

Working from Overseas: The New Zealand Naturalist and Collector Julius von Haast and European Scientific Societies on the Other Side of the Globe

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This paper examines the institutional networks in which the New Zealand naturalist Sir Julius von Haast (1822–1887) involved himself and provides novel insights into the strategies and scientific-diplomatic practices with which scientists from overseas collaborated with their colleagues in Europe. In the second half of the nineteenth century, learned societies based in imperial metropolises were one of the most influential modes of scholarly organisation. They provided the infrastructure to validate knowledge, facilitate cross-continental exchange and channel the discussion between their members to the outside world. Overseas members, such as the German-born naturalist Julius von Haast, who left Europe for the British Crown Colony of New Zealand in 1858 and pursued his career there, benefitted from the associations' resources. Besides the prestige of becoming a member, scientists working abroad used the societies' publication series and their networks for their knowledge exchange, to facilitate bilateral cooperation, or as a means of showing presence from a distance. Due to their on-site expertise, and access to field sites and sources, they compensated for their inability to participate in decision-making processes and meetings in person in Europe. For imperial scientific societies, in turn, the integration of overseas members not only provided them with a loyal educational class in the remote parts of the empire, but it became a means of scholarly acculturation to how science was practised in European capitals. By studying Haast's correspondence with selected scientific societies, this paper analyses the characteristics, claims and functions of his international membership and communication network as well as the extensiveness of knowledge exchange processes. Particular attention will be paid to the intermediating role of naturalists working at the intersection of personal benefits, local needs and imperial policies in the southern hemisphere.

Keywords: communication, cross-continental collaboration, empires, Julius von Haast, naturalist, New Zealand, scientific societies

Introduction

In November 1866, the German-born Austrian-naturalised earth scientist Ferdinand von Hochstetter stated before the k. k. Geographical Society in Vienna:¹

Frequently, I had the opportunity to report in the meetings of the k. k. Geographical Society on the interesting results obtained by the researches of my friend and former travelling companion in New Zealand, Dr Julius Haast, in the southern Alps of New Zealand Through the repeated expeditions which the province [Canterbury] has equipped under his leadership since the year 1861 ... geographical order is gradually coming into the mountain chaos I can only approve that my friend Haast in this naming ... has followed the custom of the English and Americans, who everywhere, where they plant their flag in foreign countries, immortalise the names of their compatriots in the geography of the country (Hochstetter 1866–1867: 57).

That was 8 years after Julius Haast (1822–1887) first set foot on the soil of the British Crown Colony of New Zealand. He was a 36-year-old German immigrant and at that time still without an academic title, accreditation, or noble rank. A lot had happened since then; Haast became friends with Hochstetter

(1829–1884), who had landed in Auckland aboard the Austrian frigate *Novara*, which was on a global scientific voyage (e.g. Veit-Brause 2006; Basch-Ritter 2008). On behalf of the provincial governments of Auckland and Nelson, Haast and Hochstetter travelled in both the North and South islands together in 1858 and 1859, conducting geological and topographical surveys (Burrows 2005; Johnston and Nolden 2011). As a vital element of the colonial rule, maps and knowledge about mineral resources served the interests of British settlers and their political representatives in the provinces.² They were also beneficial in the armed conflicts between imperial troops and Māori, fuelled by doubtful land sales to settlers. After Hochstetter's return to Vienna in late 1859, Haast's scientific career gained traction and in 1861 he was appointed provincial geologist in Canterbury. Through the mentorship of his friend, Haast received an honorary doctorate from the University of Tübingen in 1862 and, just 5 years later, he was elected a Fellow of the prestigious Royal Society of London.³ At the same time, he was instrumental in the founding of Canterbury Museum in Christchurch and was appointed its curator soon after. Under his dynamic leadership, the Museum became one of the finest natural history museums in the southern hemisphere (Haast 1948; Langer 1992; Nolden 2016a).

As the aforementioned quote from Hochstetter illustrates, Haast remained present in the European learned communities through his correspondence, friendships and memberships of scientific societies, even though a 2-month ship passage separated him from them. He was to leave the Antipodes only once, in 1886–1887 for the Colonial and Indian Exhibition in London. Likewise, Haast represented the European scientific communities by collecting New Zealand items and performing research tasks, exchanging specimens and knowledge, and, similar to diplomatic missions, acting as a point of contact for naturalists travelling to the southwest Pacific Ocean. He also inscribed the scholarly relationship with the “Old World” into the geography of the colony, by naming more than 100 mountains and other features after his English, German and French sponsors and colleagues (Reed 2010). Even if this means that “sometimes ... good, i.e., significant and euphonious [Māori] names have to give way to new ones”, as Hochstetter (1866–1867: 57) critically noted.

This paper analyses the European institutional networks in which Haast was involved, the resulting career strategies, and ways of cross-continental cooperation between imperial centres and scholars working on the other side of the globe. It examines the scientific-diplomatic practices and knowledge Haast used to bring himself into play as a multi-loyal agent in various geopolitical settings, societal frameworks, and disciplinary contexts. Which mutual benefits, resources, and means of scholarly acculturation did affiliation with European learned institutions involve? In this regard, was Haast an exception or an archetype for other naturalists working in remote parts of an empire?

