# ARCHIVIO STORICO

PER LE

# PROVINCE NAPOLETANE

### pubblicato a cura della SOCIETÀ NAPOLETANA DI STORIA PATRIA

CXL DELL'INTERA COLLEZIONE



NAPOLI SOCIETÀ NAPOLETANA DI STORIA PATRIA 2022

## ARCHIVIO STORICO PER LE PROVINCE NAPOLETANE

Volume CXL (2022)

#### SOCIETÀ NAPOLETANA DI STORIA PATRIA CASTELNUOVO - 80133 NAPOLI Ccp. 16529802

ISSN 0392-0267

Presidente Renata De Lorenzo

Vicepresidente Giovanni Muto

*Tesoriere* Nicola De Blasi

Consiglio direttivo

Carolina Belli, Giangiotto Borrelli, Luigi Mascilli Migliorini, Alessandra Perriccioli,

Mario Rusciano, Francesco Senatore, Giovanni Vitolo

Sindaci Alessandra Bulgarelli Lukacs, Silvio De Majo, Vittoria Fiorelli

Circolo numismatico
Marina Taliercio

#### ARCHIVIO STORICO PER LE PROVINCE NAPOLETANE

 $Comitato\ direttivo$ 

Renata De Lorenzo (direttore responsabile), Carolina Belli, Giangiotto Borrelli,
Alessandra Bulgarelli, Nicola De Blasi, Silvio De Majo,
Vittoria Fiorelli, Luigi Mascilli Migliorini, Giovanni Muto,
Alessandra Perriccioli, Mario Rusciano, Francesco Senatore,
Marina Taliercio, Giovanni Vitolo

Comitato scientifico

David Abulafia, Jean-Paul Boyer, Caroline Bruzelius, John A. Davis,
Mario Del Treppo, Bruno Figliuolo, Paolo Frascani,
Brigitte Marin, Angelantonio Spagnoletti, Nicola Spinosa

#### Redazione

Alessandra Perriccioli, Francesco Senatore (coordinatori),
Domenico Cecere, Silvana D'Alessio, Rosa Maria Delli Quadri,
Rosalba Di Meglio, Teresa D'Urso, Corinna Guerra,
Maria Rosaria Rescigno, Francesco Storti, Antonella Venezia
Consulenza per i testi in inglese: Domenico Cecere, Donatella Perriccioli

Per la sezione Saggi, la redazione si avvale anche di valutatori esterni in forma anonima.



#### AN UNKNOWN LETTER BY CHARLES DARWIN TO THE SEISMOLOGIST ALEXIS PERREY

The correspondence of Charles Darwin (1809-1882) is an extraordinary and practically limitless resource which continues to reveal surprises to historians dealing with the 19th century.

After Darwin's death, his son Francis edited a selection of his father's letters into five volumes<sup>1</sup>. However, it was not until 1985 that the publication of the great naturalist's correspondence in its entirety began<sup>2</sup>; a project which continues to the present day. That same year the collection of all the letters thus far identified was also printed<sup>3</sup>, whilst a second edition, including supplements, was published nine years later<sup>4</sup>. As of late 2021, 28 volumes have been published, the last of which is dedicated to the letters of 1880.

Darwin's letters, including almost 2,000 different correspondents, amount to over 15,000 documents and date from the period 1821 to 1882. Since 2002, a digital version of all the letters has been available as an online database, continually updated as new findings are reported. More than 12,000 letters, dating until 1878, have so far been completely transcribed to this database, while a summary of the content is available for those yet to be transcribed.

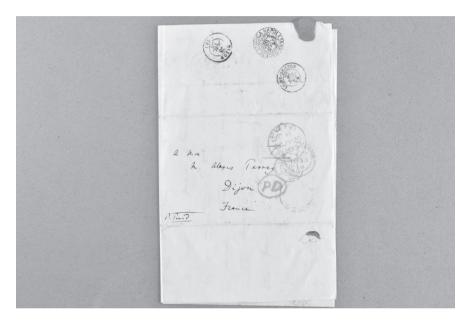
However, despite the careful selection and wide-ranging research undertaken by the editors of the Darwinian correspondence, new letters by the English naturalist continue to emerge. That is the case with the previously unknown letter presented here for the first time in transcription<sup>6</sup>, together with

- \* We would like to thank the staff of the Library of the Società Napoletana di Storia Patria, in particular its responsible, Paola Milone, and the head of the Manuscripts section, Silvana Musella, for having allowed the consultation and digital reproduction of the Darwinian document. We would also like to thank Sofia Baranello of the INGV-Bologna for the revision of the article.
- <sup>1</sup> The Life and Letters of Charles Darwin, ed. F. Darwin, 3 vols., London, John Murray, 1887; More Letters of Charles Darwin, eds. F. Darwin A.C. Seward, 2 vols., London, John Murray, 1903.

