome of scientific rationalization not as the production of knowledge itself, but as knowing that we can learn through calculation, and thus we need not ‘implore the spirits’.¹⁰ In *The Religion of China* he concluded with a comparison of Confucianism and Puritanism, echoing the passage in *The Protestant Ethic*: ‘Nowhere has the complete disenchantment of the world been carried through with greater consistency [than in early modern Protestantism], but that did not mean freedom from what we nowadays customarily regard as “superstition”.’¹¹ Rationality does not replace magic; disenchantment is a process within history, not a product of modernity.

It is now unfashionable to pursue universal, monolithic definitions of religion, magic, and science. Robert Merton, following Weber, documented the study of natural philosophy and innovations in technology by Puritans in early modern England, and Charles Webster explored the intellectual fervour of this world, a

Dee: Interdisciplinary Studies in English Renaissance Thought (Dordrecht, forthcoming); Lynn Thorndike, *A History of Magic and Experimental Science*, Vol. 2 (New York, 1934), pp. 281–3.

- 8 Cf. Brian Copenhaver, ‘A tale of two fishes: magical objects in natural history from antiquity through the Scientific Revolution’, *Journal of the History of Ideas*, 52–3 (1994), 373–98; Krzysztof Pomian, *Collectors and Curiosities: Paris and Venice, 1500–1800* (Cambridge, 1990).
- 9 Max Weber, *The Protestant Ethic and the Spirit of Capitalism* (London, 1930), p. 105.
- 10 H.H. Gerth and C. Wright Mills, *From Max Weber: Essays in Sociology* (New York, 1946), p. 139; see also pp. 148, 155, 357.
- 11 Max Weber, *The Religion of China* (New York, 1951), p. 226.

world in which science, religion and magic were part of the same project of reformation.¹² Weber kept returning to the notion of the disenchantment of the world, not only because he was studying religion, but because he was concerned for the plight of the individual and the premium on rationality in a world where people, economy, administration, politics and science are systematized. The notion of the rational individual remains problematic in histories of early modern magic, science and religion because we, via nineteenth-century anthropologists, have inherited definitions of these subjects dating from the seventeenth century.¹³

This also holds true for definitions of economy that centre on the rational individual.¹⁴ In the formal sense, economy can be defined as the production, distribution and consumption of goods and services. Were we to explain the history of magic in terms of this formal concept of economy, we would document the production, distribution and consumption of magical goods and services according to the choices of individuals. Capitalism mystifies, or fetishizes wealth, and attributes (or generates) a value inherent to land, labour and capital; this value is defined as ‘use value’, something intrinsic to the object. The problem with magical objects is that from our perspective they contain a dubitable inherent value. We thus explain the ‘belief’ in their inherent value, their intrinsic efficacy, in terms of psychological

- 12 R.K. Merton, ‘Science, technology and society in seventeenth-century England’, *Osiris*, 4 (1938), 360–632; Charles Webster, *The Great Instauration: Science, Medicine and Reform 1626–1660* (London, 1975); Charles Webster, *From Paracelsus to Newton: Magic and the Making of Modern Science* (Cambridge, 1980); see also Christopher Hill, *Intellectual Origins of the English Revolution* (Oxford, 1965). For general discussions of magic, science and religion see Stanley Tambiah, *Magic, Science, Religion and the Scope of Rationality* (Cambridge, 1990); Richard Kieckhefer, *Magic in the Middle Ages* (Cambridge, 1989) and ‘The specific rationality of medieval magic’, *American Historical Review*, 99 (1994), 813–36; and Robert Scribner, ‘The Reformation, popular magic, and the “disenchantment of the world”’, *Journal of Interdisciplinary History*, 23 (1993), 475–94. These discussions have been fuelled by Keith Thomas, *Religion and the Decline of Magic* (Harmondsworth, 1971) and Valerie Flint, *The Rise of Magic in Early Medieval Europe* (Princeton, 1991). On Thomas see Hildred Geertz, ‘An anthropology of religion and magic, I’, *Journal of Interdisciplinary History*, 6 (1975), 71–89 and Thomas’s reply, ‘An anthropology of religion and magic, II’, *Journal of Interdisciplinary History*, 6 (1975), 91–109. On Flint see Kieckhefer, ‘Specific rationality’ and Brian Vickers, ‘On the rise of magic in early mediaeval Europe’, *History of European Ideas*, 18 (1994), 275–87. For a call for ‘a revival of Weberian-style historical sociology...of the cultural origins and character of scientific rationality’, see Lorraine Daston, ‘The moral economy of science’, *Osiris*, 10 (1995), 2–24.
- 13 Thomas, *Religion and the Decline of Magic*, p. 69; Tambiah, *Magic, Science, Religion*, p. 24; Kieckhefer, *Magic*, pp. 14–15.
- 14 See Louis Dumont, *From Mandeville to Marx* (Chicago, 1977); William Pietz, ‘Fetishism and materialism: the limits of theory in Marx’, in Emily Apter and William Pietz, eds, *Fetishism as Cultural Discourse* (Ithaca, 1993), pp. 119–51; Karl Polanyi, *The Great Transformation* (New York, 1944).

need. In an unpredictable, dangerous, anxiety-ridden world, people flock to the marketplace to purchase magical goods and services. This account, however, sacrifices contemporary ideas about the inherent value and intrinsic power of magical objects in order to preserve a notion of rationality. It also undermines the authority and expertise of the magical practitioner, and neglects the dynamic between him and his clients. Magic is demystified and it becomes quackery or religion.