Scientific societies were significant players in the flourishing world of nineteenth century associations. Bringing together professionals, practitioners and sponsors (i.e. university professors, curators, collectors, science patrons), these societies saw themselves primarily as communication hubs. Periodicals and regular meetings gave them a stable identity and structure. Members hosted popular lectures, built up large collections, initiated expeditions and volunteered for large-scale cooperative projects. A sophisticated system of literature exchange connected the associations' journals and book series with the publications of related societies worldwide. While scientific societies initially played a major role in nationalising the research landscape in Europe, from the 1880s onwards they became driving forces for establishing new forms of internationalism and cross-border collaboration such as a vibrant congress culture and transnational scientific organisations (Fox 2016). They thus linked scholars, institutions, practices and geographies within which research was conducted.

However, there was no single model for scientific societies. Major differences between societies existed, among others, in their range of exclusivity, public and/or private sources of funding,

the geographical reach of membership, the involvement in science popularisation and level of collaboration among members. While societies situated in European metropolises were often divided into scientific disciplines, those in the provinces and overseas colonies were characterised by a higher degree of interdisciplinarity and institutional hybridity, sometimes combining the tasks of a learned society, a museum, or even an institution of higher learning. Of special significance were societies established in imperial capitals and promoted by the sovereign. The distribution of their members between centres and peripheries resembled geopolitical zones of influence, characterised by a consensus on shared bodies of knowledge and culture. While corresponding members originally comprised researchers working in the provinces, they were later joined by colleagues from overseas as colonial empires expanded. Closely linked to the state administration and its imperial goals, the societies offered powerful support for managing inner-imperial diversity (Gascoigne 1998: 16–33). While empires relied on a variety of scientific, spatial, social and administrative knowledge gathered, surveyed and exchanged by learned societies, these, in turn, gained merits and funding by fulfilling imperial tasks such as advising officials or conducting expeditions. These societies thus became vital embodiments of statehood and territoriality (Mattes 2020).

A comparison of the (science) policy agendas of European empires and the learned societies associated with them, shows some significant differences. While, for example, trade interests, economic resources and land use issues were prominent in the British Empire (Cain and Hopkins 2016: 33), initiatives and profit-sharing by private beneficiaries such as the colonial official and geographer Gustav Nachtigal (1834–1885) played a major role in the German Empire (Conrad 2011: 21–23). In the Habsburg Monarchy, territorial-expansive and civilising-integrative claims on the Balkan Peninsula went hand in hand. “Indirect attempts of colonisation” (Holub 1884: 23), such as in Central Africa or the Ottoman realm, should serve both economic and scientific goals (Sauer 2012). Of particular importance were the Habsburg diplomatic missions, consulates and naturalists from overseas. They were involved as institutional or individual members of scientific societies and, on behalf of Viennese authorities or fellow scientists, collected specimens and information. These empire-wide learned associations provided the environment in which Haast sought to prove himself and boost his career in New Zealand.

In the following, I will analyse the relationship between Haast and the European scientific societies on three levels. The first section deals with the network of associations to which Haast sought affiliation, his promoters and door openers, and the goals of his membership. Second, I will investigate how the scientific societies and their fellows, and Haast personally, benefited from his involvement and the resulting bilateral collaborations. The last section discusses the typology of naturalists working from overseas, their significance for the access and validation of knowledge, and their strategies to balance the inability to participate in decision-making processes in Europe. For this purpose, I have evaluated the journals of selected scientific societies as well as the correspondence between Haast and these societies or their boards, respectively.

Haast’s Network of Scientific Societies

Although there is no evidence of Haast’s membership in learned societies before he arrives in New Zealand, it is not unlikely that he heard public lectures and joined a popular scientific association after his school years in Bonn, when Haast gained some knowledge of geology and mineralogy (Langer 1992). Documented, however, is his election as a corresponding or foreign member of the k. k. Geographical and k. k. Zoological-Botanical societies in Vienna at the beginning of 1862 (Nolden et al. 2016: 51–52). Haast’s nomination, however, went back to May of the previous year, since the admission of candidates from abroad required their prior approval by the Ministry of Foreign Affairs.

Both societies were founded in the 1850s on private initiative as empire-wide associations, but later received the privilege of the sovereign to use the title and some rights of a state agency. As private-public partnerships, the geographical and zoological-botanical societies reinforced the consensus between the authoritarian state and the rising civil society and made science a holistic, integrative and imperial endeavour (Mattes 2020). By simultaneously practicing and popularising research, they stood in opposition to the prestigious and more exclusive Imperial Academy of Sciences in Vienna, which only admitted exceptional “self-taught” naturalists to its ranks.⁴

In the early 1860s, Haast’s academic status better fitted the more internationally and socially diverse geographical and zoological-botanical societies, which, due to the lack of government subsidies, collected membership fees to fund their activities. The societies consisted of state officials, including scientists, ministerial bureaucrats, diplomats, teachers and military officers, as well as private collectors, aristocrats and businessmen (Drobesch 2006). Of their 700 and 1,100 members respectively, about a quarter lived abroad and less than 5% were in the British Empire. For the Geographical Society (1862), Haast was the only representative in the southwest Pacific Ocean besides the German-born scholar Ferdinand von Mueller (1825–1896), Director of the Royal Botanic Gardens in Melbourne (Moore 1997), and thus a great asset. In contrast, the Zoological-Botanical Society (1862) had more than a dozen members in the Antipodes, including in New Zealand Carl Fischer (died 1893), Charles Heaphy (1820–1881) and Arthur Purchas (1821–1906).

