

# Basedow the scientist

Herbert Basedow practised science at a time when it was not uncommon to work across disciplines. But the combination of his talents and interests provided opportunities, attitudes and perspectives unique even in his time, and rarely encountered since. The broad scope of his university qualifications armed Basedow with the background knowledge and methodologies he would later draw upon in recording and interpreting new information that he would come across on his many travels into remote and little-explored regions of Australia.

## Basedow's early career

Basedow's undergraduate studies at the University of Adelaide and his postgraduate work in German universities at Breslau, Göttingen and Heidelberg included botany and zoology alongside his geology major. Professor Ralph Tate, who had held the Elder Chair in Natural Sciences at the University of Adelaide since its foundation in 1874, had a significant influence on Basedow's development as a scientist. Tate himself routinely published in all three areas. Basedow, a willing satellite of the great man, aimed to continue in his footsteps.<sup>1</sup>

Basedow's first scientific paper was read before the Royal Society of South Australia in July 1901, while he was still an undergraduate student at the University of Adelaide.<sup>2</sup> In it he presented an extension of work originally performed by Tate on fossil molluscs from Edithburgh, on South Australia's Yorke Peninsula,

including one Tate had named in Basedow's honour, *Tellina basedowi*.<sup>3</sup> The paper concluded with a heartfelt tribute to Tate, 'who has been recognised as having a place among the highest authorities in natural science, and one to whom students of palæontology, especially in Australia, are deeply indebted'.<sup>4</sup> At the time of Tate's death, on 20 September 1901, he and Basedow had been working together on five new fossil species. Basedow presented a paper based on this research to the Royal Society of South Australia the following year.<sup>5</sup>

## Zoology and botany

In 1905 Basedow presented two more scientific papers to the Royal Society of South Australia, this time on living molluscs. In the first he described two new species of gastropod (the class of molluscs that includes snails) collected on a marine dredging expedition off Adelaide with physician and amateur conchologist Dr Joseph Verco. The second, jointly written with Charles Hedley of the Australian Museum, described six new species of nudibranchs ('sea slugs').<sup>6</sup>

From this time on, Basedow's professional activities were directed away from botany and zoology. He himself did not publish any more on new species, and he did not write any more scientific articles on fauna. The expeditions he undertook, however, with their prime purposes of geological, anthropological and medical investigation, allowed him to collect specimens opportunistically and, over the years,

he was responsible for adding a considerable number of new species of invertebrates and plants to museum and herbaria catalogues. There was a great flurry of academic activity upon Basedow's return from the 1903 prospecting expedition to north-western South Australia, as his collected specimens providing his fellow Royal Society members with new material for their own papers.<sup>7</sup>

Australian herbaria contain nearly 800 individual plant specimens collected by Basedow over the period of his working life; many more are known to be housed in collections in Europe and England. Although Basedow never described himself as a botanist, and he didn't publish in this area, as a collector he extended both the known range of previously described plants, as well as adding new species, and at least one new genus to the Australian flora.<sup>8</sup> On Basedow's first major expedition, prospecting for metal ores in the Musgrave, Mann and Tomkinson ranges in 1903, he collected the type specimens of *Acacia basedowii* (Basedow's wattle) and *Triodia basedowii* (colloquially known as spinifex). On subsequent expeditions he collected the types of an *Eragrostis*, a *Scaevola*, and a *Pandanus* (see page 25), all of which were named in his honour. The new genus he collected, *Basedowia*, a herb named in 1929, comprises a single species.

There are at least two species of plants that once carried his name — the herb *Goodenia basedowii* (named in 1912) and the rush *Typha basedowii* (named in 1915) — but these have since been determined not to be new species after all. Under the laws of nomenclature these revert to the original name of the species. Of the six species of nudibranchs described by Basedow and Hedley in 1905, five remain classified as new species, despite four being later reassigned to different genera.<sup>9</sup>



**Herbert Basedow  
examining plants on  
Mannakai station,  
Northern Territory  
1922 or 1928**

photograph by Frank Feast  
reproduced from film  
negative

In all, Basedow described more than 30 new species of flora and fauna, including two with Tate and six with Hedley. The full extent of Basedow's collecting and naming of plant and animal specimens remains to be fully investigated. What we do know is that Basedow discovered at least one new genus and 20 new species of insects, six new molluscs and six new fossils that were described in his lifetime by various scientists, in addition to the new plants referred to above.

## Geology

Geology was the mainstay of Basedow's paid scientific work. Several of the expeditions and many of his shorter trips were because of his qualifications — undergraduate and postgraduate<sup>10</sup> — and experience in geology. Earlier trips were undertaken as an employee of the South Australian Geological Department. After 1911, while Basedow was a consulting geologist, he undertook geological investigations for both individuals and for organisations, including mining syndicates and companies.

When carrying out his geological fieldwork Basedow's investigations were limited to surface outcrops and shallow diggings unless there were existing shafts where he was conducting his inspections. While he could observe features such as faulting and folding to gain clues to the geological record, or examine fossils to gauge the age of deposits, in cases where such evidence was absent he was limited in what he could determine.