Historians and anthropologists tracing the emergence of capitalism have noted the tautology implicit in using a formal notion of economy to distinguish between pre- and post-capitalist societies. Following Karl Polanyi, they adopt a version of the substantivist (as opposed to the formal) approach which defines economy as a socially embedded process. Here value is defined as ‘exchange value’, where it is not intrinsic to a static, reified thing, but accrued, expressed and measured through its process across space and time.¹⁵ Arjun Appadurai describes this as the ‘social life of things’.¹⁶ Things, as embodiments of social action, undermine the conceptual categories of religion, economy and social structure (or lineage), categories which themselves became defined in early modern Europe.

This is why this essay is about magical sigils, particularly the one that Forman made.¹⁷ To make a sigil was to stamp the powers of the stars into a piece of metal, creating an object both natural and artificial; to use it was to traffic in the occult powers of nature, the dead, or demons; to record its designs was to collect its meaning; to sell it was to redeem its value either as a piece of precious metal or an object of curiosity; to collect it was to endow it with natural historical or antiquarian value, an object, like a coin or medal, embodying the virtues of the past, or like a shell, the secrets of nature, a token for trading with the invisible, what John Aubrey called ‘the Oeconomie of the Invisible World’.¹⁸ The value of a sigil was inherent to the object but it was not constant.¹⁹ Occult powers were subject to the

15 For a clear outline of these ideas see Karl Polanyi, ‘The economy as instituted process’, reprinted in George Dalton, ed., *Primitive, Archaic and Modern Economies: Essays of Karl Polanyi* (New York, 1968), pp. 139–74. For a survey of the uses of the term ‘economic’ by anthropologists, with some criticisms of Polanyi for his emphasis on objects, see Robbins Burling, ‘Maximization theories and the study of economic anthropology’, *American Anthropologist*, 64 (1962), 802–21.

16 Arjun Appadurai, ‘Introduction: commodities and the politics of value’, in Appadurai, ed., *The Social Life of Things: Commodities in Cultural Perspective* (Cambridge, 1986), pp. 3–63.

17 My approach is especially indebted to Igor Kopytoff’s notion of a ‘cultural biography of things’, for which see his ‘The cultural biography of things: commoditization as process’, in Appadurai, *Social Life of Things*, pp. 64–91.

18 John Aubrey, *Miscellanies* (London, 1696), sig. A3v.

19 On collecting and the invisible, see Pomian, *Collectors and Curiosities*, especially pp. 7–44. On coins as magical objects, see Henry Maguire, ‘Magic and money in the early Middle Ages’, *Speculum*, 72 (1997), 1037–54. For gestures towards the importance of economic factors in early modern science see the introduction to Pamela Smith and Paula Findlen, eds, *Merchants and Marvels: Commerce, Science and Art in Early Modern Europe* (New York, 2002). On the preternatural as a subject of natural

vicissitudes of nature, the motions of the stars and planets and the whims of demons, and economic values depended on how an object had been made, where it had come from, and whether it was to be used or collected. A natural and a social history were inscribed in the life of a magical object.

Simon Forman's magic

Lilly showcased the sigil that was made by Forman, worn by Mrs Wright's first husband, kept in Mrs Wright's armpit, left to Lilly, and copied and sold by him. Lilly's history was part of Ashmole's project to record the history of magic, astrology and alchemy in Britain, a project that led him to preserve, even fetishize and idolize, thousands of pages of manuscripts, including Forman's. Forman wrote compulsively, spurred by the need to correlate the motions of the stars and planets with the vicissitudes of life in Elizabethan and early Jacobean London. Between 1580 and his death in 1611 he filled more than fifteen thousand pages with details mundane, celestial and divine. Forman's pursuit of magic is most thoroughly documented in a pair of works dating from his final decade, an alchemical commonplace book 'Of Appoticarie Druges' and a series of incomplete essays on 'the motion of the 3 superiour heavens' (hereafter 'The Motion of the Heavens').²⁰

'Of Appoticarie Druges' can be read as a record of Forman's study of 'chymical' and 'hermetical' physic and a compendium of his expertise in using alchemy, astrology and magic in his medical and related practices.²¹ Thirty of its three

philosophical inquiry see Lorraine Daston, 'Preternatural philosophy', in Daston, ed., *Biographies of Scientific Objects* (Chicago, 2000), pp. 15–41. On stamping, see Katharine Park, 'Impressed images: reproducing wonders', in Caroline A. Jones and Peter Galison, eds, *Picturing Science, Producing Art* (New York, 1998), pp. 254–71.

