

Rudolfine Prague

*Astronomers, Alchemists and
Doctors at the Court of Rudolf II*



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Immanuel Weber, *Rudolphum II*, 1707.

Rudolf II (1552–1612)

Rudolf II, Holy Roman Emperor, King of Bohemia and Hungary, was one of the most interesting and extraordinary European rulers of the 16th and 17th centuries. Quite unusually, as a Habsburg monarch, he chose Prague, the capital of Bohemia, as his residence. During Rudolf's reign, his court occupied a central position in the Europe of that time. He himself was not of lesser importance than monarchs such as Philip II of Spain, Henry IV of France, Ivan the Terrible of Russia or Elizabeth I of England.

Rudolf was in many ways a controversial figure and he has been connected to many legends and fantastic stories. According to English historian R. J. W. Evans, posterity has in fact recognised three distinct Rudolfs. The first is the feeble, unstable and impoverished monarch, who began his reign by succeeding to a glamorous political inheritance but ended it as a prisoner in his own castle, powerless in the Empire, evicted from Austria, deposed even in Bohemia where he was forced to endure the coronation of his detested brother Matthias.

The second Rudolf is a great Maecenas, a protector of arts and sciences, who amassed a collection of artistic treasures unrivalled in that lavish age. The third Rudolf is a notorious patron of the occult arts. His passion, or more precisely obsession for this field, bordered on madness. He has been remembered, above all, for his enthusiasm for alchemy, astrology, Cabala and old-fashioned superstition.

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Prague during Rudolf's reign became one of the most fascinating centres of spiritual life. Rudolf's court attracted many famous scholars and humanists from across Europe. One of the reasons for this was a relatively high degree of tolerance and religious freedom resulting partly from the anarchic political situation in the kingdom.

Rudolf II was an unusual Catholic due to his marked antipathy towards the papacy, for political as well as spiritual reasons. Evans mentions a case when, in 1606, Rudolf authorised the issue of the thaler which depicted him as an alchemist, with various magical symbols on his coat. On seeing the silver coin, the Pope sent a message via a nuncio in Prague warning Rudolf against advertising his involvement with the forces of the 'inferior world' in such a blatant manner.

Rudolf was, indeed, interested in mystical aspects of religion and in the occult spirituality that magic had to offer. Artists and scholars of every denomination were welcomed at court as long as they did not disturb the religious peace by writing against the Catholic Church.

At court, learned men were brought into close contact with Bohemian scholarship and – no less important – with the excellent Prague printers and publishers. Intellectual traditions in Bohemia at the time placed a strong emphasis on practical sciences such as mining, including metallurgy and geodesy, medicine and botany, but there were also students of alchemy, natural magic, astronomy and astrology.

One of the easiest ways to be accepted by the Emperor's court was to have a good reputation in astronomy, alchemy or the occult arts. Some fortunate scholars received official titles such as Court Astronomer or Court Mathematician, while others enjoyed temporary payment or different favours, even the granting of nobility. The latter was actually the 'cheapest' means of promotion, since the Emperor claimed that alchemists needed neither money nor medicine as they themselves could make them, while the granting of social elevation was the sole privilege of the ruler.



Hoefnagel: Prague in 1595. Credit: Jan Sokol.

Astronomy

The arrival of Tycho Brahe at the Prague court in 1599 and of Johannes Kepler a year later were of great importance regarding astronomy. Astronomy was essential for the contemplation of the cosmos. Brahe and Kepler had the best instrument-makers of Central Europe at their disposal, because they all worked for Rudolf. For 13 years, until Rudolf's death in 1612, Prague was the centre of astronomical studies.

Tycho Brahe (1546–1601) was a Danish astronomer. He became interested in astronomy at the age of 13 when he saw a partial eclipse of the Sun. Later he studied law, astronomy and chemistry.

In 1576, with some financial help from the King of Denmark, Brahe set up the Uraniborg observatory, on the Danish island of Hven. The basements of the observatory were designed as laboratories as his interest in alchemy continued. Over the next 20 years he made by far the largest and the most accurate set of observations of stellar and planetary positions. He had some visitors including King James VI of Scotland (later James I of England).

In 1597, Tycho was forced to leave, partly because of the new Danish King's unwillingness to continue paying the high costs of the observatory. Tycho tried to appeal to Rudolf II. In 1599, he moved to Prague to take up the post of Imperial Mathematician to the King and stayed there until his death.