<sup>2</sup> The Correspondence of Charles Darwin, ed. F. Burkhardt - S. Smith, Cambridge, Cambridge University Press, 1985-.

- <sup>3</sup> A Calendar of the Correspondence of Charles Darwin, 1821–1882, eds. F. Burkhardt S. Smith, associate editors D. Kohn W. Montgomery, New York, Garland, 1985.
- <sup>4</sup> A Calendar of the Correspondence of Charles Darwin, 1821–1882, with Supplement, eds. F. Burkhardt S. Smith, Cambridge, Cambridge University Press, 1994<sup>2</sup>.
- $^5\,$  Darwin Correspondence Project, accessed on 23 October 2021 (www.darwinproject. ac.uk/).
- <sup>6</sup> Mentioned for the first time in E. GUIDOBONI J.E. EBEL, Earthquakes and Tsunamis in the Past. A Guide to Techniques in Historical Seismology, Cambridge, Cambridge University

the reproduction of the original and its envelope (Fig. 1), which was written by Darwin to the French seismologist Alexis Perrey (1807-1882) in response to a lost "note". The original letter is preserved in the correspondence of Perrey at the Library of the Società Napoletana di Storia Patria. In 1894 the institution received a donation, known as the Fondo Sismico (Seismic Fund) from the Club Alpino of Naples which included both the library and archive of Perrey, bought in 1878 with a grant from the Municipality of Naples. The archive of the French seismologist contains over 3,000 letters, dating from the period 1842-1873 and written by more than 400 correspondents<sup>7</sup>.



The envelope of the letter written on 25 July 1853 by Charles Darwin to the French seismologist Alexis Perrey (1807-1882).

Naples, Library of the Società Napoletana di Storia Patria, correspondence of Perrey, 4D.

Alexis Perrey was born in Sexfontaines, north-eastern France, on 6 July 1807 and in 1837 settled in Dijon, where he was to live for three decades. In 1847 he became professor of Applied Mathematics, a position created specifically for him. Perrey's interest in seismology began in 1841, when he published a brief essay on the earthquakes which occurred from AD 306 to 1583 and their annual frequency. After that, he wrote 28 essays containing annual lists of seismic events for the years 1843-1871 (the list for the year 1872 remained

Press, 2009, pp. 192-194.

<sup>&</sup>lt;sup>7</sup> P. MILONE, Alexis Perrey e il Fondo Sismico della Società Napoletana di Storia Patria, in «L'Appennino meridionale», 1 (2004), pp. 123-126; L. Esposito, Il Fondo Sismico della Società Napoletana di Storia Patria, in Viaggio nelle aree del terremoto del 16 dicembre 1857. L'opera di Robert Mallet nel contesto scientifico e ambientale attuale del Vallo di Diano e della Val d'Agri, ed. G. Ferrari, Bologna, SGA, 2004, vol. 1, pp. 331-336.

unpublished) recording a total of over 21,000 earthquakes, and further compiled 21 regional monographs for a total of 9,000 earthquakes between 1845 and 1866. In the decade between 1856 and 1865 Perrey published the *Bibliographie Séismique* which includes 4,098 titles, regarding not only topics of seismology, but also volcanic eruptions and other geological phenomena. Perrey died in Paris on 29 December 1882<sup>8</sup>.

Darwin's letter was written on 25 July 1853 (Figg. 2, 3). Although the year is not explicitly indicated in the letter, it can be inferred from the postmark on the envelope. The letter is addressed from "Down, Bromley, Kent", which was Darwin's usual residence, perhaps because the "note" sent by Perrey had arrived when Darwin was still in Down. It is known that between late July and the beginning of August 1853 Darwin was on holiday in East Sussex, on the south coast of England<sup>9</sup>. The chronological context in which this letter falls is as follows: around 12 or 13 July 1853<sup>10</sup>, Darwin received an unspecified "note" from Perrey dated 9 July. On 14 he was in Eastbourne and visited Brighton and Hastings. After that, on 25 of the same month, he answered Perrey and on 4 August he finally returned to his home in Down<sup>11</sup>.

