The Correspondence of Sir Julius von Haast

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This paper describes the correspondence of Sir Julius von Haast (1822–1887), with a focus on the primarily inward correspondence held in the collections of the Alexander Turnbull Library. The review of prior scholarly engagement with the correspondence looks at examples of letters published to date. After describing the correspondence and previous editions the concept for a project to prepare a Haast Bicentenary Edition is then presented.

The overview of the archival holdings, including their arrangement and description, gives an insight into the organisation of the collection, the hierarchical structure of the finding aids and indexing through name authority terms, and how this assists discoverability for researchers.

The review of the publication of letters comprising those published during Haast's lifetime and posthumously, initially in the biography by Heinrich Ferdinand von Haast published in 1948, and then as part of various projects since the collection was donated to the Alexander Turnbull Library, shows the added value achieved through published editions.

In outlining the concept for a project to prepare a scholarly annotated edition of correspondence, the possible arrangement is delineated, presenting letters grouped by language, correspondent, and date. Some of the tasks and requirements of the project are considered, and the options for forms of output in print editions and potential encoding for digital publication are discussed.

As the extant collection held in the Alexander Turnbull Library comprises mostly inward correspondence, the value of looking at other archival holdings for outward correspondence is noted. With the ultimate aim being to bring together the two halves of conversations, gaining a fuller understanding of correspondence networks, and contributing to a richer documentation of nineteenth-century New Zealand history of science and the life and work of Sir Julius von Haast.

Keywords: Alexander Turnbull Library, archives, arrangement & description, correspondence, editing, history of science, Julius von Haast, nineteenth century, publishing, transcription, translation.

Introduction

The inward correspondence of Sir Julius von Haast (1822–1887) (Fig. 1) is held in the collections of the Alexander Turnbull Library, National Library of New Zealand, Wellington.¹ This corpus of correspondence has been the subject of extensive scholarly engagement, resulting in publications ranging from individual excerpts to entire editions of correspondence with individuals, but there is still more to be gleaned from this primary source material in terms of historical and biographical evidence. The review of the letters published to date and discussion of these legacy formats and prior projects, leads to a proposal for a new project to prepare archival manuscript letters for publication.

This overview of the archival holdings in the Sir Julius von Haast Collection (ATL-Group-00475),² including their arrangement and description, gives an insight into the archival organisation of the collection, the hierarchical structure of the encoded finding aid and indexing through encoded name authority terms, and how this assists discoverability for researchers.³

The legacy interfiling and sorting of letters are noted, with a lack of clear delineation between the main corpus of inward correspondence and Haast's autograph collection of letters originally addressed to others, resulting in blurred provenance and loss of original order in contravention of archival principles.

The review of the publication of letters provides an historical overview beginning with examples of those published during Haast's lifetime, when letters he wrote were published in newspapers and journals or formed the basis of articles. Posthumously, his papers moved into the custody of his son Heinrich Ferdinand von Haast (1864–1953), who eventually prepared a monumental biography of his father under the title *The Life and Times of Sir Julius von Haast*, self-published in 1948. This biography incorporated a rich selection of letters and excerpts from letters, including translations. Once the biography had been published, the papers were donated to the Alexander Turnbull Library in successive deposits between about 1948 and 1953.

Identifying the various efforts to publish selected letters and editions of correspondence since the collection was donated to the Alexander Turnbull Library gives an insight into scholarly engagement with the collection, and the contribution and added value achieved through published editions in print and digital formats.

In outlining the concept for a project to prepare a scholarly annotated edition of correspondence, the possible arrangement is delineated, following the major language subdivisions, and within each language group the arrangement by correspondent in alphabetical order, and the letters of each correspondent in chronological order. This approach would align with what was originally attempted and aimed for in the arrangement of the collection by the Alexander Turnbull Library.

The requirements of such a project to prepare archival manuscript letters for publication are then considered, including the tasks of editing, describing, transcribing, translating, annotating, proofing, formatting and encoding. The options for forms of output in print editions and encoding for digital publication are considered,⁴ and the hosting of such a digital edition is explored.

The fact that the extant collection comprises mostly inward correspondence provides an opportunity to look at the holdings of other archival institutions and private collections, to see where Haast's outward correspondence can be identified and integrated into the edition. Any opportunity to bring together the two sides of a given correspondence will result in a deeper insight into Haast's conversations, a fuller understanding of his correspondence networks, and ultimately contribute to a richer documentation of nineteenth-century New Zealand history of science and the life and work of Sir Julius von Haast.

The Correspondence

The Sir Julius von Haast Collection in the Alexander Turnbull Library, is also known as the Haast Family Collection as it includes the papers of two generations thus making the family the provenancial entity, it is a large multi-format archival collection of considerable historical research value and international significance, as recognised by the inscription in the New Zealand UNESCO Memory of the World register in 2019. The collection comprises material in many formats, including papers, photographs, drawings, paintings, maps and various objects ranging from medals to furniture (Nolden 2017).

The letters in the collection represent the complete known extant inward correspondence of Haast. The collection also includes some examples of outward correspondence, mostly to members of his family. There are also letters addressed to others that were not written by Haast himself, which are described below as Haast's autograph collection.

Haast was a very regular and prolific correspondent and appears to have kept most of the letters he received, including personal correspondence (from family and friends), scientific correspondence (formal and informal communications between scientists), business correspondence (relating to his professional activities in a variety of capacities and roles), official correspondence (mostly from provincial and central government administration and in relation to his role as New Zealand Commissioner), and his diplomatic correspondence (comprising letters addressed to him in his consular role).

When Haast died his papers, including the correspondence, were inherited by his son Heinrich von Haast in accordance with the will, which states: "I bequeath all my medals, Diplomas, Manuscripts,

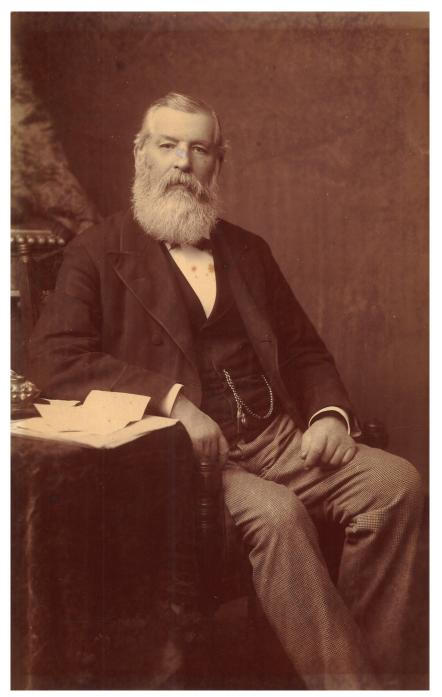


Figure 1. Photographic portrait of Sir Julius von Haast seated with items of correspondence. Photograph by Alexander Bassano, London, 1886. Alexander Turnbull Library PAColl-4711-1

Scientific Correspondence and presentation copies of books unto my Son Heinrich v. Haast as and in the nature of heir-looms" (Christchurch Probate Files CH1457/1887, Archives New Zealand).

