

Scholars and Literati at the University of Modena (1175–1800)

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This note summarizes our research into the scholars and literati of the University of Modena between its foundation in 1175 and the eve of the Industrial Revolution (1800).

1 SOURCES

The main source we rely on is the two-volume edition of *Storia dell'Università di Modena*, written by Carlo G. Mor and Pericle di Pietro in 1973 (Mor and di Pietro 1973). The first volume covers the university's history from its inception until the end of the 20th century. At the end of this volume, there is an alphabetical catalog of professors associated with the institution, along with the subjects they taught and the period of their activity. The second volume contains the *rotula* of the Studium, which list the subjects taught each year and by whom until the unification of Italy – after the unification the university yearbooks systematically list the same content.

2 THE UNIVERSITY

The University of Modena is considered one of the oldest universities in Europe, with its official foundation dating back to 1175 when Pillio da Medicina (?–1207) began teaching law in Modena. There is some speculation that the *Studium* (predecessor to the university) may have been active before this time, although there is not enough evidence to confirm this, according to Mor and di Pietro (1973). On the other hand, Frijhoff (1996) dates the establishment of the university to 1682, following the restoration of the *Studium* by the Congregation of Saint Carlo (more information on this will be provided later). Determining the exact founding date of medieval universities is a challenging task; for further details on this subject, refer to De la Croix and Vitale (2022). Regardless of the discrepancies, the University of Modena is considered one of the oldest universities in Europe.

Although it was similar to other medieval universities in most aspects, Modena's financial situation differed from other institutions. It was almost entirely supported by the municipality, which meant that the university was closely tied to the will of the local elite - the Guelphs (pro Pope) - and the local bishop. The *Studium* grew during periods of peace but shrank during conflicts with neighboring cities. In 1224, the university received official recognition from Pope Onorio III, which increased the powers of the bishop within the university administration. One of the most successful periods was in the 1260s when Guglielmo Durante (1230–1296, see Section 7) began teaching law at the university (Mor and di Pietro 1973). However, the domination by the Estense family from Ferrara in the XIVth century led to a crisis that forced students from Modena to move to Ferrara to pursue a doctoral degree. The cultural scene in Modena remained active only through various academies and schools (Mor and di Pietro 1973; Università degli studi di Modena e Reggio Emilia 2023).

It was only at the end of the 15th century, when Modena became the capital of the Estense Duchy, that there were attempts to reactivate the *Studium*. Thanks to the donations and efforts of the religious community of S. Carlo, its priests, and a private personality, the *Studium* reopened in 1682.

During the inauguration, Bernardino Ramazzini (1633–1714, see 7) clarified that the inaugurated *Studium* was not a completely new institution, but a continuation of the old one upon whose foundations the revived *Studium* would be built. In 1685, the Duke of Este and Modena Francesco II promulgated the Statutes of the *Studium* and officially recognized it as a university, which gave degrees external validation, but the Duke still did not finance university activities (Mor and di Pietro 1973; Università degli studi di Modena e Reggio Emilia 2023). It was only in 1772, when the Duchy took financial responsibility, that the university was reformed towards more specialized and practical subjects. Medicine became much more important during the reign of Duke Francesco III. However, the university halted operations during the French domination and with the Napoleonic Reign of Italy it downgraded to a *Liceo dipartimentale* until 1814 (Mor and di Pietro 1973; Università degli studi di Modena e Reggio Emilia 2023).

