Scientific archives, unpublished manuscripts in private or public corpuses: historiographical and methodological approaches

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Many historians of science develop detailed studies of inedited documents (or sets of documents): letters, unpublished manuscripts (public or private archives), drafts, communications addressed to academies and learned societies that have just been mentioned in a note of a report, documents published in full in the internal reports or journals of these societies but never communicated outside the restricted circle of its members, notebooks of laboratories or notes taken by students, etc.
The contents of those works enrich or transform our historical knowledge of the disciplines involved and often modify the historiography itself.
In this symposium it seems interesting to encourage the exchange of experiences between researchers working individually or in teams on such corpuses.
Will be welcome:
First: the contributions which show how the study of such documents can supplement (or understand better or even correct) studies based solely on published literature, and can also complete the biographies and bibliographies of the authors of the original documents, or the scientists quoted in those papers.
Secondly: the original studies of these texts (contents analysis in scientific and historical perspectives).Third: the contributions dealing with research programs (individual or collective) focused on some corpuses of archives or unpublished scientific papers: circumstances of their rediscovery, purposes of the researchers, forms of communication of the results of those studies (theses, analysis and editing of texts, online websites dedicated to them, etc.).
Fourth: the description or inventory of such corpuses of archives and all kinds of related information. For example: what has been preserved, by whom, where and why? These archives are they from a single source or have they been established through national or international exchanges? Etc.
And finally, of course, all contributions that will show how such researches have contributed to enrich the historiography and to support the work of historians of science. It will also be interesting to compare the methodologies used by researchers or research teams. Conferences on these methodologies will therefore also be welcome.

On Some Manuscripts of Louis Poinsot: Contributions to the Understanding of his Work and his Approach to Mathematics

Jenny Boucard, Institut de mathématiques de Jussieu, Rezé, France

Louis Poinsot (1777-1859), who is rather famous for his work in mechanics and geometry, published very few articles in algebra and number theory. Those papers contain results directly related to the Disquisitiones Arithmeticae by Gauss (1801) and Poinsot develops there a special approach to algebra and number theory, based on what he calls the theory of order. The goal of this talk is to show how the study of some manuscripts of Poinsot provides additional informations on his research in both areas, and on this approach to mathematics based on the notion of order. We started our review of the archives of Poinsot available at the Library of the French Institute in Paris by looking for a manuscript corresponding to a memoir about the theory of permutations read in 1813 at the French Académie des Sciences but not published. We found this text, which gives an accurate and original view of the approach of the theory of permutations by Poinsot. But these archives also contain other documents related to algebra, number theory and theory of order, including research on topics not appearing in publications of Poinsot and a few pages containing more general thoughts about mathematics. We will analyze these three types of manuscripts: in each case, we will examine the issues they raised, explain how we were (or were not) able to determine the context in which they were produced and we will consider the different contributions of each of these documents to understand Poinsot's work by comparison to what we knew only of existing publications related to Poinsot.

About a Manuscript of Emile Borel

Martha Cecilia Bustamante, REHSEIS, Université Paris 7, Paris, France

In December 1912, the physicist Paul Langevin started at Collège de France a series of lectures entitled "Difficulties of the theory of radiation". The Collège de France required that courses serve as the introduction and development of the newest scientific guidelines in France. Langevin therefore proposed a series of lessons on the new quantum physics. He talked about the thermodynamics of radiation: the contributions of M. Planck, A. Einstein, P. Ehrenfest and H. Poincare. Important was how Langevin considered the work developed by D. Hilbert during the summer of 1912 about the axiomatic theory of thermal radiation. That was the topic addressed by Langevin during the sessions in December 1912 and January 1913. Langevin's public at the Collège consisted, among others, of members of the Parisian intellectual and "scientific elite", to which he belonged, of his collaborators at the Collège and of students at the "Ecole Normale Spérieure" and at the "Ecole de Physique et Chimie Industrielle" of Paris. His close friend, the mathematician Emile Borel, especially followed the course of 1912-1913. From Borel's participation we still have a recently discovered notebook. It is around this manuscript that I shall focus the proposed presentation. This manuscript is the only trace we have of these Langevin's lectures. I am preparing the publication of the entire manuscript provided with all its contextuality. Nevertheless, the nature of the work necessary to give full meaning to the notebook requires new relevant historical issues and thereby new methodological tools. These aspects will be developed in detail.
The work around the manuscript shows the relevance of the history of science that has already incorporated in its epistemological and historical field the study of scientific texts as well as the "material practices" such as note-taking.

