Scholars and Literati at the University of Prague (1348–1800)

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This note is a summary description of the set of scholars and literati who taught at the University of Prague from its inception in 1348 to the eve of the Industrial Revolution (1800).

1 The University

Established on the 7th of April 1348, the University of Prague is the oldest university in central Europe. The inspiration for a university in Prague came from the Holy Roman Emperor, Charles IV, who asked Pope Clement VI to establish the institution. It was initially a studium generale with the four classical faculties: theology, liberal arts, law, and medicine (Britannica 2024). The early University of Prague had sections called nations: Bohemia (Czech), Bavaria, Poland and Saxonia, all with equal power. When the Decree of Kutná Hora shifted the power towards the nation of Bohemia, German students and scholars left the university and established the University of Leipzig (De la Croix and Stelter 2022b). While the faculty of liberal arts emerged as a focal point for Hussite influence, the ensuing decades were marked by theological conflicts that impeded its educational endeavors. The university had very little influence or status during this period, and was reduced to just one faculty - liberal arts. In 1556 the Jesuits had established the *Clementinum* in Prague, as illustrated in Figure 1 (Grendler 2019), and in 1622 they gained control of the university. In 1654 the remaining faculty of liberal arts, the *Carolinum*, was unified with the Jesuit *Clementinum*. From that point up to the reform of the university in 1781, only Catholics were allowed to study in Prague.



Figure 1: Timeline of the University of Prague

2 Sources

To the best of our knowledge, no unique, comprehensive source on scholars and literati at the University of Prague exists for the entire period until 1800. Thus, we collected and combined data from a wide range of sources. These sources refer either directly to the University of Prague (Svatoš and Čornejová 1995) or to specific faculties, such as Čornejová and Fechtnerová (1986) on the faculty of

theology. We added scholars and literati identified by sources focused on specific groups such as Jesuits (Fischer 1978; Sommervogel 1890) or scientists (Applebaum 2003). Finally, we added scholars from details found in encyclopedias, such as Michaud (1811) or De Feller (1849), and from projects, such as the Repertorium Academicum Germanicum (Schwinges and Hesse 2019). The set of scholars we have compiled is comprehensive, but the likelihood of a scholar being included in the data might vary across periods and fields.

3 Some statistics

Table 1 displays some descriptive statistics for the 1166 scholars we link to the University of Prague between 1348 and 1800. With more than 500 observations, we find almost half of the active scholars and literati fall into the first period from 1348-1449. Until the end of the second period (from the invention of the movable-type printing press to the rise of Protestantism), information on birth dates is rare. Birth dates are available for only around ten percent of all scholars at the University of Prague at that time. The availability of this information improves over time, to 94% in 1686-1733, before falling again in the final period. Still, due to the high fraction of scholars in the early years, the overall share with birth date remains low and is less than fifty percent. The picture differs with respect to the birth place, which is known for three-quarters of all observations. Already in the early years the birth place is documented for more than 60 percent of the scholars and literati.

Period	nb.	birth known		mean age	mean age	med. dist.	with	with
	obs	date	place	at appoint.	at death	birth-univ.	Wiki.	Viaf
1348-1449	513	10.5%	63.9%	30.9	63.1	253	12.7%	11.7%
1450-1526	63	9.5%	74.6%	29.5	68.5	84	11.1%	14.3%
1527-1617	77	63.6%	72.7%	32.4	54.9	106	37.7%	50.6%
1618-1685	162	88.9%	88.3%	34.9	56.4	182	16.0%	45.1%
1686-1733	167	94.0%	91.6%	36.1	59.5	128	9.6%	41.9%
1734-1800	184	84.8%	81.5%	37.0	60.9	122	24.5%	48.4%
1348-1800	1166	48.5%	75.2%	35.2	59.1	157	16.1%	29.2%

