

FERDINAND MUELLER AND THE ROYAL SOCIETY OF VICTORIA

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ABSTRACT: During the 1850s the botanist Ferdinand Mueller (later von Mueller) played a leading role in the affairs of the predecessor societies of the Royal Society of Victoria. He was president of the last of these, the Philosophical Institute of Victoria, when in January 1860 it was granted permission to style itself the Royal Society of Victoria. The formation of these societies also advanced Mueller's own career at a crucial stage of its development. In particular, their commitment to publishing volumes of Transactions provided Mueller with a vehicle for publishing descriptions of the many new species he was identifying in the Australian flora, thus freeing him from his former dependence on colleagues in Europe to see his work into print. Following the launching of a series of his own, *Fragmenta phytographiae australiae*, in 1858, Mueller no longer had to depend on the local society, either, in order to see his botanical work published. When his experience and advice were ignored in the planning of the Burke and Wills Expedition and he became thoroughly disillusioned with fellow members of the Royal Society who were responsible for the debacle, he gradually distanced himself from the organisation and had little to do with it for many years thereafter.

In mid-1854, when the first general scientific societies were formed in Victoria – the Philosophical Society of Victoria and the Victorian Institute for the Advancement of Science, predecessors of the Royal Society of Victoria – there were very few properly trained, practising scientists in the colony. In fact, there were only two. One was the government's geological surveyor, Alfred Selwyn, recruited from the Geological Survey of Great Britain, who had arrived in Victoria in November 1852. The other was the German-born botanist Ferdinand Mueller (later von Mueller), who had caught the attention of the Lieutenant Governor, Charles Joseph La Trobe, soon after arriving in Victoria in August 1852 after almost five years in South Australia, and who had become Government Botanist in January 1853 after La Trobe created the position for him. They were joined a year later by the two science-orientated professors appointed to the newly-founded University of Melbourne, Frederick McCoy and William Parkinson Wilson, both of whom arrived in Melbourne in time to commence lecturing when the university opened in March 1855. On 18 May of that year both joined the Philosophical Society. In contrast to these four men, almost all the other members of the two original societies, and of the Philosophical Institute of Victoria that was formed when the two merged in mid-1855, would be best described as dilettantes so far as their engagement with science was concerned – interested, in some cases reasonably knowledgeable, but with neither the background nor the commitment to undertake serious research.

ACTIVE ENGAGEMENT

Both Selwyn and Mueller were away from Melbourne for long periods in the early days of their government appointments, in pursuit of their scientific duties. Mueller was away continuously from early February to late June 1853, from the beginning of November 1853 to mid-April 1854, and from the beginning of November 1854 to early March 1855, on three remarkable journeys of botanical exploration through much of Victoria. Then, from early July 1855 until January 1857, he was a member of the North Australian Exploring Expedition under Augustus Gregory, followed by six months in Sydney working up the materials he collected during this expedition before finally resettling to Melbourne in June 1857.

Although both Selwyn and Mueller undertook their scientific duties vigorously, there is a remarkable contrast between their respective levels of engagement with Victoria's infant scientific organisations. Whereas Selwyn's name appears hardly at all in the minutes of proceedings of either society, Mueller was extremely active and, indeed, played a leading role in the affairs of both societies whenever he was in town. It was Mueller who, at a preliminary meeting, formally moved that the Philosophical Society of Victoria be established, and he became a member of that society's first council. He presented the main paper at the society's first meeting following its establishment and two others in the course of the next few months (Mueller 1855a, 1855b, 1855c). He also presented two papers at early meetings of the Victorian Institute for the Advancement of Science (Mueller 1855d, 1855e) – of the council of which he was also a member – and regularly offered comments on papers

presented by others.¹ More than any of the other papers that were read, Mueller's were significant contributions to science that attested to the serious scientific purposes of the two societies. When Mueller left for Sydney in early July 1855 to join Gregory's expedition, it was far from certain that he would ever return to Victoria. Nevertheless, the Philosophical Society was told he had 'expressed his desire to retain his connection' with the society, to which 'he hoped to be able to send ... accounts during his contemplated expedition to the interior'. In response, 'several of the members expressed their regret at having lost the valuable services of Dr. Mueller' and, this being the final meeting before the two societies merged, he was promptly elected the first honorary member of the new, merged entity.² Had he not just left the colony, Mueller would undoubtedly have joined the council of this new body as well.

