# **Guide to the Jean André DeLuc Papers**

#### MS 179



compiled by Staff of Manuscripts and Archives

September 1984

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#### Collection Overview

**REPOSITORY:** Manuscripts and Archives

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**CALL NUMBER:** MS 179

CREATOR: Luc, J. A. de (Jean André), 1727-1817

TITLE: Jean André DeLuc papers

**DATES:** 1746-1847

PHYSICAL DESCRIPTION: 17 linear feet

LANGUAGE: French

SUMMARY: Correspondence, lecture notes, and scientific writings of DeLuc and of

his nephew, Jean Andreé DeLuc (1763-1847), relating to his experiments in electricity, to lectures given in Geneva by the younger DeLuc, and to outstanding scientists of the period. Also notebooks of several geological expeditions in England, Wales, Belgium, Holland, Westphalia, and the Jura mountains (1778-1806). Correspondents of the elder DeLuc include Sir Joseph Banks, Varenne de Boest, Queen Charlotte and other members of the English royal household, William Hales, Abbé, Haüy, Sir William Herschel, James Hutton, Joseph Lalande, de la Métherie, Georges Louis Le Sage, Pilâtre de

Rozier, and James Watt.

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Key to the container abbreviations used in the PDF finding aid:

b. box

f. folder

#### **Administrative Information**

## **Immediate Source of Acquisition**

Purchased in 1939.

### **Conditions Governing Access**

The materials are open for research.

## **Conditions Governing Use**

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#### **Preferred Citation**

Jean André DeLuc Papers (MS 179). Manuscripts and Archives, Yale University Library.

### **Scope and Contents**

The Jean André Deluc Papers, purchased by the library in 1939, represent in part the archives of the Deluc family, established in Geneva since the 15th century. The collection contains in particular the scientific writings and the personal correspondence of Jean André Deluc, 1727-1817. It contains in addition the scientific papers of his nephew and namesake, Jean André Deluc, 1763-1847. It is catalogued individually. There are 5000 items in 42 boxes and 1 folio.

Jean André Deluc, the elder, a geologist and meteorologist, was noted for a vigorous and independent mind. His father, Jacques François DeLuc, 1598-1780, a substantial citizen of Geneva, and who, there is reason to believe, was a clock manufacturer, had philosophical interests besides. His name appears as the author of a work entitled "Observations sur les Savans Incrédules", (Genéve, 1762), treating of Diderot, Voltaire, Mandeville, etc. (It is regrettable that this collection does not contain any of Jacques François DeLuc's papers, known to include correspondence with Voltaire and Rousseau). This inheritance, together with a solid education gained in the liberal atmosphere of the republic of letters, obviously played an important part in the general direction towards scientific interests and speculations, for which Jean André DeLuc is noted.

Amongst the earliest papers in the collection is a scientific inquiry into the cause of dew, entitled "Dissertation et Expériences sur la Rosée", 1749 (probably unpublished). This modest paper was perhaps the beginning of DeLuc's great study of meteorology which culminated in his "Recherches sur les Modifications de l'Atmosphère..." (Genève, 1772). Probably the most complete treatise on the subject up to that time, it reviews and discusses the existing knowledge in detail, gives a description of the construction and use of barometers and thermometers (including DeLuc's own innovation of the mercury thermometer), and of many phenomena observed through their use. It describes new and original uses for these instruments, such as the measurement of the height of mountains by the use of the barometer, corrections in barometrical readings by the use of the thermometer, etc. Voluminous notes of DeLuc's original researches besides the final draft for a large part of the final published version appear in the collection.

