

Scholars and Literati at the Royal Academy of Sciences and Arts of Toulouse (1729-1793)

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This note is a summary description of the set of literati who were members of the Royal Academy of Sciences and Arts of Toulouse from its inception in 1729 to its (temporary) dissolution by the French Revolutionary Convention in 1793.

1 THE ACADEMY

Before becoming the *Académie royale des sciences, inscriptions et belles-lettres*, the academy was referred to as academic conferences. Indeed, it was founded in 1640 by some of Toulouse's greatest minds. They held meetings until 1645 before putting them on hold for about twenty years. They eventually resumed them, but it was not a success and they decided to stop again in 1685. The problem was a lack of stability and structure for these private meetings. Hence, in 1688, two of the most active members, Gabriel Vendages de Malapeire and Adrien Martel wanted to create a Royal Academy following the model of those in Nimes and Arles. Once again, they faced difficulties because of the opposition from the "Collège de Rhétorique" literary academy, also called "Jeux Floraux." A. Martel wanted to merge with the "Jeux Floraux" to have an Academy of Toulouse where all of the members could talk about poetry, sciences, and other such matters. This project did not come to fruition and then in 1729 another one appeared. Indeed, Sage, Carrière, and Gouazé created the "Société des Sciences." After some opposition from the Academy of Montpellier, the Academy of Toulouse was finally created. Indeed, the members of the latter wanted their private meetings to be recognized as an official institution. The academy was therefore officially established in 1746 by Louis XV in Versailles. During its existence, the academy provided a place of influence, exchange of ideas, and reflection to accompany the great intellectual movement of the Enlightenment (Roche 1978).

During the Revolution, the goal of the academy was to preserve its existence and its works. To reach that goal, the academy refused to be involved in political struggles, while accepting to recognize the new regime and to collaborate with the new authorities. The academy's efforts to adapt to the political change were temporarily successful. However, on August 8, 1793, the city of Toulouse received the order to disband all academies and literary societies patented or endowed by the nation. The academy therefore disappeared until 1807 when a new academy was created which still holds meetings today.

2 SOURCES

In 1984, Michel Taillefer published a book entitled *Une Académie interprète des Lumières* in which he listed the members of the academy (Taillefer 1985). Michel Taillefer was a French historian who was a specialist of the city of Toulouse.

3 SOME STATISTICS

Table 1 displays some descriptive statistics. There are 327 scholars and literati. The quality of information about them is not very high. The year and place of birth is known for about half of them. The age at appointment was higher in the initial period, as some older individuals were elected at the start of the academy. 29.7 percent of the academicians have a Wikipedia page, and about half of them (46.5%) have left a footprint in the catalogues of the libraries of the world, Worldcat. The initial generation of members was much more obscure than the following one.

Period		nb.	% birth year	mean age	mean age	exp. age
Start	End	obs	known	at appoint.	at death	at death
1686	1733	62	25.8	45.8	66	65.6
1734	1800	26	58.9	39.3	68	64.5
1000	1800	327	52.6	39.9	67.8	64.5
			% birth place	median distance	% with	% with
			known	birth-institution	Wikipedia	Worldcat
1686	1733		19.4	114	8.1	17.7
1734	1800		50.2	325	34.7	53.2
1000	1800		44.3	307	29.7	46.5

Table 1: Summary statistics by period

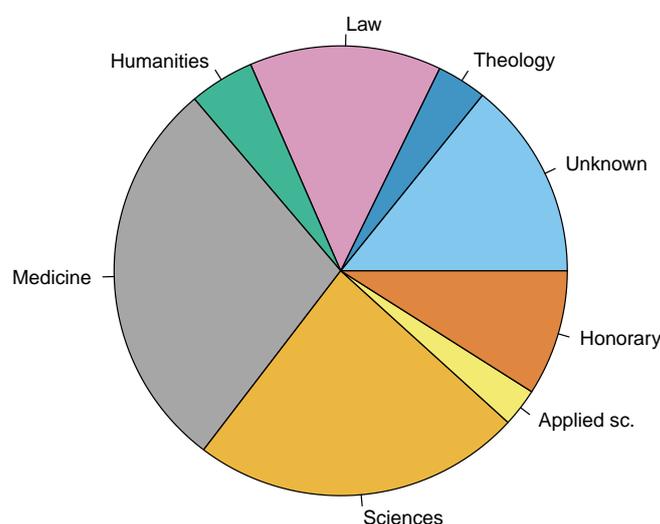


Figure 1: Broad fields at the Academy of Toulouse

4 FIELDS

Figure 1 shows the relative importance of fields, broadly defined. The academy was dominated by scientists (including medicine), but the other fields were present as well. Besides the active scholars and literati, the “honorary” members were those who were elected to the institution with no clear scientific identity.

