The Archives of the Academie des Sciences

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The Archives of the Academie des Sciences in Paris grew out of the loose collection of manuscripts and letters which served the scientific needs of its members and the record-keeping function of the secretary. When Jean Richer asked the secretary of the Academie for the return of a treatise at the meeting of 18 January 1676, the members voted to keep the original and return a copy to Richer. As members died, some of their papers passed to the membership of the Academie, which published portions of the material. In March of 1683, for example, Edme Mariotte was charged with examining the manuscripts of the late Bernard Frenicle, and Nicolas-Francois Blondel was asked to survey the papers of Gilles Personne Roberval in order to determine what was worth publishing. As a testimony to the responsible work of these early editors five cartons of Roberval's papers survive in the present Archives.

This loose collection of scientific manuscripts, which was circulating informally among the membership of the Academie, began to assume the form of an archive during the Regency (1715-1725). In a memoir written about 1718, Joseph N. Delisle asked the abbe Jean-Paul Bignon for 2,500 livres to copy various compilations of astronomical observations in order that they would be available to several members of the Academie at the same time. Philippe de la Hire had acquired the papers of Jean Picard and Georg Marcgraf, and Jacques Cassini had in his possession the papers of his father, Jean-Dominique Cassini, and those of Jean Chazelles, Sedileau, and Pere Louis Feuille. The tenor of the memoir indicated that these two members had been uncooperative in sharing their resources with other academicians. Delisle was apparently successful. In the years immediately following, he used the Archives of the Academie to prepare his Traite complet d'astronomie exposee historiquement et demontree par les observations.

The collections of the Academie were inventoried in 1732 and again in 1745. They included not only scientific manuscripts but also dried plants, minerals, anatomical specimens, astronomical devices, and models of machines submitted to the Academie in the course of seeking a patent. The inventory of 1745 reveals an archive containing letters of Descartes, Torricelli, and Pere Mersenne as well as the usual journals of voyages and papers of academicians. In September of 1791 the National Constituent Assembly ordered the collections of the Academie to be inventoried once again. The Academie was suppressed by vote of the Convention in 1793, and its collections were placed under lock and key. Two years later it reemerged as a division of the new Institut National des Sciences et des Arts (renamed the Institut de France in 1806).
In 1805 the Institut migrated from the Louvre to the Palais des Quatre Nations, formerly called the College Mazarin. The collections of the Académie moved to this new location a year later, but since the Institut possessed only a part of the Palais des Quatre Nations, there was not sufficient space for all of its cabinets and instruments. Consequently, in January 1807, the Académie voted to give its collection of machines and models to the Conservatoire Nationale des Arts et Métiers, and in July of 1807 it voted to surrender many of its natural history specimens to the Museum National d'Histoire Naturelle (the former Jardin royal des Plantes). Further weeding was felt to be necessary in 1824; more of the collections were dispersed to the Conservatoire Nationale des Arts et Métiers, the Observatoire, the Bibliothèque du Roi, and the Museum National d'Histoire Naturelle. This location in the Palais des Quatre Nations, 23 Quai de Conti, has become the permanent home of the Académie and its Archives. The extensive collections of four other bodies are found at the same address: the Bibliothèque de l'Institut, the Bibliothèque Mazarine, and the joint archives of the Académie Française and the Académie des Inscriptions et Belles-lettres.

The decision of the Académie des Sciences in 1835 to begin publication of the *Comptes rendus* spurred the Académie to undertake a regular policy of conservation of manuscripts. Yet the period from 1834 to 1848 proved to be one of the more disastrous times for the collection. During these years count Guillaume Libri, a member of the Académie des Sciences, amassed a large private collection of rare manuscripts, many of them stolen from the libraries of France, including papers from the Archives of the Académie des Sciences. As a member of the Académie, Libri had access to its Archives as well as to those of the Institut de France and of the Observatoire. He sold much of his collection to the fourth earl of Ashburnham in 1847 for 200,000 francs, and the manuscripts were taken to England. In the 1880s, due to the sustained efforts of Leopold Delisle, director of the Bibliothèque Nationale, many of these materials were returned to France. Most of the stolen items were not deposited in their original libraries, but were incorporated into the manuscript collection of the Bibliothèque Nationale, where they remain. One need only examine the inventories of the Libri collection compiled by Leopold Delisle to see the provenance of these manuscripts.