The inward correspondence dates from 1858, when he arrived in New Zealand, to the last year of his life in 1887. The letters have been arranged in archival series by language. The language of the letters, English, French, German and Italian, determines this broadest delineation. It should also be noted that the Italian language letters in the Italian and other letters series actually belong to the autograph collection described below, rather than the inward correspondence, as Haast himself does not appear to have corresponded in Italian.

The letters in each series are housed in folders arranged more or less in alphabetical order according to the surname of the correspondent. This is where the work, undertaken by the Alexander Turnbull Library staff when the collection was originally processed, encountered difficulties, resulting in a range of inconsistencies.⁵ This was largely due to the misidentification of contributors (i.e. correspondents) and the disassociation of individual pages of letters, mistakenly assumed to be fragments, and the ignoring of original identifiers annotated on the first page of letters, during the process of sorting and imposing a new order of arrangement.

The letters from a given correspondent, often spread across multiple folders, were then arranged more or less in chronological order, based on the reading or misreading of dates.

The finding aid is a legacy one, originally in the form of a typescript listing or manuscript papers inventory, which was then used as the basis for the first electronic Collection Management System known as TAPUHI introduced in 1992, and later migrated to the EMu (Electronic Museums) database rendered via IMu (Internet Museum) as Tiaki, the Alexander Turnbull Library's online catalogue for unpublished collections (Fig. 2). Over time improvements were made to the finding aid, resulting in the increased accuracy of metadata and enhanced discoverability for researchers (Nolden 2017).

The level of description in the catalogue is mostly to folder level and includes the date range of the letters and the names of correspondents and institutions they were affiliated with based on printed letterheads.⁶ The names of correspondents and institutions are in the form of encoded name authority index terms.⁷ These name authority terms enable material relating to the same named entity to be linked within the Collection Management System (i.e. the finding aid), across the entire unpublished collections holdings of the Library.

Each of the name authority entries has an associated role in the descriptive record. In most instances the correspondents will have the role of Contributor, while other names mentioned in the letters are assigned the role of Subject.

Biographical information about a correspondent is captured as part of the metadata in the Biography/ History field in the name record, as it applies to the collection material this name is linked to. For example, the name authority might be linked to a carte de visite portrait as Subject and to a folder of letters as a Contributor, both within the Haast Collection.

Haast's Autograph Collection

Letters Haast collected, but which were not addressed to him, have all been interfiled in the main correspondence series by the Library. Most of this material from Haast's autograph collection can be identified as it falls outside the date range of the letters addressed to Haast and many of them are clearly addressed to others.

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Only Born Digital Content:	Scope and Contents:	Haast (1864-1953) inherited the collection from his father and used it as the basis for his research and added his own papers from his work as an author and editor. The collection comprises correspondence, manuscripts, documents, certificates, and printed matter, including newspaper cuttings, photographs, drawings and sketches,		
Only Digitised Content:	ocope and contents.	maps, and curios. The papers are arranged in series of 'Offic	ial papers and correspondence', 'Personal correspondence', 'Mar	nuscripts', and 'Printed material'. The letters are
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		de visite and cabinet card format. The drawings, paintings, and	nd prints part of the collection consists mainly of sketches execute k in the provinces of Nelson, Canterbury, and Westland. Many fea	ed in pencil, ink, and watercolour, and largely
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		including medals and awards, along with porcelain and furnit	ure. nly relate to his work as an editor and writer, especially the prepar	ration of the biography of his father published in
		1948.	ing rolate to file work as all calles and writer, especially the propar	autor of the biography of the father published in
	Arrangement:	Various parts of the collection were formerly described in sepa- the common provenance of the material.	arate finding aids based on format. The separate components have	ve been brought together as a collection to reflect
	Custodial History:	The papers of Sir Julius von Haast were inherited by his son a publishing 'The Life & Times of Sir Julius von Haast' in 1948, death in 1953.	and biographer Heinrich Ferdinand von Haast, who donated them with some residual material from his estate being deposited by his	to the Library along with his own papers after s widow Mary von Haast following her husbands
	Acquisition Information:	Collection donated to the Alexander Turnbull Library by Heinri	ch Ferdinand & Mary von Haast, Wellington, 1948-1953.	
	Processing Information:	Collection previously dispersed among different curatorial sec in this finding aid based on common provenance in 2020.	tions based on format and described in separate groups of forma	t-based descriptive records, were brought together
	Other Descriptive Data:	Title supplied by Library.		
	Note:	Collection inscribed in UNESCO New Zealand Memory of the	World register in 2019.	
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Figure 2. Collection record of the online finding aid for the Haast Family Collection in the Alexander Turnbull Library

The autograph letters Haast collected fell into two categories: Firstly, a letter from Leopold von Buch (1774–1853) to Heinrich von Dechen (1800–1889), gifted to Haast by the latter, along with a no longer extant letter written by Alexander von Humboldt (1769–1859); and secondly, a group of 40 letters addressed to the Bonn mineral dealer August Krantz (1808–1872) in French, German, and Italian from the period 1849–1851, and a single letter written in 1887.

As mentioned above, all the Italian letters in the collection are in fact addressed to Krantz, as Haast does not appear to have corresponded in Italian with his colleagues and friends in Italy.

The autograph collection represents earlier contributors in the fields of mineralogy and the broader geosciences. It becomes apparent from a letter written to Haast by his friend and mentor Dechen in Bonn, dated 9 February 1887 (ATL MS-Papers-0037-168-2), that during his visit to Bonn in 1887 Haast had expressed a desire to bring an original holograph Alexander von Humboldt letter to New Zealand.⁸ Dechen then sent him both the Buch and Humboldt letters. But while the lesser known Buch is now represented in the collections by the letter dated Berlin, 25 December 1851 (ATL MS-Papers-0037-166-2), there is no record of the Humboldt letter (which was dated 4 March 1853) in the extant collections of the Library.

Using this example, we are able to glean details relating to the provenance and significance of some of the material interfiled among the main sequences of inward correspondence.

"Von Buch" was the cognomen bestowed on Haast when he was elected as a Fellow of the German Academy of Sciences Leopoldina (now the German National Academy of Sciences). All fellows had cognomen at the time, and Haast was Von Buch IV. Haast was justly proud of this association, as he had previously discussed the elevation crater theory of Buch with the geologist Ferdinand von Hochstetter (1829–1884) in his early correspondence (Nolden 2013: 55).⁹ The Buch letter allows a scholar to glean some of Buch's humour, as he describes the personality of Sir Roderick Impey "Vanity" [Murchison] in the letter.¹⁰ Dechen makes it clear in his 1887 letter to Haast, that he had chosen to gift him the Humboldt letter in this pairing as it describes the death of Buch.