Table 1: Summary statistics by period

The mean age at appointment in the first two periods was around 30 years and thus slightly lower than at the nearby University of Leipzig (De la Croix and Stelter 2022b). After 1527 the mean age at appointment permanently increased and reached 37 years at the end of the observation window. The mean age at death was relatively high at the beginning and had its maximum in the second period with more than 68.5 years. This is clearly above the average in the Holy Roman Empire (Stelter, De la Croix, and Myrskylä 2021). However, due to the very limited number of observations with the date of birth, we should handle this finding with caution. In the third period, when the number of observations increases, we document a clear drop to less than 55 years, which is below the corresponding life expectancy in the Holy Roman Empire (Stelter, De la Croix, and Myrskylä 2021). Afterwards, the mean age at death remains below 60 years and thus low. Similar to Leipzig, the median distance between the place of origin and the University of Prague was highest, at more than 250 km, directly after the establishment of the university. However, while it remained high in Leipzig, Prague was attracting scholars only over shorter distances in the second part of the fifteenth century with around 84 km. Then, distances increased again - a pattern comparable to the University of Heidelberg (De la Croix and Stelter 2022a).

A relatively low coverage of scholars in Wikipedia (16.1 percent) and VIAF (29.2 percent) indicates a university with a lot of low notability scholars and literati. Only in the period 1527–1617 more than one-third of all scholars had a Wikipedia page and almost one quarter in the last period of our observation window. During the remaining time, values fluctuate around 10 percent. In VIAF we find a dichotomous pattern. Up to 1527, we only link publications to 12 percent and 14 percent, respectively. Then, values always exceeded 40 percent.



Figure 2: Broad fields at the University of Prague (left: all scholars, right: published scholars only)

4 FIELDS

We show the broad academic fields at the University of Prague for all scholars (LHS) and scholars who published (RHS) in Figure 2. Among all scholars, the field of humanities (covering the lower faculty of arts, see also De la Croix and Stelter (2022c, 2022a, 2020)) and to a lower extent the higher faculty of theology, clearly dominate. By contrast, the fractions of scholars and literati at the higher faculties of law and medicine remain low. When we exclude the obscure scholars, the dominance in humanities declines while theology and science increase their fractions. Still, the two traditional faculties of law and medicine remain quantitatively small.

5 Place of birth

In Figure 3, we display the documented birth places of scholars and literati active at the University of Prague per period. In its early days, the university attracted scholars from all over central Europe and even some scholars from greater distances, such as England and Italy. From the middle of the fifteenth century to 1526, distances declined dramatically. There were only four scholars active at the university who were not local. As we will show below, this corresponds to a period where the notability of the university was at its lowest point. After 1526, locals were still dominating but the University of Prague added scholars and literati from other European countries to its staff, and their number increased up to 1685. There follows another decline in the fraction of scholars born further away and this lasts until the end of our observation window. Still, among the few scholars from abroad, we have some from a significant distance.

6 HUMAN CAPITAL OF SCHOLARS AND LITERATI

For each person in the database, we compute a heuristic human capital index, identified by combining information from VIAF and Wikipedia using principal component analysis. Based on the individual notability of scholars and literati, we compute the notability of the university at each date t by averaging the human capital of the scholars active at the University of Prague within a 25-year time frame leading up to t, and who concluded their careers before t. The details are given in Curtis and De la Croix (2023) and in De la Croix et al. (2023). Figure 4 shows the names of all the scholars with a positive human capital index. The orange line displays the notability of the University of Prague over the 450 years until 1800. Directly after its establishment we document a first boom of the university. Interrupted by a short crisis at the beginning of the fifteenth century – when the University of Leipzig was established – notability remained at a value comparable to universities such as Tübingen or Leipzig, with a notability index between 4 and 6 (De la Croix and Stelter 2022c, 2022b). At the very end after the reform of the university in 1781, we observe a further increase.



Figure 3: Places of birth of the scholars and literati at the University of Prague



Figure 4: Famous scholars and university notability (orange)

7 Top 5 professors

We now provide a brief overview of the five professors with the highest human capital index.