Jean André DeLuc was early in life associated with a brother, Guillaume Antoine DeLuc, 1729-1812, in geological and mineralogical pursuits. Miscellaneous geological field notes and memoranda scattered through the collection indicate extensive travels in this connection, beginning with Switzerland (Jura Mts.), France (Savoye), and continuing in Italy (Vesuvius, Pozzuolo), Germany (west and center), Spain (Alicante), and the British Isles (Devonshire, Wales, Birmingham, Ireland, etc.). There are in addition references to a collection of fossil shells made by the two brothers, and amply supplemented by the younger Jean André DeLuc, 1763-1847, concerning which a letter from the latter to Barthélemy Faujas de Saint Fond gives enlightening details. Other geological notes include the following papers "Observations faites dans le Jura et particulièrement sur les blocs éepars de pierres primordiales" (1782), "Notes on a geological expedition through Birmingham, Shrewsbury, Llangollen[Wales], etc. "(1788), "Second Voyage en Devonshire" (1806), the diary of a journey through Belgium in 1778, and a notebook containing the account of a scientific expedition in Holland, Wesphalia, and along the Rhine, in 1778. It is regrettable that the collection does not include more original material of this nature. However, some of these geological writings are supplemented by DeLuc's scientific letters to Queen Charlotte of England, of which the drafts are included in the collection, and which were published in his "Lettres Physiques et Morales sur l'Histoire de la Terre et de l'Homme" (à la Haye, 1779). Also contained in the collection is the final draft for "Voyages géologiques dans quelques parties de la France et de l'Allemagne" (Paris, 1813).

These geological researches led the brothers Jean André and Guillaume Antoine DeLuc into philosophical speculations on the origins of the earth, just as it did most of the other geologists and naturalists of the time. Thus are found in this collection many papers relating to this aspect of geology, such as "Sur le Déluge. Sur la Théorie de Buffon", an unpublished essay by Guillaume Antoine, and "Réponse géologique à la Préface d'un Essai de Lithurgie, de M. Ch. Schmieder" (German version published in Brunswick in 1805), by Jean André. It seems to have been a main preoccupation of the latter's during his later years, and there are many references and commentaries on the theories of various contemporaries, James Hutton, Sir James Hall, John Plaifair, Cuvier, Carl Friedrich Wrede, Erasmus Darwin, Philip Howard, etc. DeLuc's first published views on this subject appeared in his "Lettres Physiques et Morales...", mentioned above.

Jean André, who appears to have been possessed of a deep sense of religion, was ultimately led into a curious position with regard to this philosophical preoccupation. A serious and conscientious scientist, he tried to reconcile the new geological discoveries with the Biblical account of the origins of the world. The maintenance of these views seems to have been accentuated by a growing anxiety concerning the advance of eighteenth century enlightenment, particularly of the "Aufklarung" in Germany. Drafts and original letters of his correspondence with Dr. Wilhelm Abraham Teller, dean of the Protestant churches in Berlin, are included in the collection, and are the same as were published in his "Privatcorrespondenz des Herrn D. Teller..." (Braunschweig, 1804; French version, Hannover, 1803). On the same subject appears a correspondence with Rev. G. J. W. Wolff, pastor of the Cathedral of Brunswick, resulting from DeLuc's "Lettre sur 1'Essence de Jésus-Christ adressée à M. le pasteur Wolff..." (Brunswic, 1803); and drafts for the introduction to DeLuc's "Lettres sur 1'Histoire Physique de la Terre, adressées à M. le Prof. Blumenbach, précédées d'un discours sur 1'obligation morale" (Paris, 1798).

Although DeLuc evidently started life in the family business, with science merely an avocation, reverses forced him to seek a living along other lines. Thus it was that a change in his life occurred in 1773, when he was invited to England to become reader in the household of Queen Charlotte, a post which he readily accepted, and retained until the end of his life. DeLuc's personal correspondence until then indicates relationships chiefly with French scientists, with a series of letters from Lalande, de La Métherie, Abbé Haüy, Pilâtre de Rozier, and Varenne de Beost; also a lifelong correspondence with Georges Louis LeSage. Now however opens up a wider horizon of associations with English, German, Dutch and Italian scientists. His travels in Germany brought him into contact with a certain group at Göttingen, and in Brunswick, Dr. Johann Georg Zimmerman, J. F. Blumenbach, Friedrich Leopold Stolberg, Johann Christoph Salfeld, Franz Xaver von Zach, and many others. His visits to the Hartz mountains resulted in a correspondence extending over a number of years with Berghauptman Claus Friedrich von Reden, a mineralogist of distinction (uncle of Friedrich Wilhelm von Reden, chamberlain to Frederick the Great). In England, where DeLuc soon became a Fellow of the Royal Society, his correpondence contains such names as Sir Joseph Banks, James Watt, William Hales, Sir William Herschel, James Hutton, Sir Richard Phillips, Nevil Maskelyn, William Allen (the scientist), Luke Howard, Archibald Maclaine, Matthew Maty, Benjamin Meggot Forster, Sir Francis W. Ronalds, William Roy, and Sir George Shuckburgh-Evelyn. In Holland, where DeLuc spent the