20 For more on Forman's magic see my *Medicine and Magic in Elizabethan London: Simon Forman, Astrologer, Alchemist, and Physician* (Oxford, 2005), especially chapter 10. For Forman's life see also A.L. Rowse, *Simon Forman: Sex and Society in Shakespeare's Age* (London, 1974), and Barbara Traister, *The Notorious Astrological Physician of London: Works and Days of Simon Forman* (Chicago, 2001).

21 This is bound in two volumes: Oxford, Bodleian Library, Ashm. 1494 and 1491 respectively. Some pages from this work are now located in London, British Library, Sloane MS 3822. I am indebted to David Pingree for assembling a copy in which the pages from Sloane 3822 are reinstated in the volumes, and to Carol Kaske for providing me with a copy of this text. Forman seems to be modelling this work on Josephus Quercetanus [Duchesne], *The Practise of Chymicall, and Hermeticall Physicke*, trans. Thomas Tymme (London, 1605), and his title perhaps echoes sigs BB3v–BB4 of this work. On Paracelsianism see especially Charles Webster, 'Alchemical and Paracelsian Medicine', in Charles Webster, ed., *Health, Medicine and Mortality in the Sixteenth Century* (Cambridge, 1979), pp. 301–34; cf. Debus, *English Paracelsians* and Paul Kocher, 'Paracelsian medicine in England: the first 30 years', *Journal of the History of Medicine*, 2 (1947), 451–80. On commonplace books see William Sherman, *John Dee: The Politics of Reading and Writing in the English*

hundred entries mention magical operations or principles specifically and a handful ('magia naturalis', 'ars magnetica', 'homunculus') address magic directly. A majority of these operations were to effect love magic or more malicious influences on a person's will, and some were for healing. In the entry on 'Electrum', a mixture of two or more metals, Forman described the correlation between types of magic and metals:

Quicksilver hath power of and over enchanting & enchanted. Led hath power over witchcraft. Copper hath power of binding. Gould againste poison & to comferte the harte. Tyne againste thunder lightning & diseases. Silver doth preserve & hath power in magik & enchantment. Yron doth bind & command & threton.²²

Under the entry for 'Spiritus' he described a hierarchy of spirits corresponding to the elements that could be used to bind, loose, curse, bless, and do harm.²³ Sometimes Forman appealed to occult forces in nature, sometimes to spirits; he never mentioned demons. Many entries described astral magic that worked through objects inscribed with images and words. Others described entities typically alchemical, such as the homunculus, mandrake and speaking statue; classically occult natural objects (loadstone, poison from plants, spiders, snakes, toads, and menstrual blood); images made from wax and metals; amulets made from metals, gems, stones and herbs; potions in which such images were soaked or stones and minerals dissolved; human ingredients (urine, hair, blood, menstrual blood, turds, semen); animal ingredients (bones, snakes and eggs); plants and herbs; and manufactured items such as nails, bells and ink. Occasionally Forman recorded incantations and in quite a few entries he discussed the power of words and writing.²⁴ He designated some practices as traditional or old-fashioned, such as determining how well a garment would last according to the phase of the moon when it was first worn. Under 'Observances and old ruelles' he discussed the meaning of thunder.²⁵ Very few operations were divinatory, except a brief account of hazel rods and a device made with a loadstone that could be used to communicate with someone hundreds of miles away. An entry on 'Prophetes and

Renaissance (Amherst, 1995), pp. 59–65; Ann Moss, *Printed Common-place Books and the Structuring of Renaissance Thought* (Oxford, 1996); Kevin Sharpe, *Reading Revolutions: The Politics of Reading in Early Modern England* (New Haven, 2000).

22 Ashm. 1494, pp. 483–4; on electrum see also Sloane 3822, fol.7.

23 Ashm. 1491, pp. 1127–8. This scheme followed Michael Psellus, the eleventh-century Byzantine scholar, though Forman attributed it to himself. See also Ashm. 244, fols 73^v–5.

