Secret of Secrets

Medieval Europe was an intellectual battleground of magic, science, and religion

IN SHAKESPEARE'S *The Tempest*, the character Prospero had the power to survive on his island because of his books of magic spells. His magically-coerced servant Caliban, rebelling from Prospero's control, says, "First to possess his books, for without them he's but a sot."

Volumes of primordial and perilous spells and practices are still a ubiquitous feature in fantasy fiction and Gothic novels from Mary Shelly (1797–1851)'s *Frankenstein* (1818) to J. K. Rowling's *Harry Potter* series (1997–2007).

In the high Middle Ages (ca. 1000–1300) and the Renaissance (ca. 1350–1650), such books of magic were not only real, but they were numerous and widely circulated. Every literate and educated person knew about them, from curious monks to philosophers, kings, and queens. They circulated in hundreds of editions and translations, long before the printing press was invented (ca. 1440). They often derived from, or claimed to be, copies of texts from classical Greece and Rome, Egypt, Persia, or Mesopotamia. Some were more or less real translations of classical books, others were accumulations of folk magic and superstition, strange tales of foreign places, or mythical history, and some were made-up, sensationalist fiction.

One of the more prominent of these books is the *Secretum Secretorum*, or "Secret of Secrets." It was one of the most popular books of its time and spread through Europe in hundreds of versions and translations, centuries before the printing press. It purported to be a book of advice by the Greek philosopher Aristotle (384–322 bce) written for his pupil Alexander the Great (356–323 bce). It contained large sections on how a king should rule and behave, as well as discourses on natural history and the nature of plants, animals, and the cosmos. It also had sections on astrology, magical plants, useful spells, and alchemy. Versions from the 1200s and later included a copy of the "emerald tablet," one of the fundamental texts for medieval alchemists. A key element of the Emerald Tablet were its formulae leading to an alchemist's dream of creating a Philosopher's Stone (giving a person eternal life) and turning such metals as iron and lead into gold. Much of the Secretum was in fact a translation of an Arabic document from the 900s called *Kitab sirr al-asrar*, or *The Book of Science in Government*. This work was also claimed to be a translation from the Greek, but, like the versions circulated in Europe, was mostly likely written in the tenth century Islamic world.

Another example of this sort of magical text is the *Clavicula Salomonis*, or *The Key of King Solomon*, said to have been written by Solomon himself around 1000 bce. More likely, it was written in Italy in the 1300s or 1400s ce, pulling together ideas from folk magic, Greco-Roman magic, and Jewish Kabbalism. It had such spells as making a conjurer invisible. The spell was quite involved, with invocations of the Master of Invisibility, Almiras, and his ministers *Cherog, Tangedem, Transidim, Abelaios, Belamith, Castumi*, and a dozen others. The practitioner stood in an inscribed circle marked with ancient characters, with lots of paraphernalia that was necessary for the ritual. Incantations were spoken and if everything were done perfectly, the text said, the magician would be rendered invisible and could move around undetected.

Image of Alexander the Great receiving the pseudo-Aristotle book, *Secretum Secretorum*, from a messenger with Aristotle standing behind, 1326-132. Album/British Library/Alamy Stock Photo

Books of sorcery and magical spells are sometimes called "grimoires" and have existed in many cultures and historical times. In the medieval world, they were especially widespread—perhaps not surprising, as an understanding of the world was in flux. People lived in an environment in which ancient religions and newly adopted Christianity lived uneasily side by side. The animistic and polytheistic religions of ancient Europe were still powerful. Christianity was slowly incorporating these "pagan" beliefs, adapting local gods as saints in the Church and aligning its ecclesiastical calendar with traditional celebrations. For example, the goddess Brigid, one of the most important figures in the Irish pantheon, was associated with healing, fertility, and spring. Her veneration merged into

that of the Irish Saint Brigid, patroness of fertility, healing, and domestic arts. Saint Brigid's feast day is on the same day as the Gaelic festival *Imbolc*, marking the beginning of spring. These pre-Christian gods are still consequential today—the English names for four days of the week are named for Germanic and Norse gods (Tîwaz, Woden, Thor, and Freyja). The pagan celebrations of the winter solstice, celebrations of spring, and the Celtic festival marking the harvest and beginning of winter, were transformed into the holidays of Christmas, Easter, and All Saint's Day.

Sacred places of pre-Christian times retained their spiritual significance in Roman and then Christian Europe. In southern England, for example, there was a Celtic ceremonial site at the hot springs dedicated to the goddess Sulis, who was associated with healing. The Romans called the springs Aquae Sulis and built a temple to Minerva, goddess of healing, wisdom, and the arts. A Christian monastery was built on the site in the seventh century and has been greatly enlarged in many phases since then as Bath Abbey. The English king Edgar (943/944–975 ce) was crowned there in 959 ce, and the coronation rite has been used in some form for British monarchs ever since.

The high Middle Ages was also the time when classical Greek and Roman texts were trickling into Europe. Many of these were coming by way of the Islamic world, where there had been great interest in translating Greek and Roman documents in the ninth and tenth centuries. Works from Aristotle, Ptolemy (ca, 100–ca. 170 CE), Archimedes ca. 287–211 BCE), Hippocrates (ca. 460–375 BCE), and others came into Europe as Latin translations from the Arabic. These works stimulated a new interest in science, medicine, mathematics, and natural history that has continued to the present. They were an important cause of the intellectual movements known as the Renaissance and the Enlightenment.

Prospero with his books of magic, as played by Ralph Richardson, in a scene from *The Tempest*, ca. 1952. Kurt Hutton—Picture Post/Hulton Archive/Getty Images

Roger Bacon (ca. 1220–1292) studied both Greek texts and the books of magical spells and lore intently. Bacon envisioned flying machines and wrote about the Chinese creation of gunpowder a century before it became well known in Europe. Most important, he renewed Aristotle's emphasis on experimentation and studying phenomena through careful observation. Bacon cited the Islamic scholar Ibn al-Haytham (Alhazen, ca. 965–ca. 1040 ce) in support of the scientific method. His *Opus Majus* (1267) was an encyclopedic summary of knowledge at the time. His work covered mathematics, optics, geography, astronomy, astrology, botany, zoology, engineering, alchemy, and medicine. He acknowledged the importance of Islamic scholarship in his ideas about science, philosophy, and theology.

Isaac Newton (1642–1726) also studied medieval works of alchemy and magical knowledge. It does not show up much in his great work, *Mathematical Principles of Natural Philosophy* (1687), but is more evident in his other writings. He tried to create a unified concept of knowledge, with no distinction drawn between science, theology, prophesy, and what we might think of as magic.

It may now seem incongruous that in the Middle Ages and Renaissance there would be books about alchemy and magical spells on the same scholars' bookshelves as Aristotle's *Physics*, Pliny the Elder's (24-79 CE) *Natural History*, or Euclid (flourished ca. 300 BCE)'s *Geometry*. The inclusion, however, does not suggest that the early European intellectual world was less sophisticated or more superstitious than Aristotle's world, or our own. Classical scholars lived in societies where state religion and everyday folk magic were as important as ever. Galileo (1564–1642) and Copernicus (1473–15430) may have been in trouble from religious authorities for writing things that challenged the official religion, but Socrates (ca. 470–399 bce) was executed for "impiety" and corrupting the minds of the youth with his philosophical teaching. And in the United States, the internet-based, international public opinion and data company, YouGov, reports that 27 percent of Americans believe in astrology, while in recent years, colleges and universities have graduated fewer than 1,000 Astronomy majors a year.

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