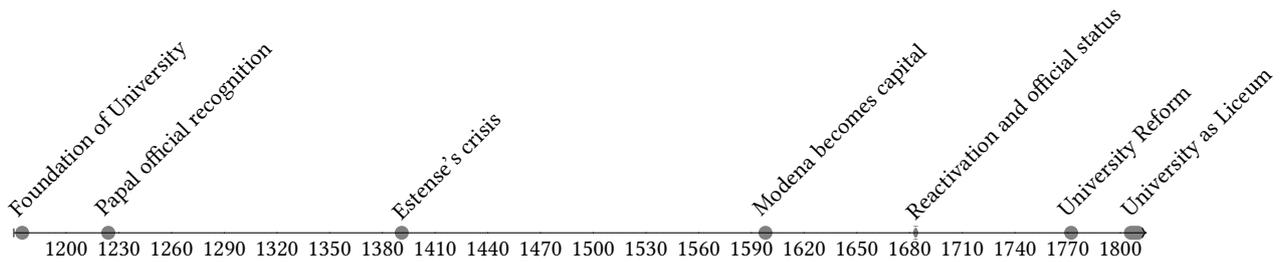


Figure 1: Timeline of the University of Modena

3 DESCRIPTIVE STATISTICS

Table 1 displays the descriptive statistics. There are 283 scholars and literati. The year of birth is known for 42% of them. The mean age at nomination is 37 years. Longevity (mean age at death & expected age at death when 30) is relatively high (68.7 and 66.6 years, respectively). The birth place is known for 45.9% of the individuals, differences in the quality of the data from period to period. The median distance between the birth place and Modena is 0km, which shows the local influence of the University of Modena, probably constrained by the power and importance of neighbouring universities like Bologna and Ferrara.

Finally, 15.5% of the scholars have a Wikipedia page (in some language), and 27.6% of them have left a footprint in the catalogues of the libraries of the world, Worldcat, either by having published some work, or by having been the subject of published books and articles, with 87.5% in applied science, 47.4% in science, and 37.2% in medicine.

Period	nb. obs	birth known date	birth known place	mean age at appoint.	mean age at death	med. dist. birth-univ.	with Wiki.	with Worldcat
1000–1199	5	0%	40%	NaN	50	50	20%	20%
1200–1347	21	19%	57.1%	31.5	68.5	50	19%	23.8%
1348–1449	9	0%	11.1%	NaN	64.0	0	11.1%	11.1%
1450–1526	24	33.3%	41.7%	44.4	68.2	0	4.2%	25%
1527–1617	50	30%	32%	34.4	66.4	0	10%	12%
1618–1685	13	61.5%	53.8%	41.5	70.7	0	30.8%	30.8%
1686–1733	46	39.1%	34.8%	37.3	67.3	0	10.9%	28.3%
1734–1800	116	57.4%	57.4%	36.2	72.6	19	20%	36.5%
1000–1800	283	42%	45.9%	37	68.7	0	15.5%	27.6%

Table 1: Summary statistics by period

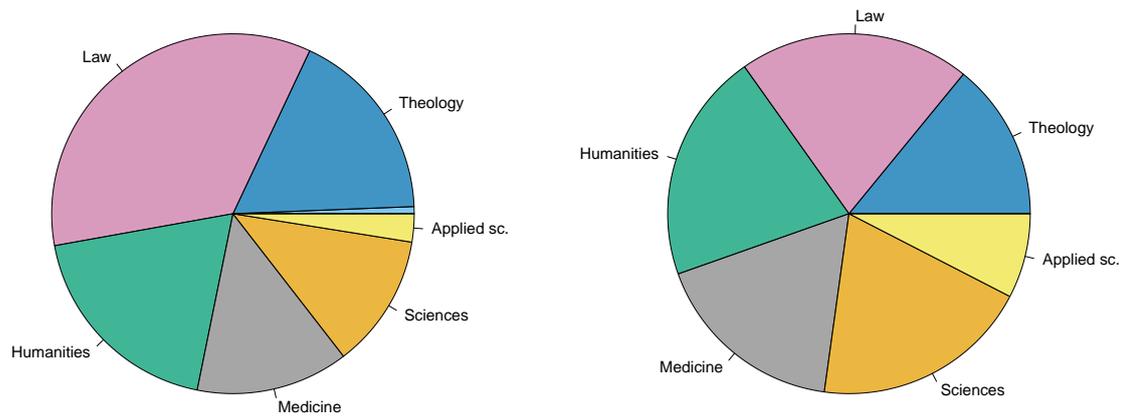


Figure 2: Broad fields at the University of Modena (left: all scholars, right: published scholars only)

4 FIELDS

Figure 2 shows the balance between the different fields. The main field at the University of Modena is law, which was the first subject taught at the *Studium*: the university was founded to educate the future jurists of the city (Universita degli studi di Modena e Reggio Emilia 2023). It is with the restoration of the *Studium* by Duke Francesco II in 1682 that the number of chairs increases to eight: logic, physics and metaphysics (all included in *Sciences* field in Figure 2), and medicine all gained a chair, and there were two in theology, in addition to the existing two chairs in law. Later more chairs were added in law, theology and medicine and new chairs in mathematics, Hebraic and Greek were introduced.

5 PLACE OF BIRTH

Figure 3 shows birthplaces of Modena University scholars and literati by period. The local character of the institution is already clear from the statistics (see table 1): until the 1680s it is difficult to distinguish the different origins of professors, who are mostly from Modena itself. After the restoration of the *Studium* some scholars came from other Italian reigns and dukedoms, but rarely from abroad.