In seeking nomination to the learned societies in Vienna, Haast was sponsored by Hochstetter, who went door to door for his “student” (Hochstetter 18 October 1863, cited from Nolden 2013: 96) and found support among the former *Novara* travellers Bernhard von Wüllerstorff-Urbair (1816–1883), at that time president of the Geographical Society, and Georg von Frauenfeld (1807–1873), secretary of the Zoological-Botanical Society. Helping his nominations were the field trip reports, observations, and natural history specimens sent by Haast to Hochstetter and Frauenfeld. The former thus gained significant inputs for the completion of his monumental work *Neu-Seeland* (1863). The *Novara* travellers also presented and discussed Haast’s findings in the associations’ meetings and gave him a voice in the publication series. When Hochstetter was elected president of the Geographical Society in 1866, he still reminded Haast to keep him updated to “highlight [his friend’s] achievements in the [Society’s] annual report” (Hochstetter 20 November 1866, cited from Nolden 2013: 132).

Haast’s memberships were not only prepared in writing but also post-discussed, with diplomas playing a key role. They were sent overseas by the imperial societies for a fee, and Haast requested them through his mentor (Figs. 1 and 2). In his endeavours for scientific employment and merits in the Antipodes, they represented a symbolic capital and were proof of Haast’s relations and scholarly accreditation in Europe. In the wake of science professionalisation, i.e. the emergence of academically trained professionals and their distinction from amateurs, these membership diplomas were aimed to compensate for Haast’s lack of university education. Moreover, no official approval was required for their issuance. In the course of Hochstetter’s efforts to get his New Zealand friend an honorary doctorate, he had to ask Haast several times for a curriculum vitae:

The seat of the German Geological Society is in Berlin and I will nominate you as a member, if you like, but they do not issue an actual diploma The diploma of the [Vienna] Geological Survey has been written a second time and sent to you You will also receive a diploma from the Zoological & Botanical Society. Unfortunately, I am not getting any results in the matter of the doctoral diploma, as I am missing your curriculum vitae. A short biographical description and academic record are needed everywhere (Hochstetter 18 December 1861, cited from Nolden 2013: 65).



Figure 1. Julius Haast’s membership diploma from the Viennese Geographical Society. It states: “The Imperial-Royal Geographical Society, in accordance with the statutes approved by the highest authorities on 21 September, 1856, elected the most esteemed Mr. Julius Haast, Government Geologist of the Province of Canterbury in New Zealand, as its Corresponding Member at the meeting on 14 January, 1862. Vienna, 15 January, 1862. (Eduard) Pechmann, Imperial-Royal Colonel, Vice-President; Franz Foetterle, First Secretary.” Alexander Turnbull Library, MSO-Papers-0171-03



Figure 2. Julius Haast’s membership diploma from the Viennese Zoological-Botanical Society. It states: “The Imperial-Royal Zoological-Botanical Society in Vienna has appointed the well-born Mr Julius Haast in New Zealand as a member. Vienna, 18 March, 1862: Dr. Moriz Hörnes, Vice-President; August Neilreich, Vice-President; Georg Ritter von Frauenfeld, Secretary.” Alexander Turnbull Library, MSO-Papers-0171-04

Haast also owed his 1864 admission to the German Academy of Natural Scientists Leopoldina to the Viennese geoscientific community. The Leopoldina had been established in the seventeenth century and, due to the lack of frequent meetings, traditionally interacted by correspondence (Gerstengarbe et al. 2016). The Director of the Imperial Geological Survey, Wilhelm von Haidinger (1795–1871), held an influential position within the Leopoldina and successfully implemented part of his institutional reform programme there in 1870–1871, which had previously been rejected at the Viennese Academy. This included, among others, opening up the academy to the public, launching collaborative undertakings and lowering barriers to electing new members (Mattes and Corradini 2022). In part, the conflict between advocates and opponents of these demands arose from different views of how to see oneself as a scientist, which in the case of the survey was shaped by fieldwork experience providing participation models and career opportunities even for academically untrained practitioners. To strengthen his position, Haidinger increasingly nominated loyal followers as Leopoldina members during the 1860s. Many of them, like Frauenfeld, had previously been rejected as members at the Viennese Academy or were not admitted to the election based on their curriculum vitae (Klos 2022). Haast, who was already a corresponding member of the survey, perfectly matched Haidinger’s goals. In his official letter of thanks for receiving the Leopoldina diploma, Haast (28 June 1866) not only enclosed a portrait photograph and a “list of [his] titles, offices” and memberships but also informed the Leopoldina president Carl Carus (1789–1869) that he had named the New Zealand peak Mount Carus (today Mount Bryce, 2,182 m) in his honour. At this time Haast distinguished himself

– in addition to the associations already mentioned – as a member of the Zoological and Linnean societies of London, the Geological Society of Berlin, the Royal Society of Dublin, the Geological Society of Edinburgh and the Royal Society of Victoria (Australia). According to their prestige, he began with those in London, continued with those in Vienna and Berlin, and finally mentioned the associations in Ireland, Scotland and the British overseas colonies.

