CHAPTER 10

'The fragments that are left behind'

Barber was a self-assertive woman whose work expresses a combination of feminist visions, Cape Colonial nationalism, an appreciation for Africans' knowledge, but a strong conviction in white and particularly 1820 Settler supremacy. This critical investigation has contributed to new understandings of Victorian natural history by examining the various forms of knowledge creation and the multiple, at times competing, at times intersecting moralities undergirding them. Barber is a particularly interesting example of a woman academic due to her varying positions among and in-between Africans, Afrikaners, 1820 Settlers, Europeans and Australians; women and men, as well as lay and professional scientists, the metropole and the periphery, wealth and poverty. Her space was complex; she had several roles and determinants which overlapped and even contradicted each other from time to time. As such, Barber was what is called a 'threshold creature' in literature and culture studies: she was liminal, a person of boundaries and margins.[1]

The most popular types of non-fiction in South Africa are biographies and autobiographies, particularly what Andrew Bank and Nancy Jacobs call 'political biographies of the individual-as-leader; social history biographies of the individual-as-exemplar; literary biographies of the individual-as-vessel-of-self; and critical studies biographies of the individual-as-fragmented-subject'.[2] This book is neither a social history biography nor a literary biography of a polymath—an ornithologist, botanist, entomologist, archaeologist, writer, painter and poet. It is by no means a simple

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celebration of a hitherto marginalised historical actor and, thus, best fits the last category. It is not a biography in the normal sense of the term as Barber's life story—and her essential self—is not presented in a chronological, linear, unified narrative. Yet, it is not a poststructuralist anti-biography as David Nye has offered with his series of different figures of Thomas Edison.[3] In 1983, Nye argued that his anti-biography 'asks new questions of the materials conventionally used to tell a life-story, and in doing so, it does far more than merely show how bogus such a biography must necessarily be. For the new questions respect the documents themselves as social constructions of reality. The anti-biography thereby moves into a new area of investigation'.[4] Similarly to Hlonipha Mokoena's discursive study *Magema Fuze: The Making of a Kholwa Intellectual* (2011), I do not redeem Barber's story from what exists and am disinclined to shape her life into a conventional narrative form.[5] The thematic structure of both *The Making of Kholwa Intellectual* and *Shaping Natural History and Settler Society* work on the themes that developed most prominently over the course of Fuze's and Barber's long lives. In Barber's case these are scientific practices, emerging new research fields and theories as well as the discourses on women's and Africans' place in science and (settler) society evolving around them. My 'relational approach' has a significant bearing on my narrative, which travels swiftly across different spaces such as centres of calculation and the field in European metropoles and colonies and among various actors such as women and men experts of manifold origins working in several scientific disciplines. Mokoena presents an intellectual history of Magema Fuze, known as the author of the first Zulu history *Abantu Abamnyama Lapa Bavela Ngakona*.[6] His life is used to understand how the first generation of Zulu converts in Natal negotiated their identities in the late nineteenth and early twentieth centuries. Similarly, Barber's life allows us to understand the history of ideas around scientific debates and practices and how women academics in the nineteenth century—particularly in settler colonial contexts—negotiated their identities. Barber's scientific work is presented as part of the settler colonial project, of building a specific white identity and laying claims to the land. My aim was to reflect on the conditions of science in a settler colonial context but at the same time to bring Barber back to life. I was interested in the interface between her intellectual influences and her readerships, and how her work allowed me to shed light on women's experiences, the construction of canons, the illiberal face of science and what her legacy teaches me methodologically about how to write history by finding ways of reading across archives.

In the following, I will summarise some of the main themes of this book with an eye on their potential to open up further debate on the role of women in colonialism and science, and on South–North engagement in the making of knowledge. This study has challenged the perception that scientific theories and practices originated in the global North and were spread to the South. Africans and Europeans in Africa made extensive contributions to scientific practices and theories as the case of ornithology exemplified. Indigenous peoples and arriving settlers in their working collaborations developed scientific practices and insights which were distinct from Northern knowledge production. These were at times taken up in the North. In other cases, they remained marginalised and are awaiting a historical reevaluation in their potential to challenge Northern hegemony. As more research on the history of science in Southern Africa is conducted, more evidence of scientific practices that originated in the region will become apparent.[7,8] Scholars in Science and Technology Studies working on Africa have challenged this assumption in the last few years and will continue to produce thought-provoking studies on innovations and theories which have originated on the continent.