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 Worldcat and Wikipedia using principal component analysis. We also compute the notability of the university (orange line) at each date by averaging the human capital of the scholars active in Modena 25 years before that date. Details are given in RETE in volumes 1–5. Figure 4 shows the names of all the scholars with a positive human capital index.

This diagram illustrates the cycles that the University of Modena went through over the centuries. For almost five hundred years, the *Studium* remained small and struggled to establish a cultural profile, despite attracting notable scholars like Guglielmo Durante.

It was only towards the end of the fifteenth century that efforts to restore and revitalise the university began to bear fruit. It took nearly eighty years to gather enough resources to give the *Studium* a fresh start. From 1682, thanks to the support of the local religious community and the vision of Duke Francesco II, what is now known as the University of Modena grew in both size and quality. Initially, the university followed traditional curricula, but with reforms in the 1750s–1770s, more practical and useful subjects were introduced. These changes led to continuous growth for the university until 1800 (Mor and di Pietro 1973).

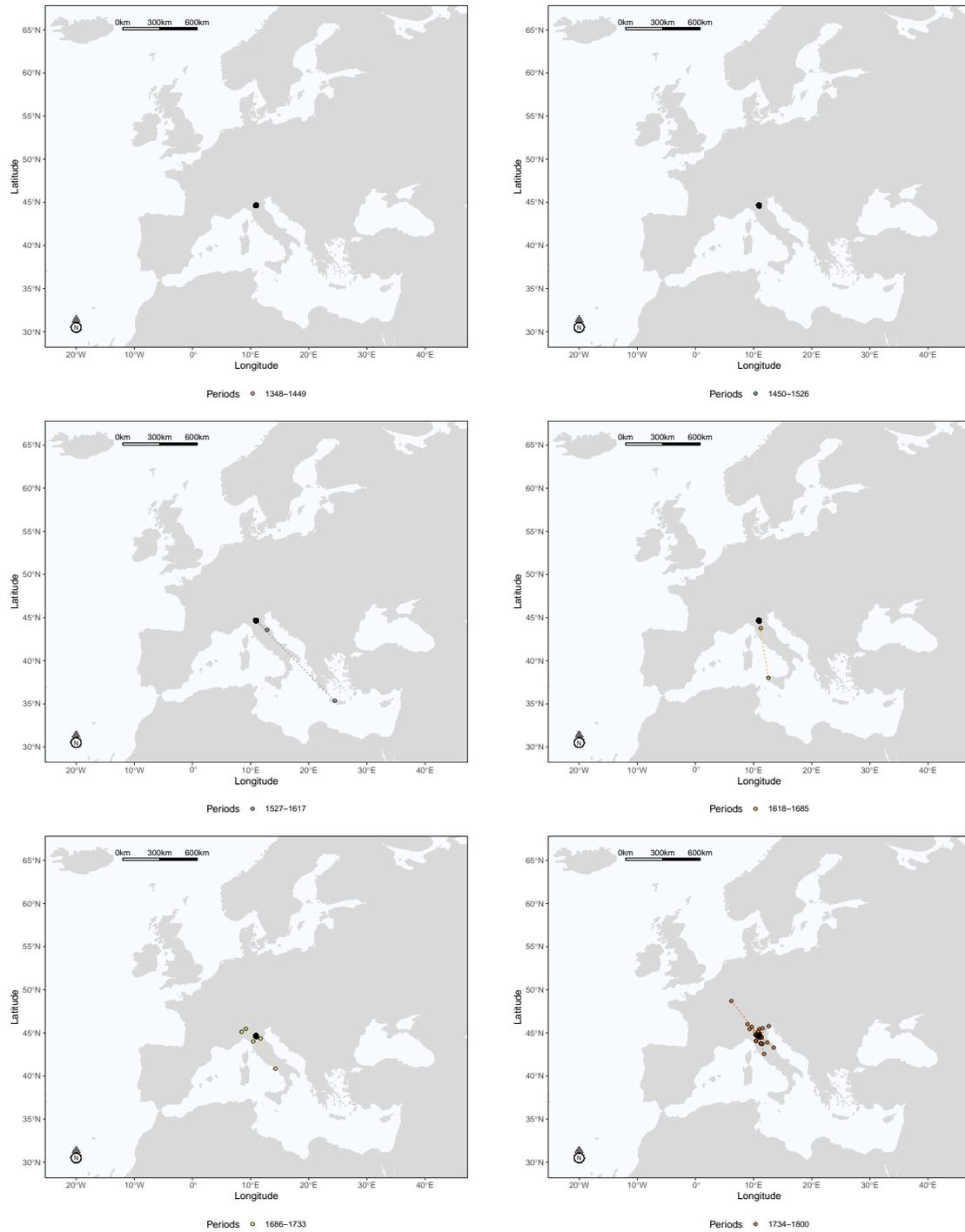


Figure 3: Places of birth of the scholars and literati at the University of Modena