Haast's affiliation to Viennese institutions and the Leopoldina served as a springboard for admission to the more exclusive gentlemen's societies of London, which were less socially permeable and in part did not distinguish between ordinary and corresponding members. There even Hochstetter, as he complained regarding his recently published book *Neu-Seeland*, was "totally ignored ... since they do not take notice of German publications" (Hochstetter 16 March 1864, cited from Nolden 2013: 101). In the meantime, Haast in New Zealand had adopted British citizenship and geopolitically refocused his efforts. To get his foot in the door, he used similar communicative strategies as in Vienna and targeted the associations situated in Scotland and Ireland first. Frequently, Haast addressed his correspondence involving observations, travel reports, booklets of his Nelson explorations, or offers of literature or object exchanges, directly to influential (board) members or even the societies' presidents. Out of tentative exchanges of letters and supplements for natural history collections shipped to Europe, lifelong friendships developed. Not only knowledge and project ideas were shared, but they quite openly discussed Haast's next career steps (Haast 1948: 449).

His key advocate in England was Joseph Dalton Hooker (1817–1911), a botanist at the Royal Botanical Gardens in Kew, who was eager to study alpine plants from New Zealand's South Island (Endersby 2008). As an influential figure and later president of the Royal Society, he first facilitated Haast's admission to the Linnean and Geological societies of London in 1864 and similarly acted as his promotor in subsequent awards and honours. Already 2 years earlier, Haast (13 September 1862, cited from Nolden et al. 2013: 27) let Hooker know in confidence that "many of the continental societies have done me the honour of electing me as a member & corresponding member & if elected a fellow, I shall do my best, by contributions (papers & collections), to show my gratitude". In addition, Haast thanked his mentors by nominating them as honorary members of newly established learned societies in New Zealand.

By 1865, Haast felt ready to become a fellow of the prestigious Royal Society of London and gained once more Hooker as his promoter, who reported to him regarding the nomination process:

I went to Sir Ror (Roderick) Murchison, (Director-general of the British Geological Survey) about the Royal Society Fellowship & found him quite favourable I then went to (the geologist) Prof. (Andrew) Ramsay, who most kindly promised to have your certificate prepared, signed & presented next year for suspension. He says however that you must not expect to get in the first year of your candidature I need not say that I will do all I can for you, but the strength of your claim must be Geological & be vouched for by practical Geologists (Hooker 3 May 1865, cited from Nolden et al. 2013: 84).

Ultimately, it would be 2 years until all obstacles were cleared and Haast was elected. Later admissions to learned associations beginning around 1870 were primarily dedicated to scholarly recognition in his old homeland, including being appointed corresponding member of the Bavarian Academy of Sciences (1868) and the Senckenberg Society for Nature Research in Frankfurt am Main (1871). Most of these later memberships were either currency in exchange for sources and scientific data or honours for Haast's life-long service to science.

This leads us to a preliminary assumption; Haast's membership in European societies relied on traditional networks of correspondence (Nolden 2016b). With the expansion of colonial empires, these bilateral exchange relationships grew into cross-continental flows of knowledge, publications and specimens, which societies brought together by providing infrastructure for scholarly communication (Grove 1994; Butlin 2009). Although Haast's membership network appears to be very diverse in terms of geographies and disciplines involved, his admissions were granted due to only a handful of influential figures. The Viennese Geographical Society, to which later mentors such as Hooker and Murchison already belonged at the time of Haast's entry, may have served as a significant resource for networking purposes. Building on his contacts in Vienna and London, Haast became a fellow of a dozen learned societies in the United Kingdom, Germany, France and Sweden in subsequent years, followed by an increasing number of honorary memberships in the 1880s (Fig. 3, Table 1). In particular, Haast's skilful use of correspondence as a form of science diplomacy, i.e. keeping open the channels of communication to various parties, identifying common goals and establishing sustainable cross-continental partnerships, made him a multi-loyal fellow as well as a welcome overseas agent of several European associations and scholars.



Figure 3. Date of admission of Julius von Haast to European scientific societies

Table 1. Selection of European scientific societies of which Julius von Haast was a member, years of admission and types of membership.