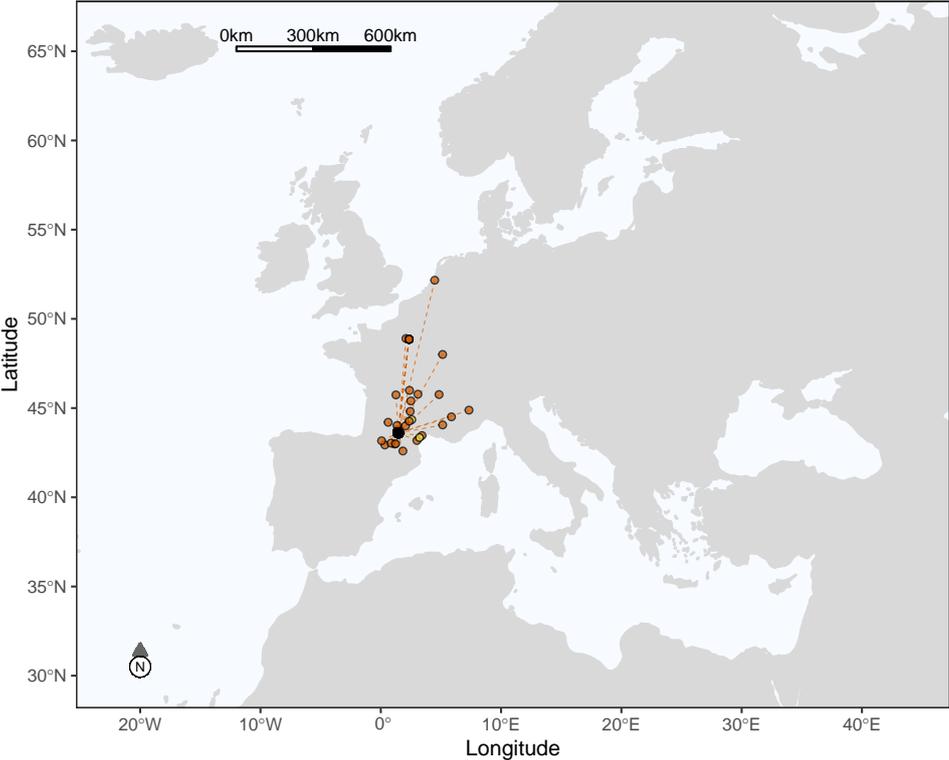


Figure 2: Places of birth of the ordinary members of the Academy of Toulouse

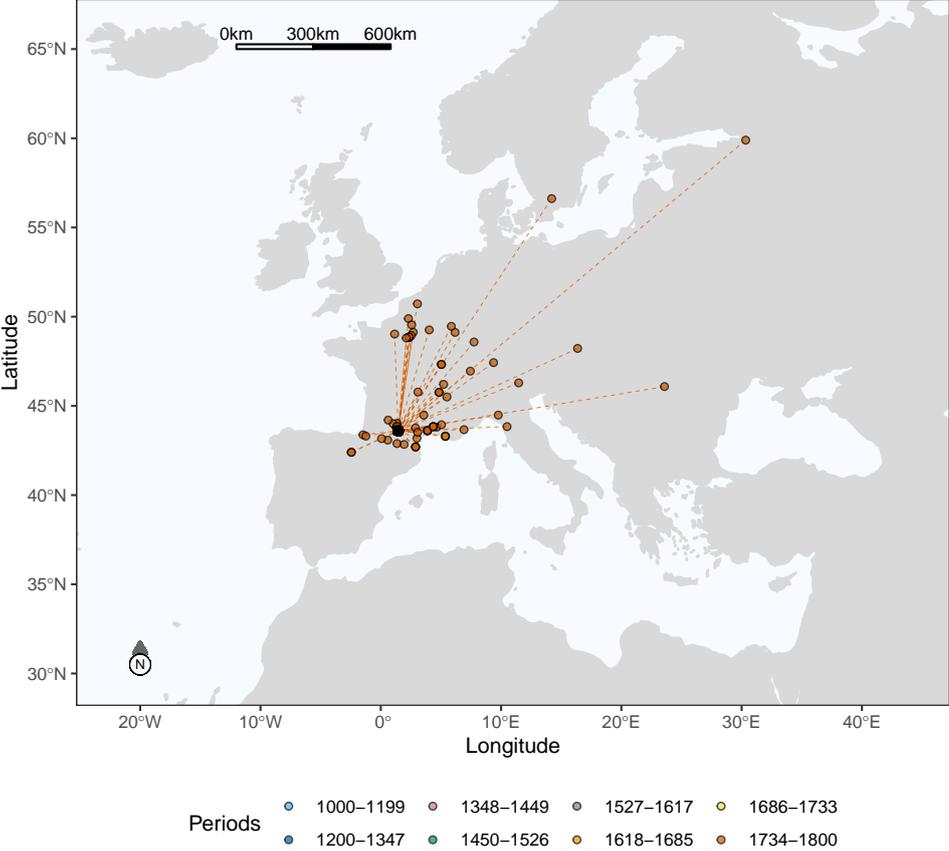


Figure 3: Places of birth of the corresponding members of the Academy of Toulouse