Johannes Kepler (1571–1630), a German astronomer and mathematician, became Brahe's assistant, partly thanks to his teacher who encouraged Kepler to become an astronomer and was in correspondence with Brahe. Kepler moved to Prague in 1600. One year later, Brahe died and Kepler eventually succeeded him as Imperial Mathematician.

Kepler continued with his astronomical research, focusing heavily on the motions of planets. As a result he defined three main laws, which are known as Kepler's Laws of Planetary Motion. In 1627, the Rudolphine Tables, which are based on Kepler's first two laws, were published. The tables proved to be reliable for many decades in comparison to other tables at the time. Their accuracy helped to persuade astronomers to accept Kepler's first two laws and thus the Copernican heliocentric system.

Alchemy

The court attracted numerous alchemists and magicians. It is sometimes believed, mostly due to popular legends about the Emperor, that the first interest of Rudolf and his alchemists and magicians was the making of gold. However, the quest for the philosopher's stone, which could eventually be used for the transmutation of lesser metals into gold and act as the rejuvenating elixir of life, turned out to be more important.



Credit: Wellcome Library, London

According to legend, the famous Polish alchemist known for performing transmutations, Sendivogius (Michał Sędziwój) (1556–c.1630), helped the Emperor in a successful transmutation in Rudolf's private chamber in 1604. The ruler commemorated this event by placing a plaque on the wall. It is claimed that Sendivogius possessed a powder transmuting lead into gold. However, in 1607, he lost the remainder of his stock.

The truth is that Sendivogius' treatise *Novum lumen chymicum* became one of the most revered alchemical texts of the 17th century. Sendivogius lived in Prague during the 1590s and was imprisoned more than once.

Most alchemists or magicians, such as the English magicians John Dee (1527–1608) and Edward Kelley (1555–1597) did not stay at the court for long, maybe, partly because of impossible claims from their side and high expectations from the Emperor that could not be fulfilled.

John Dee started his career in the 1540s as a promising scholar of Greek philology and mathematics. He travelled around Europe and engaged in humanist editions of classical scientific texts. On returning to England, he was appointed astrologer to Queen Mary, but was tried (and acquitted) by the Star Chamber of using sorcery against the Queen.

After further travels on the continent, he went back to the court of Queen Elizabeth I, where he worked as an astrologer and her informal adviser. He also lectured on navigation.

In 1563, Dee visited Austria and Hungary. He attended the coronation of Maximilian II, father of Rudolf II, as King of Hungary, and was so impressed that he dedicated his book *Monas hieroglyphica* to this learned and tolerant monarch.

From 1583 to 1589, Dee lived in Poland and Bohemia, where he conducted experiments in alchemy and the occult sciences. At the time, Dee started engaging in Enochian magic in the form of séances with help of mediums. One such medium was the alchemist Edward Kelley, who claimed he was able to communicate with the dead.

They were both invited to an estate of Polish nobleman Olbracht Łaski. However, he was not satisfied with their results so they decided to move to Prague. There, in 1584, Dee appeared in front of Emperor Rudolf II.

Dee presented his book, which he dedicated to Rudolf's father, and told Rudolf more about how he was disappointed with earthly sciences and how he had turned to angelic metaphysics. Rudolf was probably not very impressed and therefore Dee moved again, this time to Cracow to try his fortune with King Stephan Báthory.

Dee and Kelly went back to Prague once more. Because of his religious tolerance, Dee became an object of suspicion to Rudolf's Catholic advisers. Therefore, Rudolf banished Dee and Kelley from all Habsburg countries.

Dee returned to England, where he was appointed warden of Manchester College, while Kelly reappeared in the court of Rudolf II and performed transmutations for which he was knighted. Nevertheless, Kelley was imprisoned several times over the following years for failing to produce gold. In the end, he died of injuries while trying to escape from Prague castle in 1598.

Medicine

Rudolf II had his own personal physicians called the Leibartzs. One of them was Johann Pistorius (1546–1608), an influential doctor and confessor to the Emperor. He was versatile with regards to his beliefs, and before his conversion to Catholicism, he tried Lutheranism as well as Calvinism. Pistorius was also interested in the occult arts, editing one of the major Renaissance compilation of cabbalist literature *Artis Cabalisticae*.