24 See Ashm. 1494, pp. 398–404, 490, 586–96; Ashm. 1491, pp. 1214, 1216, 1220–3, 1304–5, 1306–9.

25 Ashm. 1494, p. 272; Ashm. 1491, p. 830.

prophesyng' described the need for a diviner to be physically pure.²⁶

Forman also collected testimonials about the uses of magical objects and substances. Occasionally he had experienced these powers himself: he boiled snakes in a strong water and when he drank it his grey hair turned red again; he drew characters on his left arm and right breast in a semi-permanent ink in order to alter his destiny; the angel Raziel advised him about the virtues of mistletoe that grew on oak trees; and he had to give away the taffeta britches that he first wore during a waning moon.²⁷ Sometimes he noted gossip, such as when in 1603 a man in Westminster reported that 'he sawe a mandrake of 7 inches longe with hair down to the feet and under the arm holes, like unto a man in form which was taken by on head [one Head] a constable in turtell street from a witch which was carried to prison for bewitching of Sr Jhon Harizes sonn'.²⁸ But most of the information in these volumes does not contain verification or instruction. Forman did not privilege experience as a measure of whether or not a power or substance existed, and this compendium documents his collection of details about magic, informed through a lens of alchemical and Paracelsian medicine refined in the final decade of his life. This volume could be read as Forman's contribution to Baconian natural history, but instead magical pursuits dominated his legacy.

Forman was especially devoted to the study and practice of astral magic, the use of sigils, laminas, rings, and 'characts' to harness the powers of the stars. These objects 'enclosed som parte of the vertue of heaven and of the plannets according to the tyme that it is stamped caste or engraven or writen in'.²⁹ Throughout the 1590s Forman designed numerous magical objects, some for his own use, some for his friends and clients, some to cure disease, some to empower their bearer.³⁰ In 1597 he prescribed for Jackemyne Vampena, a Dutch woman married to an English merchant, a series of potions, including one in which a ring engraved with the symbol of Jupiter had been immersed.³¹ That year he thought he had lost a gold lamina, a flat, metal amulet, which he had worn on his chest, but he found it

26 Sloane 3822, fol. 90v; Ashm. 1491, pp. 1358, 884. For evidence that Forman made such rods, see a record of his wife Jean (still a virgin) cutting eight hazel rods at the appointed hour which were then immediately whitened and inscribed on 8 February 1598: Ashm. 226, fol. 303. The same long-distance communication device, construct-ed slightly differently, was described in a text appended to *Ars Notoria: the Notary Art of Solomon*, trans. Robert Tanner (London, 1657), pp. 136–8.

27 Ashm. 1491, p. 1278 (mistletoe); Ashm. 1494, pp. 938 (hair), 586v (tattooing), 272 (britches). For a recipe for the ink see Ashm. 1494, p. 402.

28 Ashm. 1494, p. 679.

29 Ashm. 392, fol. 46; see also Ashm. 390, fol. 30.

30 For various laminas see Ashm. 234, fols 96, 99; Ashm. 226, fols 148, 152, 310. For sigils see Ashm. 219, fol. 48; Ashm. 226, fols 148, 249v; Ashm. 363, fols 69v–71. Sloane 3822 is a collection of sigils and texts about them by Forman, Napier, Lilly and Ashmole.

31 Ashm. 411, fols 95, 99v, 115, 118v.

'behind my back in my doublet'.³² In 1598 and 1599 he designed a series of rings and sigils made at the requisite times to capture the desired astral properties.³³ One of these rings had a golden setting holding a large coral stone engraved with the sign of Jupiter, under which was wedged a piece of parchment bearing Forman's name and an inscription of the words and symbols for Virgo and Mercury, the astrological house and its ruling planet at the time of his birth. It was to be worn on the little finger of his left hand, and would protect him against witchcraft and other ills as well as giving 'favour & credit & to mak on famouse in his profession & to overcom enimies'.³⁴ In 1601 he designed a sigil made under the sign of Scorpio for one Martha Shackleton.³⁵ The following year he designed a golden lamina for Jean Sherly that took four days to make and cost £4 13s.³⁶ In 1611 he sent Richard Napier some brass moulds to make symbols of the planets.³⁷ Sometime during these years Forman made the sigil that Lilly inherited from Mrs Wright, and in the entry for 'Sigilla' in 'Of Appoticarie Druges' Forman recorded the design for the type of sigil that Lilly later described.³⁸

Forman recorded incidental details about his use of sigils, and he also wrote about the powers of astral magic. 'The Motion of the Heavens', the incomplete essays that he drafted at the same time as compiling 'Of Appoticarie Druges', is a sustained treatment of this subject, combining medieval cosmology, Arabic astral magic and Neoplatonic natural philosophy.³⁹ Forman explained the analogy between the three superior, celestial heavens, known as the eight, ninth and tenth spheres, the Trinity, and man. The tenth sphere, or *primum mobile*, moves naturally from east to west, and carries all of the spheres 'against their own proper and naturalle motions'. The ninth sphere has no natural motion of its own, and as the soul obeys the spirit so the ninth sphere follows the tenth. The eighth sphere contains the fixed stars and has two motions, 'unnaturally' from east to west fol-

32 Ashm. 205, fol. 23; Ashm. 226, fol. 166.

33 Ashm. 195, fols 29v, 56v–7v, 58. See Ashm. 219, fol. 48, for details of the timing and costs of a ring and a sigil, one of which was made for Forman's close friend Alice Blague, and for evidence that Forman might have paid for these partly in kind with his laminas.