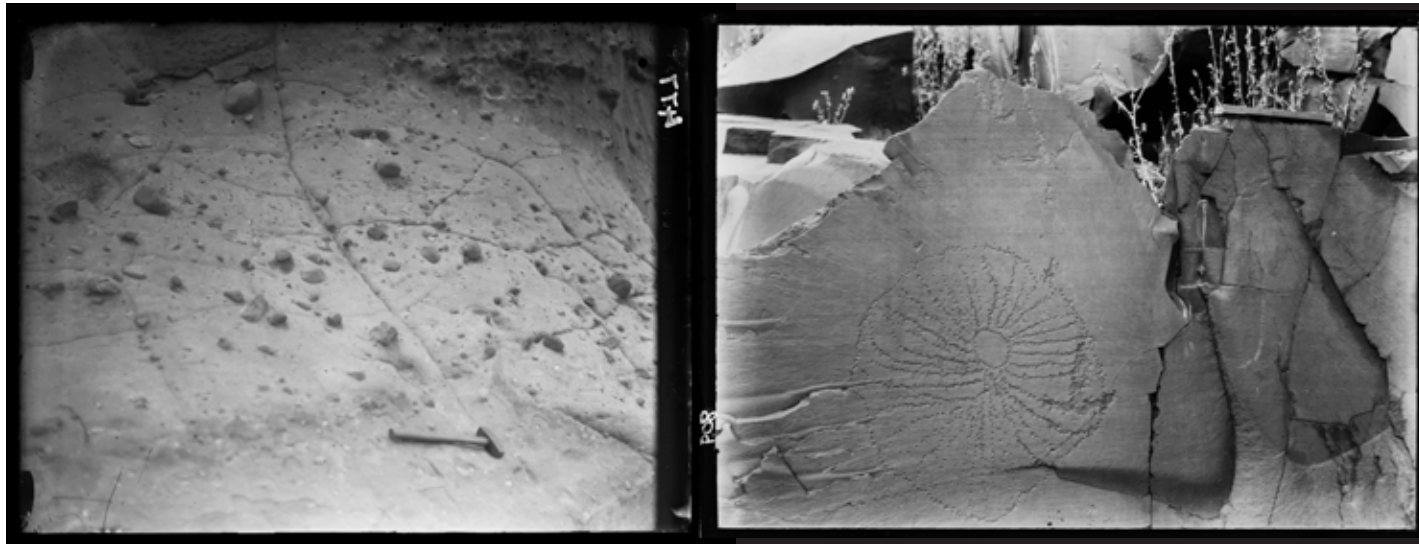
The year after he graduated, Basedow was employed as one of four prospectors on the South Australian Government prospecting expedition of 1903. On his return he published three papers — two on geological subjects — from material gathered on the expedition. For one of these, 'Geological report on the country

traversed by the South Australian Government North-West Prospecting Expedition, 1903', he was awarded the University of Adelaide's Tate Memorial Medal (named in honour of his mentor) in 1904.<sup>11</sup>

The following year Basedow was engaged as a temporary assistant to serve under State Government Geologist HYL Brown, in geological explorations in the Top End. This time Basedow was absent from Adelaide for almost eight months. Brown had considerable faith in Basedow's abilities as a geologist, and it was just as well that Basedow was competent at his work. In October, Brown contracted malaria, and from then until the party's return to Adelaide in December, he was unable to do anything more arduous than examine cores of rock or sediments brought to him. According to historian Bernard O'Neil, 'much of the geological exploration was left to Basedow'.<sup>12</sup> Basedow published five papers that derived from the 1905 expedition: one in anthropology and four in geology, including two jointly with Brown.

It was not only the Government Geologist who demonstrated confidence in the young Basedow. While the expedition party was in the Northern Territory, a report of gold being found at Melville Bay, on the western side of Gove Peninsula, was received by the minister responsible for the Territory, Laurence O'Loughlin. According to an unreferenced newspaper report, the minister requested that Basedow examine the specimens.

In 1906 Basedow conducted explorations in part of the Flinders Ranges. The same year, he classified the entire School of Mines geological collection of 2500 specimens; his catalogue was published the following year.<sup>13</sup> Basedow was appointed honorary curator to undertake this work. In 1910, Basedow was appointed



Glacial till, Yellow Cliffs, Northern Territory 1920s

Rock engravings, Deception Creek, Flinders Ranges, South Australia 1905 – about 1913

reproduced from glass plate negatives

South Australian Assistant Government Geologist, a position he held until 30 April the following year. During this time he investigated various geological deposits south of Adelaide, as far north as the Flinders Ranges and on Kangaroo Island.<sup>14</sup>

Basedow was not one to back away from controversy and on several occasions became involved in sometimes heated debates with other scientists. One particular feud, with geologist Walter Howchin over glacial deposits, was reported on and off in the South Australian media for many years.<sup>15</sup> About 10 years later Basedow was again embroiled in disputes with senior colleagues, although by this time Basedow himself was an experienced scientist with an established reputation. In 1915 and 1917 he was asked by two consortiums to respond to adverse reports, authored by Arthur Wade and LK Ward, on the possibilities of finding petroleum deposits in South Australia. Basedow's own reports were more optimistic.<sup>16</sup> In

his (albeit polite) attacks on Ward's science, it is conceivable that Basedow's strong opposition was sharpened by the fact that Ward had won the position of Government Geologist over Basedow in 1911.

Basedow's publishing on geological matters took a back seat after 1911<sup>17</sup> and, following his resignation from the position of Chief Medical Inspector and Protector of Aborigines in the Northern Territory after only 45 days, it seems that he was no longer 'the prodigal son'. After unsuccessfully applying for the position of South Australian Government Geologist (it was reported in the press that he was advised not to apply 'in order that he would not be embarrassed by his non-selection') he went back into medical practice and henceforth his geological work was undertaken as a consultant on small geological jobs, advertising himself as providing 'Geological, Mining, and Petroleum Reports. Examinations undertaken in any part of Australia'.<sup>18</sup>



**Herbert Basedow communicating  
with an unknown man, Arnhem  
Land, Northern Territory 1928**

photograph possibly by Donald Mackay  
reproduced from lantern slide

## Anthropology

Basedow always had a leaning towards anthropology and he took any opportunity to make anthropological observations. His anthropological work comprised a mix of observation and interrogation. He observed Aboriginal people going about their business, from everyday activities such as food preparation to secret ceremonies. To learn about Aboriginal interment practices he dug up graves, sometimes collecting the skeletons found within them. On many occasions, without any form of interpretation available to him, he was only able to observe. This was largely the case in his documentation of rock paintings. At Uluru in 1926, for example, he documented rock paintings

all around the monolith but was unable to learn anything of their rich religious meaning as there were no traditional owners in the vicinity to consult. He simply sketched the paintings in a notebook, noting dimensions and the colour of the pigments employed, and photographed them with his camera and cinematograph.