Another court physician was Martin Ruland (1532–1602), who, together with his son of the same name, served the Emperor in the 1600s. This Bavarian family settled in Pozsony, Hungary. Having moved to the royal court in Prague, they continued alchemical experiments as documented in the famous Paracelsian dictionary, written by the father but edited by the son: *Lexicon Alchemiae sive Dictionarium Alchemistarum*.

Ruland Jr (1569–1611) became famous for his studies of the *morbus hungaricus*, a type of typhoid fever. Unfortunately, after having described the illness, he himself died of it in 1611.

Tadeáš Hájek z Hájku (Hagecius) (1525–1600), also court physician of Rudolf II, was interested in botany, maths, alchemy, astronomy and medicine. He also contributed to the development of psychology and, as a noted astronomer, he promoted the invitation of Tycho Brahe to the royal court.

It would be worth mentioning physician and anatomist Johannes Jessenius (Jan Jesenský) (1566–1621), who, despite the often-repeated myth, was never appointed as Rudolf's physician. However, he did become one of Bohemia's most sought-after private practitioners. He knew personally Tycho Brahe, who invited him to Prague. Jessenius performed the first public anatomic dissection in the history of Charles University in 1600. Jessenius himself commemorated it in a published version of his five-day medical demonstration, the *Anatomia pragensis*.

He also contributed his findings about *morbus hungaricus* to the work of the above-mentioned Martin Ruland. However, Jessenius got himself involved in a conflict between the Czech nobility and the new emperor from the Habsburg dynasty, Ferdinand II. He was also involved in the Czech Estates rebellion which cost him his life. Jessenius was executed alongside 26 other men on 21 June 1621. According to the account by a chronicler, Jessenius was portrayed as a godless anatomist who quadrisected people and who was ultimately quadrisected himself.



Selected Items on Display

Tycho Brahe, *Astronomiae instauratae progymnasmata*, 1610.

Tycho Brahe, *De mundi aetherei recentioribus phaenomenis*, 1610.

Tycho Brahe, *De disciplinis mathematicis oratio*, 1621.

John Dee, *Monas hieroglyphica*, 1591.

Tadeáš Hájek z Hájku, *Actio medica*, 1596.

Johannes Jessenius, *De sanguine, vena secta dimisso, iudicium*, 1608.

Johannes Kepler, *Mathematici Eclogae chronicae ex epistolis doctissimorum aliquot virorum ...*, 1615.

Johannes Kepler, *Dissertatio cum nuncio sidereo nuper ad mortales misso à Galilæo Galilæo ...*, 1610.

Johannes Kepler, *Ad Vitellionem paralipomena*, 1604.

Johannes Kepler, *Chilias logarithmorum ad totidem numeros rotundos*, 1624.

Antoine du Pinet, *Plantz, pourtraitz et descriptions de plvsieurs villes et forteresses ...*, 1564.

Johann Pistorius, *Dæmonomania Pistoriana*, 1601.

Martin Ruland, *Lexicon alchemiæ sive dictionarium alchemisticum ...*, 1612.

Michał Sedziwój, *Tractatus de sulphure altero naturæ principio ...*, 1616.

Selected Sources

Gordon Campbell, *The Oxford Dictionary of the Renaissance*, 2003.

R. J. W. Evans, *Rudolf II and his world : a study in intellectual history, 1576–1612*, 1973.

Penelope Gouk: Natural Philosophy and Natural Magic. In: *Rudolf II and Prague*, 1997.

György E Szönyi.: Scientific and Magical Humanism at the Court of Rudolf II. In: *Rudolf II and Prague*, 1997.

The life and work of Jan Jesensky (1566–1621), the physician of a dying time.

Accessible online at:

https://www.researchgate.net/publication/260446977_The_life_and_work_of_Jan_Jesensky_1566-1621_the_physician_of_a_dying_time

<https://www.theguardian.com/science/2012/nov/15/astronomer-tycho-brahe-death-scientists>

<https://www.theguardian.com/world/2016/aug/21/tiny-spanish-publisher-wins-rights-voynich-manuscript-book-no-one-can-read>

<http://beinecke.library.yale.edu/collections/highlights/voynich-manuscript>