- Johannes Hus (1372 Husinec 1415 Konstanz) His birth date is uncertain, but recent research suggests 1372 as the most plausible birth year (Kuhns 1907). Jan Hus was a lecturer at the University of Prague and rector in 1409. He was a highly influential Czech reform preacher known for his radical biblical orientation. Hus vehemently criticized the abuses within the established church and its hierarchy, particularly targeting the controversial practice of indulgences. His theological stance emphasized a sharp contrast between the true church and the visibly deteriorating state of the ecclesia, portraying it as *ecclesia invisibilis* (Lochman 2006). Eventually, Hus was sentenced to the stake at the Council of Constance for refusing to recant his 'heretical' ideas, ultimately paying for his beliefs with his life. Before his execution, Hus is believed to have uttered a prophetic statement: "Today you burn a goose, but from its ashes a swan will rise, and you will not be able to roast it (Kriegsman 2019)."
- **Edmond Campion** (1539 London 1581 Tyburn) was an English Jesuit priest and martyr who conducted an underground ministry during a time when England was officially Anglican. He faced arrest by priest hunters and, following a conviction of high treason, endured a grue-some execution by hanging, drawing, and quartering at Tyburn. Recognized for his sacrifice, Campion was beatified by Pope Leo XIII in 1886 and canonized in 1970 by Pope Paul VI as one of the Forty Martyrs of England and Wales. His feast day is commemorated on 1 December (Simpson 1867). Campion served as a professor of both rhetoric and philosophy at the *Clementinum* Jesuit college in Prague from 1578 to 1580 (Sommervogel 1890).
- **Ignác Antonín von Born** (1742 Karlsburg (Siebenbürgen) 1791 Wien) After departing from the Jesuit order in 1760, von Born studied law in Prague and followed his keen interests in natural history and mining science. His scholarly pursuits extended across borders, and he eventually found himself at the Natural History Cabinet in Vienna in 1776. By 1779, he attained the esteemed position of a real court councilor at the Court Chamber in the Mint and Mining Industry. Beyond his contributions to paleontology, von Born distinguished himself as the inventor of an innovative amalgamation process and a reformer in mining and salt mine operations (Gugitz 1955). He lectured as a professor for more than two decades at the University of Prague (1769-1791) in the fields of sciences and applied sciences (Kostlán 1996). Lastly, von Born was a member of various prestigious academies and learned societies, including those in Halle, Petersburg, Stockholm, Lund, Siena, Munich, London, Göttingen, Toulouse, Upsala, Padua, Turin, and the Society of Natural Research Friends in Berlin (Gugitz 1955).
- **Bohuslav Ludvík Balbín** (1621 Hradec Králové (Königgrätz) 1688 Prague), also known as Bohuslav Babinus, was a Czech man of letters, historian, hagiographer, and pedagogue. As a member of the Jesuit order and a priest, he played a significant role in the recatholicization efforts of his time. Balbín also distinguished himself as a patriot, actively defending the Czech language during the Baroque period (Kodelková and Koudelka 2008). From 1653 to 1654, he held the formal position of professor of humanities at the University of Prague (Sommervogel 1890).
- Johannes Jessenius (1566 Breslau 1621 Prague), also known as Jan Jesenský, was a prominent Renaissance polymath in Central Europe. He studied philosophy and medicine in Wittenberg, Leipzig, and Padua. Throughout his career, Jesenský worked in various European cities, including Wroclaw, Wittenberg, Prague, and Vienna. He gained popularity as a teacher due to his excellent and captivating lectures, which emphasised the importance of botany in medicine (Kachlík et al. 2013). Together with his students, he actively participated in numerous dissections. The famous *Prague Public Dissection* was performed with great publicity and expertise, and paved his way into the intellectual circles of Prague. After the death of his friend Tycho

Brahe, he settled in Prague in 1601, where he worked as a general practitioner and performed several dissections. In 1617 he was elected rector of the University of Prague, where he remained until 1620 as both rector and professor (Kachlík et al. 2013).