Discovery of a Manuscript on the History of Astronomy from ca. 1830

Thomas Siegfried Posch, Günter Bräuhofer, Karin Lackner, Isolde Müller, Franz Kerschbaum, University of Vienna, Vienna, Austria

In 2010, a hitherto unknown manuscript on the history of astronomy has been discovered at the Archive of the Department of Astronomy at the University of Vienna. The original manuscript, written in German, comprises 819 pages and has been written in the first half of the 19th century, probably around 1830. The transliteration, which is complete by now, comprises about 220 pages. The manuscript seems to be one of the earliest compendia on the history of astronomy written in German. It has never been published in printed form, but obviously was supposed to be published as a book. The author – who did not sign the manuscript – is most probably the famous Johann Joseph von Littrow (1781–1840), who became professor of astronomy in Vienna in 1819 and published several essays on the history of science. We will present our arguments for his authorship in our contribution.
In addition, our presentation has the following aims:
- Demonstrate the significance of the manuscript within the historiography of science
- Discuss the sources which the author of the manuscript used (e.g. Lalande, Delambre, Weidler)
- Introduce the topics covered by the manuscript, which range from the astronomical knowledge of the ancient civilizations to Newton's celestial mechanics (see below)
- Highlight individual passages which prove the high quality of the manuscript with respect to linguistic and historiographic criteria

The manuscript consists of the following books and chapters:
Book 1: Astronomy of the Ancients
Chapter 1: India
Chapter 2: The Chaldaeans
Chapter 3: Greek Astronomy
Chapter 4: The Alexandrinian School
Book 2: Astronomy of the Arabs and in Medieval Europe until 1500
Chapter 5: The Arabs
Chapter 6: The Persians
Chapter 7: Medieval Europe
Book 3: Modern Astronomy
Chapter 8: Copernicus and his contemporaries
Chapter 9: Tycho and his contemporaries
Chapter 10: Kepler and his contemporaries
Chapter 11: Newton and his contemporaries

As mentioned above, the manuscript is a part of the Archive of the Department of Astronomy. In view of this, we shall also give a brief overview of the general content of this archive in our presentation.

Manuscript 2294 from the Library of Salamanca University

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The study of unpublished manuscripts can help us to acquire a different perspective on the development of science. Although many manuscripts about mathematics have been disseminated, not many have been studied from a historiographical point of view.
One of these manuscripts is the 2294 from the library of Salamanca University, which I intend to analyze in my talk. Its author is Diego Pérez de Mesa (1563-ca.1633) who was born in Ronda (Málaga) and studied Arts and Theology in the aforementioned University. He occupied the chair of mathematics and astronomy in Alcalá de Henares University and later the chair of mathematics in

Sevilla, probably by invitation from King Felipe II. He wrote interesting works about nautics, astrology, astronomy and mathematics, some of which may not have been published.
Manuscript 2294 consists of 100 double-sided pages and is titled "Libro y tratado del arismetica y arte mayor y algunas partes de astrologia y matematicas compuestas por el eroyco y sapentisimo maestro El Licenciado Diego perez de mesa catedratico desta Real ciudad de Sevilla del año de 1598". The first part is devoted to arithmetics and the second to algebra. The latter starts on page 60 and consists of an introduction and 23 chapters.
In my analysis I will focus on the algebraic part of this manuscript and I will also make reference to other works from the Iberian Peninsula that are of relevance in the second half of the 16th century. The purpose of this research is to contribute to the knowledge about the status of algebra, and also to provide new clues that will increase understanding of the process of global algebraization of mathematics in Western Europe.

