
The community pattern of Aboriginal tribes on the continent of Australia in pre-colonial days is commonly associated with the nomadic lifestyle of hunters and gatherers, their spiritual heritage of the creation ancestors of dreamtime and the rituals practised, the making of tools and weapons, and specific art forms such as rock drawings, bark paintings and body painting. Comparatively scant information has been provided to date on the botanical knowledge of native people. The author of this illustrated monograph on Aboriginal plant collectors in the 19th century is a well-known ethnographer and anthropologist as well as the author of several books on aspects of Aboriginal culture. He is based at the South Australian Museum in Adelaide. Clarke sets out to describe the interaction of native people with explorers, run-away convicts, and white plant ‘hunters’ who needed help for survival in the outback.

In Chapter 1, “Early Explorers and Aboriginal Guides”, the author reports on the first European navigators who visited Australia and had encounters with Aboriginal people, such as William Dampier, Captain James Cook and Joseph Banks. There are records of native plant collectors such as Boongaree, Nanbaree and Abarro who imparted their botanical knowledge to white newcomers. Chapter 2 discusses “Settlers and Australian Plants”, the use of edible berries, roots, greens and tubers that provided food and of other plants for tea or bush medicine. Chapter 3, focused on “Making Plant Names”, is of special interest to the linguist. The author describes the difficulties in finding the common plant names among a wide variety of local plant names used by Aboriginal people in different parts of Australia for the same species. Plant names coined by European settlers may be misnomers because they are founded on a superficial analogy between plants of their home country and the
Australian flora:

The historical records of Australian plants are full of terms based upon similarity to European species. Examples include *Australian sarsaparilla, bush plum, native cherry, desert raisin, wild currant, native guava, wild pear, [...]*. (43)

In botanical terminology, these designations of a plant, often the same species, may count as *trivial names* alongside the “correct” (systematic) name. Clarke regards “the co-existence of different common names for the same type of plant” as “variety within Australian English, in terms of geography, social context and the period.” (44)

Chapter 4 is devoted to “George Caley in New South Wales”, an important botanist, who had an essential share in “organised scientific plant-collecting enterprises” (p. 59). George Caley (1770–1829) continued the scholarly work of Joseph Banks and William J. Hooker, who developed the Royal Botanical Gardens in Kew. Caley also actively involved Aboriginal cooperators in his systematic plant collecting activities.

Chapter 5 deals with “Allan Cunningham and the Mapping of Australia.” As the “King’s Botanist for the Colony of New South Wales,” Allan Cunningham (1791–1839) worked together with Aboriginal foragers, discovered new species and sent specimens of plants to England. Botanists honoured him by naming several plant species in his memory. Chapter 6 pays special attention to “Resident Plant Collectors and Aboriginal People”. In great detail Clarke describes the activities of the botanist James Drummond (1787–1863) in southwest Western Australia, of Ronald C. Gunn in Van Diemen’s Land, and of Frederick M. Bailey in South Australia. A distinguished lady who collected plants in southwest Western Australia in the 1830s/40s was Georgiana Molloy. These botanists appreciated the indispensably necessary plant knowledge of Aboriginal people for their own studies. Chapter 7 highlights “Leichhardt and the Riddle of Inland Australia”. In a detailed biography, Philip Clarke presents Ludwig Leichhardt (1813 – 1848?) as a great naturalist, but also as a talented linguist interested in the
languages of the Aboriginal guides and interpreters he had included in his expedition crew. Leichhardt’s memory was honoured by several botanical names, e.g. *Acacia leichhardtii*, *Duboisia leichhardtii*. The important botanist introduced in Chapter 8 is the German researcher Ferdinand Jakob Heinrich von Müller (1825–1896), who emigrated to South Australia and became a British subject. He played a major part in “recording Aboriginal plant uses” (107) and corresponded with a number of plant collectors across Australia. The painter Ellis Rowan (1848–1896) “employed Aboriginal people to help her collect fresh plant specimens” (112) for her water colour paintings. These are remarkable in their botanical detail and well suited for a botanical encyclopaedia. Müller also introduced various exotic plants from Europe so as to cultivate them in Australia. His name is commemorated in the designations of some plant species, e.g. *Terminalia muelleri*. Chapter 9 treats “Inland Explorers and Aboriginal Knowledge”, with a focus on the unfortunate expeditions of Robert O’Hara Burke and William John Wills (1860), who no longer pursued “a scientific venture”, but were competitors “in a desperate race against a rival explorer, Stuart” (p. 122). They were ignorant of the Aboriginal use of bush food and perished in the desert at Cooper Creek (1861). The final Chapter 10 gives a general survey on “The Study of Aboriginal Plant Use” with implications for pharmacology, anthropology, and economic botany (in representative parks).

On the whole, Clarke’s assessment of the scientific work done by European and Australian explorers and botanists in the outback is considerate, substantiated and well balanced. In striking contrast is his opinion of the German botanist Amalie Dietrich (1821–1891), who collected, classified and preserved specimens of Australian plants and animals for her employers in Hamburg, Godeffroy & Son, and for a number of European ethnographic museums. The author presents her in a totally one-sided way.

Professional collectors of natural history specimens catered for scholars interested in indigenous peoples. In Australia, German collector Amalie Dietrich spent several years in Queensland (1863–72), where she actively sought fresh Aboriginal skeletons for her
European clients. In spite of her gruesome interests, Dietrich owed her life to the Aboriginal people, for a group saved her from drowning when she was trying to collect specimens of rare water lilies (p. 144).

It is unfortunate that Clarke based his assessment solely on two references drawn from Ann Moyal (1986), and J.B. Webb (2003), and an anecdotal incidence mentioned in R. Ritchie’s book (1989).