In cases where he was able to consult with Aboriginal people, the subject matter ranged widely from social structures, through to historical incidents and the meaning of ceremonies. He was occasionally aided in his endeavours by kindred spirits, also interested in anthropology, including Pastor Carl Strehlow at Hermannsburg, a mission in southern central Northern Territory visited by Basedow in July 1920:



**Ununited fracture of a man's arm, Denial Bay, South Australia 1920**

**Arrernte man with badly ununited fracture, Henbury station, Northern Territory 1920**

reproduced from glass plate negatives

While engaged upon one of my later commissions in central Australia, my duties took me to the Hermannsburg Mission Station on the Finke River, where for a fortnight I enjoyed the companionship of the Rev. Carl Strehlow and received every assistance in my researches among the western groups of the Arundta [Arrernte] tribe.<sup>19</sup>

In 1925 Basedow published his major anthropological work, *The Australian Aboriginal*, which brought together all of his observations on Aboriginal societies up to that time. Basedow's fieldwork was the result of opportunities usually offered to him in widely different areas and therefore without cohesiveness. This did give him, though, the opportunity to consider diversity across Aboriginal cultures. His

knowledge extended beyond the areas of his own fieldwork, but the more detailed information he presented was based on his own observations.<sup>20</sup>

He wanted to make the book 'of general interest' and for this reason it is very broad-ranging, in geographical terms and subject matter, and does not have the same degree of detail as the work of some of his contemporaries. In fact Basedow was rarely in a position to spend more than a week or two with any group of people and consequently could not make detailed and sustained observations. He was unable, therefore to complete comprehensive ethnographies such as those produced by writers such as Spencer and Gillen, or Howitt and Roth.<sup>21</sup> Nevertheless, *The Australian Aboriginal* does contain a wealth of useful information on many aspects of Aboriginal cultures

in the areas he visited, and where those areas were settled early, like Darwin, his work is a major source of information.

Basedow's status as a medical practitioner or government official sometimes facilitated his anthropological investigations. As he explains:

I do not claim to be an initiated member of any tribe. To be candid, I several times tried to qualify by impressive exhibitions of surgical skill and exaggerated munificence, but, although I gained the confidence and goodwill of the old men, I was informed that I could only be accepted provided I passed through the different grades of initiation and submitted to the attendant mutilations in the orthodox way. The medicine men, however, usually claimed me as a 'Kata' or colleague, and allowed me to witness most of their rituals and sacred ceremonies, which they carefully explained to me. In this way I was able, also, to secure a very great series of photographs depicting intimate scenes from aboriginal life, many of which are unique.<sup>22</sup>

At a time when Indigenous people were heavily exploited and interest in their cultures was limited, Basedow's interest in Aboriginal cultures probably came as a surprise to many of the Aboriginal people he encountered. On his first expedition, in 1903, his travelling companions included Arrerika, an Arrernte man, and his wife, Unnruba, a Luritja woman. In 1908 Basedow published vocabularies of both languages based on information provided by the couple.<sup>23</sup> Evidently in recognition of Basedow's interest in his people, Arrerika made a bullroarer for Basedow during the expedition.<sup>24</sup>

Basedow often drew on his broad scientific and medical knowledge to inform his anthropological work. He used geology to help explain the antiquity of rock engravings in the Flinders Ranges, which he visited several times between 1905 and about 1912 or 1913.<sup>25</sup> He drew on his medical background in his eight-part report, published in 1932, entitled 'Diseases of the Australian Aborigines'.<sup>26</sup> Basedow observed how the impoverished living conditions of Aboriginal people were often a contributing factor to poor health. He was also interested in the way their beliefs could affect the way they responded to treatment:

One of the principal difficulties experienced in handling an aboriginal patient was the prevailing superstition which attributed all morbid conditions of the system to the evil influence of some foreign power or entity which continued to sway until the imaginary enemy was disposed of, or his witchcraft made void by an effective countercharm.<sup>27</sup>

In his outlook and opinions of Australian Aboriginal people, Basedow was heavily influenced by German anthropologist Hermann Klaatsch, and became increasingly focused on the importance of preserving 'pristine' Aboriginal cultures as much as possible.<sup>28</sup> This, he believed, necessitated the removal of non-Aboriginal elements from Aboriginal society, as part of an overall protection of the Aboriginal 'race'. From 1914 onwards he campaigned (unsuccessfully) to have an Aboriginal Reserve declared in the area of his 1903 explorations, to stop the people there 'from becoming extinct'. In the late 1920s he supported the proposal for an area of Arnhem Land to be reserved for 'the native tribes at present living there':



**Herbert Basedow talking to  
Danbidelli (Jim Mariner),  
Innamincka station, South  
Australia 1919**

unknown photographer  
reproduced from lantern slide

The isolation of the area makes it most suitable for the purpose. The several tribes concerned are still living the happy hunting lives of their ancestors, and have not been contaminated by any extent by civilisation.<sup>29</sup>

Basedow's work in Europe and Great Britain on the craniometric measurements of skulls of Australian (Tasmanian) Aborigines — the basis of his being awarded a Doctorate of Medicine — added valuable data to that held by Klaatsch on the skulls of Europe's Neanderthal man. Thomas Huxley had been the first

to suggest a close relationship between the Aboriginal and European races, speaking of the 'Austral Caucasian' in 1895. Klaatsch and, later, Basedow picked up this lead. The theory, as now developed, suggested that blackness in Aborigines was only skin-deep, unlike that of the Negroid races, and that Aboriginal people and Caucasians came from the same common stock; 'the Australian aboriginal black and the European white were one and the same race'.<sup>30</sup> According to Basedow, Aborigines were more than just a relict example of the stone age, as claimed by





*Pandanus basedowii*,  
northern Arnhem Land,  
Northern Territory 1928

reproduced from film negative

Spencer and others; they were 'the prototype of man as he appeared in Europe in the Stone Age'.<sup>31</sup> So much more urgent then, to protect these distant relations of Europeans, and their culture.<sup>32</sup>

Prior to the mid-1920s Australia had very few professional anthropologists. The University of Sydney established the first department of anthropology in Australia in 1926. Briton A Radcliffe-Brown was appointed to the inaugural chair, arriving in Sydney from South Africa, where he had held a similar post. The *Bulletin* was critical of the appointment of overseas

academics when Australians of sufficient calibre were available, commenting:

But neither case is quite so dreadful as the appointment of a young gentleman in S' Africa to the chair of Anthropology while the Australian Dr. Basedow was available.<sup>33</sup>

There is little doubt Basedow was more than a capable scholar and researcher and he was highly regarded during his lifetime, especially in his home state and by anthropologists overseas. However, Basedow never held an official position as an anthropologist.