Leibniz's Manuscripts on Perspective

Valérie Debuiche, University of Paris 7-Denis Diderot, Paris, France

In 1677, Leibniz wrote his first essay about geometric characteristic, a new geometry of situation and space, without magnitudes, figures or quantities. Although it is mathematically and philosophically central, the geometry of situations is nonetheless not so accurately known, because of the lack of the editions of it, during Leibniz's life and after it. However, the published texts of the Analysis Situs between 1676 and 1682, in the French edition and translation of J. Echeverría and M. Parmentier in 1995, reveal that its invention could be connected to Leibniz's discovery of the perspective works of Pascal and Desargues. The issue is then to determine the nature of the relation between perspective and geometric characteristic, in order to clarify the true origin of the Leibnizian invention, to define the nature of that space presented as the object of the new geometry, and to decide wether perspective is for Leibniz a "particular example" of a more general science, or a "general model" for more particular geometrical specimen.
This last question becomes really problematic when we consider that Leibniz himself wrote some texts about perspective. This set of six mansucritps conserved at the Leibniz-Archiv in Hannover (which are almost all in latin and present a compact and crossed out texts with annotated margins and drawn shapes) is totally unpublished, except for a transcribed paragraph (by J. Echeverría). However, we suppose they might contain some answers to the previous questions and perhaps even some other important elements to shed light on Leibniz's general theory of geometry.
Then, my purpose is, first, to develop the reasons why the understanding of the published texts of the Leibniz's invention of the geometry of situations necessarily requires the reading of the manuscripts of perspective. Secondly, I will present the relationship between this reading and a possible new understanding of Leibnizian mathematics as well as of Leibnizian metaphysics, since geometry and perspective play a central role in the general Leibnizian doctrine. Third, I will conclude by exposing the theorical and methodological conditions of a possible transcription of these uneasily readable mansucripts.

The Correspondance of Emile Clapeyron to Gabriel Lamé (1833-1835), to Analyze of Social Networks

Evelyne Barbin, University of Nantes, Nantes, France
René Guitart, Université Paris Diderot, Paris, France

Emile Clapeyron and Gabriel Lamé were students of the « École Polytechnique » in the same years 1816-1818 and became engineers of the « École des Mines » of Paris in 1820. Together, they went to Saint-Pétersbourg in 1820 to teach in the « École des voies de communications » and also to work on suspension bridges. They came back in Paris ten years later, but the life separated the two friends.

While Lamé was professor of the « École Polytechnique », Clapeyron arrived in Saint-Étienne in January 1833 as teacher of the « École des mineurs ». From January 1833 to May 1835, Clapeyron wrote regularly to his friend to obtain news « about what it happens in the world » and to comment on scientific results or academic facts. The correspondance continued when Clapeyron left Saint-Etienne to Arras. The three years of the correspondance is a historically important moment, specially because it is surrounded by the Vues politiques et pratiques sur les tableaux publics en France, which is written by them and the Flachat brothers (1832) and the Chemin de fer de Paris à Saint-Germain (1835), written with Stéphane Mony and directed by Emile Pereire. Moreover this period is rich of many scientific results. This correspondance reveals also the tensions between the twins about their « scientific association », which mix theoretical and industrial works but has not the same institutional impact for each of them.

Reconstructing the Development of Physics in Italy after World War II: the Role of Correspondences and Archives

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In the latter part of the 20th century several archival and manuscript collections, oral history interviews, and other primary sources have been collected at the Department of Physics of the University “La Sapienza” in Rome. The richest and most fruitful collection among them is the Archivio Amaldi which includes documents related to the scientific and didactic activity of Edoardo Amaldi (1908-1989) and to his commitment to the popularization of science and to civic and social engagement. The presence of his diaries and of his huge correspondence sheds further light on the real state of the physical research in Italy after WWII, on the organization of groups of researchers and on their training.
Other archival materials have been collected thanks to donations by the physicists themselves or their heirs, giving birth to several “Fondi”: Mario Ageno (1915-1992), Nicola Cabibbo (1935-2010), Marcello Conversi (1917-1988), Enrico Persico (1900-1969), Giorgio Salvini (1920-), Bruno Touschek (1921-1978) etc., which together represent the main documentary source for the history of 20th century physics in Italy.
Their description, a classification and the analytical filing of part of the holdings have been accomplished for scholarly use by the group of researchers at the Department of Physics of the University “La Sapienza” in Rome.
In this communication I’ll provide some examples which show how these holdings have played a significant role in the historical reconstruction of the development of physical research in Italy after the Second World War.