5 PLACE OF BIRTH

Figure 2 is a plot of the places of birth of all the ordinary members of the Academy of Toulouse. It shows that the academy recruited ordinary members from all over France, but not beyond. Figure 3 provides the same information for corresponding and foreign members. It shows a moderate international character. The absence of individuals from Spain, in spite of the country's proximity to Toulouse, is worth noting.

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. The details are given in RETE in volumes 1–5. Figure 4 shows the names of all the literati with a positive human capital index. The vertical green lines (rug plot) show the distribution of all literati, including the obscure ones, over time (counting from the beginning of their active life).

Figure 4 shows that many ordinary members of the academy have left some footprint of their activity (note that corresponding members are not included in this figure).

7 TOP 5 SCHOLARS

We provide a brief overview of the five ordinary members of the Academy of Toulouse with the highest human capital index.

Jean-François Marmontel (Bort-les-Orgues 1723 – Saint-Aubin-sur-Gaillon 1799) was a French historian, writer, and encyclopedist, and a member of the *Académie française*. He published numerous plays, poems, and novels including *Cléopâtre* in 1750 and *Les Incas*, on the destruction of the Inca Empire in Peru (1777). At the academy, he studied the centripetal and centrifugal forces in 1744 before leaving for Paris at the end of the following year. It is said that he was an assiduous student.

Bertrand Barère de Vieuzac (Tarbes 1755 – Tarbes 1841) was a French politician and jurist. He was elected to the academy at only 32 when the average age to be elected was 40. In 1783, with his colleague Jean-Nicolas Gez, he created the *Conférence de charité* which was destined to defend the causes of clients in need pro bono. He was against intolerance and birth privileges and thus joined the revolutionary movement. He was elected to the National Assembly for Bigorre on April 23, 1789, and then for Hautes-Pyrénées in 1792.

Jean-Etienne Montucla (Lyon 1725 – Versailles 1799) was a French mathematician. He studied geometry at the academy in 1745. He then left for Paris where he met famous scholars like Diderot and Lalande. In 1748, he was elected to the Academy of Sciences, Humanities and Arts of Lyon and published *Histoire des mathématiques* in 1758. It is a highly precise book in which the most abstract subjects are tackled.

Philippe-Isidore Picot de Lapeyrouse (Toulouse 1744 – Lapeyrouse-Fossat 1818) was a French naturalist. He was a member of the Toulouse parliament where, in 1768, he became Advocate General at the Chamber of Water and Forests. He often travelled to the Pyrenees and published information about the fauna, flora, and minerals of that region in his Memoirs. His publications caught the attention of the French and European scientific communities. Thanks to him, Toulouse was also endowed with its first botanical garden. He was the mayor of Toulouse from 1800 to 1806.

Antoine-Augustin Darquier de Pellepoix (Toulouse 1718 – Toulouse 1802) was a French astronomer. At the academy, he focused on astronomical observations. Moreover, he frequently showed artwork at the academy's annual art exhibition held at the Toulouse city hall. During his time at the academy, he also translated some foreign works into French: *Elements of Geometry* by Thomas Simpson and *Eclissi solare del 24 giugno 1778* by Antonio de Ulloa. He observed the June 4, 1788 solar eclipse at the Royal Observatory in Greenwich. He became an astronomer of note for the scientific community thanks to his *Observations astronomiques faites à Toulouse* (Avignon, 1777). His other publications were also well accepted and he was considered as one of the best astronomers of his time. Finally, in 1766, he presented a new method to heal toothaches thanks to the application of magnetic bars.

8 RELATED SCHOLARS

Several other important individuals were related to the academy, being corresponding or foreign members. These scholars are counted in all figures, except Figure 4.

Carl Linnaeus (Råshult 1707 – Uppsala 1778) was a Swedish naturalist and professor at the University of Uppsala, who spent his life building a classification system for plants and animals. He was a member of many academies (see for example De la Croix and Doraghi (2021)). In Toulouse, his method was adopted in 1758 by Guillaume-Louis Dubernard who used Linnaeus's denominations for his work published in 1782, a catalogue of common plants which could be found in the academy's botanical garden.

Bernard-Germain de Lacépède (Agen 1756 – Epinay-sur-Seine 1825): see the RETE on the Royal Academy of Bordeaux (De la Croix and Dock 2021).