## Cartography and draughtsmanship

Basedow's talents were not restricted to fieldwork-related activities — he was also a capable illustrator and draughtsman.<sup>34</sup> His illustrations ranged from line drawings of animals and Aboriginal people undertaking activities to exquisite coloured drawings of marine invertebrates. At the University of Adelaide, Basedow studied surveying and on his expeditions he located the relative positions of the various landmarks encountered. He later produced maps of the country traversed, many of which were published. His diary of the 1926 expedition to the Petermann Ranges, for example, contains numerous readings from the various hills he climbed to take them.<sup>35</sup>

## Conclusion

Anthropology was Basedow's main area of activity and spanned his entire career. Academically, it was his most productive area. As a scientist, he was a prolific worker. He published scientific articles following directly on from work carried out during his first expedition and he continued to publish throughout his life, with two posthumous works being published two years after his death.<sup>36</sup> He was a member of a number of learned societies in Australia and Europe,<sup>37</sup> and gave frequent lectures to the scientific community. But he was also interested in communicating his findings to the wider community, giving frequent public lectures, speaking on the radio and writing articles for the popular press. Basedow spread his talents over many fields — possibly too many. While Basedow did have a worldwide reputation as a knowledgeable person on Aboriginal cultures,

he did not achieve the same career heights as many of his contemporaries. As his *Australian Dictionary of Biography* biographer Ian Harmstorf observes, 'It was frequently said of him, after his early death, that he would have achieved greater eminence if he had not spread his remarkable talents so widely'.<sup>38</sup> Perhaps, today we would judge that his greatest talent was as a fieldworker — an explorer, observer and collector.

*This chapter was co-authored by Edwin Ride.*

# Notes

## Introduction

- 1 Nell Basedow to Colin MacKenzie, 22 July 1933, National Archives of Australia, Series A2645 50/2/1. Presumably it was MacKenzie who underlined the section in this passage.
- 2 For example, different photographs of the same Aboriginal man were published in *The Australian Aboriginal*, Basedow's first book, and *Knights of the Boomerang*. In the former he is said to be a Wardaman man, which we can assume to be correct given that Basedow was involved in its publication. In *Knights of the Boomerang* he is said to be a Warramunga man. In 'Manipulation of photographs: A case study', *COMA: Bulletin of the Conference of Museum Anthropologists*, vol. 14, 1984, 2–20, I corrected many of these errors (corrections in *COMA*, vol. 15, 1984, 25).

## Basedow the man

- 1 Ian Harmstorf, 'Basedow, Martin Peter Friedrich (1829–1902)', *Australian Dictionary of Biography*, [www.adb.online.anu.edu.au/biogs/A070205b.htm](http://www.adb.online.anu.edu.au/biogs/A070205b.htm).
- 2 Some of his studies were undertaken at the South Australian School of Mines and Industries (now the Institute of Technology), where his brother Erwin (1875–1939) also studied.
- 3 *Sydney Morning Herald*, 28 May 1900.
- 4 *Register*, 19 September 1911; Robert Lucas to Basedow, 15 November 1901; SLSA, PRG 324, vol 1.
- 5 *Prince Alfred College Chronicle*, 8 March 1895.
- 6 *Journal*, 19 April 1919. His Cape Barren geese bred 'regularly' and by 1921 he had reared 36 birds.
- 7 See 'Basedow the scientist', p. 18.
- 8 This was a high-level visit that involved Basedow in a lot of organisational matters for a period of about two months. An extensive program was organised for the nine-day visit, including receptions, on-board tours, balls, dinners and excursions for the sailors.
- 9 Donald Mackay, 'The Mackay Exploring Expedition, Central Australia, 1926', *Geographical Journal*, 1929, 258–64.
- 10 Herbert Basedow, 'Journal of the Government North-West Expedition', *Proceedings of the Royal Geographical Society of Australasia, South Australian Branch*, vol. XV, 1915, 57–242 (p. 66). Basedow also recounted another tale of

his early unease with his strange surroundings. On the night of 13 June 1903, the party had been so full of apprehension regarding the natives in the neighbourhood that they had extinguished their fire and loosed a volley of shots at a tree stump they mistook for an Aboriginal scout (ibid., p. 139).

- 11 He particularly looked at stones suitable for building materials as well as certain minerals like clays, gypsum and lignite. Herbert Basedow, *Report on Recent Development in Economic Geology*, Special Intelligence Bulletin No. 17, Government Printer, Adelaide, 1910 [p. 5].
- 12 Baldwin Spencer regarded Basedow's qualifications with 'contempt' (DJ Mulvaney & JH Calaby, *'So Much That Is New': Baldwin Spencer 1860–1929 A Biography*, University of Melbourne Press, Carlton, 1985, p. 276), while South Australian anatomist F Wood Jones described Basedow's credentials as an 'impudent parade of degrees, real or assumed; and knowledge, borrowed, stolen or feigned' (quoted in Mulvaney & Calaby, p. 276). Spencer's disapproval of Basedow seems to have developed over time, as he and EC Stirling made 'valuable criticisms and suggestions on various points' of the first of Basedow's 'Anthropological notes' ('Anthropological notes made on the South Australian Government North-West Prospecting Expedition, 1903', *Transactions of the Royal Society of South Australia*, vol. XXVIII, 1904, 12–51 (p. 47)). Stirling, but not Spencer, provided 'kind assistance' three years later (Herbert Basedow, 'Anthropological notes on the western coastal tribes of the Northern Territory of South Australia', *Transactions of the Royal Society of South Australia*, vol. XXXI, 1907, 1–62 (p. 59). Regarding Wood Jones's charge of plagiarism, at worst, Basedow could be accused, on occasion, of not sufficiently or appropriately acknowledging the work of others when he should have, excusing himself for not doing so: 'for the simple reason that, had I started looking up all necessary references, the volume might never have been completed. My time at headquarters has been so limited during the last fifteen years that, in the absence of a library near at hand, it was impossible for me to adopt any other method than to write up my observations at first-hand and run the risk of a certain amount of trespass. Nevertheless, I trust that the authors so affected will realize that there was no slight intended and will treat my transgression in the spirit of independent corroboration' (Basedow, *The Australian Aboriginal*, FW Preece and Sons, Adelaide, 1925, p xii).
- 13 He used the same titles in 'Diseases of the Australian Aborigines' in