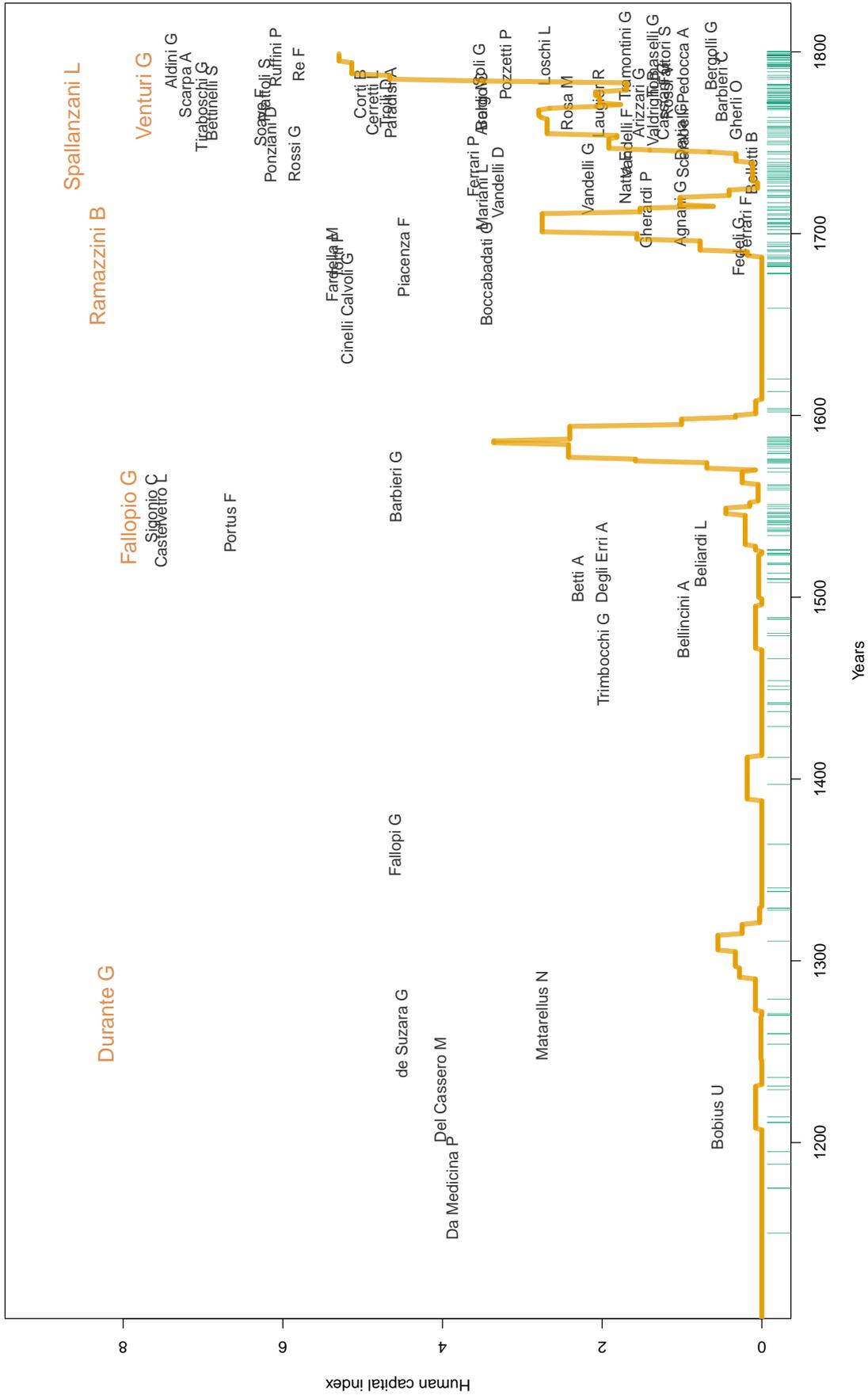


Figure 4: Famous scholars and university notability (orange)