The autograph collection of letters addressed to Krantz comprises letters from friends, colleagues, clients and collectors. Many of these feature lists of minerals being ordered or offered and provide a rare insight into the operations of the head of one of the most successful mineral dealerships in Europe, who had just shifted his enterprise from Berlin to Bonn in 1850, the year from which most of these letters are dated. Haast who had close connections with the firm, may have worked with Krantz prior to his move to New Zealand and certainly stayed with Krantz's son-in-law Theodor Hoffmann during his visits to Bonn in 1886–1887. It would appear most likely that the letters were acquired at this time, probably also in the form of a gift.

Heinrich von Haast makes reference to this group of letters. He noted that:

[A] bundle of business letters (1849–1851) to Dr. August Krantz, a dealer in minerals, first in Berlin and then in Bonn, from various mineralogists, some giving lists of minerals and prices, preserved by Haast, suggest that he was either connected with Krantz's business or was himself a dealer in mineral specimens (Haast 1948: 3).

This strongly suggests that Heinrich von Haast was not the person responsible for interfiling this tranche or bundle of letters with Haast's inward correspondence and that this new order was only imposed after the collection came to the Library. It is not clear whether Heinrich von Haast made the connection between these letters and the later visit of Haast to Bonn (where he was hosted at the home of the director of Krantz's establishment), when he was actively seeking other autograph letters for his collection. It is highly unlikely that Haast would have acquired this business correspondence from Krantz before his original departure from Europe in 1858, and packed these in his teak travelling trunk alongside the pair of duelling pistols and Masonic paraphernalia, but more likely he acquired them in 1886–1887 in Bonn.

The Italian letters addressed to Krantz are from Arcangelo Scacchi (1810–1893), Director of the Museo Mineralogico di Napoli, from the period 1849–1850 (ATL MS-Papers-0037-237-1 to -7). The French and German letters, however, are from a variety of individuals (Appendix: Table 1).

The Haast autograph collection, letters collected by Haast but addressed to others, is described here for the first time, and should be seen as a discrete sub-corpus or subseries of the Haast Collection. In considering the options for the preparation and publication of an edition of Haast correspondence below, the letters that might be attributed to the autograph collection may best be served by a standalone publication.

Published Correspondence

Haast's letters published during his lifetime appeared in newspapers and journals. Examples of these may be found in New Zealand and Europe. Early letters to the editor were published in newspapers in Nelson during the time of Haast's first independent exploratory surveys in New Zealand following Hochstetter's departure for Europe after his geological surveys had been completed. Some of the more prominent examples are letters sent to European contacts, which were then communicated via journals in the form of published letters, articles or notices reporting on Haast's latest explorations or discoveries.

Hochstetter used excerpts from Haast's letters as communications to Viennese learned societies, and August Petermann (1822–1878) of Gotha used them for articles in the geographical journal he edited.

Heinrich von Haast first published a special article prepared for a newspaper in which he used extensive excerpts from letters by Joseph Hooker to Haast (Haast 1929). He then looked at the correspondence in detail while preparing his biography of Haast, often known by the abbreviated title of *Life & Times* (Haast 1948). In this monumental work, one of the largest biographies ever published in New Zealand, comprising over 1,000 pages, Heinrich von Haast makes extensive use of his father's correspondence. This included excerpts of letters in languages other than English, quoted as English translations. These excerpts give the biography an authenticity and immediacy, and represent the first instance of these particular letters being published. The 1948 biography is built on three major groups of sources: Haast's publications and reports, contemporary newspapers and other secondary sources, and the correspondence.

Heinrich von Haast laments the fact that he had to rely almost entirely on inward correspondence for the work, as the only outward letters by Haast were those addressed to his own family, including young children (Haast 1948: xii). Despite the one-sided nature of the material available to him, Heinrich von Haast had an enormous advantage over others working on the life of Haast at the time, who had no access to these archival primary sources, and consequently the work of Burdon has been largely overlooked (Burdon 1950).¹¹

Since the letters were deposited with the Alexander Turnbull Library in 1948–1953 (Taylor 1962), there have been numerous examples of individual letters and selections of letters published and cited. Some examples are also found in academic theses and dissertations (Nolden 2002, 2007).

A brief survey of this literature and scholarship reveals the intrinsic research value of correspondence, as historical and biographical evidence. To mention just a few, Janet Paul, Art Librarian at the Alexander Turnbull Library from 1971 to 1980, wrote a piece on John Gully's watercolours, which are based on Haast's alpine sketches, with the title 'Twelve Water Colours of Glaciers in the Province of Canterbury, Julius von Haast and John Gully: collaborators' (Paul 1974). In that article excerpts of John Gully's letters to Haast are effectively integrated in the text. The paper was later also published in *Art New Zealand* (Paul 1977/1978). Paul also wrote an article for the *New Zealand Alpine Journal* with the title 'Painted mountains: Alpine painting in New Zealand before 1890' (Paul 1977), in which she quotes letters from John Gully to Haast to help document this key collaborative relationship between the artist and the explorer.

Also in the *New Zealand Alpine Journal*, we find an article by David Galloway, with the title 'Julius von Haast's botanical explorations' (Galloway 1976), in which a series of letters from Haast to Joseph Hooker from the period 1861 to 1867 is reproduced in a carefully prepared scholarly

edition. The paper concludes with the letter dated 26 June 1881, in which Haast asks for support to be nominated for the CMG (Companion of the Most Distinguished Order of Saint Michael and Saint George). This article is an early example of an academic repatriation of Haast's outward correspondence. The letters held at the Archive of the Royal Botanical Gardens at Kew, which had not been identified in response to the earlier enquiries of Heinrich von Haast in the 1940s, were worked on by Galloway during his time at the British Museum. More recently Simon Nathan also visited Kew in preparation of the edition of Haast-Hooker correspondence (Nolden et al. 2013).

The three extant letters by the Auckland-based Bohemian cabinetmaker Anton Seuffert (1815–1887) to Haast, translated by Frank Hoffmann, were published in exemplary fashion, with fullcolour reproductions of the holographs, by Brian Peet (Peet 2008: 188–191). The letters of William Colenso (1811–1899) were published by Ian St George (St George 2019). Other scholars who have cited Haast letters in their research include Ruth Barton in her work on Haast, the moa and museum exchanges and research (Barton 2000). Examples of Haast correspondence have also been included in exhibitions (Nolden 2008).