Year of admission	Society (Location)	Type of membership
1862	Imperial-Royal Geographical Society in Vienna	corresponding member
1862	Imperial-Royal Zoological-Botanical Society in Vienna	corresponding member
1863	German Geological Society in Berlin	corresponding member
1863	Geological Society of London	corresponding member
1863	Royal Dublin Society	corresponding member
1863	Edinburgh Geological Society	corresponding member
1864	German Academy of Natural Scientists (Dresden, since 1878 Halle)	member
1864	Linnean Society of London	member
1865	Horticultural Society of Mainz	corresponding & honorary member
1867	Royal Society of London	member
1867	Société de Géographie (Paris)	corresponding member
1868	Bavarian Academy of Sciences (Munich)	corresponding member
1868	Botanical Society of Regensburg	corresponding member
1869	Berlin Society of Friends of Natural Science	honorary member
1871	Berlin Society of Anthropology, Ethnology, and Prehistory	corresponding member
1871	Senckenberg Society for Nature Research (Frankfurt)	corresponding member
1872	Société nationale des sciences naturelles et mathématiques de Cherbourg (France)	corresponding member
1876	Zoological Society of London	corresponding member
1881	Garden Society of Gothenborg	honorary member
1883	Geographical Society of Leipzig	corresponding member
1883	Ornithological Society of Vienna	honorary member
1884	Royal Geographical Society of London	honorary member
1886	Royal Society for the Encouragement of Arts, Manufactures & Commerce (London)	corresponding member

Strategies of Mutual Benefit

The involvement of naturalists from the southern hemisphere in the scientific communities of European empires was not based on a one-sided relationship of dependence, but on mutual benefits. Even if their exchange of letters and the individual collaborations that developed from it relied on friendship, they followed strategic considerations, and personal and imperial goals (Home and Kohlstedt 1991). For overseas members, these associations served as a means of acculturation of how science was practised in the imperial centres. At the same time, strengthening the ties to foreign members helped keep the emergence of independence efforts at bay. Unifying norms, values, and attitudes thus were in the foreground. These included the use of English, German, or French as a language of science communication and consensus on the integrity of the respective empire, the legitimacy of its government and its political-cultural claim to supremacy.

Scholarly acculturation, however, can also be observed at the epistemic level. An integration of naturalists from overseas fostered the emergence of “thought collectives” (Fleck 1979: 160) based on a

common reference to the same bodies of knowledge and culture, e.g. theories, terminology, methods and handbooks. In the case of Haast, it was not a university education in Bonn, but the personal training by Hochstetter, the time spent together in New Zealand and his later involvement in the European scholarly communities that provided a durable common framework. Standard literature written in Europe, such as Hooker's *Handbook of the New Zealand Flora* (1864–1867), in the completion of which Haast himself had played a decisive role through his collections sent to London, became his constant “travelling companion” and basis for his study of New Zealand nature (Haast 18 May 1865, cited from Nolden 2013: 85). Such cross-continental collaborations in colonial science networks, studied by Barton (2000) based on the example of Haast and moa fossils, ensured also that new as well as existing Māori knowledge gathered through Haast was incorporated into European scientific holdings and epistemes (Cooper 2011).

For naturalists from overseas, membership in European associations could serve several needs. Firstly, it provided access to the resources, spaces and networks of societies. Even if personal admission to libraries, collections and lectures was not possible from a distance, members received requests for duplicates of publications and specimens as well as, regularly, the societies' journals, allowing them to follow up on lectures and current debates. They thus gained greater autonomy from their correspondence proxies in Europe and their colleagues in the colonies. Secondly, learned societies gave their international members a voice in their communities in Europe, both by publicly reading out their letters during meetings and by publishing their submissions. Associations validated the research outcomes of their overseas members, identified them as scientific knowledge and integrated them into existing knowledge. The public dissemination of their findings and explorations in Europe could stimulate the implementation of their research projects in the colonies and bring financial support from the societies, state, or private stakeholders. Third, an affiliation to scientific societies meant academic prestige and accreditation of practical expertise that went beyond university-trained scholarship. This was especially true for collectors working overseas. They played a major role in supplying European museums, sometimes on behalf of research facilities, sometimes on their own initiative in return for payment or honour. However, such collectors rarely published their research on their own.

Likewise, scientific societies benefitted in numerous ways from members working from overseas. Firstly, the members were indicators of the international standing of societies and considered their local representatives on-site. They embodied the diversity of European empires and their global civilisational and expansive claims. Therefore, members were often given prominence in the societies' reports, and, if they permanently returned to Europe, were elected to their board. Secondly, as local experts, they provided scientific evidence of specimens and artefacts discovered abroad. This was central to the increasing claims to objectivity in science during the nineteenth century, which involved local verifiability of data (Daston and Galison 2007). Thirdly, members from overseas maintained the continuous inflow of objects for imperial collections (Henare 2005; MacKenzie 2009). Besides representational needs, these were fundamental to all research and their acquisition was essential for keeping pace with the increasing international demand for these scientifically precious specimens. European research facilities, in turn, sent stocks of specimens to New Zealand to complete the natural history collections there or to introduce non-native species through acclimatisation societies.⁵