To Write the Biography of a Scientist today: Using Photo Archives

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There is a growth of interest to biography as a historic genre. The space of a scientist’s activity as a historic subject is becoming a subject of research of different schools and methods – the history of commonness, gender and social history, historic anthropology or micro-history. Biography sometimes is provided with a number of photos, which are used as a supplementary material of an ordinary application to a scientist’s biography. However, the cognitive potential of photographic materials opens new perspectives for research. Photography archives must help to a historian to understand the structure of a scientist’s biography as possibilities of reading and interpretation are included implicitly. At the same time this type of interpretation is wider than just historic explanation. Photos represent reality instantly, providing facts – details of lifestyle and interior, samples of changing fashion – fragments which allow a researcher to recover the life history. In this

case the conversation is not only about the consequence of external events organized in the linear story, but about original print of a personality embodied in memory as its existence demonstration. Memory-history through photographic archives doesn't give us a set of chronographic events, but a material that provides 'meeting' past and present through perception of a historian – interpreter. Past takes place (becomes alive) in present and this event is called into being by the critical position of a person who tries to conceive it. Work with archives including photographic ones initially involves a researcher's definite cognitive position. Photography coinciding with the definite form of the world cognition sets a methodological range: from phenomenological witnessing to deconstructive scheme. A photo is a direct analogue of the reality fragment and a source of visual information perceived by an eye. Our eyes can distinguish shapes and recognize them placing the received data in a definite set of cultural coordinates. The essence of photography is connected with loss and authenticity is recovered simultaneously every time while 'reading' photos. Any biography aspires to be represented like a set of photos. The information unexpressed in biography can be represented as a set of separate photos.

Les recherches de Jai Singh II (1688-1743) sur l'astronomie non classique (siddhāntas), d'après des lettres et manuscrits conservés à Lisbonne, Goa et Jaipur

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At the beginning of the XVIIIth century, Jai Singh II, a Rajput king vassal of the great Mughal emperor Muhammad Shah, was a passionate astronomer. After founding his new capital city, Jaipur, he began to erect there a large observatory and was charged by Muhammad Shah to build another observatory in Delhi. These celestial laboratories were aimed at improving the precision of the observations, in order to compare them with the results of the calculations made with the help of the algorithms given in the classical Indian astronomical treatises, the siddhāntas. Already before 1720, Jai Singh II had been informed about other astronomico-mathematical traditions and had at his disposal the translations into Sanskrit of the Arabic versions, made by Naşīr ad-dīn at-Ṭūsī, of Euclid's Elements and Ptolemy's Megalè Syntaxis (Almagest in Arabic) under the titles of Rekhagaṇita et Siddhāntasamrāṭ. Around the end of the same decade, thanks to his encounter with Manuel de Figueiredo, Rector of the Agra Jesuit mission, Jai Singh learned about European astronomy. After sending the same Jesuit to Lisbon, to find treatises, instruments and informations in order to check his methods against those of the Portuguese King João V's court, Jai Singh wanted to complete his astronomical staff by a European astronomer. Unhappily, this was achieved only in 1740, three years before Jai Singh's death. We will follow the eventful moments of Jai Singh's astronomical evolution, from his initiation to the siddhāntas until the arrival of a European astronomer in Jaipur, in various documents, of which many are still unedited : letters in Latin, Portuguese, French and German; Persian and Sanskrit manuscripts, that we had the opportunity to consult in Lisbon, in the Goa archives or in the Library of the Man Singh II Museum of Jaipur.

W.H.F. Talbot (1800-1877) Mathematician: the Handwritten Notebooks, the Drafts and the Correspondence with the French Mathematician J.D. Gergonne (1771-1859)

Christian Gerini, Université du Sud Toulon Var GHDSO (Groupe d'Histoire et de Diffusion des Sciences d'Orsay), France