- 1932 (*Journal of Tropical Medicine and Hygiene*, vol. XXXV, no. 12, 177–85; vol. XXXV, no. 13, 193–8; vol. XXXV no. 14, 210–13; 1 August, 229–33; 15 August, 247–50 and vol. XXXV, no. 18, 274–8).
- 14 *South Australian Government Gazette*, 11 August 1910, p. 290.
- 15 In the *South Australian Government Gazette* of 1 December, Basedow's Christian name was given as 'Hubert'. This was corrected in the following *Gazette* (8 December 1910, p. 1184).
- 16 *Express*, 25 January 1910.
- 17 Heidi Zogbaum, 'Herbert Basedow and the removal of Aboriginal children of mixed descent from their families', *Australian Historical Studies*, vol. 121, 2003, 122–38.
- 18 *ibid.* (p. 132). In Neville's view the 'full-blood' was doomed to extinction, while the 'half-castes', if cross-bred with whites, would inevitably produce whiter children, to the point where they would reach the standard of white Australians.
- 19 *ibid.* (p. 123).
- 20 Basedow met the South Australian Commissioner of Public Works on 3 June 1914 to discuss the matter and followed up the meeting with a letter the following day (SLSA, PRG 324, Item 2).
- 21 In 1929, for example, when he was president of the Aborigines' Protection League, he made a public appeal for fruit to send to Hermannsburg Mission in the Northern Territory to supplement meagre rations and, according to one newspaper, 'so that the blacks may not die of scurvy' (*Bunyip*, 30 August 1929).
- 22 *Register*, 7 May 1919.
- 23 *Critic*, 14 May 1919.
- 24 These were the only expeditions on which Nell accompanied her husband. Sometimes while her husband was away, she travelled overseas. On one trip in 1929 she visited Japan, China, Java and Singapore (see Bernard Basedow, *The Basedow Story: A German South Australian Heritage*, The Author, Adelaide, 1990, p. 125).
- 25 The reports included itineraries, a list of personnel, information on the nature of the country travelled, climate, geographical features, background information on the Aboriginal groups encountered including broad reasons for health problems, lists of individuals examined, diseases encountered and concluding remarks.
- 26 Herbert Basedow, 'Report upon the third medical relief expedition among the aborigines of South Australia', State Records of South Australia, GRG 23/1, 1921, 330, p. 30.
- 27 Herbert Basedow, 'Relic of the lost Tasmanian race: Obituary notice of Mary Seymour', *Man*, 14, 1914, 161–2.
- 28 Quoted in Bernard Basedow, *The Basedow Story*, p. 147.
- 29 Facsimile in *ibid.*, p. 146.
- 30 *ibid.* Bernard Basedow says the girls were treated 'extremely well, despite the fact that some people felt they were only servants'. A photograph in Adelaide's *Register* newspaper (8 January 1929) shows them serving Basedow with refreshments; the caption is headed 'Aboriginal girls as servants in Adelaide'. Other photographs in Basedow's collection show Tjikanna and Unndela with Nell at the zoo and with family pets and an unknown toddler. When Basedow died in 1933 both Tjikanna and

- Unndela 'deeply mourned the untimely death of Dr. Basedow' (*ibid.*, p. 147). Nell wanted to return the girls to the Northern Territory but Herbert's three sisters 'took them over and befriended them, in deference to their brother', creating a rift that led to Nell moving overseas for about 20 years (*ibid.*, p. 145).
- 31 *Register*, 12 August 1914.
- 32 Basedow to Richard L Butler, 26 August 1927, SLSA, PRG 324, Item 4; Secretary for Lands to Basedow, 16 September 1927, SLSA, PRG 324, Item 4.
- 33 Brown to Basedow, 28 March 1911, SLSA, PRG 324, Item 2.
- 34 S Roy Burston, Mervyn J Holmes, JT Beckett & JH Kelly to Basedow, 24 August 1911, NAA: Series A1 1912/2149.
- 35 Basedow, *Australian Aboriginal*, p. vii.
- 36 *ibid.*, p. ix.
- 37 *Advertiser*, 28 February 1925.
- 38 Sir Arthur Keith to Basedow, 6 April 1925, SLSA, 572.994b.
- 39 *The Times*, literary supplement, 17 September 1925. This review strongly reads as having been written by an anthropologist familiar with Aboriginal cultures and the literature that had been written on the subject. Nevertheless, the reviewer goes on to acknowledge that the book 'has given us much, and we must be grateful to him for it; it is a compliment rather than a reproach to him that we wish he had given us much more'.
- 40 This reputation was acknowledged when Basedow was asked to write the contribution 'How should the visiting scientist approach the primitive Australian Aboriginal?' for a series entitled *Practical Hints to Scientific Travellers*, published in The Hague, 1926.
- 41 Both T Werner Laurie Ltd, and Thornton Butterworth Ltd, London-based publishers, approached Basedow.
- 42 Harmstorf, 'Basedow, Herbert (1881–1933)', [www.adb.online.cdu.au/biogs/A070204b.htm](http://www.adb.online.cdu.au/biogs/A070204b.htm). Basedow had stood unsuccessfully in 1924.
- 43 Unreferenced newspaper item, SLSA, PRG 324, Item 4.
- 44 Harmstorf, 'Basedow, Herbert'.
- 45 *Mail*, 13 August 1927.
- 46 'Certificate of discharge', SLSA, PRG 324, vol. 6.
- 47 Unreferenced newspaper article, SLSA, PRG 324, vol. 6.
- 48 Unreferenced newspaper article, SLSA, PRG 324, vol. 6.
- 49 *Leader*, 8 June 1933.

## Basedow the scientist

- 1 Although he did not publish in botany, he produced published work in geology and zoology.
- 2 Herbert Basedow, 'On the occurrence of Miocene limestones at Edithburgh, and their stratigraphical relationship to the Eocene of Wool Bay, with description of a new species by Professor R. Tate', *Transactions of the Royal Society of South Australia*, vol. XXV, 1901, 145–8.
- 3 *ibid.*, (p. 148).
- 4 *ibid.*
- 5 Herbert Basedow, 'Descriptions of new species of fossil mollusca