winter of 1779-1780, to oversee the publication of his "Lettres Physiques et Morales sur 1'Histoire de la Terre et de L'Homme", he was affably received, and established friendly realtions with C. C. van der Aa, J. H. Van Swinden, and others.

DeLuc's position in the household of Queen Charlotte resulted in a correspondence of certain non-scientific interest which it seems worth while to note. The people concerned were chiefly political figures in Hanover, Brunswick, and elsewhere in Germany. Interesting and intimate sidelights on events contemporaneous with the French Revolution and the Napoleonic Wars is contained in a lengthy correspondence with Freiherr Georg August von Steinberg, Hanoverian state officer, and with Freiherr August Nicolai von Preen, grand master in the court of the Dutchess of Brunswick; also with one De Pape, an unidentified private counsellor at Göttingen. In 1797, DeLuc made the journey to Göttingen on the occasion of his appointment as honorary professor. It served likewise as the opportunity to carry out a diplomatic mission of indeterminate nature, as evidenced by a correspondence with Duke Karl Ferdinand of Brunswick, Count Christian von Haugwitz, Johann Ludwig Graf von Wallmoden-Gimborn, and several others.

DeLuc at this time remained continuously in Germany for almost seven years, chiefly occupied in a crusade against irreligion, and his correspondence with a variety of political and social figures of the time, including Friedrich Wilhelm III of Prussia,[the Empress of Austria],Luise hereditary dutchess of Brunswick, etc., contains significant historical material.

After the series of geological letters to Queen Charlotte, DeLuc's correspondence with her and with members of the Royal family and entourage seems to have been fairly constant, and he appears to have remained a favorite at Windsor. During the political disturbances in Geneva around 1782, DeLuc, who was on the continent at the time, in great anxiety for his relations and family in Switzerland, delayed in returning to Windsor; the resulting correspondence with various members of the Queen's household, urging his immediate return, shows how much was valued his presence in the English Court.

The manuscripts dealing with DeLuc's experiments with electricity begin with the year 1782, and from 1800 continue almost without interruption until the end of his life. They include descriptive records and accounts of experiments with static electricity and with the Galvanic Pile, etc., together with drafts for the following published essays: "On the Galvanic Pile", and "On the Electric Column and Aerial Electroscope", both published in Nicholson's Journal of Natural Philosophy, 1810. There is evidence in the correspondence that DeLuc met Volta in 1782; and in LeLuc's "Essai d'Histoire de la Physique" (1804, unpublished), there are references to experiments by Louis Galvani, T. Cavallo, and Valli. Letters with references to electricity include the following names: J. Hendrik Van Swinden, (Sir Humphry Davyr), \*(William Allen), \*Benjamin Meggot Forster, Richard Phillips, and Sir Francis W. Ronalds; also Dudley Adams, instrument maker, brother of George Adams, the optician.

Jean André DeLuc, 1763-1847, nephew of the preceding, was primarily a geologist and palaeontologist. He evidently received an inspiration in his chosen field from his father, Guillaume Antoine DeLuc, and more particularly from his more famous uncle, Jean André. A little over a half of the DeLuc collection in the Library represents papers in the nephew's hand. They contain primarily informal writings in the various subjects treated in the form of notes for lectures which he delivered in Geneva. These were supplemented by innumerable additions during the course of his life, chiefly representing new discoveries or views of various scientists as they were published during those years. The notes are arranged in separate portfolios, of which some of the titles are as follows: "Du Déluge", "Fragments du Catalogue du Musée de Genève", "Sujets Géologiques", "Articles d'un Cours de Géologie", "Géographie Physique", "Coquilles... de la collection de la famille DeLuc", "Ossemens fossiles...", "Comparaison des fossiles d'Europe et de l'Amérique Nord", "Végétaux fossiles", "Poissons fossiles", "Formations primitives..., secondaires..., tertiaires...", "Tremblemens de Terre", "Glaciers des Alpes...", several folders on the subject of glacial drift, "Substances métalliques", "Substances combustibles", "Météorites...", "Espèces minérales", "Du Weald à la craie...", etc.