For the scientific evaluation of the specimens, their rarity and state of preservation were more important than the quantity received. Haast, who had become one of the main interfaces in the trade in natural history and ethnographic objects from New Zealand to Europe in the 1870s–1880s, was well aware of this. For example, the Senckenberg Society for Nature Research, which operated a natural history museum, thanked its member Haast in 1880: “The shipment, consisting of 60 specimens of New Zealand birds, skeletons, and plants, has far exceeded our expectations in richness and rarity” (Blumenthal 6 June 1880). To ensure his chances of being granted an Austrian knighthood, Haast, at

Hochstetter's suggestion, even dedicated three moa skeletons and a collection of New Zealand birds, exhibited at the Vienna World's Fair of 1873, to the Imperial Natural History Museum. In the end, however, it was a gift of anthropological objects, especially Māori skulls,⁶ presented before Crown Prince Rudolf by Hochstetter, which won the emperor's favour to approve Haast's elevation to knighthood.⁷ With Hochstetter's appointment as director of the newly established Natural History Museum, the exchange relations between Christchurch and Vienna increased to the benefit of both sides. While, in the following years, duplicates from Vienna significantly boosted the holdings of Canterbury Museum, which in total had grown to 150,000 labelled specimens at the time of Haast's death (Royal Geographical Society 1887). The New Zealand collection of the Vienna Natural History Museum became the largest outside Oceania. Accordingly, Hochstetter wrote in 1876:

So we are working in the same direction at opposite ends of the globe I am now asking you [Haast] a favour and I will be in a better situation to fulfil your wishes. The director of [the Zoological] department, [Franz] Steindachner, and I are particularly keen on acquiring marine mammals, fish, and lizards but also complementing and completing our moa collection. I am also looking for anything ethnographical and prehistoric, human skulls, etc. is now doubly valuable to me, so do aim to put together for me whatever you can in the next few years. Steindachner offers complete skeletons of lions, tigers, giraffes, aurochs, etc., and whatever else he has by way of duplicates, and I will have these things packed and placed ready for you (Hochstetter 15 May 1876, cited from Nolden 2013: 175).

In addition to such individual cross-continental collaborations, partly within the framework of research facilities, new forms of international cooperation emerged in the 1870s. These were cooperative undertakings, led by learned associations, requiring the voluntary participation of many contributors, and often involving the pooling, coordination and standardisation of observations, measurements, and objects (Kohler 2006). This shift from extensiveness to an intensiveness of international exchange, which was accompanied by a gradual replacement of established media such as correspondence networks, scholarly travels, meetings and the exchange of papers by joint ventures, also affected the status of the associations' corresponding members (Crawford 2009). Cooperative projects such as organising expeditions or exhibitions, building joint collections or handbooks, and maintaining research infrastructure gained in importance over the more traditional role of societies as communication hubs.

The traditional model of corresponding members, who occasionally took up the pen, obtained the society's periodicals for a fee and served as living proof of the society's transnational reputation transformed gradually into a system of proactive agents, spread over the whole globe. As partly mobile informants, they conducted collecting activities on-site, prepared expeditions, or, as participants, promised a higher success of the undertakings due to their local knowledge and language skills. Haast, too, was certainly more than a simple corresponding member for most European scholarly communities; initially, as a contributor to the book projects there such as Hochstetter's *Neu-Seeland*, as the main interface for specimens from Oceania and finally as the New Zealand Commissioner for the Colonial and Indian Exhibition in London (1886), paving the way for the founding of the London Imperial Institute as a museum of the whole British Colonial Empire.

Intermediating Role of Naturalists Working Overseas

"My demands are not great and I have – I am now 25 years old – a healthy and strong body. If I do reasonably well in the country [New Zealand], I think I'll stay there forever", wrote the German zoologist Wilhelm Haacke (16 December 1880) in a letter to Haast. Having earned his doctorate under the renowned scientist Ernst Haeckel, Haacke (1855–1912) emphasised the high level of competition and poor career prospects in his home country as reasons that would ultimately lead

him to go abroad to New Zealand and South Australia for several years. Young naturalists who set out on overseas trips from the imperial centres and tried their luck on the other side of the globe usually had career opportunities in mind. The fieldwork experience, cross-continental networks and evidence in the form of specimens and information gathered for their projects or those of their European mentors, were considered door-openers for academic employment and recognition in their former home countries.

Towards the end of the nineteenth century, with the increasing saturation of the academic labour market in the German and Habsburg empires, long-term individual journeys along global migration flow flourished besides traditional modes of probation for young researchers such as the participation in pre-planned expeditions. Since these countries (initially) had no overseas territories and thus did not represent immediate competition for other European colonial powers, scientists from Austria and Germany often obtained positions in the British colonial administration. These included, for example, the Schlagintweit brothers, who travelled India and Central Asia on behalf of the East India Company (Brescius 2019), or earth scientists in the service of the Imperial Geological Survey of India such as Karl L. Griesbach (1847–1907), Fritz Noetling (1857–1928) and Ferdinand Stoliczka (1838–1874) (Schedl and Hofmann 2005; Flügel 2013). In this regard, the high status of scientific university education in German-speaking countries, close ties between their learned societies and those in London, and the international recognition of the Vienna and Berlin Geological Surveys were certainly beneficial.