Barber carefully constructed 'imagined communities'. Afrikaners, Australians, different African and European ethnic groups were important in distinction from the values and characteristics she ascribed to 1820 Settlers. European explorers and naturalists have often been subsumed in one category, but Barber creates the awareness that they should carefully be distinguished. Living at the Cape all her life, she was convinced to be more accustomed to the land and to see nature differently from European travellers whose point of reference and comparison was of European nature.

This study has also shown Barber's affiliation to trans-imperial networks. Her case has clarified the connections between the Cape and Britain, as well as other parts of Europe and the British Empire. I have emphasised Barber's trans-imperial connections with scholars such as Emil Holub, Hermann Becker and Otto Sonder, and the impact these contacts had on her career. Future research on German botanists' connections across empires, in South Africa and other settler colonial settings would certainly enrich our understanding of scientific practices during colonialism. Here again the relational approach was crucial as much light could be shed on Barber's scientific practices by following individual actors' trans-imperial networks which were not directly link to her. Mauch and others for instance helped us understand Barber's archaeological theories and Hans Schinz her collecting practices.

The professionalisation of science had a deep impact on the opportunities (or increasing lack thereof) for women academics. Some women, such as Mary Glanville and Lucy Lloyd, succeeded in gaining paid positions in scientific institutions at the Cape. Others, such as Barber, became members of scientific societies and managed to publish their research in scientific journals at the Cape and in Britain. In the accelerated development of professional positions and distinct disciplines, eroding the space for 'amateur scientists', some institutions, societies and journals remained or even became semi-permeable—porous and accessible for women who had relatives, who acted as patrons and found themselves in situations where they needed to earn their own living. Many leading men scientists at the time perceived disparities among zoological species and human varieties as gradual but gender differences as categorical and absolute and were eager to establish or maintain their privileges. They only occasionally allowed 'one exceptional woman' into their midst, as shown with regard to Barber and Treat's research on insectivorous plants. Yet, neither were the women victims of patriarchy, nor did they straightforwardly resist it. Their legacies call for a careful (re-)examination of individual women's scope of action.

Darwin's stance with regard to women's rights has always been controversial. Some scholars have emphasised the misogynist passages in his work,[9] others how he furthered women interested in science.[10] I have shown that his theory of sexual selection was multivalent and allowed both conservatives and feminists to find passages that assisted their concerns. A number of women scientists grasped the potential of Darwin's theories to argue for increasing women's rights and developed a feminist Darwinism. Darwinism was thus enmeshed in heated political debates at the Cape, and the British Empire at large, and this study has discussed them in relation to the complexities of gender and racial hierarchies.

The comparative analysis of Barber's and Gould's ornithological illustrations has been enlightening in terms of how they conceptualised gender relations through birds. What impact these and other cases of scientific feminism and sexism had and how ideas from the South shaped gender relations in other parts of the world deserves further research. In fact, scientific illustrations deserve much more attention and reevaluation for their potential social implications.

The women's rights movement had been transnational and interrelated with networks of protest such as the anti-plumage movement in Britain and the US. These overlapping networks of protest—of ornithologists, scientific feminists, bird conservationists and women's rights activists—require further meticulous studies.

Archaeology at the Cape served to justify land dispossession and indigenous displacement that was integral to settler nation-building. A sequel to pioneer narratives in other settler colonies such as Australia and Zimbabwe, the study of archaeological practices from the 1850s to current curatorial and archival practices has drawn out some of the Eurocentric and colonialist implications inherent. The theory of an original white population in Southern Africa shaped Anglophone South African nationalism, legitimised the British, as well as the Cape Colonial annexation of land, and the requirement of large numbers of African labourers in the mining industries, agriculture and the other sectors in which 1820 Settlers hoped to be economically successful. Barber and her relatives rendered Africans the working class in order to constitute themselves as belonging to the middle or upper-middle classes which was particularly important to them in times of financial difficulties, such as during unsuccessful periods of farming or diamond digging.