Shortly after Mueller returned to Sydney with other members of Gregory's expedition at the beginning of January 1857, he paid a brief visit to Victoria to see his sisters before settling for six months in Sydney while he worked up his collections. During this visit he also confirmed arrangements for resuming his position as Government Botanist once he had finished his work in Sydney, and indeed for expanding his responsibilities by also becoming Director of the Melbourne Botanic Gardens.

While he was away in northern Australia, a number of his papers had been published in leading botanical journals in Europe. These papers had given him international standing in his science, something that no-one else in Australia had at the time. In addition, his already considerable reputation as an explorer, chiefly based on his three Victorian expeditions, was greatly enhanced by this latest journey and was soon to be cemented by a warm public tribute by Augustus Gregory (1857). In dramatic testament to his new status, at a meeting of the Philosophical Institute on 4 February 1857, the chairman 'read letters from Professor Wilson and Dr. Wilkie respectively resigning the office of Vice-President, in order that the offer of one of the Vice-Presidentships might be made to Dr. Ferdinand Mueller'.³ From Sydney, Mueller graciously declined the offer when it was made to him, but once settled back in Melbourne he again became an active participant in the Philosophical Institute's affairs and presented a series of major papers at its meetings during the following few months (Mueller 1857a, 1857b, 1857c). At the Anniversary Meeting on 3 March 1858, he was elected one of the vice-presidents, and a year later he succeeded Sir William Stawell as president.

Mueller's year as president was perhaps the most notable in the organisation's history. Most time-consuming was the compiling of a comprehensive report on the natural resources of Victoria. The project was prompted by a request

from the Society of Arts in London but was encouraged by the Victorian Government because, while the subject was close to the heart of many members, including Mueller, it was also vitally important to the development of the colony as the alluvial gold deposits were worked out and large numbers of miners sought alternative employment. As well as chairing the committee that oversaw the project as a whole, Mueller became convener of two of the seven working parties that reported on different aspects of the subject, those dealing with 'Indigenous Vegetable Products' and 'Agriculture and Horticulture'.⁴

Even before the request from the Society of Arts was received, the government had shown its faith in the Philosophical Institute as a source of advice on the resources of the colony when it declared its intention to place on the Estimates for 1860 a sum of £600 for 'prize essays on scientific and other subjects connected with the development of the resources of Victoria' and to ask the Philosophical Institute under Mueller's leadership to oversee the expenditure of the money. The institute put forward for approval seven possible subjects for the essays, and in due course four topics were advertised. Mueller was no longer president by the time of the closing date for submissions in October 1860, and he was not involved in the judging. Twenty-six entries were received. The prizes were awarded early in 1861 and the four winning entries were published later that year.⁵

It was also during Mueller's year as president that the organisation gained its permanent home, the building in which it is still located today – or rather, the first stage of this, a high-ceilinged, single-storey meeting hall with space for the museum and books that the Philosophical Institute had begun to accumulate. The government provided the land and a £2000 grant to cover the cost of the building. Construction began in May 1859 and by 21 December the institute was able to assemble for the first time in its new home. Mueller as president was in the chair at this historic meeting and delivered 'a very eloquent address, appropriate to the occasion'.⁶ Even when he was no longer president, he continued to take responsibility for the laying out of the surrounding ground.

There was further excitement at the Philosophical Institute's next ordinary meeting, held on 23 January 1860, following the opening of the hall. Mueller was once again in the chair when it was announced that Queen Victoria had sanctioned the institute's assuming the title the 'Royal Society of Victoria', in imitation of the Royal Society of London.⁷ For many members, seeing the Philosophical Institute become a 'Royal Society' in due course had been an ambition since the earliest days of the organisation, but not until after Mueller became president was a formal application sent to London.