However, there was a difference between working overseas for a limited period of time or establishing a new existence abroad. Haast was only one of several German-speaking scholars, such as the zoologist Robert Lendlmayer von Lendenfeld (1858–1913) or the taxidermist Andreas Reischek (1845–1902), who travelled to the southwest Pacific (Stoffel 1993; Mückler 2012). Haast as a British citizen remained there for the rest of his life and almost certainly had a more successful scientific career than if he had remained in the country of his birth. Living in the Antipodes as a naturalist was based on different expectations, goals and career strategies. Researchers like Haast married, settled down and became supporting pillars of everyday scientific life in the colonies. They were not only entrusted with research assignments by the government, but also participated themselves in the establishment of local scientific institutions – often based on experience they had brought with them. Nevertheless, relationships of dependence and aspirations of autonomy from their European proxies were often closely connected.

Due to language skills and involvement in various networks of knowledge, these pioneering naturalists took on intermediary roles and acted as brokers and facilitators of public-private partnerships that straddled various levels of imperial polity. Haast, too, apart from his promotion of German immigration and appointment as German Consul in New Zealand in 1880, displayed diplomatic skills in dealing with his various partners and profited, albeit indirectly, from the armed conflicts between the British settlers and the indigenous population that escalated in the early 1860s (Moon 2021: 153). Through his non-British origin, he had an advantage in his relations with the Māori. For example, he could travel to otherwise inaccessible territories and exchange knowledge with them in personal conversations (Bade 1993; Cooper 2011). In turn, Haast used this to bring himself into play with his European partners. For example, he wrote to Hooker in 1865:

Now I have examined thus Libocedrus very carefully & found that your description [in the handbook] agrees very well, the wood is very soft, as my Maoris said, like boiled potatoes, but it shows that it is not an alpine state, but only the manner of growth on swampy ground. ... Maori name for Libocedrus Kawhaka I cut today close to my tent in a thicket near the river bed a coniferous tree, which the Maoris call Pakihirimu I can not find anything in the

Handbook which leads me to believe that you know it, I shall send specimens Near Lake Kanieri I found often 15 feet above the bed, lots of shells of Unio, but all broken at the side. ... I took one up, examined it & observed to my Maoris, that there were marks like those of the teeth of rats. They answered me that this was well known to them & dug up a rat hole, where many more were found (Haast 31 May 1865, cited from Nolden et al. 2013: 90).

In case of inquiries, Haast (9 June 1869, cited from Nolden et al. 2013: 142) acted as a communicator and, for example, “wrote to [his] friend [Reverend James] Stack, missionary of the English Church living amongst the natives to get [him] the necessary information” for Hooker. Haast’s position as a scientific intermediary in the British Crown Colony was certainly helped by his rather holistic approach as a naturalist, covering several fields of (practical) research such as geology, geography, zoology, botany and ethnography. His career combined the activities of a professional collector with those of a provincial science manager, geared towards high imperial honours in science and politics (Caudel 2007). Thus, Haast did not hesitate to act as a local informant and gladly pulled the strings to establish political and scientific contacts. This can be seen as an attempt to gain ground on his competitors within New Zealand, particularly his Scottish-born friend and at times opponent James Hector (1834–1907). Being 12 years younger than Haast, he came to the Antipodes for a geological survey of Otago in 1862 and quickly climbed the ladder of the Crown Colony’s scientific institutions (Nathan 2015).

In 1865, Hector was appointed inaugural Director of the New Zealand Geological Survey. This and his other appointments such as the manager of the New Zealand Institute placed him in the British Crown Colony in a position above Haast, who acted largely at the provincial level. An important factor may also have been Haast’s offices and networks in New Zealand learned associations. He co-founded the Philosophical Institute of Canterbury in 1862 and the Canterbury Acclimatisation Society in 1864, among others. By nominating his European mentors as honorary members of New Zealand associations, he made himself an interface between the scientific communities in the Antipodes and Europe. The Viennese pipe-carver and fossil collector Franz Sikora (1863–1902), spent over 14 years in Madagascar providing Habsburg and British research facilities with specimens but received scant recognition for his effort which underlines the significance of European promoters for opening up sustainable career opportunities for their mentees abroad.

In short, naturalists such as Haast served as bridge builders between local, colonial, imperial and other European stakeholders and thus, on an individual level, also became hubs for inter-imperial exchange and transfer (Barth and Cvetkovski 2015). To successfully implement their plans, they were able to leverage scientific, political and economic sources both locally and in Europe. As collectors, these naturalists working from overseas could be more effective than the rather expensive expeditions, dispatched from the imperial centres (Nielsen 2012; Leshem and Pinkerton 2019). Thanks to their on-site expertise, and access to field sites and sources, they represented a secure investment for the ambitions of European associations and, due to their targeted use of correspondence as a diplomatic tool, balanced the inability to participate in decision-making meetings on the other side of the globe.