The letter under review represents the first epistolary contact between the two scholars and likely remained the only one. Responding to his interlocutor Darwin states that, in his opinion, the account of his journey aboard the Beagle (1831-1836), namely his *Journal of Researches*, published for the first time in 1839<sup>12</sup>, is of little value for the Perrey's seismological research and that when he returns home he will find the catalogue of earthquakes recently published by Perrey himself.

<sup>8</sup> Biographical information on Perrey, with a bibliography of his writings divided into topics, are contained in E. Rothé - H. Godron, Alexis Perrey, professeur à la Faculté des sciences de Dijon, sismologue français, in «Mémoires de l'Académie des Sciences, Arts et Belles-lettres de Dijon», 1924, pp. 169-256. See also C. Davison, The Founders of Seismology, Cambridge, Cambridge University Press, 1927, pp. 47-64 (repr. New York, Arno Press, 1978). The context of Perrey's activity in the field of seismology studies in France is outlined in J. Fréchet, Past and future of historical seismicity studies in France, in Historical Seismology. Interdisciplinary Studies of Past and Recent Earthquakes, eds. J. Fréchet - M. Meghraoui - M. Stucchi, Berlin, Springer, 2008, pp. 131-145, in particular pp. 133-134.

<sup>9</sup> Darwin's Journal, ed. G. de Beer, in «Bulletin of the British Museum (Natural History) Historical Series», 2 (1959-1963), pp. 3-14, p. 13. For a more accurate transcription of the text found in the original manuscript (fol. 32r), found in 1962 (after the edition edited by de Beer), see *The Complete Work of Charles Darwin Online*, ed. J. van Wyhe, 2002-, accessed on 23 Octo-

ber 2020 (http://darwin-online.org.uk/).

The travel times of Perrey's "note" are derived, by analogy, from the stamps of the envelope containing Darwin's letter, which was sent from Eastbourne on 25 July 1853, arrived in Calais on 27 and in Dijon on 28 July.

11 These chronological data are derived from the letter of Darwin and de Beer, *Darwin's* 

Journal (cit. note 9).

The first edition of this work was published with the title of the Journal and Remarks 1832-1836, as vol. III by Robert FitzRoy (ed.), Narrative of the Surveying Voyages of His Majesty's Ships Adventure and Beagle, London, Henry Colburn, 1839; the second edition appeared as Journal of Researches into the Natural History and Geology of the Countries Visited during the Voyage of H.M.S. Beagle Round the World, under the Command of Capt. Fitz Roy, R.N., London, John Murray, 1845. The final text was published in 1860. The work later became known as The Voyage of the Beagle; see R.B. Freeman, The Works of Charles Darwin. An Annotated Bibliographical Handlist, Folkestone, Dawson, Archon Books, 1977<sup>2</sup>, corrected, supplemented and updated in the Freeman bibliographical database (see The Complete Work, cit. note 9).

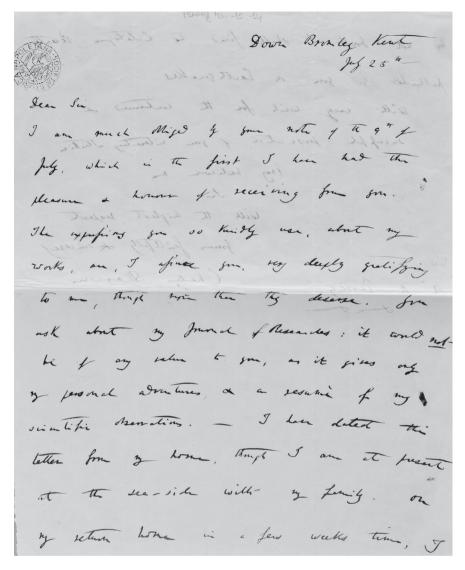


Fig. 2.

Letter written on 25 july 1853 by Charles Darwin to the French seismologist Alexis Perrey.

Naples, Library of the Società Napoletana di Storia Patria, correspondence of Perry,

4D, recto.

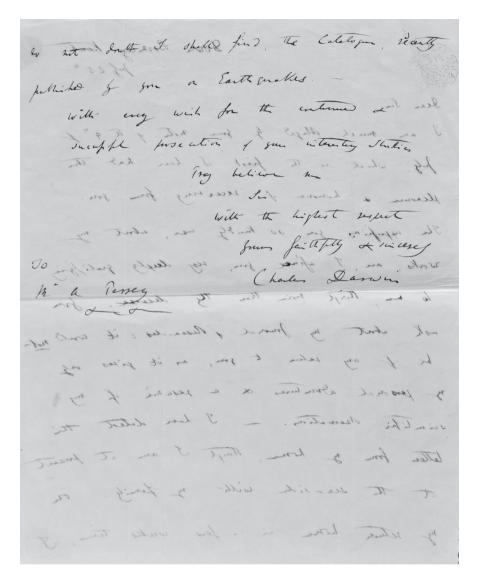


Fig. 3. Letter written on 25 july 1853 by Charles Darwin to the French seismologist Alexis Perrey. Naples, Library of the Società Napoletana di Storia Patria, correspondence of Perry, 4D, verso.