34 Sloane 3822, fol. 11. For Forman's description of how to make an 'imperialle' ring or lamina of gold by inserting a piece of peony, bay or vervain and images of a lion, ram and goat and their related astrological symbols on parchment or leather under a ruby, diamond and heliotrope, then suffumigating it and praying, see Sloane 3822, fol. 77v.

35 Ashm. 411, fol. 58v. This might be the same Mrs Shackleton whose coat of arms Forman described as having been made for her burial on 7 January 1608: Ashm. 802, fol. 207v. For Forman's account of a sigil of similar design, see Sloane 3822, fol. 96.

36 Sloane 3822, fols 13–15. For details of the other rings and sigils that he made that year and the next see Sloane 3822, fols 16–19.

37 Ashm. 240, fol. 106. Forman indicated that someone else would have made the sigils.

38 Sloane 3822, fol. 94.

39 Edward Grant, *Planets, Stars, and Orbs: The Medieval Cosmos, 1200–1687* (Cambridge, 1994), chaps 13, 18, esp. pp. 315–23; S.K. Heninger, *The Cosmographical Glass: Renaissance Diagrams of the Universe* (San Marino, CA, 1977), chaps 3, 4.

lowing the tenth sphere, and ‘naturally’ such that its equinoxes vary by eight degrees.⁴⁰ Forman stressed that a proper understanding of these motions was essential for making astrological calculations and enacting magical operations. While the ninth sphere is filled with symbols and spirits, he argued, ‘the influences operations and effects magicales are in and done by the 8 heaven and not by the 9 heaven and primo mobile’. This is why the distinction between the natural and unnatural motions of the eighth sphere was important: ‘all influences natural do come from and proceed from the 8 heaven and from the fixed stars therein, and from the planets moving under the 8 heaven according to nature and natural workinge’.⁴¹ Forman made detailed calculations about the differing motions of the eighth sphere because they were essential for determining the timing at which to make rings, images, sigils, and swords that could be used to cure diseases, expel vermin, dogs and wolves, vanquish a man’s enemies, and improve or hinder his fortune.⁴² He also specified that the hours of the day could be calculated by dividing the period from midnight to midnight into 24 equal periods, the hours of daylight into twelve, or by basing one’s calculations on the ascension of the ecliptic line of the eighth heaven. The first sort were natural hours, the second artificial, and the third magical; sigils were to be made according to the magical hours.⁴³ Seven decades later Ashmole collected Forman’s papers, had them bound in leather into thick volumes with brass clasps, and carefully studied his writings on sigils.⁴⁴

Forman’s legacy: alchemy, astrology and magic

In ‘Of Appoticarie Druges’ and ‘The Motion of the Heavens’ Forman records information old and new, from books and experience, an eclecticism informed by Paracelsianism and years of experience as an astrologer-physician and student of magic and alchemy in London. When he died in 1611, Richard Napier, his astrological protégé, soon acquired most of his papers.⁴⁵ Within a month of receiving them, Napier tested a recipe for potable gold from ‘Of Appoticarie Druges’, noting his approval in the margin.⁴⁶ He often shared his books, and ‘Of Appoticarie Druges’ bears evidence of other readers. For instance, in an entry on

40 Ashm. 244, fols 35–47.

41 Ashm. 244, fols 40v, 46.

42 Ashm. 244, fol. 48.

43 Ashm. 244, fols 91–2.

44 C.H. Josten, ed., *Elias Ashmole, Autobiographical and Historical Notes, Correspondence, and Other Sources* (5 vols, Oxford, 1966), i, p. 210; iii, p. 1208; iv, pp. 1454–5, 1809.

45 Kassell, *Medicine and Magic*, Introduction; Michael MacDonald, *Mystical Bedlam: Madness, Anxiety, and Healing in Seventeenth-Century England* (Cambridge, 1981), p. 290n; Traister, *Notorious Astrological Physician*, p. xiv.

46 Ashm. 1494, p. 145.

antimony Thomas Robson made a correction which he marked with his name.⁴⁷ Robson probably also wrote the hash marks in the margins to denote which passages he had copied from these volumes into other notebooks.⁴⁸ Others occasionally added their hands to the text without recording their identities or purposes in reading. Decades later Ashmole inserted a brief entry describing how to make a disappearing re-appearing ink.⁴⁹