In 1879 Ernest Maindron, an assistant to the perpetual secretary of the Académie, began to classify and organize the manuscript collection of the Académie des Sciences, and the Archives were given special quarters within the Palais des Quatre Nations. At this time the Archives contained 941 cartons of papers. Jean-Baptiste Dumas, the then perpetual secretary, supported this effort, but when Dumas died in 1884 the project was abandoned, leaving the classification of the Archives incomplete. In this short time, however, Maindron was able to complete an inventory of the papers and correspondence of Antoine Lavoisier. The work of classification was resumed when Alfred Lacroix became perpetual secretary in 1914. Lacroix charged Pierre Gauja to organize the collection for the purpose of publishing the *Index biographique*. Mme Gauja has continued the work of classification up to the present. Efforts are also being made to retrieve important documents which are missing but which logically belong in the Académie des Sciences collection.

The core of the modern Archives of the Académie consists of manuscript collections. The Archives also contain published materials comprising the publications of the Académie and biographical works on various academicians. The Académie also subscribes to more than a thousand scientific journals which are
housed in the Bibliotheque de l'Institut. The manuscript collections are arranged in six categories of materials, which are described below.

**Dossiers on individual members** (605 cartons). The Archives hold dossiers on individual members, including many corresponding members of foreign residence. These dossiers may contain correspondence, notebooks, scientific papers, reprints of articles on the academician, and photographs or etchings. To many researchers, this is perhaps the most useful collection in the Archives.

If little material of a given individual has survived, four or five dossiers may share a single carton. On the other hand, the dossier of Lavoisier fills 38 cartons, making it one of the major collections in the Archives. Other large collections include the papers of:

- Andre-Marie Ampere (37 cartons)
- Alfred Lacroix (30 cartons)
- Jean-Baptiste Dumas (31 cartons)
- Michel Chasles (30 cartons)
- Paul Painleve (17 cartons)
- Maurice-Rene Frechet (10 cartons)
- Rene-Antoine Reaumur (9 cartons)
- Jean-Pierre Joseph Darcet (5 cartons)
- Gilles Personne Roberval (5 cartons)
- Jean-Baptiste Elie de Beaumont (3 cartons)
- Marie-Jean Pierre Flourens (2 cartons)

There is no general inventory for the entire Archives, but the dossiers of several individual members, including Lavoisier, Alfred Lacrois, Ampere, and Reamur have been inventoried.

**Dossiers on individual meetings** (1125 cartons). The bulk of manuscripts in the Archives consists of dossiers on individual meetings of the Academie. These files were begun in 1835 to facilitate the publication of the *Comptes rendus*, but dossiers for meetings prior to 1835 have since been prepared from documents already in the Archives or acquired since that time. The contents of these early dossiers are presently being inventoried.

Scientific papers and items of business constitute the main items in these files. Whether a scientific paper appears in the file for a meeting rather than in the dossier of the member giving the paper sometimes depends on whether the paper can be identified as having been read at a specific meeting. Dossiers of the meetings may also contain information on the credentials of scientists nominated to membership in the Academie, who appear only by name in the *Proces-verbaux*. Manuscripts which the archivists have been unable to identify or date have been placed in a number of cartons simply marked "Seances 1666-1793."

**Plis cachetes** (131 cartons). If a member of the Academie believed that he had made an important discovery but was not ready to publish the results until further verification, he could submit his tentative findings to the secretary of the Academie, who would initial and seal the document, creating a *pli cachete*. In this way he protected his prior claim should someone else subsequently publish similar work. The *pli cachete* could only be opened by the wish of the member who submitted it or by vote of the Academie. These cartons date to 1733, and most of them have been opened, but one historian recently found some unopened *plis cachetes* which had been submitted by the eighteenth century chemist, Pierre-Joseph Macquer. The Academie duly voted to have them opened and made available to the historian.
Proces-verbaux (109 manuscript volumes). These volumes record the activities of the biweekly meetings of the Académie. They include the business of each meeting, the comments of members on the scientific events of the period, the reports of committees, and sometimes the text of scientific papers prepared and read by its members as well as letters addressed to the Académie from abroad. The Proces-verbaux date from the very first meeting of the Académie held on 22 December 1666, and they are the only record available of the activities of the Académie for the early years. The text is in French except for an occasional paper written in Latin. The record is fairly complete, but the years 1670 to 1674 are missing. The brevity of records on some meetings may be explained by the fact that the Proces-verbal was prepared after the date of the meetings, sometimes two or three years later. Earlier drafts of the proceedings are sometimes found in the dossier of the individual meeting. These first drafts, called Plumitifs, are usually more informative than the brief entries in the Proces-verbaux. The published Histoire et Mémoriales de l'Académie des Sciences, which appeared annually from 1699 to 1789 and again for a few years after the re-establishment of the Académie in 1795, contains only the more important papers read at the biweekly meetings; thus the Proces-verbaux needs to be consulted for papers not published there. The reports of academic committees which reviewed the scientific work submitted to the Académie may also be found in the Proces-verbaux but are seldom included in the Histoire et Mémoires. Since 1835 the proceedings of each meeting have been published as the Comptes rendus. The Académie has also published retrospectively the Proces-verbaux for the years 1795 to 1835. At the time of the 300th anniversary of the Académie in 1966 the members voted to publish the Proces-verbaux for the years prior to 1795, but the funds for this project have never become available.