An entirely different picture arises from Amalie Dietrich’s correspondence with her daughter Charitas [Bischoff] and her employers. In these letters she repeatedly expressed her deep respect for Aboriginal people and her friendly relations in bartering with them. In a letter to her daughter of October 12, 1864, Amalie Dietrich gives an account of how native people rescued her when her bamboo hut caught fire, which burned her collections and research equipment. And she mentions another incident in which Aboriginal people rescued her when she was stuck in a swamp at nightfall.1

From the very beginning of her professional work in remote regions of Queensland, her main concern was collecting and preserving specimens of plants, insects, reptiles, birds, fishes and mammals for her German employers. Although Dietrich had no academic background (impossible for women at her time), she acquired a profound botanical knowledge in cooperation with her husband, who was an apothecary, plant collector and private researcher in the small town of Siebenlehn, Saxony. In fact, she became a self-taught and ultimately self-made woman botanist and a hard-working plant collector in Germany. When she was commissioned by Godeffroy to make the voyage to Australia, she was prepared to separate from her family, taking this extraordinary opportunity to explore Australia’s fauna. Her botanical sales collection of “New Holland” included 364 species. During her stay, she compiled the largest collection of zoological and botanical material ever gathered by a single person in the 19th century. This included 20,000 botanical specimens and more than 200 new species (B. Scheps 2008: 100). In a letter of January 1, 1865, her employers commissioned her to collect not only skeletons of indigenous mammals, but possibly also
skulls of Aboriginal people, alongside their weapons and tools. Such items were most coveted by developing European museums of ethnography. In her letter to her daughter of September 20, 1869, Amalie Dietrich, however, remarked on the difficulty of providing skeletons of native adults.

It should also be taken into consideration that Charles Darwin’s fundamental work *The Origin of Species* after its appearance in 1859 had far-reaching repercussions on the policy of British museums to acquire human skeletons from remote parts of the world for legitimate scientific research. Thus, skulls from various ethnic groups had become a subject of scholarly studies named *phrenology*.

It is worth mentioning that in other chapters of his book, Philip Clarke records cases of collecting native skeletons and he expresses his disapproval of, and contempt for, such dealings from the ethical point of view of the 21st century. Thus, he mentions the botanist Allan Cunningham, who was involved with the desecration of a grave site and the exhumation “of an Aboriginal king” (72). Cunningham transgressed the rules of decency on another occasion: “Among the more unusual specimens he sent back to England was the desiccated body of an Aboriginal woman” (75). Clarke goes on to remark:

> Across Aboriginal Australia, many communities kept the smoke-dried remains of their deceased kin for a time in huts, awaiting the final ritual of disposal in a cemetery. Cunningham’s collection of the woman’s remains can only be regarded as theft (76).

In connection with the plant collector James Drummond, Clarke mentions a hostile encounter between colonists and Aboriginal men, whose leader Yagan was sentenced and killed after being recaptured on 11 July 1833, with gruesome consequences:

> Yagan’s head was removed from his body, then smoked, preserved and taken to England as a ‘specimen’. It was not returned for reburial by the Nyungar community of southwest Western Australia until 1997. The Western Australian Department of Agriculture recognised his status as an indigenous resistance fighter in 1988.
when they named a new early maturing cultivar of barley bred for sandy soils as ‘Yagan’ (82).

Clarke’s discussion of this state of affairs highlights the fact that present-day existing collections of bones of indigenous people from once colonial countries displayed in European museums have remained an extremely sensitive issue from the perspective of shifted moral standards of human rights. Amalie Dietrich’s achievements should not be measured with this yardstick alone. As an experienced plant collector and hard field worker she made a remarkable contribution to the exploration of Australian flora and applied the Linnaean nomenclature consistently to newly discovered species. After her return to Hamburg (1872), she disseminated her botanical knowledge by taking part in meetings of learned societies. Several plants and animals were named after her, e.g. Dicranella dietrichiae. Her memory is held in high esteem in her birthplace of Siebenlehn, where a small museum has been devoted to her work, and the local school conducts project work following her footsteps.

Throughout the book, it becomes evident that Philip Clarke is a determined supporter of the Aboriginal cause in that he intends to bring to the fore the indigenous people’s share in identifying and using wild plants, and their contribution to the development of Australian botany as a research subject. The author’s personality appears in this unique volume in many respects: as an ethnographer and anthropologist, an arduous plant collector and a skilful photographer. His plant photographs taken between 1985 and 2007 in different parts of Australia are of an excellent technical quality and provide aesthetic pleasure to the beholder. The reader cannot but share the author’s enthusiasm for Australia’s indigenous flora and feels included in the fascinating exploration tour leading from chapter to chapter, spiritually guided by native botanists of the past. The author presents the plants in their natural outback habitat, and draws from archival sources such as explorers’ and botanists’ diaries, journals, correspondence, and publications in periodicals. Each chapter conveys detailed information on the exploration of the Fifth Continent, on plants and botanists. Moreover, in the descriptive passages, Clarke favours common English and Aboriginal plant
names. For the general reader’s and the specialist’s benefit, the scientific plant names are listed in the appendix.

The book is written in an elaborate, literary and user-friendly style. In summary, the present volume is an outstanding botanical, historical and ethnographical introduction to a complex topic, a work of reference, and a most enjoyable book of popular scientific writing.

References
1 Charitas Bischoff (1909): *Amalie Dietrich – ein Leben*. Reprinted 1980, Stuttgart: Calwer Verlag. Literary critics and ethnographers hold the opinion that Charitas Bischoff modified her mother’s letters in some details although they are assumed to be authentic in essence.