Finally, it was during Mueller's presidential year that the necessary funding was secured for what became known as the 'Burke and Wills Expedition' and a steering committee, the Exploration Committee of the Royal Society of Victoria, established to manage things. Mueller became a member of the Exploration Committee, not by virtue of being president of the Royal Society, but in his own right. However, he was only ever an ordinary member of the committee, never an office-holder.

At the time Mueller succeeded Sir William Stawell as president, it was the organisation's policy that the president and vice-presidents should hold office for a single year only, and he therefore stood down at the Anniversary Meeting in March 1860, to be succeeded by the Governor, Sir Henry Barkly. Since it would have been seen as akin to *lèse majesté* to expect Barkly to stand aside a year later, the one-year rule was promptly abandoned and Barkly continued in office until he left the colony in September 1863. Mueller continued on the Royal Society's council until March 1863 and even allowed himself to be drafted as secretary some months after that when R.B. Smyth resigned the position,⁸ but he did not re-nominate in March 1864 when the next election took place following Barkly's departure. He never again served on the council.

THE NEED TO PUBLISH

The different levels of engagement of Mueller and Selwyn in the affairs of the Royal Society of Victoria and its predecessor organisations during these years no doubt in part reflected their different personalities and degrees of gregariousness. But they were also, I suggest, a reflection of the different needs of the sciences involved. The fundamental and most pressing task confronting Selwyn was to produce a series of geological maps of the parts of the colony of greatest interest to the mining community. Any paper that he presented to one of the local scientific societies – and in fact he did not present any – would have involved additional work extraneous to the chief task before him. For Mueller, on the other hand, determined as he was not to be a mere collector for metropolitan botanists but to do his own analyses, characterising the new and unfamiliar flora he was encountering was fundamental to his role as Government Botanist, and this led necessarily to his producing papers embodying his descriptions.

How, though, was he to get these papers published? Earlier on, his only option had been to look to his contacts in Europe to get them published for him – at first his friend Wilhelm Sonder in Hamburg and later William Hooker, Director of Kew Gardens in England. Mueller was acutely aware in the early years that he lacked both an authenticated suite of herbarium specimens for comparative purposes and an adequate botanical reference library, and that, as

a result, he could not be certain about his identifications. He thus relied on his European colleagues to check these identifications prior to publication, and he was devastated when Sonder published a number of his manuscript names without first checking whether the species had been described already under a different name (Mueller 1854).

Even before he became aware of this, Mueller had begun sending his new descriptions to Hooker rather than to Sonder. Mueller apparently believed that the position he now held as Government Botanist in one of Britain's colonies entitled him to Hooker's help with the publishing of his work. Eventually, as the mass of paper Mueller was sending swelled enormously following his return from the North Australian Exploring Expedition, Hooker's son Joseph made it clear to him both that he and his father regarded it as essential that the descriptions be checked before they were published, and that neither the father nor the son could find the time to do this. Moreover, William Hooker was discontinuing the journal in which Mueller had expected his work to appear, *Hooker's Journal of Botany and Kew Garden Miscellany*. Mueller's manuscripts were therefore returned to him (Home et al. 1998: 293–295, 328–331).

Long before Mueller's prospects of having his work seen into print by Hooker evaporated in this way – indeed, even before Mueller became aware that Hooker had not published the first papers sent to him – the formation of scientific societies in Melbourne and, more particularly, their commitment to publishing their transactions, gave him an alternative means of publishing his work. Moreover, this was a means that he felt increasingly free to take advantage of as the reference materials available to him grew stronger and rendered him much more confident than he had been about his botanical diagnoses. His library had been growing dramatically as a result of his committing a considerable fraction of his annual salary to buying books, and so, too, had the Government Herbarium that he had established following his appointment as Government Botanist. As a result, the published *Transactions* of the Philosophical Society of Victoria, the Victorian Institute for the Advancement of Science and the Philosophical Institute of Victoria all include substantial papers by Mueller with descriptions of many new species. Many of these descriptions Mueller had previously sent to Kew, where they had been languishing unpublished until they could be checked. Once Mueller's species were published in Melbourne, however, William Hooker re-published them in his journal, perhaps because now the responsibility for publishing them was indisputably Mueller's, not his.