During the 1830's the scientist and inventor William Henry Fox Talbot (1800-1877) discovered the chemical and optical properties of silver iodide and its optical properties under the effect of heat, which have been essential in the invention and progress of photography.
The British National Library owns many unpublished handwritten notebooks and drafts written by W. H. F. Talbot throughout his life and that we have read and studied. They contain scientific reasoning, chemical and mathematical formulas and calculus, etc. dealing with many sciences. In most of them,

even in the years when Talbot devoted his work mainly to chemistry and optics, one can see him here and there solving an equation, giving references to books of mathematics, copying extracts from Euclid's Elements, etc...
He has been interested in mathematics throughout his whole life and he really began his research by doing mathematics. He published for example when he was 22-23 years old some articles in the first French Journal of Mathematics: the Annals of Pure and Applied Mathematics of the French mathematician Joseph Diez Gergonne (1771-1859). In those Talbot's papers, one can see he was an attentive reader of the Annals. And some of those articles were in fact letters he sent to Gergonne from different towns of Europe (and especially from Italy).
This talk intends to give first a brief description of those Notebooks - which show his precocious education and his interest in sciences - and of his works in mathematics one can find in those handwritten papers and drafts.
In a second step, we propose a comprehensive review of the correspondence between Talbot and Gergonne in order to better understand the texts published in the Annals.
We will end our presentation by giving an idea of the contents of those articles and by showing how interesting was the principle of the "questions - answers" that Gergonne proposed in his journal to the international community of mathematicians.

Scientific Archives, Unpublished Manuscripts for New Interpretation of the Scientist's Biography

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Biographical genre, which is regarded by us as a method, got recognition and is considered essential for understanding of psychological atmosphere of the epoch, personal aspect of development of the science. Application of this method allows to study and interpret spheres that did not attract attention of researchers earlier. This is also important , it allows to overcome limitation of history of science only by cognitive history, allows to find specific historical mechanisms of connection between cognitive part and social micro groups, to expose connection between intentions of a specific researcher and formation of a research program.
W.F.Louguinine (1834-1911), the physical chemistry scientist, is reputed for his research in sphere of thermochemistry. In Russia his name and scientific achievements are recorded in all encyclopedic and biographic reference books; abroad – in the well-known issue "Dictionary of Scientific Biography".
Having unexpectedly discovered the Louguinine's manuscript "Memoirs about my life" in the Archive of International Institute of Social History (Amsterdam) and also correspondence with famous French chemist M.Berthelot (that was not published earlier) in a number of French state and private archives, having got acquainted in detail with the whole correspondence W.F.Louguinine – professor A.I.Kablukov from the Archives of Russian Academy of Sciences, I have decided to turn to the creative heritage of this scientist again. The aggregate of these various sources provides new facets of life and creativity of this outstanding scientist. The manuscript and mentioned correspondence gave us priceless material on value preferences of Louguinine both in scientific and social life. On their basis it became possible to define more precisely many earlier mentioned facts and dates in the biography of our hero and what is not less important to trace back the genesis of the scientist's choice of research object and methods; transformation of his scientific and pedagogic views in the light of personal contacts with leading representatives of French and Russian scientific schools etc.
In the present work is showed the importance of such sources as memoirs, correspondence for reconstruction of professional activity of concrete personage.

Toward a Complete Biography of Henri Brocard

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At the end of the XXth century, Henri Brocard took a mean part in the revival of interest in triangle geometry. Brocard's name is known for Brocard points or Brocard angle but only few of his personnal or professional life has been studied. We propose to present a detailed biography of Henry Brocard based on inedited documents in one hand and very restricted diffusion documents in another hand. Our aim is to supplement the few and brief current biographies, especially to point Brocard's multiactivities (mathematical and astronomical research, bibliography, teaching, textbooks writing, popularization...) which surpass the ones (multiple enough) due to his position of Engineer in the French Army as a meteorologist.
Our study will be based on the Bibliographic Notice written by Brocard in 1895. It relates in a very detailed way 30 years of the prolific scientific activity of a non-academic position researcher. His Legion d'Honneur personal file will provide us with administrative documents that had never been consulted before we do. Finally, the study of inedited letters from his correspondence with Maurice d'Ocagne will complete our Henri Brocard's portrait.
This research is in line with those we made for two working groups we belong to : "Networks of scientists in the XIXth century" (supervised by E. Barbin, Université de Nantes) and " Press and Periodical" (supervised by H. Gispert, GHDSO, Orsay).