Competitions (352 cartons). Early in the eighteenth century the Académie began the practice of sponsoring competitions on scientific subjects. These papers have been preserved, but the historian needs to be aware that losing papers were often withdrawn.

Miscellaneous (100 cartons). These cartons contain the papers relating to special projects and commissions undertaken by the Académie. Included for example are papers on the transit of Venus, the Fonds Pasteur, and papers relating to the phylloxera plague of the 1860s.

In 1977 the Archives of the Académie des Sciences were open from 9 A.M. to 3 P.M. Monday through Friday, and did not close for lunch. They are closed on weekends and national holidays; long vacations are taken at Christmas (ten days) and for the fermature annuelle (six weeks) in August and September. Permission to use the archives is obtained by submitting a letter of request to the perpetual secretaries of the Académie. Permission is usually granted promptly and is easily arranged after arrival in Paris.

Two archivists, one of whom is always on duty, are employed by the Archives. Service is not normally interrupted by general strikes. No facilities for either xerooting or microfilming are provided by the Académie. One may arrange for microfilming by the private photographer who visits the Archives periodically, and who will come on request at other times. Charges in 1977 were one franc per frame plus two base fees: 30 francs for the photographer's transportation to and from the Archives and a minimum charge of 20 francs for each carton or volume handled. Permission to have the desired material microfilmed must be requested from the perpetual secretaries of the Académie. Not more than two consecutive meetings from
the *Proces-verbaux* may be filmed, and other material is also subject to restrictions.

Notes

2 Ibid., IX (6 Mars 1683).
3 Collection d'observations astronomiques pour l'usage de l'Académie par De Lisle le cadet, BN, MS. n.a.f. 5156, pp. 63-64.
4 Sedileau's first name is unknown.
5 S G. Bigourdan, "La correspondance inédite de l'astronome J. N. Delisle," *Comptes rendus des séances de l'Académie des Sciences*, CLXI (1915) 63. Delisle's manuscript was never published. Further evidence of Delisle's success is the fact that the Bibliothèque de l'Institut holds a duplicate copy of the original manuscripts which are in the Bibliothèque de l'Observatoire.
7 Ibid., p. 128.
8 Ibid.
11 Ibid., p. 131.
12 The Archives of the Académie des Sciences are on the first floor of the east wing which faces onto the second courtyard.
15 Leopold Delisle, *Notice sur des manuscrits du fonds Libri conservé à la Laurentienne, à Florence* (Paris, 1886). Some of the Libri manuscripts were returned to France after Lord Ashburnham's death in 1878, but the rest of the collection was sold to the Biblioteca Medicea-Laurenziana in Florence and was subsequently purchased by the Bibliothèque nationale from this library.
17 Ibid., p. 92.
18 Personal communication from Roger Hahn.
19. The *Index biographique* appears in the *Annuaire de l'Académie* beginning in 1917, but due to the excessive quantity of biographical material it was dropped from the *Annuaire* after 1937. A separate volume of the *Index biographique* was published in 1931, and subsequent editions have followed, the latest being 1968.
20 The Académie is still trying to obtain possession of the notebooks of Claude Bourdelin (1621-1699) from the Bibliothèque nationale (MS. n.a.f. 5133-5149). These were part of the Libri collection which Leopold Delisle brought back to France and deposited in the Bibliothèque nationale.
22 These hours may be changed in the near future. In March of 1978 the Archives circulated a questionnaire to patrons in order to solicit preferences for hours of operation.
23 The Archives are still within the private domain of the Académie and are not part of the governmental archival system.