Conclusion

Haast’s scholarly career relied to a significant extent on European communities and its learned institutions. His rise from an unknown autodidact to a highly decorated scientist is hardly thinkable without the colonial framework, the political situation in New Zealand and Haast’s collaborations with European partners grounded on joint benefits. Shared field and collaborative experiences forged sustainable social bonds between Haast and his fellow countrymen and colleagues working in Vienna.

These relationships were formalised with his entry into the inclusive learned societies established there in the 1850s. Individual correspondent relationships and, from today's point of view, irresponsible use of cultural and natural history heritage material formed the springboard for Haast's admission to the prestigious British associations. These multiplied his networking activities, channelled cross-continental exchange and accredited his scientific work.

In this respect, Haast's biography can serve as a model for a better understanding of other naturalists working in colonial environments. The persistence and success with which Haast pursued his career as well as the extent to which he and Hochstetter exchanged the natural history and anthropological collections of the Canterbury and Vienna museums, however, is unique. Important to colonial rule, practical fieldwork such as geological surveying and mineral prospecting opened up career opportunities, even for non-academic contributors. This was especially true for non-British immigrants with a penchant for natural sciences, ambition, pre-experience as collector and a willingness to take risks. The late professionalisation of science in the Habsburg Monarchy and close connections between the imperial geological surveys in London and Vienna may have facilitated Haast's involvement in the earth science communities of these two metropolises.

Besides autodidacts such as Haast, in the second half of the nineteenth century, many young PhD candidates turned their backs on the competitive scientific labour market in the German and Habsburg empires and sought their fortunes in British colonies. They profited from the fact that the Habsburg Monarchy participated only indirectly in colonial ventures outside Europe and that the German Empire entered colonial politics after 1880. The British colonial administration thus considered German-speaking scholars more trustworthy and impartial than their colleagues from other European colonial powers such as the French and Dutch empires. In local conflicts, they could bring their origin into play as a sign of their political neutrality, thus acting more independently than many British colleagues and securing their home countries a share of the scientific profit. In this way, many of them succeeded in social advancement in the overseas and European scholarly communities, both as loyal employees of the colonial administrations and as informal agents of the learned societies in their countries of origin.

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Endnotes

¹ The status of "k. k." (Imperial-Royal) approved organisation, an honour granted to federal institutions in the Habsburg Empire before 1867, included more than a dozen societies (e.g. in the fields of agriculture, medicine, photography and meteorology) and often required an official protector from the Imperial family. This could be associated with privileges such as state subsidies or a postage exemption for correspondence with public authorities. The first k. (imperial) stood for the title of the Emperor

of Austria. The second k. (royal) stood for the title of the King of Hungary.

² It was the British settlers and their political representatives who wanted to know more about the potential resources (land, minerals) in their respective provinces. This was particularly the case in Nelson Province, where agricultural land was limited but mineral deposits seemed to be abundant. I thank Mike Johnston for this remark.

³ As "our universities have only recently stopped

the practice of purchasable doctoral diplomas”, Hochstetter turned (20 September 1861, cited from Nolden 2013: 56) to the University of Tübingen, where he had received his own doctorate 10 years earlier. In his application in the name of Haast, Hochstetter (24 September 1862, cited from Nolden 2013: 84–85) enclosed Haast’s curriculum vitae and underlined his scientific achievements while undertaking geological investigations in Nelson and Canterbury, his support of the *Novara* mission and his membership in Viennese learned societies (Nolden 2016a: 75).

⁴ One of the exceptions was the Austrian field geologist, palaeontologist and alpinist Georg Geyer (1857–1936), who, despite not having a doctorate, was elected a corresponding member of the Vienna Academy of Sciences in 1914 and a full member in 1921. I thank my colleague Sandra Klos for this remark.

⁵ Acclimatisation societies were volunteer organisations, established from 1850 onwards, that promoted the introduction of non-native species in various places around the world. They were particularly popular in the colonies, especially in Australia and New Zealand. These societies aimed not only to complete the local fauna and flora with foreign species, but also to send useful exotic animals and plants from the colonies to the European centres.

⁶ An on-going project on the colonial acquisition contexts at the Vienna Natural History Museum will examine its inventories from 1876 to 1918, analysing the Anthropological Department’s collections from New Zealand and Tierra del Fuego as a first step. In total, the anthropological collections comprise about 40,000 human remains, with an estimated 3,000 objects from countries with a colonial history (Austrian Press Agency 2021). In 2015, the Weltmuseum Wien, Austria’s major ethnographic museum, returned Māori bones, including a tattooed Māori head, the mummy of an infant, and skeletal parts, which the Austrian taxidermist Andreas Reischek (1845–1902) had collected and purchased. Reischek had used his good contacts with Māori to loot abandoned settlement and burial sites expressly declared tapu (sacred). In 2009 and 2011, the Austrian Academy of Sciences, the University of Vienna, the Natural History Museum, and the Vienna Pathological-Anatomical Federal Museum repatriated 47 Aboriginal skeletons to Australia.

⁷ Hochstetter, although being of Protestant faith, had been appointed by Emperor Franz Joseph as natural science teacher to Crown Prince Rudolph in 1872. In this role, he presented the Māori skulls sent to Vienna by Haast to the crown prince.

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