The Cape Colony was expanding, and many colonisers had already been born in the Cape, which in turn had a deep impact on their thoughts and actions. As the South African colonial Empire has progressively been dismantled, its genesis and persistent legacies have become an important area of study. Yet South African Empire Studies have hitherto not taken these early colonial actions into account. I have provided a brief cross-generational overview of Barber and her relatives, and their engagement in expanding the Empire through their research. Meticulous research in this regard seems particularly promising to contribute to a better understanding of the wider Southern African region in the post-apartheid era.

The periods when Barber developed her own insights, and endeavoured to build a career and a reputation as a naturalist were of particular concern. It is therefore pertinent to enquire after the legacy of her work. The question how archives, museums and digital collections have been dealing with Mary Elizabeth Barber opens up a history of waxing and waning relevance of her work that differs depending on institution and location. The networks she was connected to in life afforded her an uneven reception. Yet digitisation projects led to a posthumous marginalisation of Mary Elizabeth Barber and her work, a matter I refer to as her 'hibernation'. This cannot be undone by one monograph alone. There are, however, contemporary interests at work that might direct further attentiveness to her. Women scientists have recently attracted more attention in popular culture.[11] Popular culture with all its interest in women academics assists in bringing key figures back into present consciousness. However, this phenomenon has the danger of reinscribing the trope of the 'exceptional woma/en'. My relational approach allowed me to present Barber together with many, women academics' endeavours, failures and achievements and to write all of them into a wider history of science. Rather than stressing exceptionalism and aberrations, I hope future studies will take women scientists seriously as women and scientists and will not treat them as separately from men scientists as this would limit our understanding of the past.[12]

Thanks to Barber, Harvey and their contemporaries, South African women botanists were 'in advance of their sisters in other professions by a generation or more' and particularly call for our attention.[13] To invite further research, I list a number of them here: Reino Pott-Leendertz (1869–1965) founded and became the first curator of the herbarium of the Transvaal Museum, Pretoria, in 1892. In 1910, Harriet Margaret Louisa Bolus (née Kensit) (1877–1970) became honorary curator of the Bolus Herbarium for life. Alice Pegler (1861–1929) was accepted as one of the first women members of the Linnean Society in 1912. In the Western Cape, Louise Guthrie (1879–1966), working on *Ericaceae*, Augusta Vera Duthie, focusing on the Stellenbosch flora, and Edith Layard Stephens (1884–1966) at the University of Cape Town, all advanced botany. Stephens became the leading expert on algae, fungi, and in later years on edible and poisonous mushrooms.[14] Margaret Rutherford Bryan Levyns (née Mitchell, 1890–1975) was an inspiring lecturer and researcher at the University of Cape Town from 1917 to 1946. After retiring, she continued working as an honorary reader in taxonomy with research facilities at the Bolus Herbarium. She was the first woman president of the Royal Society of South Africa (1962–1963).[15] Helena Madelain Lamond Forbes (1900–1959) worked at the Natal Herbarium in Durban and wrote several taxonomic papers. Maria Wilman (1867–1957), a botanist and geologist, was director of the Kimberley Museum. Margaretha G. Mes (1905–1959) was a renowned plant physiologist and the first woman botanist to become professor in 1944.[16] As environmental history and the history of science are flourishing in South Africa and more and more attention is paid to women academics, I am convinced that we will soon be able to read interesting studies on all of them and not just in isolation but in relation to many more women academics in other parts of the world.

In comparison to these twentieth-century women, Barber had no universities to attend, could not rely on the institutional structures and did not benefit from the new opportunities women in the twentieth century experienced. Barber was much more marginal and all she had were her letters and drawings and a tenuous sense of connection to some men of science to work with.