When Lilly wrote the history of his life in 1668, at the request of Ashmole, he drew on the legacy of Forman, a legacy traced through rumour and manuscripts and linking himself and Ashmole in their pursuit of the natural and social histories of astrology, alchemy and magic in early modern England. Lilly read many of Forman's manuscripts, probably either when he visited Napier in Great Linford, Buckinghamshire throughout 1632–3, or after Sir Richard Napier, Napier's nephew, had inherited them in the 1630s.⁵⁰ He also heard about Forman from Margery Wright and from Forman's widow, known as Ann, Jean, and Forman's pet name for her, 'Tronco'. Lilly's story of his life as an astrologer is punctuated with digressions about the skill and integrity of other practitioners in astrology and alchemy and the successes of various scryers, including John Dee's assistant, Edward Kelley.⁵¹ The story of the sigil in the armpit sparks the first digression, and Forman is its subject. Lilly praised Forman's astrological integrity; but he insinuated that Forman was an old-fashioned, ill-educated magician, noting that Margery Wright had habitually consulted cunning or wise men 'as were then called'. Forman was 'judicious and fortunate' in horary questions such as thefts, and sickness was his 'masterpiece'. He was meticulous and thorough in his calculations, and 'had he lived to methodize his own papers, I doubt but that he would have advanced the Iatromathematical part thereof very completely'. Despite his calculations, Lilly continues, Forman had difficulty in his pursuit of the philosophers' stone and his own preferment. Elsewhere Lilly noted that according to Margery Wright, Forman was very successful in his conferences with spirits; he also, according to Lilly, had a book that he 'made the devil write with his own hand in Lambeth Fields 1596' and he predicted his own death.⁵²

About his own life, Lilly reports that he himself first began to study magic in

47 Ashm. 1494, p. 62.

48 Many volumes of Robson's notes on alchemical texts are preserved in the Ashmole and Sloane collections.

49 Ashm. 1494, p. 552. For notes probably by Ashmole see Ashm. 1494, p. 85; Sloane 3822, fol. 84v. Ashmole might also have book-marked items, as the entry on 'Karakteres' is presently marked with a slip of paper bearing numbers and astrological houses seemingly in Ashmole's hand: Ashm. 1494, p. 586.

50 Lilly, *Life*, p. 79. On the nexus of astrologers including Dee, Forman, Napier and Lilly see Michael MacDonald, 'The career of astrological medicine in England', in Ole Grell and Andrew Cunningham, eds, *Religio Medici: Medicine and Religion in Seventeenth Century England* (Aldershot, 1996), pp. 62–90.

51 Lilly, *Life*, pp. 221–7.

52 Lilly, *Life*, pp. 42–4.

1634, the year after his first wife died. He bought a copy of the *Ars Notoria*, and he admits ('I do ingenuously acknowledge') that he used the art briefly before giving it up.⁵³ His disillusionment with magic began when he went on a hunt for treasure in a ruined abbey using dowsing rods, but too many people were present, demons were let loose and had Lilly not dismissed them the abbey would have collapsed.⁵⁴ Then he advised a woman in matters of love, divining where she might meet her estranged lover, and she nearly poisoned herself. Following these mishaps, Lilly 'burned his books which instructed in these curiosities' and moved to the country.⁵⁵ But Lilly tells us that in 1634–5 he taught John Hegenius, a Dutch physician and astrologer, his 'art in framing Sigils, Lames &c. and the use of the Mosaical rod'.⁵⁶ Lilly had probably learned about sigils from some books and moulds that had been stashed by one Mathias Evans in the wall of his house, only to be discovered by a later occupant; Ashmole noted that Lilly had bought these for five shillings.⁵⁷

Lilly, Ashmole, and antiquarianism

Lilly recounted the story of Forman's amulet, noted his lack of method (at which Lilly excelled) but extreme diligence in the science of astrology, and described the interest in spirits to which he too, briefly, had succumbed. Without saying any more about Forman's sigil, he quietly reported his own expertise in the casting of sigils, stressing, like Forman, that astrology was essential to all other arts. He noted his and Ashmole's pursuit of books and manuscripts, and reported on his study of Forman's astrological figures and accounts of his life. Through stories about the occult practitioners that he had known or heard about and the curious events that he had experienced, Lilly, like Forman, portrayed astrology, alchemy and magic as related arts. Lilly, however, did not people his account with mandrakes and homunculi, or even magnets and menstrual blood. At the request of Ashmole he recorded the materials for a social history of magic in England, and in so doing he stressed his own practices, said nothing about the natural history of magic, and perhaps taunted Ashmole with details such as his having sold Forman's golden sigil, burned some books, and visited a wood filled with fairies.⁵⁸ Perhaps Lilly was suggesting that the antiquarian pursuit of magic was no more than the stuff of romance.

53 Lilly, *Life*, p. 76.

54 Lilly, *Life*, pp. 78–81.

55 Lilly, *Life*, p. 83.

56 Lilly, *Life*, p. 221.

57 Lilly, *Life*, pp. 152–3. Evans was known for his magical and astrological practices and he was a friend of Richard Napier's and an enemy of John Lambe's: Kassell, *Medicine and Magic*, chaps 3 and 4; Macdonald, 'Career of astrological medicine', p. 85; Pelling, *Medical Conflicts*, p. 112; Thomas, *Religion and the Decline of Magic*, pp. 297, 413.