André Cholesky's Personal Archives and their Exploitation by Historians

Dominique Tournes, Claude Brezinski, University of La Reunion, Sainte-Clotilde, France

The archives recently submitted to the École Polytechnique by members of his family have renewed in-depth our knowledge of the life and work of André-Louis Cholesky (1875-1918), a French artillery officer, topographer and mathematician. Manuscripts and notebooks contained in these archives have clarified the context of geodetic work in which Cholesky conceived his famous algorithm for solving systems of linear equations. Moreover, letters and manuscripts of partially unpublished treatises of topography and graphical computation written for the ESTPBI (École Supérieure des Travaux Publics, du Bâtiment et de l'Industrie), a school founded by Léon Eyrolles, are valuable to better understand the teaching by correspondence offered by this school, and to analyze the mathematical and scientific training of engineers and technicians in the early 20th century.

Hertz's Mechanics and Schrödinger's Equation by Means of Schrödinger's Manuscript "On Hertz's Mechanics and Einstein's Theory of Gravitation"

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There has been much historical research on Schrödinger's 1926 series of papers founding wave mechanics. The first of these starts with Hamilton's differential equations and the second, generally considered the foundational one (Jammer 1966, Mehra and Rechenberg 1987), begins with Hamilton's Principle. Historians of science have understandably looked for routes from Hamilton to Schrödinger's equation. The traditional historical line (Hamilton 1828, 1834-5, Sommerfeld and Runge 1911, Epstein 1916, Schwarzschild 1916, Einstein 1917, etc.) omits one seminal work: Hertz's Principles of Mechanics (1894). Even though "Heinrich Hertz" is mentioned in Schrödinger's foundational paper and some connections between this paper and Hertz's Mechanics can be inferred from the text itself, many other striking connections only become apparent through an examination of Schrödinger's manuscript "On Hertz's Mechanics and Einstein's Theory of Gravitation", tentatively dating from 1918-19. Mainly by means of this manuscript, a connection between Hertz's mechanics and Schrödinger's foundational paper will be established. A table of translation, enabling the comparison between the two texts and facilitating further research on the relation between them,

will be provided. The significance of Schrödinger‘s manuscripts for his 1926 series of papers has been pointed out by several historians of science (see Joas and Lehner 2009). Mehra and Rechenberg 1987 presented the most detailed reading of the manuscript referred to above. However, to our knowledge, the connection between this manuscript and Hertz’s Mechanics has never been addressed. This connection sheds some light on the role of the Hamiltonian optical mechanical analogy regarding the route to Schrödinger’s equation (Kragh 1982, Wessels 1983, Mehra and Rechenberg 1987, Mehra 1987, Moore 1989, Joas and Lehner 2009, among others).

Meteor Archives of the post-Soviet States

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Meteor archives stored in the meteor centers (or by individual scientists) of post-Soviet countries have great scientific value. They accumulated a powerful layer of meteor knowledge of the 20th century. During this period the meteor science in the Soviet Union had a significant development in the result of impetus from the International Geophysical Year program. We say about the knowledge in Russian. These archive materials, in Russian, have limits in their integration into the world of science. There is the global problem as concerns integration into the world science all the Russian-language meteor knowledge gained in the second half of the 20th century in the Soviet Union. There are difficulties due to that research results were published in the special collections, such as (e.g.) "Meteor research," the publication of which was discontinued with the collapse of the Soviet Union. At the same we know about disintegration of the administrative structure in framework which meteor science had evolved in the Soviet Union. Now many archives of active meteor centers of the Soviet Union (and scientists) are dormant, as the active carriers of the knowledge - scientists either died or have dramatically changed the scope of their activities. A new generation of scientists isn’t knows the whole structure of the scientific tree. There aren’t available even published sources in full for the modern scientists, as young scientists simply do not know about them. In this situation the collections, archives and other ones of individual scientists or research groups can provide a link between the past and the modern science. A good example is the private library of well-known meteor researcher V. Fedynsky from Moscow. The study of the Fedynskiy special collections allowed the Kharkiv modern scientists to understand value of the International Geophysical Year program 1957 in the development of meteor research.