We find that letters are an important source for gaining an understanding of relationships between individuals. In an article by Graham Bagnall (1912–1986) on the Swedish naturalist Sven Berggren (1837–1917), his letters to Haast are cited, and the contrast noted between what Berggren confided in his diary and what was committed to paper in his letters (Bagnall 1970).

In 1984 visiting Fulbright Research Scholar, Jacob William Gruber (1921–2019) completed research at the Alexander Turnbull Library and cited letters from Haast to Richard Owen in an article. Gruber noted at the time that:

[M]anuscript collections in the Alexander Turnbull Library provide an important body of archival data for an understanding of the development of science during New Zealand's earlier decades ... [For example,] the large mass of literary material which is the relict of the life and work of Sir Julius von Haast, dutifully preserved, ordered and interpreted by his son Except for the occasional use of an item here and there from the collection for purposes alien to the life and work of Haast himself, the collection has been virtually ignored by scholars since its acquisition by the Library (Gruber 1987).

Haast correspondence has been incorporated into a number of major correspondence projects, including the Darwin Correspondence Project;¹² the Correspondence of Ferdinand von Mueller Project;¹³ and the John Tyndall Correspondence Project.¹⁴ Letters from both sides of the correspondence between Haast and William Branwhite Clarke (1798–1878) have also been published (Moyal 2003).¹⁵

The letters of Hochstetter to Haast were presented in the form of an annotated scholarly edition, both as transcriptions and translations, as the core of the author's PhD thesis (Nolden 2007), with the English translations being subsequently published by the Geosciences Society of New Zealand (Nolden 2013).

The Hector Correspondence project, led by Simon Nathan, was an offshoot of a research project that Nathan undertook while preparing the first biography of Sir James Hector (1834–1907), published in 2015 (Nathan 2015). This correspondence project enabled a number of contributors to work with Nathan on transcribing and annotating several series of Hector's correspondence and those of his contemporaries. The project resulted in eight volumes of published letters, all of which have also been made available in digital format as downloadable pdf-files, enabling

word-searchable access to this rich archive. Five of the volumes feature Haast correspondence (Burns and Nathan 2012, Mildenhall et al. 2013, Nolden et al. 2012, Nolden 2013, Nolden et al. 2013).

As with the Hector correspondence project, where the initial output was in print form, followed by digital 'ebook'-like editions, in the Darwin Correspondence and Ferdinand von Mueller correspondence projects the initial versions have also been print editions, with the resulting output being subsequently made available on digital platforms.

Digital editions come in various forms, ranging from pdf-file format digital copies of books to fully encoded machine-readable editions on dedicated platforms.

Epsilon is the name of the digital platform developed by the Darwin Correspondence project team at Cambridge University Library. Launched to the public in 2018, it brings together the content and metadata of a number of projects,¹⁶ and, relevant to this section of the paper, features a substantial number of letters addressed to Haast that are held in the Alexander Turnbull Library.¹⁷

Preparing archival manuscript letters for publication has a long tradition and some established conventions with innumerable variants, just as there are numerous approaches and rules for citation. The well-established formats were largely dictated by the needs of print editions. However, in more recent years print editions have increasingly been accompanied by digital editions (McCarthy 2018). Some of the advantages of the digital format include the ability to make adjustments and enhancements over time. Moving from digital copies of books towards editions designed for dedicated platforms has opened up the opportunity to fully utilise all that encoding and markup have to offer. One of the model exemplars of a successful project to produce a digital edition, including English translations, with full TEI markup and encoding is the Vincent van Gogh Letters Project.¹⁸ The Epsilon platform also uses TEI 5 markup and xml file format for the correspondence editions.

So what does TEI 5 markup and the use of xml formatting mean in the context of publishing letters? It has to be acknowledged that since the time when the early versions of the Text Encoding Initiative standard were released, a great deal of progress has been made in ensuring that the needs of correspondence are more specifically addressed. This has been the focus and purview of a special interest group, known as the TEI Special Interest Group on Correspondence,¹⁹ which has developed the correspDesc and the dedicated manual for the encoding of correspondence (Dumont et al. 2019–2020). Other important developments aligned with these initiatives are the aggregated search databases enabling searches across multiple correspondence projects, such as correspSearch.²⁰

Haast Bicentenary Edition: A Proposal for a New Edition of Haast Correspondence to Mark the Bicentenary of his Birth

Marking the 200th birthday of Haast is an opportunity to look at the potential for a project to prepare an edition of Haast correspondence. The collection of inward correspondence comprises several thousand letters, of which only several hundred have already been published.

The project would aim to build an edition of letters based on the following hierarchical structure and arrangement: language (English, French, German); correspondent (in alphabetical order); chronology (in original date order).

For the purposes of providing an example, a review of the German language letters shows this series comprises 75 folders of letters from 185 identified correspondents writing to Haast from Germany, Austria, Switzerland, Australia, New Zealand, the United States and elsewhere during the period 1859 to 1887 (Appendix: Table 2).

From the German series there are a number of groups of letters that have been researched in detail: those from Ferdinand von Mueller (Home et al. 1998–2006), Eugen von Guérard (Darragh and Pullin 2018), and Ferdinand von Hochstetter (Nolden 2013). The letters from these three correspondents have all been published in full. In the case of Mueller (MS-Papers-0037-202 to -214 etc.), the 70 letters have all been published on Epsilon as part of the Ferdinand von Mueller Correspondence Project, in both transcription and translation. The Eugen von Guerard letters were published as annotated English translations (Fig. 3), and the Hochstetter letters (MS-Papers-0037-180 to -191 etc.) as annotated scholarly translations, while the transcriptions are included in the unpublished PhD thesis (Nolden, 2007).

Another group of letters to Haast published as an annotated scholarly edition are those by Constantin von Ettingshausen (1826–1897), Franz Foetterle (1823–1876), Wilhelm Karl von Haidinger (1795–1871), Franz von Hauer (1822–1899), Guido Stache (1833–1921), Ferdinand Stoliczka (1838–1874), and Karl von Zittel (1839–1904), all of whom were scientists at the Imperial Austrian Geological Survey (Nolden et al. 2016a), and by Eduard von Suess (1831–1914) of the University of Vienna (Nolden et al. 2016b).

The letters of Andreas Reischek (1845–1902) (MS-Papers-0037-217 etc.) have also been transcribed and are included in an appendix of an MA thesis (Nolden, 2002). Many other letters written in German have also been transcribed but remain unpublished as part of the author's work in progress.

The English language correspondence comprises letters from close to 500 correspondents, including many notable contemporaries in New Zealand and eminent scientists around the world. The French series comprises 140 letters addressed to Haast by 31 correspondents (Appendix: Table 3) in 10 folders (MS-Papers-0037-153 to -162).