58 Lilly, *Life*, pp. 34, 83, 228.

Lilly and Ashmole had met in 1646, soon after Ashmole had begun to study astrology, alchemy, natural history and other subjects and to acquire related books and manuscripts. Ashmole's fortune improved in 1649 with his marriage to Lady Manwaring, and he began to collect coins and medals, then from the 1650s to study heraldry and collect portraits, antiquities and curiosities artificial and natural. Through texts, images and objects, Ashmole preserved the relics of the history of Britain and the lives of his countrymen, materials forgotten or desecrated by his contemporaries.⁵⁹ His collection of magical texts dates from 1648 at the latest, when he and Lilly swapped their copies of the *Picatrix*, an Arabic book of magic circulating in manuscript.⁶⁰ In 1649 Ashmole transcribed a treatise entitled 'Three books on natural magic'.⁶¹ He also used these texts: in July 1650, for instance, following directions attributed to Paracelsus, he made a magic speculum to see things in the past and present.⁶² A few days later he made four sigils to drive away caterpillars, flies, fleas and toads, and in September he made sigils against the pox.⁶³ Those against vermin were made from lead, took the shape of the creature, were void of characters, and were cast during a conjunction of Saturn and Mars. Those against the pox took the form of genitalia and were cast during a conjunction of Venus and Mars.⁶⁴

That same year Ashmole acquired a number of magical books and manuscripts, including one on Arabic talismans and another on calling spirits.⁶⁵ In 1651 he prepared *Theatrum Chemicum Britannicum* for publication. This included

- 59 Cf. Pomian, *Collectors and Curiosities*, p. 34. On Ashmole see Josten, *Ashmole* and Michael Hunter, *Elias Ashmole, 1617–1692: The Founder of the Ashmolean Museum and His World* (Oxford, 1983), reprinted in Hunter, *Science and the Shape of Orthodoxy: Intellectual Change in Late Seventeenth-Century Britain* (Woodbridge, 1995), pp. 21–44. On Ashmole's collection of books and manuscripts see Josten, *Ashmole*, i, p. 210; iii, p. 1208; iv, pp. 1454–5, 1809. Most of these manuscripts are now in the Ashmole collection in the Bodleian Library, though it is unclear why some of Ashmole's papers, particularly those containing magical material, are now in the Sloane Collection in the British Library. For the Ashmole collection see William Black, *A Descriptive, Analytical and Critical Catalogue of the Manuscripts Bequeathed Unto the University of Oxford by Elias Ashmole* (Oxford, 1845) and W.D. Macray, *Index to the Catalogue of Manuscripts of Elias Ashmole* (Oxford, 1866). On coins and medals see Josten, *Ashmole*, ii, p. 684; iv, pp. 1717, 1727, 1864 and Hunter, *Ashmole*, pp. 37–8, 40.
- 60 Josten, *Ashmole*, i, p. 53; ii, p. 466. Lilly's copy might have come from Sir Richard Napier.
- 61 Ashm. 358. Black attributes this text to Ashmole and Josten disagrees: Josten, *Ashmole*, ii, p. 490.
- 62 Josten, *Ashmole*, i, p. 72; ii, p. 536.
- 63 Josten, *Ashmole*, ii, pp. 537, 545–9.
- 64 Josten, *Ashmole*, ii, pp. 594, 608, 619. He also describes sigils with embracing couples on one side and words (Hagiel, Graphiell) on the other: Josten, *Ashmole*, ii, p. 608. For Forman's description of a sigil against rats, see Sloane 3822, fol. 102v.
- 65 Josten, *Ashmole*, ii, p. 537n.

Thomas Norton's 'Ordinal of Alchemy', and Ashmole glossed the line 'But the chief Mistris among sciences all/for the helpe of this art, is magic naturall' with a five-page essay on the subject. Following Paracelsus, Agrippa, Francis Bacon and others he distinguished 'True Magicians' from 'Conjurers, Necromancers and Witches'. He lamented the false accusations of demonic magic made against scholars in previous centuries, and he stressed that natural magic did not require incantations, words, circles, charms or other 'invented fopperies'; but he did not proscribe the use of magical objects.⁶⁶