This study has also traced the changes in displays at the Albany Museum in Makhanda (Grahamstown). South African museums have experienced a considerable transformation in recent years and will continue to do so and thereby provoke museum curators and scholars in museum studies to ask new questions and find new curatorial practices.[17] A number of historians have stressed how museums were colonial institutions that desperately required Africanisation, such as the founding of new community museums and other forms of curating people's past.[18] The past matters and should not be silenced. The 'ghosts' of the past and the stories around them need to be voiced, written and articulated in one form or another in public spaces. The Xhosa poet and historian Samuel Edward Krune Mqhayi (1875–1945) once warned that: 'A person who knows nothing of the historical events […] lives his life with blunt teeth, he can't really get his teeth into anything he does. [*Indoda engalaziyo ibali lezinto zakowayo ihleli imaziny' abutuntu, ihlezinga kwinto yonke eyenzayo.*].'[19] People in the Makana municipality constantly expand their historical knowledge which allows them to question continuity and discontinuity in their daily lives. Learning about one's past, the eGazini Outreach Project artist Vusi Khumalo once said in an interview, is like burying one's grandmother. 'It is not to forget her, but to put her life behind you so that you can carry on. You can't just keep on dwelling on the past. You need to know where you come from to know where you are going.'[20]

In this regard, Barber's life and legacy can help us discuss the complexities of settler colonialism. While historians and authors have been interested in excavating South African women's histories and women academics' stories, the ambivalences discussed in Barber's case did not find a place for discussion.[21] I hope that this book is opening new pathways to others and that—like in Barber's description of the honey guide—readers 'may […] pick up the fragments that are left behind'.[22]

Notes

1. (McClintock 2001, 13).
2. (Bank and Jacobs 2019). Thanks to Andrew Bank for sharing two manuscripts with me before publication.
3. (Nye 1983). Nye had already written his doctoral dissertation as a series of different figures of car manufacturer Henry Ford.

4. (Nye 1983, 12).
5. (Mokoena 2011).
6. (Fuze 1922).
7. Clapperton Chakanetsa Mavhunga (ed.), What Do Science, Technology and Innovation Mean from Africa (Cambridge Mass., MIT Press, 2017).
8. Clapperton Chakanetsa Mavhunga, The Mobile Workshop: The Tsetse Fly and African Knowledge Production (Cambridge Mass., MIT Press, 2018).
9. See for example: (Murphy 1998); (Hamlin 2014).
10. See for example: (Harvey 2009); (Willmann 2009).
11. See for example: *Queen of the Desert* (2015) and the BBC-documentary *Kew's Forgotten Queen* (2016), on English writer, political officer, administrator, spy and archaeologist Gertrude Margaret Lowthian Bell (1868–1926) and botanist Marianne North respectively. Similarly, in literature, the life story of an American botanist has attracted attention: Gilbert (2013). While they succeeded in excavating women scientists' achievements, they also make the gendered spheres stronger than they actually were and thereby re-inscribe gender binaries.
12. Hammel wishes to address a broader audience. Her *Kronos* article informed the American director and playwright Wendy Dann, Associate Professor, Ithaca College Theatre Arts, while conducting research for a play on a fictional ornithologist. *Birds of East Africa* was staged at the Kitchen Theatre Company, in Ithaca, NY, in February 2017. Also see (Cohen, Hammel, Rindlisbacher forthcoming): https://baslerafrika.ch/product/mary-elizabeth-barber-growing-wild-the-correspondence-of-a-pioneering-woman-scientist-from-the-cape/
13. R. A. Dyer, "Botanical Research in South Africa in the Twentieth Century", in (Brown 1977, 248–249).
14. See for example: (du Plessis 1968).
15. See (Bennett 2015).
16. See for example (Saubert and Tager 1960).
17. For examples of transformation, see: (Witz 2010).
18. Prime examples that have widely been discussed in Heritage and Museum Studies are the District Six Museum in and the Lwandle Migrant Labour Museum near Cape Town. See for example: (Rassool and Prosalendis 2001); (Rassool 2006, 2007); (Mgijima and Buthelezi 2006); (Faber et al. 2007); (Murray and Witz 2014). According to Rassool: 'The museum is not only an institution of modernity and ordered citizenship, but is the primary institutional form of empire. It was made and is being remade and adapted through both sides of empire's history: by a rapacious and violent empire of plunder and pacification, and by empire as "benevolent colonization", humanitarianism and trusteeship over people and things.' (Rassool 2015, 658).

19. (Opland 2009, 28).
20. From an interview by Julia C. Wells in 2000, quoted in (Wells 2003, 93).
21. See for example (Bank 2016); or in popular culture, see for example (Beukes 2005).
22. (Barber 1880, 202).

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