The Alexander Turnbull Library also holds surrogate copies on microfilm of some outward correspondence, including letters from Haast to Sir Charles Lyell (1797–1875) between 1862 and 1869, held by Edinburgh University Library (ATL Micro-MS-Coll-20-1676). These letters were transcribed and extensively annotated by Rodney Grapes (2012, 2013a, 2013b). Also on microfilm are the letters of Haast to Henry Augustus Ward (1834–1906), from the period 1876 to 1884, held at University of Rochester Library, New York (ATL Micro-MS-0086). These are both examples of outward correspondence that was unknown to Heinrich von Haast at the time when he was preparing the biography of his father.

Preparing Archival Manuscript Letters for Publication

On a practical level the tasks and processes of preparing archival letters for publication are both varied and challenging. Some of the key elements are:

Editing

The editorial role and tasks are both central and broad ranging, from the editing of the individual letters and the resulting manuscript to oversight and management of the project or sections of the project. This might include the writing of introductory texts and possibly biographical introductions to the correspondents.

m LETTERS FROM EUGEN VON GUÉRARD TO JULIUS **VON HAAST**

Figure 3. *Lieber Freund! Letters from Eugen von Guerard to Julius von Haast* front cover (Darragh and Pullin 2018)

Describing

The letters have only been described to folder level by the Library and most of the correspondents identified. The task of describing the letters falls into two subtasks.

Firstly, the capture of metadata for each of the letters. Based on examples of Haast letters already in Epsilon, this would include: Author, Date, Place, To, Series, Language, Physical Description, Extent, Unit ID, Repository, Project ID, etc. Most of the items on this list are fairly standard metadata and simply need to be formatted consistently.

Secondly, and this is one of the entries already found in the foregoing list, is optimally completing the Physical Description. This is something that would ideally require access to the original letters (as it is impossible if accessing microfilm, and only to a limited extent possible when working with digital surrogates). Depending on the conventions to be followed for the edition, this could include a full physical description of the letters as objects, capturing the type of paper (e.g. wove, laid), watermarks, letterheads, seals, ink, annotations, folds and dimensions. Other material to be described includes enclosures and any extant envelopes, complete with postal markings (e.g. Fig. 4). This contributes a word picture of the original object, capturing and preserving something of the original which would otherwise be lost in a digital edition (noting that images or digital surrogate files are not stored in Epsilon for example).

Transcribing

The task of transcribing the letters is one of the most challenging and interesting. Although the common factor of the project is the recipient of the letters, undertaking this task means reading the handwriting of hundreds of individuals in several languages from various backgrounds writing over a period when handwriting styles were rapidly changing from one generation to the next.

The palaeographic skills and abilities called for are rare and fast disappearing, and fewer and fewer people are accustomed to reading historical manuscript material. Consequently, for ever increasing numbers this material is indecipherable and illegible. This is almost an inherent vice in this type of archival material, perhaps comparable to the obsoletion of digital file formats making files unrenderable. The loss of informational value in holograph (e.g. Fig. 5) and manuscript material in its original form, implies that the preparation of scholarly editions is an important means of preserving cultural and historical knowledge and ensuring this remains accessible to future generations of scholars.

Translating

It might be considered desirable to include English language translations of the French and German letters. In this case the effort required to produce this section of an edition is at least doubled. The translations need to be well planned, taking into account the language of the period when the letters were written. There is also a need for a thorough understanding of the context and subject matter of the communications, in order to convey the spirit and meaning of the original, combined with a degree of fidelity to the source language, the translation of which needs to be readable and natural in the target language.



Figure 4. Envelope of a letter addressed to Julius von Haast by Georgiana von Hochstetter. Alexander Turnbull Library MS-Papers-0037-191-12

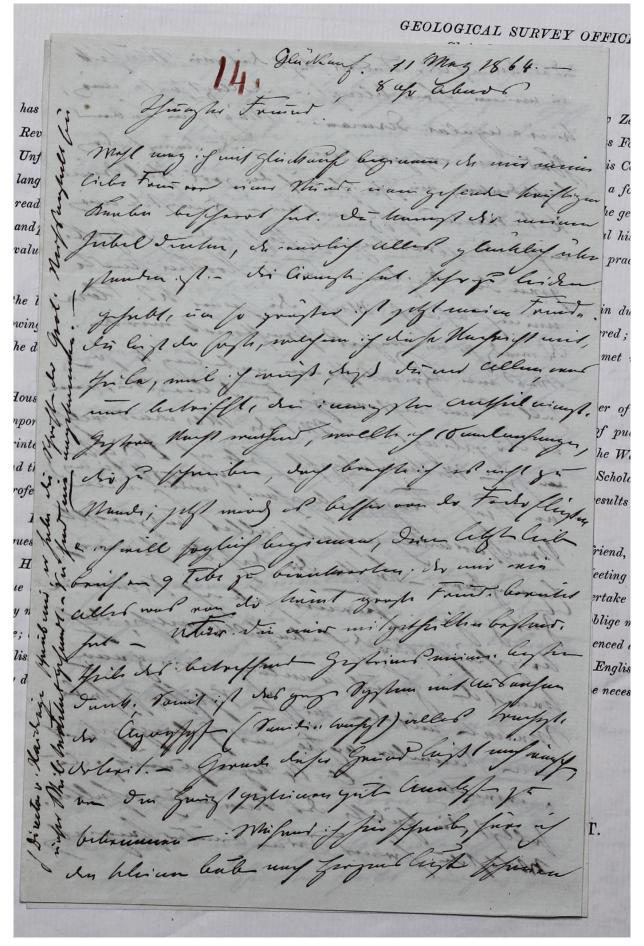


Figure 5. Holograph letter from Julius Haast to Ferdinand Hochstetter, dated 11 May 1864. Hochstetter Collection Basel

Annotating

Working with the correspondence of the more universal scholars and scientists of the nineteenth century, whose professional engagements and interests span wide ranging disciplines, means that producing authoritative annotations requires extensive research and a network of subject matter experts to call on.

Annotations are the key to adding real value to the edition. Consistency is one of the challenges and well-established conventions for formatting are essential.

Proofing and formatting

Beyond the core purpose of checking for orthographic and typographical accuracy, this is above all a consistency check and quality control exercise, while formatting for print publication is both an extension of this with potential added graphic design elements.

Encoding

Converting files to xml formats and TEI markup, including validation, is the final step for digital publication.

Outward Correspondence

As more and more archival holdings are made increasingly discoverable via online finding aids and catalogues, and institutions are documenting their collections in more detail, there is a gradually increasing opportunity to virtually reconnect the two sides of correspondences, often held on opposites sides of the globe.