Mueller used the pages of the local *Transactions* as the main publication outlet for his work for only a few short years, but during that time they were crucial to his scientific

practice. Without them, he had no reliable means of getting his work into print. Yet by 1858 – prompted, it would seem, by Hooker's returning his manuscripts to him – he had devised a means of publishing his work independently of the *Transactions*, launching what amounted almost to a scientific journal of his own entitled *Fragmenta phytographiae australiae*. Eventually, 94 fascicles of this work were published, the last of them in December 1882. The first fascicle was published by Mueller himself in March 1858 as a private venture, and even though the work thereafter came out at government expense, both the content and the rate of publication remained largely under his control – the latter being an important consideration given the uncertainties and delays in publication that beset the Royal Society of Victoria's journal in the early 1860s. So long as the *Fragmenta* continued to appear, it carried virtually all Mueller's new taxonomic work. More particularly, with a single exception – a paper that he presented in 1862 on the Nardoo plant that had sprung into prominence as a result of the Burke and Wills Expedition (Mueller 1865) – once the *Fragmenta* was launched, no new taxonomic papers of Mueller's appeared in the *Transactions* of either the Philosophical Institute or its successor, the Royal Society of Victoria.

DISILLUSIONMENT

At the time when a major Victorian exploring expedition – later the Burke and Wills Expedition – first became a serious possibility, Mueller was indisputably the colony's leading authority on exploration and he played a dominant role in the early discussions. Later, however, his influence declined markedly. Most crucially, despite Mueller's vigorous campaigning on behalf of his preferred candidate as leader of the expedition, the South Australian police commissioner Peter Warburton, the appointment went instead to Robert O'Hara Burke (Bonyhady 1991).

Mueller's experience in travelling with Gregory had taught him the importance of an expedition's having a leader with highly developed bushcraft and navigational skills, who had experienced at first hand the perils of exploring the Australian outback. The Exploration Committee, however, in appointing Burke, had chosen to ignore Mueller's advice and appoint a leader who was entirely ignorant of the things that to Mueller mattered most in an explorer. In Mueller's opinion, Burke's appointment was a recipe for disaster. According to his assistant at the time, Hermann Beckler, 'Dr Mueller is completely put out over the arrangements and prophesies a catastrophic outcome to me every day' (Beckler in Voigt 2000: 290). The appointment was also a serious rebuff to Mueller himself, on a subject about which he cared deeply and on which he had every reason to expect to be treated as an authority.

In response to the committee's decision, Mueller seems to have lost all enthusiasm for the expedition. He did not become a member of the sub-committee established to liaise with Burke about the detailed arrangements, and in the weeks that followed he missed many more meetings of the Exploration Committee than he attended. When the committee sought his advice about the equipping of the expedition, he made a large number of very sensible practical suggestions based on his own experience (Home et al. 2002: 91–94). Unfortunately, while the Exploration Committee adopted a few of his ideas, it allowed Burke to ignore most of them. As a result, the expedition set out burdened with much unsuitable equipment but wanting many items that had proved their value on earlier expeditions into the interior.

Mueller obviously expected to have an opportunity, before the expedition set out, to share his experience of northern Australia with Burke. The latter showed no interest, however, in profiting from Mueller's knowledge of the country into which he would be venturing. Not until the day before the expedition was due to leave Melbourne did he make a perfunctory attempt to speak to Mueller, calling to see him without notice. Unfortunately, Mueller was out at the time. Though Mueller evidently resented being treated in such a cavalier fashion, he could not resist writing at considerable length, once he got home and learned that Burke had called, to wish the expedition well and to offer additional excellent practical advice (Mueller 1860) – advice that Burke once again for the most part ignored.

Thereafter Mueller had little to do with the Exploration Committee for many months. Only when it became clear that the explorers were overdue and search expeditions were being organised did he temporarily re-engage with the committee. Once the relevant decisions had been taken, however, his attendance at meetings again fell away. Though the committee remained in existence for a further ten years and Mueller remained officially a member throughout that time, he played no role in its day-to-day affairs and attended meetings only when there were significant decisions to be taken.