Included in these notes are articles and essays on special subjects, some of which were published in local scientific journals, such as the Bibliothèque Universelle (de Genève), Naturwissenschaftlicher Anzeiger der allgemeinen Schweizerischen Gesellschaft für die gesammten Naturwissenschaften, (Bulletin de la Société Hélvétique des Sciences naturelles, Berne), and Bibliothèque Britannique. These articles deal particularly with geological subjects relating to the theory of glacial drift, the formation of mountains,

or the effect of mountain snows on the general climate of the region, etc. Included also are printed items by other scientists, Alexandre Brongniart, Jean de Charpentier, Sir Henry Thomas De La Bêche, P. S. Rang. Also included with this material are a few autograph letters, C. L. von Buch, Jean de Charpentier, William Buckland, Pierre Prévost, Konrad Escher de la Linth, etc.

Answers to criticisms of DeLuc's "Histoire du Passage des Alpes par Annibal..." (Genève, 1818), published with the edition of 1826, are contained in a group of papers separate from the scientific papers. There are in addition, two portfolios of notes, "Ancien Testament", and "Nouveau Testament", as well as an essay entitled "Eclaircissemens sur 1'Apocalypse", which belong to his later years, and which indicate a certain interest in the religious thought of the day.

In general it may be said that the merit of the younger DeLuc's papers lies not so much in the record of original observations, of which there are relatively few, as in the richness of bibliographical material, consisting of innumerable quotations from and references to the outstanding scientists of the day.

\*Mentioned only.

H. LaFarge.

#### Arrangement

Arranged in two series: I. Correspondence. II. Writings.

## **Collection Contents**

## Series I: CORRESPONDENCE, 1746-1843

b.1	1746-1777	1746-1777
b. 2	1778-1783	1778-1783
b. <b>4</b>	1796-1801 A copy of this material is available in digital form from Manuscripts and Archives. Contact Manuscripts and Archives at <a href="mailto:beinecke.library@yale.edu">beinecke.library@yale.edu</a> to request access to the digital copy.	1796-1801
b. 3	1784-1795	1784-1795
b. 5	1802-1806	1802-1806
b. <b>6</b>	1807-1843, undated	1807-1843, undated

#### **Series II: WRITINGS**

b. 7	"Ancien testament"
b. 7	"Animaux marins"
b. 7	Articles d'un cours de Géologie
b. 8	Astronomy See also:box 43
b. 8	Aurores Boréales
b. 9	Biographical notes on Deluc correspondence
b. 9	"Classification des roches"
b. 9	"Comparaison des fossiles"
b. 10	"Coquilles bivalves"
b. 10	"Coquilles Univalves" I
b. 11	"Coquilles Univalves" II
b. 11	Déscription Géognostique de pays particulier
b. 12	Dr. Hutton's meteorology
b. 12	Du Déluge
b. 13	"Du Weald à la Craie"
b. 13	Éclaircissements sur 1'Apocalypse
b. 13	Electricity
b. <b>14</b>	Espèces minérales
b. <b>15</b>	Expériences sur la propagation de la chaleur dans 1'eau
b. <b>15</b>	"Extraits des lettres de Deluc sur 1'histoire de la terre et de 1'homme"
b. <b>15</b>	"Formations carbonates"
b. <b>16</b>	"Formations primitives et de transition"
b. <b>16</b>	"Formations secondaires"
b. <b>16</b>	Fragments du catalogue du Musée de Genève
b. 17	Genres et espèces fossiles d'aprèes Lamarck
b. 17	Géographie physique
b. 18	Géologie
b. 18	Geology
b. 19	Glacial drift, I-III