The one-sided nature of the extant correspondence has long since been an obstacle to gaining a fuller appreciation and understanding of Haast, as Heinrich von Haast already noted in 1948:

Nor were there letters of Haast's extant, save a few to his young children and a series written to me from England in 1886 and 1887, mostly concerned with Museum and private business. There were some thousands of letters from other scientists to be perused, but practically none of Haast's letters to them.

He goes on to observe that "from their replies much of the more intimate side of Haast's life had to be inferred, a difficult task", and finally, "The same difficulty occurs in scientific correspondence where the letters of Haast's correspondents but not of his own have been preserved" (Haast 1948: xii).

In setting out to produce a new edition of Haast correspondence, one of the greatest challenges and opportunities will be to determine what extant holdings of Haast's outward correspondence can be identified and potentially included in the edition. The rewards of such an undertaking are evident from the examples of the more complete, two-sided conversations between Haast and Hooker (Nolden et al. 2013), and Haast and Hector (Nolden et al. 2012), published to date.

Early Extant Letters by Haast

Given that relatively so little is known about Haast's early life and career, from the period prior to his arrival in New Zealand in 1858, any correspondence from this time may be seen as being of special biographical and evidential value.

An example of this is an early extant letter, dated 18 January 1853 from Milan, which also gives Haast's permanent address at the time, as Mainzer Chaussee 45, Frankfurt am Main. This letter is addressed to Carl Thomas Mozart (1784–1858), the second son, and the elder of the two surviving sons, of Wolfgang Amadeus Mozart (1756–1791) and his wife Constanze Mozart (1762–1842). The letter is held in the collections of the Mozarteum in Salzburg²¹ (Fig. 6).

A number of letters by Haast from the early period are held in the Staatsbibliothek zu Berlin and are discoverable in the Kalliope Union Catalogue.²² This includes a series of letters to Aloys Fuchs (1799–1853). A letter held in Basel, Switzerland, from Frankfurt am Main on Steinhardt & Haast letterhead written during the year 1848 provides confirming documentary evidence of Haast's business partnership with Carl Christian Steinhardt.²³

These early letters shed further light on Haast's connections and standing in musical circles and provide additional supporting evidence for his travel and movements, which have been hinted at in the literature, but remain largely unsubstantiated.

Conclusion

The correspondence of Sir Julius von Haast has been described and reviewed, along with its various published manifestations and editions. The research value of the letters is apparent from

Deutsch Home DME Mozart Letters and Documents – Online Edition 5 کوری کی 2.9 Junij 1778		
Autor Hass, Julius Johann Franz von (1822-1887) Ort: Mailand	Status Editorial Guidelines Abbreviations Impressum / License Impressum / License <t< th=""></t<>	
Image: State St	Totage 1 Blat (Brieboger) mit 2 besch. S. (27,5 x 46 m)	
A Project of the #Moza	arteum Foundation Salzburg and a The Packard Humanities Institute	

Figure 6. Haast letter to Carl Thomas Mozart, dated 18 January 1853, in Mozart Letters and Documents - Online Edition. Stiftung Mozarteum Salzburg

the editions published to date, and those cited in other publications have functioned as primary sources of scientific, historical and biographical information.

Working towards the proposed fully annotated edition will enable new connections to be established and the potential of aggregation and digital intersections to be more fully realised.

Preparing a new edition of Haast correspondence will enable this resource to become fully discoverable and searchable, thereby contributing to a fuller documentation of the history of science in New Zealand and the life of Sir Julius von Haast.

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Endnotes

- ¹ The Alexander Turnbull Library was opened on 28 June 1920. It holds New Zealand's national documentary heritage collections and is now a division of the National Library of New Zealand.
- ² Also known as the Haast family Collection. In 2019 the Sir Julius von Haast Collection was inscribed in the New Zealand UNESCO Memory of the World register (39 Sir Julius von Haast Collection, New Zealand Register, UNESCO Memory of the World Aotearoa New Zealand [https://unescomow.nz/inscription/sir-juliusvon-haast-collection (accessed 22/07/2022)]).
- ³ The Alexander Turnbull Library online finding aids in Tiaki, the Collection Management System is xml based, with the descriptive records EAD (Encoded Archival Descriptive) encoded and the name authority records or indexing terms are EAC-CPF (Encoded Archival Context - Corporate Bodies, Persons, and Families) encoded.
- ⁴ The TEI (Text Encoding Initiative) based on XML (Extensible Markup Language) format encoding.
- ⁵ Since the Haast papers were deposited with the Alexander Turnbull Library in 1948–1952 (Taylor 1962), the correspondence has been sorted or arranged, rehoused in folders, stored vertically in metal-edged Hollinger boxes, described to folder level and microfilmed for preservation and access.

- ⁶ The descriptive records generally do not tend to provide details of the number of letters or leaves of correspondence, nor the dates of the individual letters in any given folder.
- ⁷ The EAC-CPF (Encoded Archival Context Corporate Bodies, Persons, and Families) encoded name authority records serve as indexing terms, within the Library's collection management system.
- ⁸ A holograph by definition is a manuscript handwritten by the person named as its author, and is here used to describe manuscript letters written by the signatory of the letter.
- ⁹ The elevation crater theory was an idea of the eighteenth century, which was revived by Leopold von Buch with supporting observations from Alexander von Humboldt. Humboldt and Buch considered basaltic volcanism to be linked to elevation craters (Elevation crater, Wikipedia, https://en.wikipedia.org/wiki/Elevation_crater [accessed 22/07/2022]).
- ¹⁰ This should not be confused as a Vanity Fair connection. The letter by Buch was written in 1853, and the caricature of Murchison by 'Ape' (Carlo Pellegrini (1839–1889)) was only published in Vanity Fair on 26 November 1870, with the caption "No. 108. Men of the day No. 14. A Faithful Friend, an eminent Savant, and the best possible of Presidents".
- ¹¹ Randal Mathews Burdon wrote: "This study

of Sir Julius von Haast was finished in 1945, without access to the vast amount of material recently made available by Mr H. F. von Haast in his definitive biography of his father" (Burdon 1950: 135 footnote).