Jean-Baptiste-Joseph Delambre (Amiens 1749 – Paris 1822) was a French astronomer and mathematician. At first, he studied in Amiens and then left for Paris in 1774. He became a correspondent of the Academy of Toulouse before joining the Académie des Sciences de Paris. He was also the director of the Observatoire de Paris and participated in precisely measuring the length of the terrestrial meridian, which later helped define the meter. He was also elected as a foreign member to the Royal Swedish Academy in 1788.

Charles Marie de La Condamine (Paris 1701 – Paris 1774) was a French explorer and scientist. He was a foreign member of the academy and was a member of numerous other academies (Paris, London, Berlin, Saint Petersburg, Bologna, etc.). He was also elected as a member of the *Académie française* in 1760. He is famous for travelling to Ecuador to measure the length of a meridian arc. The goal of that mission was to verify Newton's theory that Earth was not a perfect globe but that it was in fact bigger at the equator and flattened at the poles. Another mission was carried out in Lapland with other scholars including A.-C. Clairaut and P.-C. Le Monnier. The result of his measurements was extremely precise. La Condamine then travelled down the Amazon River to Cayenne and returned to Europe in 1745.

Joseph Jérôme Le François de Lalande : see the RETE on the Academy of Bordeaux (De la Croix and Dock 2021). The Academy of Toulouse published many papers about astronomy and Lalande said that Toulouse was the city where astronomy was the most cultivated. Lalande asked some of his associates to observe the transit of Venus across the Sun.

Giovanni Antonio Scopoli (Cavalese 1723 – Pavia 1788) was an Italian physician and naturalist. He was from Tyrol and therefore spoke Italian and German, but also learned Latin, French, English, Slovenian, Russian, and Hungarian. He studied medicine in Innsbruck and Vienna. He also spent time studying the flora and fauna of Tyrol. In 1777, he started teaching chemistry and botany at the University of Pavia and continued to do so until he passed away from a stroke in 1788.

Alexis Claude Clairaut (Paris 1713 – Paris 1765) was a French mathematician and astronomer. Like La Condamine, he worked on the shape of Earth. He travelled to Lapland and created “Clairaut’s theorem.” In 1731, he was accepted to the Académie des Sciences and in 1737 he became a member of the Royal Society. The debate between Descartes’s and Newton’s theories lasted for a long time, and the Academy of Toulouse crowned Clairaut in 1750, therefore proclaiming Newton’s theory as the only one that could explain how the universe worked.

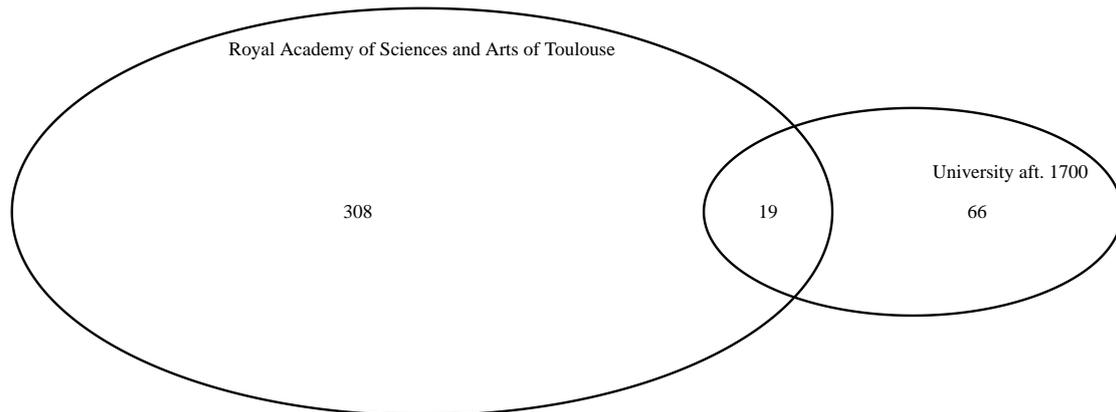


Figure 5: Intersections of the lists of scholars between the University and the Academy of Toulouse

9 INTERSECTIONS WITH NEARBY UNIVERSITIES

Figure 5 shows that some members of the academy were also professors at the University of Toulouse. Although our data on the university are still incomplete, and a large crowd of obscure professors is still missing, the numbers are complete on the side of the Academy. Six percent of academicians were also professors (19/327). This was probably a standard pattern for France, where academies were often unrelated to local universities. An exception was Montpellier, where 34% of academicians also taught at the university (see De la Croix (2020)).

10 ANECDOTE

Whenever the academy opened a position for an ordinary or associate member, elections were held. To increase their chances of being elected, candidates provided sitting members with a dissertation about their competencies in the field that they planned to work on. During the first ten years of the academy, this practice was quite rare, but it eventually spread and became a requirement. This requirement helped the academy accept individuals with real abilities in their scientific fields.

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