- from the Miocene limestone near Edithburgh (including notes by the late Professor Ralph Tate)', *Transactions of the Royal Society of South Australia*, vol. XXVI, 1902, 130–2.
- 6 Herbert Basedow, 'On Naticoid genera Lamellaria and Caledoniella from South Australia', *Transactions of the Royal Society of South Australia*, vol. XXIX, 1905, 181–6; Herbert Basedow & Charles Hedley, 'South Australian Nudibranchs, and an enumeration of the known Australian species', *Transactions of the Royal Society of South Australia*, vol. XXIX, 1905, 134–60.
  - 7 These papers described, for example, 'new species of Orthoptera' (JGO Tepper, 'Descriptions of some new species of Orthoptera from north-western South Australia — No. 1', *Transactions of the Royal Society of South Australia*, vol. XXVIII, 1904, 162–7); 'the Mollusca' (Charles Hedley, 'Report on the Mollusca collected by Mr. Herbert Basedow on the South Australian Government North-West Expedition, 1903', *Transactions of the Royal Society of South Australia*, vol. XXIX, 1905, 161–5); and 'insects including new species of Mantidae and Phasmidae' (JGO Tepper, 'Insects collected in the north-western region of South Australia proper by H. Basedow; with descriptions of new species of Mantidae and Phasmidae — No. 2', *Transactions of the Royal Society of South Australia*, vol. XXIX, 1905, 237–45). In his 1904 paper, Tepper named a new species of cockroach *Periplaneta* (now *Ataxigamia*) *basedowi* after Basedow, the specimen being one of a swarm attracted by the light of the expedition campfire at Hector Pass in the Mann Ranges.
  - 8 Basedow was, however, adept at the complex science of taxonomy and, as the following excerpt from his diary of the 1928 expedition to Arnhem Land shows, he was familiar with the characteristics to look for in identifying known species and recognising new ones: 'About these exposures a species of pandanus I have not seen before. Grows on the dry surfaces of sandstone with roots like a mangrove. The whole plant is peculiarly branched and in mature specimens reminds one of araucaria. Leaves very much smaller and less jagged than other species. Fruits quite distinct. From 15–25 feet. 2 Photographs and specimens' (Diary, 5 June 1928, Mitchell Library, MSS Set 161/5, Item 19). The pandanus was indeed a new species. Basedow submitted specimens of the plant to Kew Gardens in England and it was later named *Pandanus basedowii* (see CH Wright, '*Pandanus basedowii*', *Kew Bulletin*, 1930, 158).
  - 9 See Robert Burn, 'Notes on a collection of nudibranchia (Gastropoda: Dorididae and Dendrodorididae) from South Australia with remarks on the species of Basedow and Hedley, 1905', *Memoirs of the National Museum of Victoria*, vol. 25, 1962, 149–71; Seaslugforum, www.seaslugforum.net. The other specimen mistaken for a new species by Basedow and Hedley was in fact a juvenile form of a previously described species. One retains the name they assigned it (*Halgerda graphica*). The specimen collected by Basedow remains the paratype for this species, or one of the specimens against which future scientific determinations should be made.
  - 10 As an undergraduate student at the University of Adelaide Basedow undertook research into Tertiary age deposits and fossils. In 1907 Basedow travelled to Germany to undertake postgraduate studies. His PhD thesis was an Australia-wide examination of the country's geology, submitted to the University of Breslau in 1908 with the title 'Beitrag zur Kenntnis der Geologie Australiens'. It was published with the same title the following year (*Zeitschrift der Deutschen Geologischen Gesellschaft*, vol. 2, 1909, 306–79).
  - 11 This medal was awarded for the best original work in geology and in 1904 Sir Edgeworth David, Professor of Geology at the University of Sydney, was the examiner. There were only two candidates but David judged Basedow's contribution to be the more worthy of this significant honour, commenting: 'I have no hesitation in recommending that the medal be awarded to Mr. H. Basedow. His description of his geological explorations in the Musgrave and adjacent ranges and his detailed petrological description of the rocks is an interesting and useful contribution to Geological Science, and in every way worthy of the high distinction of the award of the Tate Memorial Medal' (David to CR Hodge, Registrar, University of Adelaide, 22 July 1904, University of Adelaide Archives, Series 200, No. 579/1904).
  - 12 Bernard O'Neil, *In Search of Mineral Wealth: The South Australian Geological Survey and Department of Mines to 1944*, Department of Mines and Energy Special Publication No. 2, Government Printer, Adelaide, 1982, p. 148.
  - 13 Herbert Basedow, *Catalogue of Minerals in the Technological Museum of the South Australian School of Mines and Industries*, Government Printer, Adelaide, 1907.
  - 14 He wrote reports on these, but the only resultant geological publications were the 'Extracts of reports' that appeared in six-monthly Mines Department printed reports.
  - 15 His mentor Tate and Howchin had been involved in a feud over glacial deposits, and Basedow continued the cause after Tate's death. Howchin had been studying these deposits since the late 1800s. Basedow and a colleague, JD Iliffe, another of Tate's students, presented a paper titled 'On the formation known as Glacial Till of Cambrian Age in South Australia', at the Royal Society of South Australia meeting of 4 April 1905. They suggested that a deposit at Blackwood was in fact not a glacial deposit, as claimed by Howchin, but was created by metamorphic forces. At the Society's meeting the following month, Howchin, supported by eminent geologist and Antarctic explorer Douglas Mawson, stridently criticised Basedow and Iliffe (*Transactions and Proceedings of the Royal Society of South Australia*, vol. XXIX, 335). Basedow and Iliffe evidently were not deterred by the Royal Society's meeting for, toward the end of 1907, a brief resume of their paper was read on their behalf at a Geological Society meeting in England, again refuting Howchin's claims. Both sides had their supporters, but in the end the general consensus was that Howchin had presented a convincing case and he was later 'completely vindicated' (Jonathan Selby, 'Geo-giants of the past: Walter Howchin (1945–1937)', *Terra Nova*, vol. 3, no. 5, 1991, 568–9 (p. 569)).
  - 16 Herbert Basedow, 'The supposed oil-bearing areas of South Australia: Dr Wade's report critically reviewed', TA Leslie, Adelaide, 1915; Herbert Basedow, 'Oil (in) the south east: Comprehensive reply to Mr Ward' [Adelaide, 1917].
  - 17 A paper he published in 1916 was little more than notes 'copied straight from [his] field-book' from the 1905 government expedition to the north-west of the Northern Territory ('Physical geography and geology