- ¹² https://www.darwinproject.ac.uk/ [accessed 22/07/2022]
- ¹³ Correspondence of Ferdinand von Mueller Project. https://www.rbg.vic.gov.au/science/library/correspondence-of-ferdinand-von-mueller-project/ [accessed 22/07/2022]
- ¹⁴ John Tyndall Correspondence Project. https:// tyndallproject.com/ [accessed 22/07/2022]
- ¹⁵ This edition includes the letters and fragments of letters held in ATL MS-Papers-0037-045, but omits the complementary fragments and missing pages ATL MS-Papers-0037-238-11, -12, and -56.
- ¹⁶ Darwin Correspondence Project. https:// www.darwinproject.ac.uk/Epsilon [accessed 22/07/2022]

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- ¹⁷ The records of the Alexander Turnbull Library do not always reference when letters are published elsewhere, and it would be a useful enhancement to the records to include a note when the letters may be accessed via an external platform or database, like Epsilon.
- ¹⁸ Vincent van Gogh Letters Project. https://vangoghletters.org/vg/ [accessed 22/07/2022]
- ¹⁹ Correspondence SIG, [https://tei-c.org/ activities/sig/correspondence/ (accessed 22/07/2022)]
- ²⁰ Dumont 2016; [https://correspsearch.net/de/ start.html (accessed 22/07/2022)]
- ²¹ http://dme.mozarteum.at/DME/briefe/letter. php?mid=195 [accessed 22/07/2022]
- ²² https://kalliope-verbund.info/ [accessed 22/07/2022]
- ²³ https://swisscollections.ch/Record/991170445825705501 [accessed 22/07/2022]
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Appendix

Table 1. Autograph collection correspondents (Authors of letters addressed to others)

Adler, Friedrich (1827–1908)	Meneghini, Giuseppe Giovanni Antonio (1811–1889)
Buch, Leopold von (1774–1853)	Mosander, Carl Gustaf (1797–1858)
Cotta, Bernhard von (1808–1879)	Sandberger, Fridolin (1826–1898)
Credner, Carl Friedrich Heinrich (1809–1876)	Scacchi, Arcangelo (1810–1893)
Erdmann, Otto Linné (1804–1869)	Scheerer, Karl Johann (1813–1875)
Forchhammer, Johan Georg (1794–1865)	Senf, Carl Adolph (1800–1887)
Hessenberg, Friedrich (1810–1874)	Sismonda, Angelo (1807–1878)
Hoernes, Moriz (1815–1868)	Thaer, Albrecht Conrad (1828–1906)
Igelström, Lars Johann (1822–1897)	Wackernagel, Philipp Karl Eduard (1800–1877)
Roemer, Friedrich Adolph (1809–1869)	Websky, Martin (1824–1886)
Landgrebe, Georg (1802–1873)	Wiborg, Samuel Simonsen (1793–1861)

Table 2. Germanophone correspondents (Correspondents writing in German)

Table 2. Germanophone correspondents (corresp	
Aegidi, Ludwig Karl James (1825–1901)	Cunliffe-Owen, Jenny (c1830–1894)
Agassiz, Alexander (1835–1910)	Czerwonka, Henry, fl. 1865–1877
Agassiz, Jean Louis Rodolphe (1807–1873)	Debes, Ernst (1840–1923)
Andrae, Carl Justus (1817–1885)	Dechen, Ernst Heinrich Carl von (1800–1889)
Andrae, Hans Carl, (c1850–1923)	Droege, Gustav, fl. 1865
Apfelstedt, Paul Alexander, fl. 1849–1887	Ehrenberg, Christian Gottfried (1795–1876)
Arndt, Auguste, fl. 1881	Enes, George, fl. 1869–1875
Bahse, Moritz Ferdinand, fl. 1834–1881	Engst, Johannes Gottfried (1819–1910)
Banft, Theodore, fl. 1870–1874	Ettingshausen, Constantin von (1826–1897)
Behm, Ernst (1830–1884)	Eugster, Ernst (c1843–1927)
Berggren, Sven (1837–1917)	Eversmann, Marie (1829–1880)
Bernays, Jacob (1824–1881)	Feddersen, Wilhelm Berend (1832–1918)
Berndt, Adolphus Robert (c1821–1868)	Fenzl, Eduard (1808–1879)
Blaschka, Leopold (1822–1895)	Finsch, Otto (1839–1917)
Blumenthal, Ernst (1846–1911)	Fischer, Carl Frank, fl. 1849–1893
Blytt, Axel Gudbrand (1843–1898)	Foetterle, Franz (1823–1876)
Bolander, Henry Nicholas (1831–1897)	Fraas, Oscar Friedrich von (1824–1897)
Boss, Emil, fl. 1881–1883	Fradersdorff, Johann Ludwig (c.1813–1892)
Brahe, William Alexander (1825–1917)	Frauenfeld, Georg von (1807–1873)
Brandt, Johann Friedrich von (1802–1879)	Fridberg, Robert (1844–1927)
Brunner, Georg Philipp (1804–1882)	Fritsch, Karl von (1838–1906)
Buchenau, Franz Georg Philipp (1831–1906)	Geisler, Wilhelm (1848–1928)
Buchner, Christian Ludwig Otto, (1828–1897)	Godeffroy, Johann Cesar (1813–1885)
Büchner, Ludwig (1824–1899)	Gordon, Lina A H, fl. 1882
Burmeister, Hermann (1807–1892)	Guembel, Carl Wilhelm von (1823–1898)
Carus, Albert Gustav (1817–1891)	Guerard, Eugen von (1811–1901)
Carus, Carl Gustav (1789–1869)	Haacke, Wilhelm (1855–1912)
Clason, Cleon, fl. 1838–1871	Haag, Carl (1820–1915)
Clason, Nis, fl. 1807–1871	Haast, Johann Franz Julius von (1822–1887)

Table 2. Germanophone correspondents (Correspondents writing in German) (Continued)