8 Who's who on the moon

Street names, names of schools, research institutes, prizes or lunar crater names are just a few other ways to measure the notability of individuals. No less than six professors at the University of Prague received the honor of a lunar crater with their name, in recognition of their contribution to the advancement of science.

- Mathias Curius ab Hagek (1520 Königinhof an der Elbe 1583 Prague) also known as Matěj Hájek (Matyáš Hájek) was a prominent Utraquist theologian and professor at the University of Prague. He played a significant role in the formulation of the Czech Confession. Throughout his career, Matěj Hájek held various ecclesiastical and secular positions. Notably, he served as the rector of the University of Prague for an extended period, holding the position with three brief interruptions in 1559–1561, 1562–1572, and 1573–1582. On September 1, 1554, Emperor Ferdinand I granted him and Tadeáš Hájek the titles of lord, along with the right to have their own coat of arms (Pavla and Makariusová 2004).
- Jan Marek Marci (1595 Landskron 1667 Prague), also known as Johannes Marcus Marci, was a Bohemian physician and scientist (Tiltman 1967). Marci delved into various scientific inquiries, including the mechanics of colliding bodies, epilepsy, and the refraction of light (Westfall 1962). He was the rector of the University of Prague and held the position of the official physician to the Holy Roman Emperors. A lunar crater on the far side of the Moon is named in his honor, known as the Marci crater (Tiltman 1967).
- **Theodorus Moretus** (1602 Antwerpen 1667 Breslau) was a Flemish Jesuit priest with a wideranging expertise in mathematics, geometry, theology, and philosophy. He spend the majority of his professional career in Prague and Breslau (Voet 1969). Between 1629 and 1630, Moretus was an instructor in Münster. He relocated to Prague in 1631 to collaborate with Gregorius van Vincent, assisting him in teaching mathematics due to Gregorius' declining health. However, the invasion of the Swedes and the plundering of Prague during the Thirty Years' War compelled both educators to leave the city. Moretus moved to Olomouc, where he taught philosophy and various subjects until 1634 (Bosmans 1928). Finally, due to his scientific contribution, the crater Moretus was named after him (Whitaker 1999).
- Nicolaus Reimers Ursus (1551 Hennstedt 1600 Prag), was an autodidact, who acquired extensive knowledge during his early years. By approximately 1569, he mastered reading, writing, Latin, Greek, mathematics, and astronomy, all without the formal structure of traditional schooling. At the age of 18, he was found tending to pigs in Hennstedt, characterized as a farmhand by the chronicler Neocorus. It wasn't until Easter 1577 that he appears in the registers of the University of Rostock (Schwanzert 2016). He taught mathematics and astronomy from 1591 to 1600 at the University of Prague (Applebaum 2003). The lunar crater Reimarus is named after him.
- **Georg Schönberger** (1597 Antwerpen 1645 Gradisch), was a German Jesuit and mathematician. Schönberger was taught at the University of Ingolstadt under Christoph Scheiner. Joining the Jesuit order in 1615, he later became a teacher, covering literature, philosophy, Hebrew, theology, and mathematics in Freiburg im Breisgau (see also Gkopi and Stelter (2023)). Schönberger moved to Bohemia, serving as prorector at the Jesuit college in Prague and later as rector in Olomouc, where he passed away in 1645 (Sommervogel 1890). At the University of Prague he taught theology and mathematics from 1633 to 1639 (Mrozik Dagmar 2016). In recognition of his contributions, the lunar crater Schönberger was posthumously named after him (John 2000).

Adam Tanner (1572 Innsbruck – 1632 Unken) was a theologian who joined the Society of Jesus in 1589 and initially taught Hebrew, apologetics, and moral theology. In 1601, during the religious debate between Catholics and Lutherans in Ratisbon, Tanner supported his fellow Jesuit Gretser in arguing that the written text of the Bible alone could not be the ultimate authority in matters of faith (Cotter 1912). In 1627, he was a professor of theology at University of Prague (Junius Institute 2013), and he was appointed chancellor by Ferdinand II, Matthias's successor to the throne of the Habsburgs (Cotter 1912). Tannerus crater was named after him (Schreiber 1898).