b. 20	Glacial drift, IV-V
b. 21	Glaciers
b. 21	The Hartley controversy ("Correspondance relative á la psychologie mécanique de Hartley")
b. 22	Investigations
b. 23	Investigations
b. 24	Investigations
b. 25	Investigations
b. 26	Le Sage et La Métherie - Correspondance
b. 27	Letters to Queen Charlotte ("Brouillons de lettres adressèes par Jean André Deluc à la Reine d'Angleterre")
b. 28	"Memoires sur la cause de la pluie"
b. 28	Météorites
b. 29	Notebooks, I-II
b. 30	Notebooks, III
b. 30	Notes relatives aux frères Deluc
b. 31	Notes sur la Géologie écrites en 1795
b. 31	"Nouveau testament"
b. 32	"L'obligation morale"
b. 32	Origins of the Earth
b. 32	"Ossements fossiles"
b. 33	"Ossements fossiles de la Suisse"
b. 33	Papiers relatifs au système de M. LeSage
b. 33	"Papiers sur Annibal"
b. 34, f. 494-498	"Papiers sur Annibal"
b. 34, f. 499-503	"Piemont. Analogues"
	"Poissons fossiles"
	"Reptiles et Sauriens"
b. 35, f. 513-515	Schmieder controversy
b. 35, f. 516	"Second voyage en Devonshire"
b. 36	Sujets divers de géologie
b. 36	"Substances combustibles"

b. 37	Substances métalliques
b. 37	Teller and the Aufklärung
b. 37	Teller correspondence
b. 38	Terrains indépendants
b. 38	"Terrains tertiaires"
b. 39	"Tremblements de terre"
b. 39	Trilobites - Crustacés
b. 39	"Vallon de Monetier"
b. 40	Végétaux fossiles
b. 40	"Volcans"
b. 41	"Voyage de Scoresby"
b. 41	Voyages géologiques dans quelques parties de la France et de 1'Allemagne
b. 41	"Zoologie et botanique"
b. 42	Unidentified
b. 42	Inventory of Deluc Papers in the Public and University Library, Geneva
b. 43	Astronomy (oversize)
b. 43	Newspapers and maps

#### **Selected Search Terms**

The following terms have been used to index the description of this collection in the Library's online catalog. They are grouped by name of person or organization, by subject or location, and by occupation and listed alphabetically therein.

#### **Subjects**

Electricity Geology Meteorology Religion and science Science

### **Geographic Names**

Great Britain

#### **Occupations**

Geologists Meteorologists Paleontologists

#### **Names**

Aa, Cornelis van der, 1749-1816 Adams, Dudley, 1762-1830 Allen, William Banks, Joseph, 1743-1820 Boest, Varenne de Charlotte, Queen, consort of George III, King of Great Britain, 1744-1818 Ferdinand, Karl, duke Forster, Benjamin Meggot, 1764-1829 Forster, Richard Phillips Hales, William, 1747-1831 Haugwitz, Christian August Heinrich Kurt, Graf von, 1752-1831 Haüy, René Just, 1743-1822 Herschel, William, 1738-1822 Howard, Luke, 1772-1864 Hutton, James, 1726-1797 Lalande, Joseph Jérôme Le Français de, 1732-1807 La Métherie, Jean-Claude de, 1743-1817 Le Sage, Georges-Louis, 1676-1759 Luc, J. A. de (Jean André), 1763-1847 Maclaine, Archibald, 1722-1804 Maskelvne, Nevil, 1732-1811 Maty, Matthew, 1718-1776 Phillips, R., Sir (Richard), 1767-1840 Preen, August Nicolai, Freiherr von.

Ronalds, Francis, Sir, 1788-1873 Roy, William, 1726-1790 Shuckburgh-Evelyn, George Augustus William, Sir, 1751-1804 Steinberg, Georg August, Freiherr von. Swinden, Jan Hendrik van, 1746-1823 Wallmoden, Johann Ludwig, Graf von Wallmoden-Gimborn, 1736-1811 Watt, James, 1736-1819