Table 2. Germanophone correspondents (Correspondents)	
Haeckel, Ernst (1834–1919)	Levier, Emile (1839–1911)
Haidinger, Wilhelm Karl von (1795–1871)	Lipp, Richard Rudolph (1805–1873)
Hartmann, Robert (1831–1893)	Lund, Hermann Maier (1848–1932)
Hatzfeldt, Paul von (1831–1901)	Lundgren, Bernhard (1843–1897)
Hauer, Franz von (1822–1899)	Luschan, Felix von (1854–1924)
Hayek, Gustav von (1836–1911)	Malm, August Vilhelm (1821–1882)
Heger, Franz (1853–1931)	Marienfeld, Otto (1826–1893)
Helms, Richard (1842–1914)	Martius, Carl Friedrich Philipp von (1794–1868)
Heussler, Johann Christian (1820–1907)	Mattnauer, R, fl. 1886
Hiller von Gaertringen, Johann Frederick, fl. 1830–1881	Mayer, M, fl. 1882–1886
Hiller von Gaertringen, Johann Hermann (1838– 1880)	Meyer, Adolf Bernhard (1840–1911)
Himmer, Rudolf (1852–1921)	Morhange, Salvador, fl. 1820–1875
Hochstetter, Ferdinand von (1829–1884)	Mueller, Ferdinand Jakob Heinrich von (1825–1896)
Hochstetter, Georgiana von (1842–1905)	Mueller, Gerhard (1835–1918)
Hoffmann, A, fl. 1880–1881	Müller, August, fl. 1884–c1902
Hoffmann, Robert Theodor, fl. c1846–1888	Müller, Nicholas L F (1852–1933)
Hubrecht, Ambrosius Willem (1853–1915)	Nehrkorn, Adolph (1841–1916)
Jacobsen, John Sigismund Martin (c1823–1906)	Neumayer, Georg Balthasar von (1826–1909)
Jacobsen, P H, fl. 1883	Noeggerath, Johann Jacob (1788–1877)
Jelinek, Anton (1820–1897)	Obst, Hermann Bernhard (1837–1906)
Jung, Karl Emil (1833–1902)	Petermann, August Heinrich (1822–1878)
Kate, Herman Frederik Carel ten (1858–1931)	Peters, Wilhelm (1815–1883)
Kaup, Johann Jakob (1803–1873)	Petschler, Charles (1820–1882)
Keller, Ferdinand (1800–1881)	Philippi, Rudolf Amandus (1808–1904)
Kerz, Friedrich (1842–1915)	Pichler, Josef, fl. 1873–1880
Kettler, Julius Iwan (1852–1921)	Pinschof, Carl Ludwig (1855–1926)
Kinkel, Gottfried (1815–1882)	Pipitz, Franz Ernst (1815–1899)
Klipstein, August Wilhelm von (1801–1894)	Radde, Gustav Ferdinand Richard von (1831–1903)
Koch, Augustus Carl Ferdinand (1834–1901)	Rath, Gerhard vom (1830–1888)
Krantz, Adam August (1808–1872)	Reichenbach, Oskar von (1815–1893)
Krauel, Frederick Richard (1848–1918)	Rein, Johannes Justus (1835–1918)
Krauss, Christian Ferdinand Friedrich von (1812– 1890)	Reischek, Adelheid (1852–1908)
Krefft, Johann Ludwig Gerard (1830–1881)	Reischek, Andreas (1845–1902)
Krepp, Friedrich, fl. 1829–1872	Remenyi, Gizella (1836–1914)
Krull, Friedrich Augustus (1836–1914)	Reuleaux, Franz (1829–1905)
Kuhn, Friedrich Adalbert Maximilian (1842–1894)	Rinnböck, Josef C (1841–1900)
Lange, Karl Julius Heinrich (1821–1893)	Rosenberg, Georg Otto Franz von, fl. 1834–1900
Lehmann, Richard (1845–1942)	Reichert, Karl Bogislaus (1811–1883)
Leitgeb, Hubert (1835–1888)	Rueppell, Wilhelm Peter Eduard Simon (1794–1884)
Lendenfeld, Robert Ignaz Lendlmayer von (1858– 1913)	Schaaffhausen, Hermann (1816–1893)

Table 2 Common anhone a	arraanandanta (Carraanar	donto uniting in Correct) (Continued)
Table 2. Germanophone c	onespondents (Conespor	idents writing in Germai	i) (Continued)

Scheerer, Theodor (1813–1875)	Suess, Eduard (1831–1914)
Scherzer, Karl von (1821–1903)	Tannen, Karl (1827–1904)
Schleiermacher, Heinrich August (1816–1892)	Thebing, Theodor Bernhard (1824–1866)
Schliemann, Heinrich (1822–1890)	Thureau, Gustav (1821–1901)
Schmellitscheck, Felix, fl. 1884–1934	Tilgner, Victor (1844–1896)
Schmeltz, Johannes Dietrich Eduard (1839–1909)	Troschel, Franz Hermann (1810–1882)
Schmidt, W, fl. 1882	Ulrich, Carl/Charles Adalbert (1838–1907)
Schmidt, Wilhelm, fl. 1859–1874	Ulrich, George Henry Frederick (1830–1900)
Schneider, Gustav (1834–1900)	Umlauff, Johann Friedrich Gustav (1833–1889)
Schomburgk, Moritz Richard (1811–1891)	Veling, Rudolf (1812–1901)
Schuchardt, Theodor (1829–1892)	Vogeley, Johann Peter (1819–1899)
Schuette, Rudolf (c1840–1886)	Völkner, Carl Sylvius (1819–1865)
Schwartz, Augustus J E (1837–1916)	Weber, Friedrich/Frederic (1819–1909)
Schwarzbach, Bruno Beheim, fl. 1845–1911	Weismann, August (1834–1914)
Schweinfurth, Georg August (1836–1925)	Weiss, Emanuel (1837–1870)
Seelhorst, Georg, fl. 1879–1882	Wiesenhavern, Charles Frederick (c1828–1915)
Seuffert, Anton (1815–1887)	Wilhelmj, August (1845–1908)
Siebold, Karl Theodor Ernst von (1804–1884)	Willemoes-Suhm, Rudolph von (1847–1875)
Silaman, H W, fl. 1881	Wohlers, Johann Friedrich Heinrich (1811–1885)
Robert Miles Sloman & Company (Hamburg)	Zernin, Eduard (1830–1914)
Stache, Guido (1833–1921)	Zinckgraf, Karl Albert (1832–1873)
Steindachner, Franz (1834–1919)	Zittel, Karl Alfred von (1839–1904)
Stoliczka, Ferdinand (1838–1874)	Zurhorst, Heinrich Melchior, fl. c1836–1871
Strauss, Auguste, fl. 1880	

Table 3. Francophone correspondents (Correspondents writing in French)

Tuble 3. Huncophone correspondents (corresponde	
Archiac, Adolphe d' (1802–1868)	Malte-Brun, Victor Adolphe (1816–1889)
Bayet, Ernest de (1859–1935)	Marcou, Jules (1824–1898)
Borre, Alfred Preudhomme de (1833–1905)	Maunoir, Charles (1830–1901)
Capellini, Giovanni (1833–1922)	Morhange, Salvador, fl. 1820–1875
Cornalia, Emilio (1824–1882)	Hamy, Ernest (1842–1908)
Doria, Giacomo (1840–1913)	Milne-Edwards, Henri (1800–1885)
Dubois, Alphonse (1839–1921)	Netto, Ladislau (1838–1894)
Dupont, Edouard (1841–1911)	Noulet, Jean-Baptiste (1802–1890)
Filhol, Henri (1843–1902)	Peschard, Albert (1836–1902)
Fremy, Edmond (1814–1894)	Parlatore, Filippo (1816–1877)
Gauthiot, Charles (1832–1905)	Perrey, Alexis (1807–1882)
Gervais, Paul (1816–1879)	Quatrefages, Armand de (1810–1892)
Grad, Charles (1842–1890)	Serrurier, Lindor (1846–1901)
Harven, Emile de (1837–1903)	Swiencki, Apollinaire Leon Alfred (1841–1903)
Hüber, William (1830–1895)	Vaillant, Leon Louis (1834–1914)
Jenevin, Louis Henri Constant (1840–?)	