7 TOP 5 PROFESSORS

Lazzaro Spallanzani (Scandiano 1729 – Pavia 1799) was a biologist and priest. He studied biology at the University of Bologna under the guidance of his cousin Laura Bassi (Bologna 1711 – Bologna 1778), who was a professor there. His groundbreaking research focused on animal reproduction and echolocation, which helped to disprove the theory of spontaneous generation - the idea that living organisms could arise from inanimate material. He was affiliated with the University of Modena between 1754 and 1769, and he also became a member of the academy of the city, the *Dissonanti Academy*, from 1768. In addition, he taught at the University of Pavia from 1768 until his death and he was also a member of thirteen other academies throughout Europe.

Bernardino Ramazzini (Carpi 1633 – Padova 1714) was a scientist, doctor and writer. He is the father of occupational medicine, which focuses on the prevention of diseases among workers. He studied medicine in Parma and the commencement of his medical activity is influenced by some violent family disputes. In 1680, he began his medical career in Modena. His reputation soon grew, and Duke Francesco II, who was restoring the *Studium*, appointed him as a professor. In 1700, Ramazzini published his most famous work, *De morbis artificum diatriba*, on occupational medicine, which led to his appointment as the second chair of theoretical medicine at the University of Padua. Due to the instability of the Duchy of Este, he remained in Padua until his death. During his time in Modena, he was a member of the Academy of Modena, known as the *Accademia dei Dissonanti*, and was also affiliated with the Leopoldina Academy and the Prussian Academy.

Guglielmo Durante (Puimisson 1230 – Roma 1296) was a Catholic bishop. He was born in the south of France, and studied in Lyon and Bologna. He became a professor of law in Modena in 1271. He likely also taught at the University of Bologna around 1264 (Mazzetti 1847). Later he moved to Rome where he had an administrative role within the Vatican and obtained its trust. He moved to France and was elected Bishop of Mende in 1285. Later on in life he was also appointed Archbishop of Ravenna. While in Modena, he produced his most important work on civil and canonical procedures and laws, the *Speculum judiciale*, which had over 60 editions and earned him the title of “Doctor speculator.”

Gabriele Fallopio (Modena 1523 – Padova 1562) was a self-taught doctor and botanist. When he was studying in Modena, there was no chair in medicine so he practiced dissecting corpses of executed criminals to gain experience. Eventually, the Studium of Modena called him to teach, even though he had never formally studied medicine. In 1545, Fallopio went to Padua and Ferrara to attend lectures. He became a professor of medicine in Ferrara in 1547 and in Pisa in 1548. His fame continued to grow, and he eventually reached the peak of his career when he began teaching in Padua in 1551.

Giovanni Battista Venturi (Bibbiano 1746 – Reggio Emilia 1822) was a physician who began teaching logic at the seminary where he had studied, after being ordained a priest at the age of 23. He was a pupil of Lazzaro Spallanzani and was appointed as a professor of mathematics at the University of Modena in 1774. From 1780 to 1796, he also worked for the Duke of Modena and Reggio Emilia. In 1796, Venturi began traveling around Europe as a diplomat, networking with many notable personalities of the time, such as Alessandro Manzoni and his mother, Giulia Beccaria (daughter of Cesare Beccaria). He taught in Modena until 1799 and was also a member of the Academy of Modena from 1778. He was affiliated with the Academy of Verona in 1786, the Academy of Bologna in 1794, and the Academy of Turin in 1797. He probably also taught at the University of Pavia.

8 RELATED SCHOLARS

Gherardo Rangoni (Modena 1744 – Wien 1815) was a prominent scholar who had close ties with the University of Modena, although he never held a regular position there. Rangoni was a member of the elite during the Estense domination and served as the Minister of Education under Duke of Este and Modena Francesco III. Rangoni's passion for culture was always the driving force behind his work, which was fueled by his numerous personal connections with the best local scholars of his time, including Lazzaro Spallanzani and Agostino Paradisi.