In 1853, one of the French seismologis's annual lists of earthquakes, specifically that relating to the year 1852 was published<sup>13</sup>. This, however, appears to be an unsuitable publication to identify as the "Catalogue" mentioned by Darwin. A more plausible candidate would appear to be the catalogue on the earthquakes in Chile, a large section of which is dedicated to the earthquake of 20 February 1835. Darwin himself felt that earthquake while he was in Valdivia, southern Chile, as he recalled in a letter dated 10 March 1835 to his sister Caroline and in the account of his journey on the Beagle<sup>14</sup>. In his Catalogue, Perrey<sup>15</sup> transcribes reports from several travellers, including the information published by Darwin himself in his essay in 1840<sup>16</sup>. But since this catalogue is dated 1854, and it appears from Darwin's reply that Perrey's catalogue had been "recently published", these chronological data contradict this interpretation. Since there are none of Perrey's publications<sup>17</sup> in Darwin's library, it remains unclear which catalogue Darwin would have found on his return to his house in Down.

Alberto Comastri – Graziano Ferrari

<sup>13</sup> A. Perrey, *Tremblements de terre ressentis*, en 1852, in «Bulletin de l'Académie Royale

des Sciences, des Lettres et des Beaux-arts de Belgique», 20, 2nd part (1853), pp. 39-69.

14 See *Darwin Correspondence Project* (cit. note 5) and the *Journal of Researches*, 1860 (cit. note 12), pp. 301-302. For a coeval account on this large seismic event, see, for example, A. Caldcleugh, An account of the great earthquake experienced in Chile on the 20th of February, 1835, in «Philosophical Transactions of the Royal Society», London, 126 (1836), pp. 21-26; a mathematical simulation of the effects of this earthquake based directly on Darwin's descriptions in the Journal of Researches has been proposed by S.U. Galiev, The theory of non-linear transresonant wave phenomena and an examination of Charles Darwin's earthquake reports, in «Geophysical Journal International», 154 (2003), pp. 300-354 in particular on p. 325. On the relations between the 1835 and 2010 Chile earthquakes see D. Melnick - M. Moreno - M. CISTERNAS - A. TASSARA, Darwin seismic gap closed by the 2010 Maule earthquake, in «Andean Geology», 39 (2012), pp. 558-563, in particular pp. 559 and 561.

A. Perrey, *Documents relatifs aux tremblements de terre au Chili*, in «Annales de la

Société Impériale d'Agriculture, d'histoire naturelle et des arts utiles de Lyon», 6 (1854), pp.

232-437.

16 C. DARWIN, On the connexion of certain volcanic phenomena in South America, in South Amer The Collected Papers of Charles Darwin, ed. P. Barrett, Chicago, Chicago University Press, 1977, vol. 1, pp. 53-86.

Catalogue of the Library of Charles Darwin now in the Botany School, Cambridge, ed. H.W. Rutherford, Cambridge, Cambridge University Press, 1908; List of books received in the University Library Cambridge March – May 1961, typescript; Charles Darwin's Marginalia, ed. M.A. Di Gregorio, with the assistance of N.W. Gill, New York, Garland, 1990.

### Appendix

To Alexis Perrey 25 July [1853] Down Bromley Kent July 25<sup>th</sup> [1853]

Dear Sir

I am much obliged by your note of the 9<sup>th</sup> of July, which is the first I have had the pleasure & honour of receiving from you.

The expressions you so kindly use, about my works, are, I assure you, very deeply gratifying to me, though more than they deserve. You ask about my *Journal of Researches*: it could <u>not</u> be of any value to you, as it gives only my personal adventures & a resumé of my scientific observations.—I have dated this letter from my home, though I am at present at the sea-side with my family. On my return home in a few week times, I do not doubt I shall find the Catalogue recently published by you on Earthquakes

with every wish for the continue & successful prosecution of your interesting studies

try believe me | Sir | with the highest respect | Yours faithfully & since-rely | Charles Darwin

To | Mr. A Perrey