- of the Western Rivers' district, Northern Territory of Australia', *Proceedings of the Royal Geographical Society of Australasia, South Australian Branch*, vol. XVI, 148–217 (p. 6)). Attached to his published journal of a 1916 expedition to the Kimberley was a précis of the geology he had recorded, supplemented with notes by Robert Etheridge jnr ('Narrative of an expedition of exploration in north-western Australia', *Proceedings of the Royal Geographical Society of Australasia, South Australian Branch*, vol. XVIII, 1918, 105–295). Basedow's other geological writings during this period were opinion pieces, particularly relating to petroleum in south-eastern South Australia, and short published notes and unpublished reports.
- 18 Undated advertisement, probably about 1923, SLSA, PRG 324, Item 3. Surviving reports demonstrate that his geological examinations after 1911 were undertaken in Western Australia, the Northern Territory and his home state.
  - 19 Herbert Basedow, *The Australian Aboriginal*, FW Preece and Sons, Adelaide, 1925, p. ix.
  - 20 Basedow, *Australian Aboriginal*, p. xii.
  - 21 The closest he came to this was in his 'Anthropological notes' and perhaps his 'Notes on the natives of Bathurst Island' ('Anthropological notes made on the South Australian Government North-West Prospecting Expedition, 1903', *Transactions of the Royal Society of South Australia*, vol. XXVIII, 1904, 12–51; 'Anthropological notes on the western coastal tribes of the Northern Territory of South Australia', *Transactions of the Royal Society of South Australia*, vol. XXXI, 1907, 1–62; 'Notes on the natives of Bathurst Island, North Australia', *Journal of the Royal Anthropological Institute*, vol. XLIII, 1913: 291–323).
  - 22 Basedow, *Australian Aboriginal*, p. xiii. Some of the 'intimate' photographs Basedow referred to are, no doubt, of secret rituals.
  - 23 Herbert Basedow, 'Vergleichende Vokabularien der Aluridja- und Arrundta- Dialekte Zentral-Australiens', *Zeitschrift für Ethnologie*, vol. 40, 1908, 207–28.
  - 24 Bullroarers are, among central Australian peoples, secret ceremonial objects, which women and children are not permitted to see.
  - 25 Herbert Basedow, 'Aboriginal rock carvings of great antiquity in South Australia', *Journal of the Royal Anthropological Institute*, vol. XLIV, 1914, 195–210 (pp. 198–203). In the absence of direct dating techniques he suggested the silica film covering the entire rock surface and geological forces that had caused rocks to split through engravings or break away from the bedrock, meant the engravings were of some antiquity (a theory since confirmed).
  - 26 Herbert Basedow, 'Diseases of the Australian Aborigines', *Journal of Tropical Medicine and Hygiene*, vol. XXXV, no. 12, 177–85; vol. XXXV, no. 13, 193–8; vol. XXXV no. 14, 210–13; 1 August, 229–33; 15 August, 247–50 and vol. XXXV, no. 18, 274–8.
  - 27 Herbert Basedow, 'Report upon the First Medical Relief Expedition amongst the Aborigines of South Australia', 1920, South Australian Archives, GRG 23/1 1920 144, pp. 30–1.
  - 28 Basedow probably met Klaatsch at an Adelaide meeting of the Australasian Association for the Advancement of Science, when Klaatsch delivered a paper based on his research and travels through Australia from 1904 to 1906. Klaatsch was determined 'to attack the difficult problem of the origin of the Australian blacks, and of their importance in relation to the whole development of mankind' (Hermann Klaatsch, 'Some notes on scientific travel amongst the black population of tropical Australia in 1904, 1905, 1906', *Report of the Australasian Association for the Advancement of Science*, vol. XI, 1908, 577–92, (p. 577)). At that time he inclined to the theories of AW Howitt, who had postulated a now-submerged continent as the most probable origin of the Australian Aborigines, and the Asiatic race; however this opinion was to undergo revision and further development in later years. Klaatsch referred in his paper to work undertaken by Basedow: 'Before my arrival Mr. Herbert Basedow, that gifted young scientist, made a profound study of the customs and weapons of the tribes of Palmerston and of the Daly River' (p. 584).
  - 29 *Brisbane Courier*, 22 September 1928. See 'Basedow the man', p.9, for a fuller discussion of Basedow's complex attitudes towards Aboriginal people.
  - 30 Basedow lecture quoted in the *Northern Territory Times*, 2 September 1922.
  - 31 Basedow, *Australian Aboriginal*, p. 58.
  - 32 See 'Basedow the man', p. 10 for a discussion of how recent commentators have accused Basedow's explanation of the close relationship between the two races as contributing to government policies separating part-Aboriginal children from their Aboriginal parents.
  - 33 *Bulletin*, 23 December 1926.
  - 34 Basedow's talent as an artist was evident by his early teens, as two watercolours reproduced in a family history attest (Bernard Basedow, *The Basedow Story: A German South Australian Heritage*, The Author, Adelaide, 1990, pp. 107, 108). These demonstrate an eye for balance and detail characteristic of Basedow's later drawings.
  - 35 Surviving maps from his 1903, 1905, 1916, 1919, 1920b, 1923, 1926 and 1928 expeditions demonstrate his competency in cartography and surveying.
  - 36 One was an examination of the cultural practices of circumcision and subincision ('The strange erotic ritual of Australian Aborigines', in R Burton (ed.), *Venus Oceanica*, New York, 1935, pp. 321–62). The other was his second book, *Knights of the Boomerang*, a popularised account of his travels and investigations into Aboriginal cultures (The Endeavour Press, Sydney, 1935). It has been suggested that *Knights* is 'less careful with both "facts" and interpretation' (RM Berndt & CH Berndt, *The World of the First Australians*, Lansdowne Press, Sydney, 1981, p. 539). Although loose in its interpretation the book is helpful in developing an understanding of Basedow's travels as it is quite detailed in referring to places and people.
  - 37 Basedow was a member of the Royal Society of South Australia and the Royal Geographical Society of Australasia, South Australian Branch (now the Royal Geographical Society of South Australia). He was also a member of British and European Societies, including the Royal Anthropological Institute of Great Britain and Ireland, sometimes by invitation. In 1910 he was 'asked by the Geographical Society of

Hamburg to accept an honorary corresponding fellowship' (unknown newspaper, 3 May 1910). In 1932, after he had lectured in Europe, the Vienna Anthropological Society made him an honorary member, 'in recognition of distinguished services rendered in the fields of anthropology and exploration' (*News*, 3 May 1932).

- 38 Ian Harmstorff, 'Basedow, Herbert (1881–1933)', *Australian Dictionary of Biography*, www.adb.online.anu.edu.au/biogs/A070204b.htm.