Around 1668 Ashmole and Lilly swapped stories about their lives and their experiences with magic. Lilly studied Ashmole's nativity and noted that though an educated gentleman, Ashmole was expert in casting medals and sigils. Ashmole asked Lilly to write an account of his life and times, which he did.⁶⁷ Then Ashmole asked Lilly to elaborate on the details of who was present and what happened during the magical activities that he described.⁶⁸ Around this time Lilly also sent Ashmole a trunk full of sigils that had belonged to one 'Lord Bothwell', then Sir Robert Holborn, the lawyer and astrological enthusiast who had died in 1648. Ashmole recorded the designs of several sigils, rings and stones by impressing them in wax.⁶⁹ When Sir Richard Napier died in 1676 Ashmole bought his collection, including Forman's papers, from his son, Thomas. He studied Forman's writings, and from 1677 he made dozens of sigils, some to improve his fortune, some to stop his wife from vomiting, and most to drive vermin from his house and garden.⁷⁰ He compiled lists of titles of Forman's treatises, noted works that he cited, re-copied damaged pages, and indexed figures that he had cast about the weather and the making of sigils.⁷¹ Ashmole studied Forman's notes on sigils with particular care. For instance, throughout the entry on 'Amulets' in 'Of Appoticarie Druges' he systematically noted whether Forman's calculations were based on natural or artificial hours, and Ashmole likewise included these two sorts of time throughout his records for making sigils from late in 1677.⁷² He also annotated Forman's essays in 'The Motion of the Heavens', paraphrased them, and checked

66 Elias Ashmole, ed., *Theatrum Chemicum Britannicum* (London, 1652), pp. 443–7.

67 Josten, *Ashmole*, iii, pp. 1072–3; ii, p. 538n. On images of famous men, identities of collectors, autobiographies, and medals see Paula Findlen, *Possessing Nature: Museums, Collecting, and Scientific Culture in Early Modern Italy* (Berkeley, 1994), pp. 291–392.

68 Josten, *Ashmole*, i, p. 62; iii, pp. 1113–15.

69 On the trunk of sigils see Josten, *Ashmole*, iii, p. 1076; Thomas, *Religion and the Decline of Magic*, pp. 634–5. On Holborn, see Josten, *Ashmole*, ii, p. 471. On impressions: Josten, *Ashmole*, iv, pp. 1233, 1288. The former example is explicitly magical, while the latter might have had magical or heraldic values.

70 Josten, *Ashmole*, ii, pp. 537, 538, 545–9, 567, 578–9, 584, 594, 595, 608, 619; iv, pp. 1508, 1513, 1523, 1533, 1538–40, 1608–32, 1616, 1624, 1629, 1656–7, 1662–3, 1679, 1681, 1688–97, 1738.

71 Ashm. 421, fol. 152; Ashm. 1790, fol. 102; Sloane 3822, fol. 20.

72 Sloane 3822, fols 6–19; Josten, *Ashmole*, iv, p. 1508.

Forman's figures against other sources, at one point finding Forman's calculations lacking in comparison with those included in Edward Sherburne's *The Sphere of M. Manilius* (1675).⁷³ In a letter to Anthony Wood a decade later, Ashmole described Forman as 'a very able Astrologer and Phisitian, as appears by the manuscript bookes he left behinde him, which are now in my possession'.⁷⁴ Hundreds of sigils were probably numbered amongst the almost nine thousand silver, brass and copper coins and medals that Ashmole lost, along with impressions of heraldic seals, printed portraits, notes on history and heraldry and other antiquities and curiosities, in the fire in the Middle Temple in 1679. That his collection of manuscripts and gold coins (less precious but more valuable) survived because Ashmole kept them at his house in South Lambeth was an irony that neither he nor Lilly could have foreseen.⁷⁵

Lilly had inherited a tradition of magic from Forman that was tied to astrology and dominated by the uses of sigils and a curiosity about scrying. Ashmole collected the relics of Forman's and Lilly's expertise. From Lilly he received stories to chronicle the progress of astrology and encounters with spirits, demons and fairies. Forman's reputation and papers might have inspired him to perfect the art of making sigils and certainly informed his understanding of the motions of the heavens and their importance for magical operations. For Ashmole, Lilly, and Forman, the value of magic inhered in knowledge and expertise, knowledge most often used to make sigils that harnessed astral powers. Magical objects, the texts that described them and documented their uses, and knowledge about how they worked, followed distinct paths of transmission between practitioners, clients and friends, and across generations. Objects might shed occult powers and they and their legacies acquire historical value; the meaning of texts and the expertise they conveyed was more enduring. Whether magic was distinguished from religion in terms of coercion or supplication; whether a new type of contemplative, spiritual magic was defined that achieved divine enlightenment instead of Faust's mundane powers and pleasures; whether the magus, no longer a priest, aspired to a clerical role; whether religion and magic together were moved from the church to the home; in seventeenth-century England magical objects were disenchanting not only because of Baconian natural histories, but because of Ashmole's antiquarianism. He knew that his collections were channels for conversations with the dead and that his sigils worked by magic.

73 Ashm. 1790, fols 78–100; Ashm. 421, fols 149r–v. For his annotations, see especially Ashm. 244, fols 50, 51v, 92, 96–7v, 99v, 107v.

74 Josten, *Ashmole*, iv, p. 1809.

75 Josten, *Ashmole*, i, pp. 229–30; iv, pp. 1726–7; Hunter, *Ashmole*, pp. 37–40. Sloane 3822 preserves Ashmole's records of sigils, including at least one impression in wax (fol. 159; cited in Josten, iii, p. 1233).