9 Related scholars

- Johan Kepler (1571 Weil der Stadt 1630 Regensburg), a renowned German astronomer and mathematician, played a crucial role in the Scientific Revolution during the 17th century (Di Liscia 2021). Born in 1571, Kepler spent a significant part of his career in Prague, where he worked under the patronage of Emperor Rudolf II (Coullet, San Martin, and Tirapegui 2022). In Prague, Kepler collaborated with the Danish astronomer Tycho Brahe, who had amassed a wealth of observational data (Coullet, San Martin, and Tirapegui 2022). After Brahe's death in 1601, Kepler inherited the data and spent years analyzing it. Kepler's analysis led to his formulation of the three laws of planetary motion between 1609 and 1619. The laws describe the elliptical orbits of planets around the sun and the relationship between a planet's orbital speed and its distance from the sun (Di Liscia 2021). Moreover, his work laid the groundwork for Isaac Newton's later development of the law of universal gravitation (Voelkel 2001).
- **Tycho Brahe** (1546 Knutstorp Castle 1601 Prague), was a Danish astronomer of the Renaissance. His exceptional and precise astronomical observations contributed significantly to the field of astronomy. His work, conducted before the invention of the telescope, earned him recognition as an astronomer, astrologer, and alchemist. In 1572, Tycho's groundbreaking discovery of a new star, brighter than any known celestial body, prompted his commitment to advancing measurement instruments. Over the following fifteen years (1576–1591), he meticulously improved his observational tools (Wootton 2015). In 1599, he established himself in Prague with the support of Emperor Rudolf II, who also provided support to the astronomer Johannes Kepler in the subsequent years (Eggen 2024).

10 UNIVERSITY NETWORK

We can assume that professors, who were active in more than one university over their life, established a link between these universities. These potential links between the University of Prague and other universities are displayed by period in Figure 5. Until the middle of the fifteenth century, the University of Prague was well integrated into the network of early universities north of the Alps. After 1450, this network collapsed and only three universities remained. In the third period the network recovered and extended over large distances. In 1686–1733, we observe a second breakdown of Prague's connections: we find only 2 links. Eventually the number of links increased again.

Scholars' memberships in scientific academies are an alternative mechanism to document networks between their members. In Figure 6 we show a significant overlap between the University of Prague and the Royal Bohemian Society of Sciences (data from Wegner (1884)). Although it was only established in 1784, 82 members were active in the academy before 1800. More than 20 percent out of these scholars were also active at the University of Prague.

11 Anecdotes

One of the top five professors, *Ignác Antonín von Born*, was protrayed in Mozart's masterwork, *The Magic Flute*, as the mysterious figure "*Sarostro*". He is acknowledged in this piece for his enlightened



Figure 5: Links between Prague and other universities through scholars' mobility, by period

viewpoint. This portrayal in popular culture is also found in von Born's own lively and slightly satirical work "*Specimen Monachologiae*" (1783), a critical examination of monastic institutions which garnered considerable attention within anti-clerical circles.

12 FINAL THOUGHTS

The University of Prague has a tumultuous history, shaped by diverse population groups and religions from its inception. Conflicts arising from these differences occasionally hindered teaching. In 1882, the university was officially split into German Karl Ferdinand University and Česká univerzita Karlo-Ferdinandova.

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Figure 6: Scholars at the university of Prague and the Bohemian Academy of Sciences)

elite human capital trigger the rise of the West? Insights from a new database of European scholars." Robert Stelter acknowledges financial support from the Max Geldner Foundation.

Homepage: https://perso.uclouvain.be/david.delacroix/uthc.html Twitter: https://twitter.com/UTHCerc Database: https://shiny-lidam.sipr.ucl.ac.be/scholars/

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