## Basedow the photographer

- 1 Other negatives remained with Basedow's brothers and sisters and were acquired by the South Australian Museum after the last of his siblings, Hedwig, died in 1963. Another 28 were acquired by University of Sydney anthropologist NWG Macintosh and, after his death, were donated to the Australian Institute of Aboriginal and Torres Strait Islander Studies in Canberra by his widow.
- 2 As some form of identification existed for at least one image per roll, the order in which the rolls were exposed could be determined. Reference to Basedow's diary for the 1926 expedition, yet to be done, should enable most, if not all, of the remaining images to be documented.
- 3 Brenda L Croft, 'Laying ghosts to rest', in Judy Annear (ed.), *Portraits of Oceania*, Art Gallery of New South Wales, Sydney, 2000, p. 9.
- 4 Letter, Basedow to David, 13 February 1925, University of Sydney Archives, P11/32/5.
- 5 Herbert Basedow, 'Journal of the Government North-West Expedition', *Proceedings of the Royal Geographical Society of Australasia, South Australian Branch*, vol. XV, 1915, 57–242 (p. 240).
- 6 Herbert Basedow, 'Narrative of an expedition of exploration in north-western Australia', *Proceedings of the Royal Geographical Society of Australasia, South Australian Branch*, vol. XVIII, 1918, 105–295 (p. 106).
- 7 An entry in the diary of 18-year-old Richard Grenfell Thomas, one of two assistants on the first medical relief expedition in 1919, reveals that he and Basedow were watching horses being branded on Innamincka station when Basedow took 'several snaps with the Reflex' (Richard Grenfell Thomas, Diary entry for 8 September 1919, private collection). This may have been the same camera referred to by Basedow's assistant Frank Feast in an interview about the third medical relief expedition of 1920. Feast mentioned that Basedow had a 'Press Graflex for close-ups of Aborigines' (Interview with Frank Feast, sound recording, 27 February 1986, Tape 8, Side B, National Museum of Australia). This camera took glass plate negatives identical to ones used on expeditions during the period 1919 to 1924. Basedow also used it to take family photographs. When Basedow went to London on a business trip at the end of 1931, he took a camera that used the same size of glass plate negative, but it was not the same camera as it had a different method for holding the negative in place, as indicated by marks left on the negatives themselves.
- 8 In the period 1905 to 1911 Basedow seems to have only used large half-plate glass negatives, which generally provided fine-quality images.

These were the largest of the negative types employed by Basedow. Basedow was still using this type of camera until at least 1916 and possibly as late as 1924 when he was completing his major book, *The Australian Aboriginal*, published the following year.

- 9 Basedow, 'Journal of the Government North-West Expedition' (p. 77).
- 10 Donald Mackay, 'The Mackay Exploring Expedition, Central Australia', *Geographical Journal*, vol. 73, 1929, 258–64 (p. 264).
- 11 Herbert Basedow, 'Notes on the natives of Bathurst Island, North Australia', *Journal of the Royal Anthropological Institute*, vol. XLIII, 1913, 291–323.
- 12 Basedow, 'Journal of the Government North-West Expedition' (p. 113).
- 13 See Herbert Basedow, *The Australian Aboriginal*, FW Preece and Sons, Adelaide, 1925, pp. 76–77, Plate XIII/1.
- 14 Herbert Basedow, *Knights of the Boomerang*, Endeavour Press, Sydney, 1935, p. 165.
- 15 *ibid.* Perhaps Basedow was unaware that it was also common practice for the ceremonial design to be obliterated at the conclusion of festivities.
- 16 Basedow, *Australian Aboriginal*, Plate XXXII.
- 17 Basedow was not alone in this intent. His better known contemporaries Baldwin Spencer and Frank Gillen, for example, also went to lengths to ensure European materials did not appear in their photographs. See Nicolas Peterson, 'Visual knowledge: Spencer and Gillen's use of photography in *The Native Tribes of Central Australia*', *Australian Aboriginal Studies*, vol. 1, 2006, 12–22 (p. 17).
- 18 Basedow, *Australian Aboriginal*, p. 58.
- 19 Basedow, *Knights of the Boomerang*, p. 22. It was not particularly uncommon for Aboriginal people to be asked to undress, partially or completely, to be photographed. The evidence for Basedow's actions in this respect comes largely from the photographs themselves, where clothing can be seen on the ground near the subject, or where trousers or blouses have clearly been lowered or partially lowered. Basedow was motivated in some instances by his anthropological and medical interests: Basedow took three photographs of a man in the Kimberley in 1916. He is not wearing a shirt and his trousers are partly lowered, just to the top region of his buttocks. It is fairly clear that the reason for the photographs is to record all of the man's cicatrices, which Basedow also documented in a notebook.
- 20 Basedow, *Knights of the Boomerang*, p. 23.
- 21 Basedow, *Knights of the Boomerang*, pp. 184–90.
- 22 Murray Garde & Apolline Kohen-Raimondo, 'Putting Herbert Basedow back in focus: the 1928 expedition to Arnhem Land', *Australian Aboriginal Studies*, vol. 1, 2004, 26–36 (p. 35).
- 23 Peterson, 'Visual knowledge', p. 18.
- 24 Basedow, *Australian Aboriginal*, pp. ix–x.
- 25 *Adelaide Chronicle*, 30 January 1904.
- 26 This was not the only time Basedow's photographs were treated in this way; in *The Australian Aboriginal*, photographs showing a naked woman and man also had pubic covers added (Plates XVI/1 and 2). Other photographs in the book had shadows further darkened to hide detail in the genital region. For reasons unknown, similar photographs

were left unmodified. There is an even more extreme example of image manipulation in which Basedow must have been complicit. In his 'Anthropological notes' of the 1903 expedition, one photograph shows three men holding spears in tandem with spear-throwers, while another man is sitting in the foreground (Basedow, 'Anthropological notes made on the South Australian Government North-West Prospecting Expedition, 1903', *Transactions of the Royal Society of South Australia*, vol. XXVIII, 1904, 12–51, Plate VIII/1). In the original photograph the expedition's male Aboriginal assistant, Arrerika, can also be seen, fully clothed. This would not have sat well with Basedow's intention of depicting traditional culture and, furthermore, Arrerika was not from the same cultural group as the other people shown.

- 27 The only other album of Basedow's known to exist depicts subjects of medical interest, and comprises photographs taken by Basedow and others.
- 28 See Paul S Taylor, Howard M Levin & Katherine Northrup (eds), *Dorothea Lange: Farm Security Administration Photographs, 1935–1939*, 2 vols, The Text-Fiche Press, Glencoe, Illinois, 1980.