Although he did not teach at the university, Rangoni played a crucial role in transforming the institution's structure during the 1770s, to make its curriculum more flexible and practical. His extensive connections with the most important intellectuals in the area led him to establish the Rangoniana Academy in 1783, which was closely associated with both the university and the other academy in the city, the Dissonanti Academy. This connection is illustrated in Figure 5: 8 members of the Rangoniana Academy (out of 12) were also part of both the Dissonanti Academy and the University of Modena, 2 were in common only with the academy and other 2 only with the university. Rangoni founded the academy because there was not enough space for science at the Dissonanti Academy, and eventually closed his academy ten years later when the Dissonanti Academy began to address scientific topics (Maylender 1930).

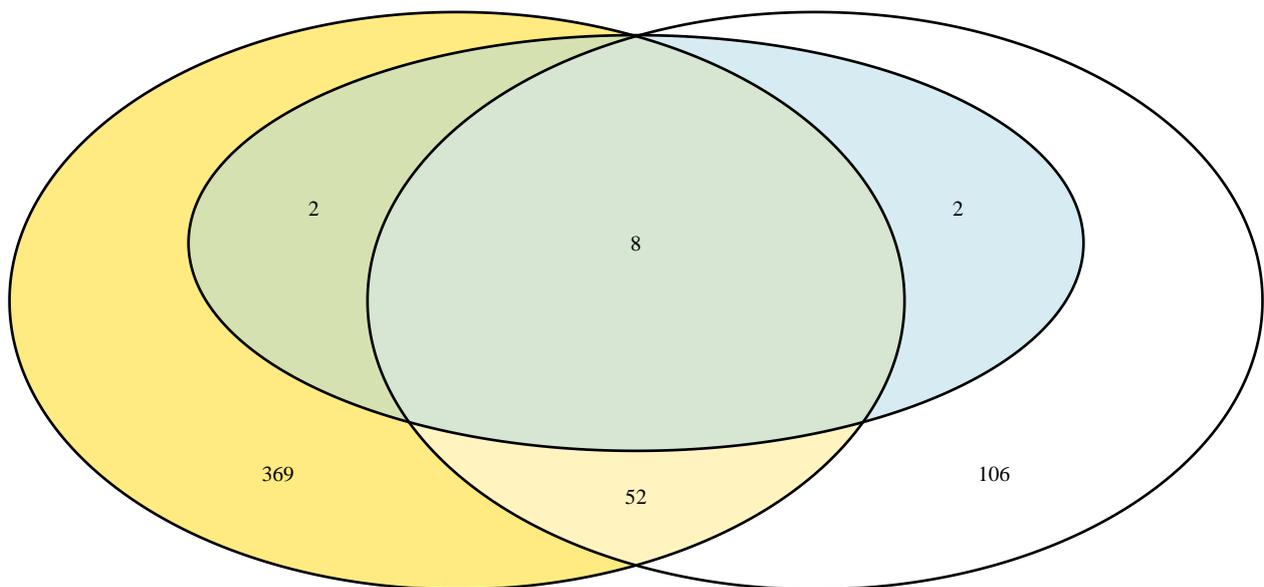


Figure 5: Interaction between the University of Modena (white), Dissonanti Academy (yellow) and the Rangoniana Academy (light blue) from 1680 until 1800.

9 FINAL THOUGHTS

The University of Modena is one of the oldest universities in Europe, dating back to its founding in 1175. However, it did not develop immediately, and it took almost five centuries of effort and resources for it to finally flourish in the 1680s. Despite its age, the university has always had a

relatively limited local influence, in part due to the great reputation of its neighbor, the University of Bologna.

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REFERENCES

- De la Croix, David, and Mara Vitale. 2022. A Timeline of Medieval Universities. *Repertorium Eruditorum Totius Europae* 8:1–5. <https://doi.org/10.14428/rete.v8i0/timeline>.
- Frijhoff, Willem. 1996. Patterns. Chap. 2 in *A history of the University in Europe. vol. ii: Universities in Early Modern Europe (1500–1800)*, edited by Hilde de Ridder-Symoens. Cambridge University Press.
- Maylender, Michele. 1930. *Storia delle accademie d'Italia*. Vol. 5. L. Cappelli.
- Mazzetti, Serafino. 1847. *Repertorio di tutti i professori antichi e moderni della famosa università, e del celebre istituto delle scienze di bologna*. Bologna: tipografia di San Tommaso d'Aquino.
- Mor, Carlo Guido, and Pericle di Pietro. 1973. *Storia dell'università di Modena*. Vol. 1-2. Leo S. Olschki Editore.
- Universita degli studi di Modena e Reggio Emilia. 2023. *Cenni storici*. <https://www.unimore.it/ateneo/cennistorici.html>.