The unhappy events surrounding the Burke and Wills Expedition undoubtedly left Mueller disillusioned and created a rift not just between him and the Exploration Committee but between him and the Royal Society of Victoria as a whole, dominated as this was by the very men who had ignored his advice in relation to the Exploring Expedition and then overseen the unfolding disaster. The rift was never healed – a most unfortunate estrangement between the colony's leading scientist and its principal scientific society that weakened the Royal Society much more than it did Mueller. With a secure and independent

publication outlet for his work and a rapidly expanding network of scientific correspondents around the world, Mueller no longer needed the society in the way he once had, and he chose to distance himself from a group of men in many of whom he no longer had any confidence.

References

- Bonyhady, T., 1991. *Burke & Wills: From Melbourne to Myth*. David Ell Press, Sydney.
- Gregory, A., 1857. North Australian expedition. *Argus*, 16 February, p. 6.
- Home, R.W., Lucas, A.M., Maroske, S., Sinkora, D.M., and Voigt, J.H., 1998–2002. *Regardsfully Yours: Selected Correspondence of Ferdinand von Mueller*, 1 and 2. Peter Lang Verlag, Bern, Switzerland.
- Mueller, F., 1854. Letter to William Hooker, 27 May 1854. Royal Botanic Gardens Kew, Directors' letters, vol. LXXIV, Australia letters 1851–1858, letter no. 139.
- Mueller, F., 1855a. Definitions of rare or hitherto undescribed Australian plants chiefly collected within the boundaries of the colony of Victoria. *Transactions of the Philosophical Society of Victoria* 1: 5–24.
- Mueller, F., 1855b. Definitions of rare or hitherto undescribed Australian plants chiefly collected within the boundaries of the colony of Victoria. *Transactions of the Philosophical Society of Victoria* 1: 34–50.
- Mueller, F., 1855c. Descriptive characters of new alpine plants from continental Australia. *Transactions of the Philosophical Society of Victoria* 1: 96–111.
- Mueller, F., 1855d. Descriptions of fifty new Australian plants, chiefly from the Colony of Victoria. *Transactions of the Victorian Institute for the Advancement of Science* 1: 28–48.
- Mueller, F., 1855e. Account of the Gunyang, a new indigenous fruit of Victoria. *Transactions of the Victorian Institute for the Advancement of Science* 1: 67–70.
- Mueller, F., 1857a. Account of some new Australian plants. *Transactions of the Philosophical Institute of Victoria* 2: 62–77.
- Mueller, F., 1857b. On a general introduction of useful plants into Victoria. *Transactions of the Philosophical Institute of Victoria* 2: 93–109.
- Mueller, F., 1857c. An historical review of the explorations of Australia. *Transactions of the Philosophical Institute of Victoria* 2: 148–168.
- Mueller, F., 1860. Letter to Robert O'Hara Burke, 19 August 1860. MS13071, box 2083/5, State Library of Victoria.
- Mueller, F., 1865. On the systematic position of the Nardoo plant, and the physiological characteristics of its fruit. *Transactions of the Royal Society of Victoria* 6: 137–147.
- Voigt, J.H., 2000. *Entdeckungen in Australien: Briefe und Aufzeichnungen eines Deutschen 1855–1862*, ed. J.H. Voigt. Jan Thorbecke Verlag, Stuttgart.

Endnotes

- 1 *Transactions of the Victorian Institute for the Advancement of Science* 1 (1855).
- 2 *Transactions of the Philosophical Society of Victoria* 1: xxv (1855).
- 3 *Transactions of the Philosophical Institute of Victoria* 2: xxvi (1857).
- 4 Report on the resources of the colony of Victoria. *Transactions of the Philosophical Institute of Victoria* 4: Appendix (1859).
- 5 *The Victorian Government Prize Essays, 1860*. Royal Society of Victoria, Melbourne (1861).
- 6 *Transactions of the Philosophical Institute of Victoria* 4: xxxiv (1859).
- 7 *Ibid.*, p. liv.
- 8 *Transactions of the Philosophical Institute of Victoria*