The Kunstkamera’s Archive: an Attempt of Historical Reconstruction of its Earliest Collections

Ekaterina Yurievna Basargina, Archive of Russian Academy of Sciences, St. Petersburg, Russian Federation

The Kunskamera, established in St.-Petersburg in 1714 was the first state public museum in Russia and one of the oldest world museums. After the founding of the Academy of Sciences in 1724, the Kunstkamera was put under the Academy’s supervision. The museum possessed unique collections in the areas of natural history and ethnography. During a century of its history the Kunstkamera went through a lot of serious changes. In 1747 it suffered great damage from a terrible fire: a great part of the museum collections was completely destroyed.
In the beginning of the 19th century, as the result of differentiation of scientific knowledge, several specialized academic museums were established on the basis of the encyclopedic Kunstkamera collections. New museums inherited some items of once a single collection and started their independent research work. The Kunskamera may be said to terminate with the creation of new museums.
The only academic institution which presently is keeping the memory about the Kunstkamera as a

whole collection is the Saint Petersburg branch of the Archive of the Russian Academy of Sciences. The Archive is a depository of manual catalogues of the Kunstkamera and the drawings of its earliest items, which are the only evidence of the initial period in the history of the Kunstkamera. The splendid enthomological watercolours by Maria Sibylla Merian, which were part of the Kunst-cabinet form the collection of global scientific and cultural importance. While the museum accumulated items from the academic expeditions, the expedition's iconographical materials were added to the depository of the Archive and now they have great importance for the history and origin of the museum collection.
Today the Saint Petersburg branch of the Archive of the Russian Academy of Sciences is working on goal-oriented identification, registration, record keeping and scientific description of all graphic materials devoted to the history of the first state museum of Russia. Just as the collections of the Kunstkamera served a valuable source of scientific research materials on the natural history for several generations of scientists, so do the unique collections of the Saint Petersburg branch of the Archive of the Russian Academy of Sciences serve the main source of materials for studies of the Kunstkamera's history and heritage.

Finding a Place to Sit

Aleksandra Majstorac-Kobiljski, CECMEC, CNRS/EHESS, Paris, France

Sometime in the early 1970s, if it is to be judged by the newspapers in which the papers were wrapped, a son of an important Japanese chemical engineer Shimomura Kōtaro deposited 25 boxes of documents in an archive of the University of Dōshisha in Kyoto, Japan.
It was a logical choice for the deposition because Shimomura was a graduate, a teacher, and finally the president of Dōshisha. But the "university archive" is a somewhat misleading translation of where the documents ended up. In fact, the boxes were left in a storeroom of an office called shashi (社史) which is a short for shashi shiryou sentā (社史資料センター). Many corporate entities, such as a business or a university, has such an office which is mostly a depository of institutional memory and occasionally produce institutional histories. Yet, the most important difference between a shashi and an archive is that archives, how ever limited, at least nominally assumes a degree of openness to the public and service to the historical profession. Shashi, on the other hand, have no such ambitions and thus often have very limited physical capacity to accommodate researchers. It is often quite difficult to find a place to sit and place one's notebook. Staff, while very kind, has limited training in archival techniques. Shashi is usually headed by a senior administrator who distinguished himself in his service to the corporation and comes to shashi to wait out his last pre-retirement years. Outsiders, regardless of their academic credentials, have a very delicate position on shashi premises, between an impostor.
This paper proposes to examine what happens when papers of an important scientist, discovered in an university sashi, launch a researcher into several years of negotiations over access, conservation, and digitizing of the Shimomura collection. Why were these documents preserved? How were they discovered and how preliminary findings can changes the way we think about the history of technology in Japan at the turn of the 20th century?

Against their own Recollections: Archival Evidence versus Community Folklore in 20th c. Italian Physics

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Writing history requires relying on different kind of sources, and among them a prominent place is taken, when dealing with contemporary science, by the historical actors' reminiscences and memories. Historians cannot avoid dealing with these documents, while being aware at the same time of their relevance as much as of their unreliability, unless checked against independent

evidence. The dominant picture of Italian 20th century physics has been up to now largely shaped by the narration that has been consigned to fellow physicists and to posterity by some of its main protagonists, and a sort of “community folklore” has emerged, building up an image of the development of the discipline in the country that is widely spread and accepted, with its highlights and its low moments.
In recent times a great effort has been done in Italy to collect, preserve and make available to researchers personal and institutional archives, providing scholars with a wealth of unpublished documents. Relying mainly on the physicists’ personal papers collected at the Physics Department of the University Sapienza in Rome, I will show how in some relevant instances the evidence gathered from these sources allows and requires to put under scrutiny the received versions of the story, raising issues that either had escaped the protagonists’ perception or were altered and misrepresented in their later reconstructions.